ENTERPRISE RISK MANAGEMENT IN ACTION

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ABSTRACT

The new Basel regulatory initiatives and a burgeoning risk management literature signify the rise of enterprise risk management (ERM) in the financial services sector. However, very little is known of the roles that risk management plays in organizations and how it obtains organizational significance. This study, utilising case study material from seventy-five in-depth interviews with senior managers at two large banking groups, is a first step in exploring ERM in action.

Apart from the field material, the study draws on the normative-practitioner literature of risk management, as well as on a long strand of organisationally grounded studies of management control.

ERM appears to be an *assembly* of four risk management ideal types (*Risk Silo Management, Integrated Risk Management, Risk and Value Management, Strategic Risk Management*), all of which aspire to be 'enterprise-wide', and together constituting the 'risk management mix' in a given organisation. Three distinct types of risk managers emerged in both organisations, displaying characteristic aspirations and alliances (*risk silo specialists, risk capital specialists, senior risk officers*).

The case study analysis compared and contrasted the observed two ERM assemblies, and emphasised the alternative *patterns of organizational significance* displayed by the risk management functions. Under the first model (*value-based ERM*) risk management was integral to the formal planning and performance measurement process, while remained neutral in the discussions of discretionary strategic decisions. Under the second model (*strategic ERM*) risk management was incidental to formal planning and control, however, senior risk officers exercised agenda-setting power to influence the discussion of key strategic uncertainties.

The study explains the observations in terms of firm-specific factors and institutional pressures. The politics of risk control and the presence of different calculative cultures in the organisations were tampered by contemporary corporate governance imperatives, such as the shareholder-value drive and the risk-based internal control imperative.

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CHAPTER 1

INTRODUCTION

"Would you please tell me which way to go?" said Alice.
"That depends a good deal on where you want to get to" said the cat.
Lewis Carroll

Recent trends in corporate reporting and governance in the UK and elsewhere have increased the importance of risk management in business enterprises. Carey & Turnbull (2001), for example, depict risk management as an 'integral part' of sound business management[1]. Others call attention to 'the rise and rise of risk management' (Hunt, 2001) and to its strategic potential by arguing that '*with their specific skills ... risk managers can more easily identify relevant potential risks and can give focussed advice on controlling them to line managers*'[2] as well as to chief executives (Butterworth, 2001).

Accordingly, the emerging notion of Enterprise Risk Management (ERM) operates with a rather wide remit. Moving beyond an initial financial risk agenda, it concerns itself with strategic and operational issues. Setting an important milestone on the road of corporate governance developments, the Treadway Commission defined ERM as *'... a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risks to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.'*[3] This definition calls into mind Anthony (1965)'s widely-quoted definition of management control: *'the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives'*[4]. With the emphasis placed on the strategic role of ERM ('applied in strategy setting... to provide ... assurance regarding the achievement of entity objectives'), ERM is being advocated as a strategic management control system.

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[1] Nigel Turnbull was chairman of the corporate governance committee that in 1998 recommended that directors of listed UK companies should apply a risk management framework to the assessment of the soundness of internal controls.
[2] Butterworth (2001), p.22.
[3] COSO (2003), p.6.
[4] Anthony (1965)

Still, enterprise risk management remains a rather elusive and under-specified management control. Its broad definition is an umbrella over diverse risk management techniques and arrangements, whose users aspire to create an image of consistent and comprehensive application across an organization. Normative texts are telling of the diverse practices that all seem to be bundled under the heading of enterprise risk management. ERM advocates typically outline a set of risk management tasks and envision a 'framework' for the treatment of these under the auspices of an appointed senior risk officer. This requires the prioritisation and the ordering of the various elements into a control cycle with recognisable structural and personnel arrangements. Many contributions to the development of ERM techniques have been made by practitioners in specific industries (notably from oil companies, banks and specialist consulting firms) and are proprietary.

ERM has captured growing academic interest (see for example the edited collections by Pickford, 2001 and Alexander, 2001, as well as Power, 2003a), but for the most part, academic contributions focus on financial risk (Jorion, 1997; Dowd, 1998; Danielsson et al., 2001; Medova, 2002). The focus of existing research is, on balance, normative. Recommendations for new risk management techniques greatly outnumber actual accounts and explanations of the implementation of risk management. According to the normative practitioner literature, ERM faces a promising future. It is being advocated as a panacea to many modern-day managerial problems.

Risk management as a financial subject is rooted in portfolio theory (Markovitz, 1952), which directed attention to the inverse relationship between risk and return, and to the risk-reducing benefits of portfolio diversification. Risk management was originally applied in managing the insurance portfolio of business organisations. It was with the invention of new techniques such as credit rating models and Value-at-Risk (J.P. Morgan Bank, 1995; Jorion, 1997; Dowd, 1998) that risk management could be implicated in the day-to-day trading and lending activities of financial institutions.

In the mid-nineties, a series of financial disasters, most notably the collapse of Barings bank in 1995 and other headline-catching losses such as those suffered by Daiwa Bank, directed attention to the problems posed by complex financial instruments let out of control (Marshall, 2001). Further, credit crises

across Europe revealed poor lending policies and/or inadequate credit risk assessments among lenders such as Credit Lyonnais, which suffered credit losses amounting to $29bn in the 1980s and 1990s. Risk management emerged as a financial discipline that offered a means of controlling such risks. Risk management, adopted by financial institutions as a means of strengthening internal control over their trading and lending activities, soon caught the attention of corporate governance policy makers.

By the late nineties, corporate governance advocates in the Anglo-Saxon world looked for a cure to weak internal controls. Inadequate control was quoted as having led to the demise of the Maxwell empire (Power, 2003a). Lack of internal control, lack of management oversight and fraud became seen as the ultimate reasons explaining even the large financial trading losses suffered by Barings ($1.6bn), Orange County ($1.7bn), and Sumitomo Corp. ($1.7bn) (Marshall, 2001).

Thereafter corporate governance advocates prescribed risk management for firms, be they financial or non-financial, as a pillar of 'sound internal control' and serving the interests of shareholders. The Treadway Commission in North America was one among a number of bodies that promoted the link between risk management and 'good management.'

Risk management came to be understood as a strategic control system, as advocated by the Treadway Commission's previously quoted definition. In the UK it was the Turnbull Committee that directed attention to the strategic potential of risk management as a means of ensuring that the objectives of adherents are met. Further to the influential Turnbull Report (ICAEW, 1998), risk management has become a governance requirement encrypted in the listing rules of the London Stock Exchange. Other countries in Europe are likely to follow, with Germany already in tow with the Control and Transparency Act (Power, 2003a).

Apart from its influence on corporate governance, risk management has influenced regulatory designs. The international bank regulatory body (the Basel Committee on Banking Supervision) as well as a number of national regulatory bodies, in financial and non-financial sectors (e.g. the Financial Services Authority, the Environmental Agency and the Housing Corporation in the UK, the nuclear industry regulator in the US) are implementing new regulatory

frameworks applying risk management principles. The rise of risk-based regulation marks yet another victory for risk management advocates.

However, there are critical voices who sound words of caution about the 'risk management of everything' (Power, 2004) and strongly warn aficionados and the riders of the risk management band wagon against the unintended consequences of ERM (Hunt, 2004). However, both risk management advocates and the discordant critics are weakened by the dearth of empirical accounts, descriptions and explanations of actual risk management arrangements and the roles risk managers play in organisational life.

This thesis is motivated by the belief that organizationally grounded accounts of enterprise risk management are needed to inform the risk management discourse. Currently we have little understanding of how enterprise risk management works in action. Many questions are unanswered. Given the lack of synthesis of the burgeoning normative literature and the dearth of detailed case studies, we have little knowledge of what form(s) ERM takes in organisations. We are also short of an assessment of the extent to which ERM delivers on promises of being a panacea to strategic and internal control problems. What roles does the management of risk come to serve within organisations? Is there evidence that risk management has effectively moved beyond its original financial agenda? How does it relate to existing strategic planning and control systems? Is risk management complementary to the existing practices of financial management and control or is it in competition with those for managerial attention and use?

Risk management is particularly topical in banking – apart from bankers seeing their business as the intermediation of risks, the international regulatory framework for risk management in banking is under review (BIS, 2003a). A major concern of regulators, rating agencies, investors and of the banks themselves is whether a given bank holds sufficient capital in order to withstand economic shocks. The Basel Committee (under the auspices of the Bank of International Settlements) has been issuing capital regulations since 1989 that attribute an increasing role to enterprise risk management in banking organizations. The BIS capital regulations challenge the risk management functions of banks to devise and implement risk measurement methods that can assess and control the risk profile of the organization. The regulatory definition of

'capital adequacy' (the amount of minimum capital a bank should hold) has been gradually changed to reflect the risk profile of the institutions, the rationale being that banks with a higher risk profile should hold more capital than their less risky peers.

The Basel Committee endorses enterprise risk management as an umbrella notion that can accommodate the techniques required for bank capital adequacy calculation: '*...integrated firm-wide approaches to risk management should continue to be strongly encouraged by the regulatory and supervisory community.*'[5] Authors of articles bearing titles such as '*Will Every Bank Eventually Have ERM?*'[6] assert that ERM is indeed becoming established in the banking industry. So much so, that Power (2003a) wonders if ERM might be emerging as a *'world model': 'If we were to imagine the creation of a new banking organization, we know that it could not be founded without rapidly adopting the mission and principles of ERM...* '[7]

Taking a wider look across a number of sectors, Hunt (2003) observes that ERM is spreading outside the banking sector: '*At the beginning of the 1990s, risk management was an important, but essentially peripheral, business activity. (...) By the end of the decade, corporations had institutionalized elaborate frameworks for managing risk, under the heading of 'enterprise-wide risk management'.*'[8]

But where do the drivers for the spreading of ERM come from? It can be argued that bank regulators are setting incentives for the banking sector to adopt 'the mission and principles of ERM'. Similarly, corporate governance trend-setters (such as the Treadway Commission or the Turnbull Committee) further increase ERM's appeal outside the banking sector by advocating it as a process to ensure the successful implementation of strategies, and adoptable by any organization. Further, Power (2003a) proposes that the rise of the shareholder value imperative, closely related with recent corporate governance trends, also paves the road of ERM in financial institutions. However, there is virtually no empirical research that would explain actual ERM practices with reference to external influences, thus the external origins of ERM still await empirical scrutiny.

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[5] BIS (2003b), p.2.
[6] Gilbert (2004)
[7] Power (2003), p.10.
[8] Hunt (2003), p. 83.

The aims of this Thesis are twofold. Based on extensive fieldwork with two stock exchange listed large banking organisations, it probes the roles that ERM has come to play in them. It also sets out to explain the observed practices of ERM with reference to both internal organizational factors and external influences.

The choice of listed banking organizations for study allows the researcher to consider a host of stakeholder pressures on the observed ERM practices. Thus regulatory, shareholder, rating agency as well as internal managerial influences will be considered. The focus on banks has a *caveat emptor* – risk management here (supposedly) addresses the question of bank capital adequacy, which is a regulatory requirement not faced by non-financial institutions. However, as the observed risk managers will be shown to have wider objectives, and try to become involved in strategic planning, performance management and control, the study has implications for all risk managers who cast their nets wide and cultivate strategic ambitions. What can be learned from these cases is therefore thought to have implications for not only banking specialists, but also for the theory and practice of enterprise risk management elsewhere, as a corporate governance and internal control discipline.

The Thesis is organised as follows. Chapter 2 offers a literature review that pins down the theoretical reference points of the study. The research project draws on organisationally grounded studies of calculative practices and management control, as well as institutional organisational theory. The first body of literature is rather eclectic; it consists of early theoretical studies of management control, survey- and field-based contingency research, as well as more sociologically informed field studies. This diverse research body offers valuable insights about the roles control systems (might) play in organizational life. It explains the observable patterns of control system design and use with reference to organizational characteristics and the micropolitics of control. The institutional organizational literature further probes the external origins of internal control practices.

Based on the influence of individual control systems on strategic planning and performance measurement, Chapter 3 develops *six tests for the examination of the organisational significance* of risk management. The differences found in the case studies, at this stage, will be explained by the micropolitics of risk

management. Risk management as a control activity appears to be inherently political. For instance, by assessing the risk profile of business units, risk people can propose changes to internal capital allocations. This would allow them to influence planning and control. Nevertheless, risk people may easily land in the middle of a battlefield where different business units with conflicting profit and capital interests combat for or against radical changes in the internal definition of capital adequacy. Whether or not risk managers can influence strategy making and control depends on their political skills and alliances. It will be shown that *three types of risk managers* are emerging with different ambitions, political skills and alliances. This leads to diverse ways in which ERM can contribute to strategy and control – in particular, two markedly different patterns of organizational significance will be explicated.

Given that risk management as a control system has not arrived in unoccupied territories, Chapter 4 considers ERM as part of a multiple organizational control package where it may be in competition with (or complementary to) other planning and control systems, such as managerial accounting. Chapter 4 examines *top management's use of risk management and accounting controls* over a period of economic boom, bust and recovery at one of the case study companies. It addresses how and why certain control systems become influential, receive managerial attention and set the organizational agenda, while others get sidelined, ignored or marginalised. The chapter applies Simons' (1990, 1991) distinction of interactive vs. diagnostic use of control systems and shows risk management functioning in both capacity. The observed patterns of risk management use correspond not only to particular organisational characteristics (as Simons postulated), but also to institutional pressures. The study here builds on institutional organizational theory (Powell and DiMaggio, 1991; Meyer and Rowan, 1977) in that it argues that risk management's visibility and use by top management can partly be attributed to its *perceived institutional appropriateness* - its ability to legitimise the organization.

Chapter 5 develops the argument that the inclusion of risk controls into a broader organizational control landscape raises questions which have implications for a more general management control literature. Risk management controls share a common design feature with many other management control innovations – they are envisioned in accordance with the cybernetic control ideal. Thus they

aim to set objectives, measure the process and produce feedback to decision makers who can take corrective action if needed. However, the management control literature recognises that today's complexities present controllers with rather complex control situations. Under such circumstances more complex (non-cybernetic) control practices have been anticipated. In particular, the literature attributes the rise of complex controls to the increased uncertainties in the operating environments of many firms. Such circumstances might reduce the ability of control systems to determine and monitor means and ends. The chapter will investigate how the risk and return objectives were controlled in the case study firms. It will point to the uncertainties that frustrated the cybernetic ideal in the risk control practices at the two banks. Specifically, considerable uncertainties can surround the calculative practice that is espoused the be the tool of cybernetic control, giving rise to non-cybernetic ('complex') control patterns. The study here suggests that the uncertainties that might frustrate the cybernetic control ideal can be found within the firm itself, independently of the perceived uncertainty of the operating environment.

Chapter 6 brings together what the previous chapters have revealed about the organizational significance of risk management and probes to what extent the findings can be generalised. Based on the findings of the study, the organisational significance of risk management will be argued to stem from 1) the micropolitics of ERM and its relations with planning and control, 2) its institutional appropriateness and 3) its role in the control of conflicting risk and return objectives. By relating the findings to the normative literature on ERM, it will be argued that ERM appears to be an assembly of risk management ideal types, constituting what could be a 'risk management mix' that varied across the organisations. By linking the observed patterns of organisational significance (and the differences in the two risk management mixes) to organisational characteristics as well as wider institutional pressures, the chapter traces out the implications for the further development of enterprise risk management. The cases might be indicative of the emergence of alternatives in the development of enterprise risk management. Before moving on to the second chapter, a description of the research method is warranted.

1.1. RESEARCH METHOD

The study was conducted over a period of three years. The first institution, Fraser Bank[9] was visited between December 2001 and June 2003, while the researcher first made contact with BWT in February 2002 and visited them last in September 2004. The longer engagement with BWT can be explained by the fact that at the time of the study its financial situation fluctuated: it underwent the most severe crisis of its 150-year old history. While in the five years prior to the study the bank had quadrupled its market value, in the first year of the research project it saw its market value dwindle. Eventually (by late 2003) it managed to convince investors that it has drawn a line under its disastrous financial performance. The researcher stayed in the field until, amidst the signs of recovery and stabilisation, she became convinced that her observations about the risk management function were not driven entirely by the fleeting economic crisis but were likely to have picked up the more lasting patterns within which BWT operated. Frasers, on the other hand showed no such economic fluctuations, although at the start of the study a sense of urgency and crisis was present there too. However, instead of a real financial crisis, this was the result of a top management initiative to overhaul much of organizational life at Frasers (including the risk management function) as part of the introduction of a new managerial ethos, Value-based Management (VBM). Along with (or despite) the VBM implementation Frasers continued to show a steady, rather even growth over the period of the research, which was in line with the previous ten-year trend. Appendix 1 and 2 give a timeline that indicates the research period against the backdrop of the key organisational developments that occurred in the time window of the research project.

The case studies are based on seventy-five in-depth interviews with senior finance, lending, strategy, controlling (management accounting) and risk staff. Appendix 3 shows the list of interviews. Additional informal exchanges

[9] The identitiy of the banks is concealed as much as possible, in accordance with their wishes. It is believed that far from compromising the richness of the data collected, giving the banks assurance of confidentiality actually enhanced the depth and scope of access granted by them. Other field researchers have also acknowledged the benefits from granting confidentiality to their case study companies (see for example Carter and Crowther, 2000; Dambrin et al., 2004).

took place, especially at BWT, where the researcher was provided with an office in the central risk management department during her visits. Here the possibility of participating in informal meetings (lunchtime get-togethers and chats at the coffee machine) was also given. Within the boundaries of confidentiality, the banks provided historical and other documentary evidence (annual reports, presentations, internal reports) as well. Being a relatively new department at BWT, and undergoing a reorganisation at Frasers, the risk people in both banks were curious to find out how top management and other staff functions perceived their activities and they showed a great interest in the study. All in all, the opportunity to get acquainted with a small, but significant aspect of life at the banks was there.[10]

The organizational significance of risk controls can only be grasped by appreciating the interactions and possible tensions between risk management and other organizational control systems. This requires the researcher to get close to the field. In a paper that gives accounting scholars many helpful suggestions as to how to realise 'the richness of field research', Ahrens and Dent argue that '*rich descriptions of accounting should draw out the tensions which develop around its use in organizations and the interpretive differences that give rise to them. Concentrating on those tensions offers a practical route into the difficult process of making sense of the particular functionings of accounting in the field.*'[11]

While all interviews at Frasers were prepared at headquarters, at BWT the researcher had the opportunity to observe risk management both at the centre and also at one of the business units, Division X. Division X was a multinational financial services organisation itself, which (among other factors) was held responsible for the financial crisis BWT suffered. Interviews at both organisations and further historic data (from annual reports and the financial press) allowed the researcher to track divisional control, the way Divisional X had been controlled by BWT, from the time of its acquisition until the recovery period. The role of risk management and accounting controls in divisional control could be explicated from this, giving rise to Chapter 4. Chapter 4 draws out the

[10] This sentence paraphrases Mouritsen (1999)'s assessment of his field study set-up, which, I believe, in many respect, resembles mine.
[11] Ahrens and Dent (1998), p.12.

tensions between accounting and risk controls and the interpretive differences that gave rise to these.

It is notable that BWT was more open to the research project than Frasers, allowing the researcher greater access. In BWT a larger number of organisational actors agreed to discuss risk management and control issues. This has inevitably introduced an asymmetry into the study, giving rise to an 'overflow' of BWT information. Much of the extra material concerned the (past, present and future) position of Division X, giving rise to the stand-alone chapter on the role of risk management in divisional control.

Apart from Chapter 4, all the chapters that present empirics are narrated through juxtaposing the two banks. Chapter 3 compares and contrasts the apparent strategic significance of the risk management functions in the two banks, and complements this with a comparative analysis of the ambitions and alliances of the risk officer groups found. Chapter 5 compares and contrasts patterns of dealing with conflicting risk and return objectives at the two banks, as events unfolded. Finally, Chapter 6, summarising previous findings and adding observations about the calculative cultures of the banks as well as their wider institutional contexts, compares and contrasts 'the risk management mix' at Frasers and BWT.

The use of contrasting observations from multiple cases is not alien to field-based accounting research (Ahrens, 1996). The choice of the two banks, however, was not based on 'theoretical sampling', an *a priori* assessment of which organizations would provide a rich source of data (Baxter and Chua, 1998). Neither was a pre-constructed comparative framework in place. Instead, the research project relied on '*the opportunism of field researchers*' (Baxter and Chua, 1998), and access was indeed opportunistic.[12] Nevertheless, the two banks showed remarkable similarities: they have got a similar market capitalisation

[12] The initial plan was to study two oil companies, based on some interesting anecdotal evidence of the role of risk management in major oil companies. However, in early 2002 I came across with a senior executive of BWT. It was her who suggested I could do a case study in BWT, given the then concerns with risk management and control. After having secured access at BWT I looked for another bank. The fact that BWT had agreed to the study made the idea of a comparative case study attractive to Fraser Bank, famed for its reputation for market leadership in the risk management area. They welcomed the opportunity to be 'benchmarked' against BWT, particularly at a time when the risk function at Fraser Bank was undergoing a reorganisation. I then settled on a sample of two, hoping that the comparative case adds breadth (as opposed to a single case study), without compromising on depth.

(size), a similar spread of activities, international strategic ambitions and a global reach. It also turned out that their risk management organisations, aspirations and expectations regarding risk control, and the language they used for risk were comparable too. At a closer look, however, interesting contrasts emerged between the banks. In particular, the personal convictions of senior risk officers, the control styles and the apparent long term strategies differed significantly. Drawing out similarities and contrasts between 'matched pairs' (Ahrens and Dent, 1998) helps the researcher to move systematically from field material through interpretation to explanation. Although the bancassurance situation was unique to BWT, it did give rise to the opportunity to investigate the role of risk management in the divisional control over the insurance unit, leading to a stand-alone chapter (Chapter 4) that is in effect a 'case within a case'.

The story that is the result of the patterning of the field material gradually took shape over the research and writing period. The researcher examined and re-examined observations and gathered more field material at each stage of the field work, to ensure, as far as possible, '*that the patterns adequately represent the observed world and are not merely a product of [the researcher's] imagination*' (Ahrens and Dent, 1998).[13] The point of departure from the field came when (similarly to Dent's experience (Dent, 1991)) it became clear that interviewees' views were predictable, given a knowledge of their function (accounting, strategy, risk management etc.). By participating in international practitioner events the researcher further checked upon her major results and found that the roles and perceived influence of risk officers from other financial organisations appeared to echo the lessons learned from the initial cases.[14] Most usefully the researcher participated in the Risk Europe conference including the specialist pre-conference workshop on risk management in the insurance industry, which took place in April 2004. The events were attended by senior delegates

[13] Ahrens and Dent (1998), p. 9.

[14] However, the study must be cautious in its claim to generality. This is because of the 'situatedness' of the initial two stories. The 'inescapable truth' is that 'the reality conveyed, however carefully researched, is only one of a possible number of explanations.' (Ahrens and Dent, 1998: 10). Therefore alternative explanations could have been found for the same cases by a different researcher, with a different background. In the course of the theorizing process many previous attempts at explanation were discarded, revised and modified. This crafting of the account led to an explanation that created the best fit between data and theory, among the various alternatives that were tried. Extending the explanatory framework of the study to other cases is not likely to produce such a fit. The 'situatedness' of the other cases would have to be accommodated as well by further adjusting and refining the explanations.

from Europe's major financial institutions. The organisations whose chief risk officers the researcher had discussions with included Swiss Re, Aegon UK, Allianz Cornhill and Halifax Bank of Scotland (HBOS). An hour-long interview was later arranged with each of the CROs of the last three organisations in London, two of which were allowed to be recorded.

Given that all but four interviews were recorded, field material primarily consisted of extensive interview notes and transcriptions. Secondly, documents gathered in the field, such as annual reports, presentations and internal reports as well as press cuttings, broadened the data set.

Interpretations and pattern making were guided by theoretical constructs, some of which had to be discarded, some survived and some had to be developed. Chapter 3 drew on organizationally grounded studies of management controls to ensemble six tests for assessing and comparing the *organizational significance* of risk management in the two banks. Chapter 4 applied one of these tests, namely Simons' (1990, 1991) notion of *interactive vs. diagnostic use* of management controls, in order to describe the role of risk and accounting controls in the divisional control over BWT's troubled business unit. The same chapter used the new institutionalist concept of '*institutional appropriateness*' as an explanatory construct, arguing that management controls' rise into vogue and their fall out of top management's favour depends, in part, on their perceived ability to legitimise the organisation in the eyes of influential external stakeholders. Moving on, Chapter 5 dealt with the complex control patterns that rose in the wake of the simultaneous application of risk and traditional accounting controls at the two banks. Applying the distinction between practitioners' *espoused vs. in-use-theories* (Argyris, 1976), the chapter sought to come up with an explanation for the actual practices found. Finally, Chapter 6 set out to synthesise the previous findings with the normative-practitioner literature on ERM. The construct of the '*risk management mix*' was created to establish the case for ERM as an assembly of risk management archetypes, which occurred in distinct combinations at the two banks. In order to explain the observed 'risk management mixes', they were related to the '*calculative cultures*' of the organisations (a recent construct developed by Power, 2004) and two major institutional pressures: 1. the shareholder value imperative and 2. the rise of the risk-based internal control thinking in Anglo-Saxon corporate governance.

The major analytical task was the *theoretical appreciation* of the field study patterns. According to Ahrens and Dent (1998), field research does not yield a unique story, neither does it give rise to unique theoretical interpretations. A certain amount of subjectivity is the privilege of the field researcher. It is not granted to survey-based researchers who are armed with sophisticated statistical packages. However, this interpretive freedom poses the challenge for the researcher to choose (or develop) theoretical constructs with care, otherwise the empirics can easily appear to be disjoint from theory. The laboriously carved field accounts can easily end up saying nothing new, annoying the reader as trivial and banal. As Ahrens and Dent (1998) constructively put it, '*the major analytical task at this point is, thus, to develop a theoretical appreciation of the field study patterns that will be valuable to the reader: one that extends the reader's prior theoretical knowledge, or leads to more complex appreciation of theory.*'[15]

As for 'what theory is not, *theorizing* is', Weick's (1995) view is instructive. Theory is a continuum rather than dichotomy, and theorising is the process of approximation, the road to what eventually become established as 'theories'. The process of theorising consists of abstracting and selecting factors that are deemed as explanatory (while omitting and discarding others are equally important steps), relating them to each other, explaining, and synthesizing. These activities spin out data (or 'rich accounts' in Ahrens and Dent, 1998), lists of variables, diagrams and hypotheses, each advancing closer to 'full-fledged theories.' This study attempts to summarise the empirics in tables, arranged according to a number of variables (that resulted from previous theories or emerged from the field), thus, represent approximations. The extent to which these represent theory is difficult to judge if theory is understood as a continuum.

DiMaggio's (1995) influential response to Weick (1995) helpfully distinguishes three types of theories. First, 'theory as covering laws' is concerned with explaining variance rather than regularities, and the determination of variables that best fit the data (statistically), with little regard for the how and why. By definition, such theory can only be the result of large sample studies. Field researchers must aim for two other types of theories. 'Theory as narrative' requires that hypotheses be accompanied by plausible accounts of how the actions

[15] Ahrens and Dent (1998), p. 30.

of humans could produce the associations predicted and observed. 'Theory as covering laws' and 'theory as narrative' are therefore complementary, allowing this conception to co-exist comfortably with Weick's understanding of theories constituting a continuum, residing in different (though advanced) stages of approximation. Finally, 'theory as enlightenment' suggests that theory can be complex and rich in paradox, clearing away conventional notions to make room for artful and exciting insights. Thus theory can result from exploring the boundaries of accepted or unquestioned theories, as well as from critically exploring new phenomena that turn out to have unanticipated consequences.

This study primarily aims to produce 'theory as narrative' by accounting for how actions produced the patterns observed (between firm characteristics, the micropolitics of control, sources of external legitimacy and the organisational significance and uses of risk management). Secondly, the theorizing process has resulted in 'theory as enlightenment' – in the form of conclusions and explanations that surprised both the researcher and the participants of the study. The 'paradox of getting the politics of risk management right' (Chapter 6) and the 'senior risk officer as the Eminence Gris' (Chapter 6) are for example two insights that were tested on the participants concerned. These interpretations had a surprise effect at the banks and got positive response from readers ('this is very interesting'; 'impressive'; 'you see things in a way we do not' were the responses received in e-mails and on the phone from participants who read drafts of the empirical chapters).

The process of pattern making, explaining and theorizing was far from being linear and systematic. As Ahrens and Dent (1998) note, '*field work is a constantly evolving dynamic between observation and pattern making*' and '*theorizing is the product of conscientious, self-critical analysis in which unsatisfactory theories have been discarded.*'[16]

A major challenge of the writing stage was the question of how to produce a '*credible and trustworthy story*' (Baxter and Chua, 1998). The writing strategy aimed for what Baxter and Chua call 'short stories' – the narration of a series of events.[17] The narrated events were clustered around analytical themes,

[16] Ahrens and Dent, 1998, p. 28 and 24, respectively

[17] Baxter and Chua distinguish four common 'genres' in fieldwork writing: field report (a depersonalized account with little use of quotes from informants); short stories (narrating a

such as the 'organizational significance' of risk management, the control of risk-return objectives, each giving rise to distinct chapters. Within the chapters the events were presented roughly in chronological order, however, there was a primary selection of events that were deemed to be key for telling the stories concerned.

The extensive use of verbatim quotes from the field is deemed necessary to give credibility to the study. Baxter and Chua (1998) argue that '*field research needs to resonate with the many sources of data and voices from the field. The reader needs to hear the other, not only the authorial voice.*'[18] However, one has to be careful not to treat verbatim quotes as self-evident.

Therein lies another challenge of the writing and interpretation stage. The researcher needs to distinguish informants' literal, unedited statements from the researcher's own opinion (Ahrens and Dent, 1998). As Ahrens and Dent (1998) elaborate: *'scenes and quotations generally serve as illustrations, rather than as evidence. [...] It is the story that makes those quotations and scenes significant to the reader.'*[19] But field research will not yield a unique story – it yields data that can be analysed in different ways. Therefore, Ahrens and Dent (1998) argue that the researcher needs to be open to different interpretations of the field material. This calls for sensitivity to '*multiple theoretical metaphors.*'[20] The danger of this, however, is 'theoretical tourism', and the possibility of the eventual fragmentation of the theoretical frame.

This study therefore (similarly to other field-based research projects) has to make a number of difficult trade-offs. Failing to cut the right balance can lead to a number of weaknesses. First, the opportunistic selection of a small number of cases limits any claims to generality. The studied banks are believed to be typical of large, international financial services organisations. However, they are atypical in the context of the banking sector as a whole, even in their own countries of origin. They stand out with their high profile, significant market share (in almost all business areas where they had ventured), and reputation of having 'leading edge' practices. In particular, they both appear to be 'advanced' adopters

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series of events with the extensive use of verbatim quotes from the field); short histories (of management accounting change); and autobiographies (that reflect on experience in the field).

[18] Baxter and Chua (1998), p. 82.

[19] Ahrens and Dent (1998), p. 32.

[20] Ahrens and Dent (1998), p. 32.

of risk management techniques as outlined by the regulators, thus having reached a stage of compliance that most banks can only aspire for (BIS, 2003b). Therefore the issue of *external validity* (Atkinson and Shaffir, 1998) arises – '*instead of speculating directly about the larger population*'[21], the ambition of the study is to use field research results to develop a theory (or to illuminate further existing ones).

Moreover, the story told is likely to be just one possible interpretation, raising the issue of *reliability.* Atkinson and Shaffir (1998) pose the question, '*how is it that field researchers sometimes offer different characterisations of the same or presumably similar institutions, organisations, or communities?*'[22] This criticism points to the importance of presenting data in sufficient depth so that links from data to theory can be traced. It also highlights the importance of distinguishing the researcher's own opinions from those of the informants (Ahrens and Dent, 1998). However, interview quotes (once deemed to be illustrative of the story) can be seen as very helpful in advancing the narrative. The high reliance on interviews was the result of the very binding confidentiality agreements that limited the use of internal documents (and external reports on the banks) in the narrative.

As people in organisations interpret problems differently, one has to cut a fine balance between representing a variety of voices yet distilling a story out of the cacophony. The dangers of doing this are multiple.

First, the researcher might pay partial attention to a particular informant or point of view. In the case of this study the level of seniority gave different levels of overview to the participants. Triangulating between the recollections of people with different backgrounds, motives and access to information was warranted, but the possibility of doing so was highly dependent on the actual access that was granted to the researcher. It has been noted that BWT gave more open access than Fraser Bank, resulting in a higher degree of richness in the BWT material.

The other danger of dealing with multiple voices is that contradictions, ambiguities and loose ends might remain (and indeed, remained) at the end of the interview stages. Some of these were later resolved (in

[21] Atkinson and Shaffir (1998), p. 62.
[22] Atkinson and Shaffir (1998), p. 62.

subsequent interviews), others just remained unsettled to the puzzlement (and frustration) of the researcher. These puzzles were helpful in giving rise to whole chapters (e.g. Chapter 5 originated from the puzzle of the mismatch between the practitioners' espoused theories and apparently in-use practices). However, their ultimate resolution (in the form of a story) relies, to a great extent, on the researcher's theoretical background, thus cannot be claimed to be unique.

Finally, there is always the danger that the constructed stories appear to be too tidy. There is a trade-off between one sleek version of a story and the fragmentation that occurs when complexities, ambiguities and loose ends are emphasised. It is only hoped that in this study the links between data presentation and explanations are not only sufficiently strong, but also sufficiently varied too. But overall, the stories presented here remain open to criticism for having underplayed some of the loose ends and complexities, out of the researcher's lack of further information or her effort to make sense and to reduce complexity.

CHAPTER 2

ENTERPRISE RISK MANAGEMENT IN ACTION – THE RELEVANCE OF ACCOUNTING RESEARCH

'If knowledge can create problems, it is not through ignorance that we can solve them.'
Isaac Asimov

Studying enterprise risk management in its organizational settings presents a number of challenges to the academic researcher. First, risk management has a variety of applications in different sectors: it is present in the running of nuclear power stations, oil companies, as well as banks and insurance companies. Depending on its area of application, risk management comes with different definitions, practices and calculative techniques. This study seeks to explore enterprise risk management practices in financial institutions; hence risk management will be understood here in the context of the financial services industry.

The diversity of research frameworks presents another challenge to students of risk management – the need to appreciate the contributions made from various angles, and possibly, to work on the interface of multiple disciplines. Over the last three decades a substantial sociological research agenda has been established that concerns itself with risk management both at the organizational level, in complex socio-technical systems, and at societal level. These studies have found important linkages between risk management and a number of disciplines.

Despite the contextual specifics of risk management, some common themes in risk research prevail and are significant. In particular, research into man-made disasters, the failures of complex socio-technical systems (Turner, 1976, Turner and Pidgeon, 1997) highlighted patterns of risk emergence that are widely observable across organizations, independently of their sector characteristics. Turner's seminal study established that at the root of risk failures

there are a number of commonly detectable organizational processes[23]. For this reason, there are good reasons for researchers to adopt an organizational perspective to the study of risk management (Short and Clarke, 1992).

There is also a rapidly expanding normative-technical treatment of the subject of risk management in the finance literature. In particular, two highly developed disciplines stand out: insurance and portfolio theory. The former produced methods of quantifying risk in monetary terms (Bernstein, 1996), while the latter highlights the calculable trade-offs between risk and reward (Crouhy et al., 2000). Actuarial science and portfolio theory make the subject of risk liable to financial management and control. Finance theory provides many of the techniques that underlie risk management in financial (and an increasing number of non-financial) organisations (Jorion, 1997). The practical applications of the financial theory of risk are numerous – insurers use it to determine premiums, bankers use it to differentiate between borrowers and to calculate capital adequacy, fund managers use it to determine asset allocation and project managers use it to gauge the risk aspect of investment decisions.

In response to the first challenge (the need to clarify and narrow one's research focus on a specific application of risk management) the researcher chose to study enterprise risk management in the financial services sector.

Taking on the second challenge of the multitude of disciplines that bear relevance on risk studies, a technical-normative literature of risk management in financial institutions can be identified, but it also needs to be complemented by others. It is suggested that yet another sphere of studies, the literature of management accounting and control, can usefully contribute to the study of enterprise risk management. Given that the suggested applications of ERM in

[23] Based on the analysis of three disaster case studies Turner brought together a number of organizational factors that might well provoke a disaster. He argues that in the context of large, complex sites organizational members recognise and plan for certain hazards, but will neglect others. Turner highlighted the role of rigid, culturally conditioned beliefs that tilt the accurate perception of the possibility of disaster and also affect decision making. Events going unnoticed or misunderstood because of erroneous assumptions create the set for a disaster in the waiting (risk incubation). A large array of possible information and communication difficulties compounds the problem of risk incubation, resulting in effective violations of precautions. These often pass unnoticed because of pressures of work, or a 'cultural lag' and a reluctance to fear the worst outcome, or simply because recognising them and taking action would call for the investment of time, money and energy which would be difficult to justify within the organization. Chronicles of recent man-made disasters such as the Challenger launch decision (Vaughan, 1997) and the Kursk submarine disaster (Moore, 2002) testify for the validity and timelessness of Turner's insights.

financial institutions belong to the realm of financial decision making and management control, it is somewhat puzzling that accounting researchers have so far given little attention to the subject. However, there is considerable scope for discussion on the connections between the literature of accounting and the subject of enterprise risk management. In particular, studies of accounting as a social and institutional phenomenon offer insights into the workings and impact of calculative techniques. These studies from the accounting literature have amassed a wide array of sociological and organizational perspectives. This literature can therefore offer a number of reference points that guide one in building a multi-disciplinary framework for the study of risk management.

This chapter is a literature review that aims to demarcate existing works in the accounting genre that can be brought to bear relevance on researching risk management in its organizational settings. The chapter points to three common areas of interest that characterise both accounting research (be it organizational or social) and the study of risk management in financial organizations.

The first common area of interest is the roles and organizational significance of calculative practices. Risk management in the financial services industry has developed as a calculative practice addressing the issue of capital adequacy and the allocation of capital to business units. Risk managers also aspire to be more involved in performance management, control and strategic discussions. Accounting practitioners have similar aspirations. Twenty years ago accounting was viewed mostly as a technical subject and little was known of '*the organizational processes (...) through which the technical achieves its potential*' (Hopwood, 1983, p.291). Recognising this, a number of important manifestos called for an organizational, rather than a singularly technical approach to accounting research (Burchell et al. 1980; Hopwood, 1983). The organizational view of accounting promised to illuminate the problematic aspects of calculative practices. By studying the roles that calculative practices play and the consequences (intended and unintended) they have, researchers investigated whether or not (and how) calculative practices achieve and maintain a position of organizational significance. These studies can be called upon in the course of exploring and scrutinising the roles and organizational significance of risk management.

The second area of common concern for researchers of accounting and risk management is the study of management control systems. Recent advances in corporate governance and bank regulation have given emphasis to the management control aspect of risk management. Risk management blueprints resemble the traditional managerial accounting control cycle of target setting, measurement, monitoring and corrective action. The origins of this control ideal can be traced back to cybernetics. Management accounting and control researchers have long been sceptical about the applicability and usefulness of the described traditional (cybernetic) control ideal. There is an interest in more complex control practices, which do not adhere to the cybernetic control pattern. Otley (1994) for example proposed the dichotomy of traditional (cybernetic) and complex controls, highlighting a blind spot of the latter in the management accounting literature. Complex controls still await theorising and empirical scrutiny.

Risk management differs from other traditional control systems in that its orientation is containing risk, rather than maximising return. Indeed, the two are often conflicting objectives in financial institutions. If organizational control is to encompass both risk control and profit control, it might become a matter of controlling conflicting objectives. Thus introducing risk management systems may add complexity to the existing control landscape of banks. Studying risk management from a management control theory perspective can potentially enhance our understanding of what might be more complex organizational control practices.

Thirdly, a common concern to accounting and risk management research is the study of calculative practices as social phenomena. Hopwood (1983) argued that accounting '*can never be seen in purely organizational terms.*'[24] The '*external origins of internal accounts*'[25] have generated much interest in the last two decades (Hopwood and Miller, 1994). A similar interest resulted in a couple of accounts of enterprise risk management that trace its roots to regulatory and corporate governance trends, outside the host organizations (Power, 2004; Hunt 2004). With various stakeholder agendas surrounding it, risk management practices are not isolated local phenomena - their origins and impact are to be

[24] Hopwood (1983), p.302.
[25] Hopwood (1983), p. 301.

traced outside the organizational boundaries. Amidst provocative claims about the 'institutionalisation' (Hunt, 2004) of enterprise risk management and its apparent status as a 'world model' (Power, 2004) risk management must be understood as much a social as an organizational phenomenon. However, the external origins of risk management practices are still largely unexplored. Among others, contingency research and new institutionalist studies have addressed the external origins of accounting. The insights these studies offer help us further understand how the organizational significance of enterprise risk management is (or is not as the case may be) obtained.

In sum, the proposed theoretical framework brings together three literature strands, as summarised in Table 1.

Perspectives	***Technical***	***Organizational***	***Social***
Focus on	The tools and techniques of calculative practices	The roles and organizational significance of calculative practices	The external origins of internal accounts; The appropriateness of calculative practices
Literatures	Normative practitioner texts on ERM	Organizationally grounded studies of accounting exploring * the roles of accounting in organizations and * the management control theory aspects of accounting	Contingency theory; New institutionalism

Table 1. Theoretical framework

First, a burgeoning normative and practitioner literature shows us the technical aspects of risk management as a calculative practice. There exists a significant body of literature that could be labelled as the 'consulting research genre', as defined by Lukka and Granlund (2002). Its typical features are a strong concern with practical problems and applications, supportive empirical evidence of the case study-type (descriptions of 'best practices'), and a *'prescriptive and propagating style overall.'*[26] Authors of this genre are not necessarily consultants *per se*, they can be academics, regulatory guideline writers and practitioners in non-consulting organisations. It is their intention (rather than professional identity) that classifies them as authors in this genre. They sell ideas (concerning

[26] Lukka and Granlund (2002), p. 168.

risk management in this case) to the readers. The source of the ideas is often a risk management implementation process that the author had participated in.

Second, organizationally grounded studies of accounting shed light on the workings of accounting and other calculative practices. The current Thesis aims to contribute to this literature, through the examination of risk management practices. Lukka and Granlund (2002) classify this genre as 'basic research.' The intention is a rigorous analysis of the nature, functioning, effects and diffusion of calculative practices. It is a methodologically diverse corpus, and our focus will be on case study-based and conceptual studies, given that the Thesis itself will combine these approaches.[27]

Third, social studies of accounting illuminate the origins of calculative practices. Based on Lukka and Granlund (2002), such studies could be classified to be both 'basic research' (e.g. contingency studies that explicate the link between external conceptual factors and internal practices), as well as a third research genre – 'critical research.' As critical studies create an explicit link between accounting and the promotion of social change (Lukka and Granlund, 2002), sociological theories play a key role in this genre. The Thesis draws on institutional organizational theory in its attempts at suggesting links between risk management and wider institutional concerns. However, it is important to emphasise that the primary focus of the Thesis is to contribute to 'basic research' in the management control area, specifically on risk management. The Thesis does not provide a rigorous analysis of the link between risk management and (the promotion of) social change. It merely suggests tentative links, given the apparent influence of external regulatory, corporate governance and performance pressures on the risk management practices observed. These tentative links will be cast in the language of institutional organisational theory, hence a review of how institutional studies explicate such links is warranted.

The chapter is organised as follows. Firstly, an introduction to the aspirations, tools and techniques of enterprise risk management is offered. From a technical perspective, based on regulatory and normative practitioner texts (the

[27] The typical objective of *conceptual research* is to clarify the concepts of a new control (or calculative) practice and to map structural similarities and differences with regard to practices that have already prevailed. *Case studies* describe why and how companies have experimented with, or adopted the researched practice. Based on interview methods and participant observations, these studies aim to gain in-depth views on the practices of single (or a small number of) firms (Lukka and Granlund, 2002).

'genre of consulting research' in risk management), the chapter sketches out four themes that characterise the genre. These themes will inform the analysis of the case studies of ERM in action.

Secondly, the chapter attempts to review a body of accounting research that helps us conceptualise the 'organizational significance' of calculative practices. Drawing on organisationally grounded studies of management accounting, the chapter will review what we have learned from this subset of 'basic research' (Lukka and Granlund, 2002) about the role, uses and impact of calculative practices in organizations. This will be the basis of a theoretical framework that allows the study to investigate the organizational roles and uses of ERM in action.

Thirdly, the offering of the management control perspective will be outlined. Consisting mainly of conceptual studies, this research body gives us a looking glass through which risk management, as we know it from normative texts, will appear to be a traditional cybernetic control system, with a potential to transform the internal control landscape of organizations. Whether it does, and how, will be scrutinised in the study later.

Finally, the chapter broadens the focus to consider 'the external origins' of management control systems. Following a brief overview of contingency and new institutionalist approaches, the chapter postulates that the key insights of both are relevant to the study. Accordingly, it is argued that the rise and fall of control systems depend not only upon their fit with the demands of the organization and the environment that surround them, but also upon their institutional appropriateness and their capability of legitimising the organization.

2.1. MAKING SENSE OF ENTERPRISE RISK MANAGEMENT – FOUR THEMES

According to the Treadway Commission's recent authoritative definition, ERM is *'... a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risks to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.'*[28]

Still, enterprise risk management remains a rather elusive and under-specified concept. Its broad definition is an umbrella for diverse risk management techniques and arrangements, so long as they create the image of consistent and comprehensive application. Normative texts are telling of the diverse practices that all seem to be bundled under the fashionable heading of enterprise risk management (henceforth also ERM). For example, Lam (2000) is illustrative – his list of 'ERM components' range from risk analytics and risk appetite setting through risk pricing and risk transfer to the management of stakeholder perceptions (be they regulatory, analyst or rating agency perceptions). Just like Lam (2000), ERM advocates typically outline a set of risk management tasks and envision a 'framework' for the treatment of these under the auspices of an appointed senior risk officer. This requires the prioritisation and the ordering of the various elements into a control cycle with recognisable structural and personnel arrangements.

Having studied a number of normative and technical texts, it appears that four themes have emerged in the literature that help us make sense of enterprise risk management: 1. risk quantification, 2. risk aggregation, 3. risk-based performance measurement, 4. the management of non-quantifiable risks. To these themes we turn next.

[28] COSO (2003), p.6.

2.1.1. THEME I: RISK QUANTIFICATION

Normative texts assert that over the past decade there have been significant advances in the risk measurement capabilities of financial institutions (Garside & Nakada, 1999; Marrison, 2002). Indeed, one recognisable strand in the development of risk management is the subjecting of more and more types of risk to quantification, measurement and control. In this vein, a number of specific techniques have evolved to measure market risk, credit risk and quantifiable (i.e. recurring) operational risks. Most textbooks focus on describing these techniques (see for example Marrison, 2002; Alexander, 2001).

Risk quantification gives rise to what the most common perception of risk management in financial institutions is: the measurement and control of market, credit and operational risks in 'silos', across the institution.[29] The techniques used in risk quantification have influenced the current reforms to the Basel Accord (Basel II) and local supervisory regimes. This is because financial regulatory bodies increasingly require banks to hold capital reserves corresponding to their measured risk profile.

At the core of risk measurement activities lies the collection of data to construct loss distributions for each risk type. The reason why risk managers aim for establishing a loss distribution for each risk category is that such representations of historic (in some applications: simulated) losses allow estimations to be made on the 'tail of these distributions' – in other words, the consideration of 'unanticipated loss' events. The amount of loss that would be suffered under such dire conditions is called Value-at-Risk. It represents the level of 'maximum probable loss' against which a bank wishes to cushion by setting aside adequate capital.

The confidence level, according to which Value-at-Risk can be determined, could be arbitrary. In case of one-day loss distributions, a 95% VaR

[29] The following commonly quoted definitions apply for the main risk categories (Drzik et al., 2004). *Market risk* arises from changes in the value of financial assets and liabilities (c.f. trading book) due to volatility in market prices (interest rates, currencies, equities, commodities). *Credit risk* arises from changes in the value of assets (c.f. banking book) and off-balance sheet exposures due to volatility in default rates or credit qualities. Bancassurance firms and insurers add the additional category of *insurance risk*, which arises from volatility of insurance claims around the expected level of claims. *Operational risk* has long been defined as a residual category, one that captures all of the risks not covered in the first three categories. The regulatory definition of operational risk is more specific (BIS, 2003a). For a discussion for the 'invention' of operational risk, see Power (2003b).

is a loss that is expected to be exceeded only in 5 out of every hundred trading days; a 99.9% VaR is a loss that is expected to be exceeded only once in thousand trading days (in effect, four years). Further VaR analyses result from changing the horizon of the loss data – in general, a long data stream of daily returns is rarely available, not even in the most liquid market risk areas. In truth, frequent loss data collection would require banks to invest heavily in information storing and processing capabilities, which is not affordable to all. Experts tend to agree that it is the sheer lack of loss data that poses the greatest challenge for statistics-based risk quantification. Due to problems with liquidity and data availability, credit and operational losses are often measured over longer horizons (if at all).

Thus a wide range of VaR analyses can be conducted, resulting in numbers that are not directly comparable – due to the wide range of assumptions that underlie statistics-based risk estimates. Even the regulators recommend different confidence levels for different risk types. For example, in 1996, the BIS set the requirement for calculating market risk VaR based on ten-day-losses at a 95% confidence level. Thus the market risk minimum capital requirement should cover a ten-day loss amount that is expected to be exceeded only five times in thousand trading days (four years). Based on further regulatory standards, risk managers may assess not only market, but credit and operational risk as well, and give recommendations for the corresponding minimum regulatory capital amount for each risk category.[30]

2.1.2. THEME II: RISK AGGREGATION

A recent and important addition to the strand of risk–quantification is the development of a common denominator measure for market, credit and operational risks, enabling firms to aggregate their quantifiable risks into a total risk estimate.

The emerging common denominator of quantifiable risks is called Economic Capital. Similarly to Value-at-Risk, it is also a proxy for the amount of loss a bank could suffer under fairly dire circumstances. While VaR can be

[30] Value-at-Risk is currently prescribed by the BIS to be used in the determination of market risk capital only. The evolving Basel II framework will recognise credit risk VaR and operational risk VaR as a basis for capital adequacy calculations in case of banks with 'advanced' measurement capabilities. Other banks will have to use a set of scale indicators and multipliers (as opposed to the statistics-based VaR method) for the determination of their minimum capital levels in the risk silos.

restated according to different economic scenarios (different confidence levels), Economic Capital is defined with only one scenario in mind. This scenario is related to the bank's external credit rating. Economic Capital is the measure of the maximum probable loss that the bank must appear to be able to withstand in order to justify its target credit rating. Thus Economic Capital is not only a measure of a possible (though highly unlikely) loss, but it also contains an imperative and a promise. The imperative is the expectation of rating agencies of a minimum capital amount that a bank needs to set aside, over and above its regulatory minimum, in order to justify its target credit rating. The promise is that by reserving capital in this manner, a bank can live up to expectations about its capital level coming from both the regulators and the rating agencies.

Given that rating agency opinions concern different banks to different extent, Economic Capital (or its promise) appeals primarily to banks that wish to maintain a high credit rating. For example, firms rated AA by S&P have historically defaulted with a 0.03% probability over a one-year horizon. If a bank aims for a AA credit rating, then the corresponding capital level (Economic Capital) is the amount required to keep the firm solvent over a one-year period with 99.97% confidence (Garside & Nakada, 1999). Given the higher confidence level applied, the 'economic' capital amount is to be higher than the regulatory minimum.

Economic Capital, as a measurement tool is, in effect, a restatement of value-at-risk amounts using a set of parameters that corresponds to a solvency standard (rather than to the regulatory rules). It can be calculated on market, credit and (measurable) operational risks, with the help of judgment where data is not sufficient or cannot be simulated (especially in case of operational risk).

Furthermore, Economic Capital is recognised by the new Basel II framework as a promising tool for financial institutions to allocate capital internally, across the business units. This is because the ability of the Economic Capital technique to aggregate risk (measured in risk silos) in a given subsidiary. While internal capital allocation is a regulatory requirement, doing so via Economic Capital models is not. The Basel Committee sets its use out merely as an option for '*the most sophisticated banks*' (BIS, 2003a). According to the new capital adequacy accord, at a minimum, banks are required to have a credible and clearly defined capital allocation methodology. For the most sophisticated banks,

this is likely to take the form of an internal economic capital allocation model, defining an institution to be adequately capitalised based on a reasonable soundness definition, such as target insolvency probability.

Thus Economic Capital, as the common denominator for the measurable risk types, creates a consistent and comprehensive framework, or at least the appearance of it, in which risks can be compared and aggregated, enterprise-wide. Further, risk limits can be set according to the solvency standards (by second-guessing rating agency expectations), expressed in the form of Economic Capital. Thus Economic Capital, if applied, can become the new language of risk limit setting (risk control) too.

2.1.3. THEME III: RISK-BASED PERFORMANCE MANAGEMENT

Risk quantification and risk aggregation are both motivated by capital adequacy concerns. While Value-at-Risk metrics measure risk with reference to varying standards (e.g. corresponding to the minimum regulatory requirement or any other decision-relevant scenarios), Economic Capital is the common denominator risk measure with reference to a single solvency standard set by an external rating agency.

Economic Capital, in a given bank, is applied with an agreed set of assumptions and confidence level that requires a particular way of looking at the loss distributions in the different risk silos. Agreeing upon these assumptions and confidence levels is unlikely to be purely a technical matter. There are at least two reasons for this. First, as Economic Capital corresponds to the target credit rating of the bank, those who determine it must understand (if not second-guess) the impact of capital on the bank's credit rating. However, historic analyses of bank capital levels and credit ratings show enough inconsistency and anomaly to reveal that considerable amount of other factors (and judgement) tilt this relationship.[31] Therefore, setting Economic Capital is likely to require judgment as well as analysis. Secondly, Economic Capital can be calculated not only for the whole bank, but for its business units as well. As indicated in the previous section, the BIS already advocates the use of this methodology for internal capital allocations.

[31] This result was showed to me at Fraser Bank. It comes from proprietary research conducted at the bank (possibly by consultants). A similar analysis (with the same conclusion) was produced at BWT too.

Economic Capital allocations are supposed to reflect the risk profile of business units, requiring riskier ventures to carry more capital, and leaving less risky ventures relatively capital-light.

Recent works in the risk management literature advocate the idea of using these risk-based internal capital allocations for performance measurement and control. The possibility of introducing risk-based performance measurement in banks has emerged as a result of developments in risk quantification and risk aggregation. It also appears to coincide with the rise of the shareholder value concept in corporate rhetoric (Arnold & Davies, 2000; Hunt, 2003).

Although the concept of shareholder value (or as it was previously referred to, residual income) dates back to the beginning of the 20th century, its wide-spread incorporation into management thinking has only recently gained momentum. This is largely to do with the renewed efforts of business schools and consulting firms that are advocating shareholder value and Value Based Management (the revival of the residual income concept is often associated with Stern et al.,1995). The principle is simple enough: firms create shareholder value by earning returns in excess of the cost of capital.

Against the backdrop of the rise of the shareholder value imperative, it is not surprising that a similar shift took place in the stakeholder concerns surrounding financial institutions. Here too, the emphasis has moved from growth to shareholder value creation. As Molyneux (2000) observes, '*The strategic priority in banking has shifted away from growth and size alone towards a greater emphasis on profitability, performance and value creation.*'[32] The application of VBM in large financial institutions is advocated as virtually limitless: it may entail implementation at the level of business units, products and even transactions (Hall, 2002; Marrison, 2002; Jameson, 2001; Haubenstock & Morisano, 2000).

There is now a burgeoning practitioner literature also suggesting that value-based management has taken its own route in banking. Risk aggregation has led to new definitions of capital charges that differ from those used in the original value-based management literature (Stern et al., 1995; Arnold & Davies, 2000). The point of departure in this new quest for 'value', banking style, is the

[32] Molyneux (2000), p.218.

calculation of capital charges based on the risk profile of business units (or products / transactions), expressed either as the minimum regulatory capital, or, increasingly, Economic Capital allocations.

Theoretically, there are two broad approaches to risk-based performance measurement in banks. The *ratio approach* relates risk-adjusted profit to economic (risk) capital. The second, *shareholder value added* approach calculates the residual income left after subtracting a charge on economic (risk) capital from profit.

Pushing these performance measurements down to business units, products and even transactions gave rise to ambitious claims as to what risk management can do in order to enhance shareholder value. Risk pricing, risk transfer, portfolio risk management (as in Lam, 2000) are the most frequently advocated possibilities in the literature.

The joint consideration of risk and profitability in a common framework is an application of value based management that is specific to the financial services sector. At the same time, it represents an application of risk management that is equally specific.

2.1.4. THEME IV: MANAGING NON-QUANTIFIABLE RISKS

We have seen how the ascent of the shareholder value concept, coupled with developments in the quantification and aggregation of risk in financial institutions, paved the way for risk-based performance measurement. This section focuses on the impact of another powerful notion, also heralded by corporate governance advocates, that of risk-based internal control. In the wake of this, a new theme has emerged in the risk management literature: the management of non-quantifiable risks.

The reports from the Treadway Commission (COSO, 2004) and the Turnbull Committee (ICAEW, 1999), which are important milestones of Anglo-Saxon corporate governance, advocate ERM as a framework for capturing risks that are material from the point of view of the achievement of the strategic objectives of the enterprise. Apart from the measurable risk silos, this conception of ERM encompasses risks that cannot be readily quantified or aggregated. These non-quantifiable risks include, for example, the risks of strategic failure, environmental risks, reputational risks and operational risks that materialise only

rarely. Recent developments in corporate governance have emphasized the importance of monitoring and managing these risks.

As a result, there have been calls for the risk management framework to be gradually expanded to incorporate non-quantifiable risks in addition to those that can be quantified (Lam, 2000; COSO, 2004). However, by attempting to render non-quantifiable risks to control, risk managers have to venture outside the boundaries of risk quantification, risk aggregation, regulatory capital determination and internal capital allocation.

However, it is an open question if by doing so risk managers would become an influential voice in financial institutions. Currently we have no empirical evidence if risk management practices actually offer a 'strategic view' by reaching beyond the realm of measurable risks at all.

2.1.5. SUMMARY

In sum, this section has outlined four topical themes in the ERM literature. Firstly, *risk quantification* is relevant due to the imminent changes in the international bank regulatory framework that will relate the notion of capital adequacy to the quantified risk profile of the banks. There are considerable technical and data challenges that make the subject fully accessible only to a select few. The statistical nature of risk quantification gives it a glow of analytical mystique. However, risk quantification is no longer the sole concern of risk management textbooks and commentators. With the invention of the Economic Capital concept, risk quantification was followed by the theme of *risk aggregation*. Economic Capital can be defined in a firm so that it passes for a common denominator for statistical risk measurements. Economic Capital can therefore be aggregated (at least in theory) at the level of the whole institution, or at lower levels, in individual subsidiaries. Despite the technical challenges risk aggregation poses, Economic Capital has a status of 'best practice' with considerable institutional support behind it. It also emerged at the time of the rise of the shareholder value tide, resulting in a third powerful theme in the literature: *risk-based performance measurement.* The first three themes concern risks that are measurable. However, corporate governance guidance-setters (such as the Treadway Commission and the Turnbull Committee) emphasise the need to manage all material risks that can prevent the achievement of entity objectives, be

those measurable risks or not. Accordingly, a fourth theme widens the remit of risk management to encompass *the management of non-quantifiable risks* as well, endorsing ERM with the status of a strategic management control system.

Taken together, the various normative elements make ERM resemble an assembly of practices, which is a noted characteristic of other management accounting innovations, such as Activity Analysis (Gosselin, 1997) and the Balanced Scorecard (Speckbacher et al., 2003). From this perspective, although ERM is unique in the particularities of its technology and its focus, its scope and development might follow patterns common to other control innovations. Chapter 6 will conceptually and empirically investigate the idea of ERM as an assembly of normative practices.

The four themes drawn from the literature suggest many possibilities for the empirical manifestations of risk management in action. Will it be a highly quantitative practice, shrouded in analytical mystique, the playground of a select few? Or will it become part of the strategic control practice of the organisation and a concern to all, with risk calculations feeding routinely into performance appraisals? In brief, in what way will ERM impact organizational life (if at all)? The next two sections explore what accounting research has to offer in order to conceptualise the organisational significance and impact of ERM.

2.2. THE ORGANISATIONAL SIGNIFICANCE OF CALCULATIVE PRACTICES

In 1983 Hopwood posed the question: '*Just how (...) does accounting achieve and maintain a position of organizational significance?*'[33] In order to answer the same question about enterprise risk management, we need to conceptualise 'organisational significance'. Accounting researchers have identified a number of facets to organizational significance.

Accounting practices are supposed to reflect the economic reality of the organization in which they are used. However, researchers have argued time and again that calculative practices are not merely reflective, but also constitutive of economic life. For example, Hopwood (1983) stresses that accounting '*has the power to shape and influence organizational life on its own accord. (...) Whilst in part reflecting many another parameters of organizational life, accounting also has played a more active role in constructing the organizational world in which it is now embedded, shaping views of both the constraints on organized action and the ends it seeks to serve.*'[34] That is, accounting creates particular visibilities to certain issues (while not for others), directs attention, and influences organizational actors and actions. As Miller (1994) put it: '*The calculative devices of accountancy have shaped and formed possibilities for action in many organizations.*'[35] Thus calculative practices derive organizational significance not only from mirroring economic activities, but also from being constitutive of them.

Calculative practices have been argued to be constitutive of various aspects of organizational life: 1. goal setting and decision making, 2. organizational action, change and adaptation, 3. strategy making and control, and 4. organizational power.

2.2.1 GOAL SETTING AND DECISION MAKING

Organizational theory has produced two very different perspectives on action: the *deliberate,* otherwise also called *rational or model-based* view and a contrasting alternative, the *emergent, partially-irrational or process-based*

[33] Hopwood (1983), p. 291.
[34] Hopwood (1983), p. 301.
[35] Miller (1994), p. 2.

perspective (terminology from Mintzberg, 1989; Dent, 1986; Boland, 1979, respectively). Similarly, depending on which perspective on action is applicable, one can demarcate two approaches to goal setting and decision making: deliberate and emergent.

The first school of thought expresses a belief in the rationality of organizational actors and their ability to analyse information, choose a desirable objective (or a set of consistent objectives) and to implement adequate actions. Goal setting, the formulation of organizational goals, is thus viewed as a rational process, and goals arise out of deliberation and careful analysis. It is a hierarchical process, starting with a statement of the *goals of the organization*, escalating down into defining lower level *goals for the organization* (Thompson, 1967). This deliberate (rational) approach to goal setting is akin to the formulation of 'deliberate strategies' (Mintzberg, 1989). Similarly, this perspective on action gave rise to the traditional rational models of decision making. These describe a routine, by which information is collected, analysed, alternatives are outlined and evaluated, and finally one alternative is selected. The linear decision making process assumes that adequate information systems can be engineered to fulfil its information need (Kimberley, 1984).

The second approach is the result of many theories that critique the rational school and claim that in many organizational settings action, goal setting, strategy formulation and decision making simply do not fit the rational model. Individuals often lack the information processing abilities that are required for fully rational action –rationality is bounded (Cyert and March, 1963). Preferences, opportunities and constraints may be held to be continually redefined through experience – rationality is fluid (Dent, 1987). Goals may not be pre-ordained, on the contrary: understandings of purpose can be the result of action, not the source of it (Weick, 1979). Or as March (1976) suggests: '*Human choice behaviour is at least as much a process for discovering goals as for acting on them.*'[36] In these settings organizations may engage in conflicting actions, and decisions reached in one part of the organization may become constraints for another part. Solutions may compete for finding problems to be attached to (March and Olsen, 1976) – the organization may resemble a 'garbage can' of competing interests, goals and

[36] March (1976), p. 72.

actions. The goals discovered through action are thus not a result of a deliberate, hierarchical process, but rather stem from lateral interactions, as organizational actors interact with each other and their environment, and gradually make sense of their experience. Goals can thus emerge, akin to Mintzberg's 'emergent strategies' (Mintzberg, 1989). Hence decision making in organizations does not necessarily fit the linear process model (Mintzberg et al. 1976). Dent (1990) gives a comprehensive overview of organizationally grounded research that characterizes decision making '*as a messy, disorderly, disjointed activity around which multiple units and sub-groups with often conflicting interests contend.*'[37]

Accounting theory has embraced both the rational and the process-based perspectives on decision making and argues that accounting can play an active part in (and be constitutive of) both. The dichotomy was expanded by the inclusion of Thompson & Tuden (1959)'s model of organizational decision making (Figure 1). Based on this model, Burchell et al. (1980) in a landmark paper postulated four ways in which accounting can be constitutive of organizational decision making. This was a very influential conceptualisation of the roles that accounting (and calculative practices) might plausibly play in organizational settings.

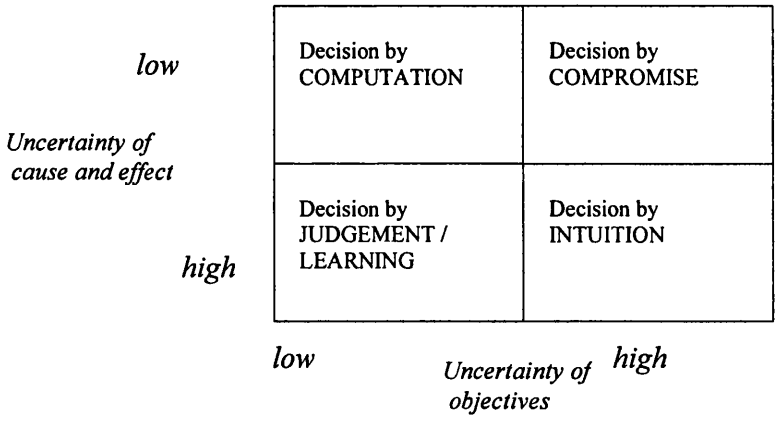

Figure 1: Styles of decision making
Source: Burchell et al. (1980)

[37] Dent (1990), p. 8

The presumption of the model is that rational decision making (akin to deliberate goal formulation) requires low levels of the uncertainties that surround the decision in question. In particular, the decision maker faces two types of uncertainty. First, there is uncertainty (disagreement) over the objectives for organizational action. Second, there is uncertainty over the patterns of causation that determine the consequences of action. The latter is briefly referred to as the uncertainty of cause and effect. In the presence of low uncertainty of both the objectives and the causes and effects of action, decisions can be assumed to be made by deploying a calculative or analytical practice – by *computation*. Based on differing levels of uncertainty over objectives and cause and effect, the model distinguishes three other styles of decision making: First by *judgement*– when objectives are clear but the effects of the action are not, therefore computations are tempered with judgement. Burchell et al. (1980) assume that decision makers turn the information systems at their disposal into *'learning machines'* in order to inform judgement. Secondly, decisions can be made by *compromise* – this is likely when objectives are contested and different interest groups and coalitions in the organization further different goals and claim knowledge of the consequences of the actions they propose. They use the available information systems as *'ammunition machines'* - to support their agendas, but selectively. Finally, decisions can be arrived at by *intuition* – when uncertainties are looming so high that the decision maker resorts to gut feel. Burchell et al. (1980) argue that under these conditions decision makers might use information systems to create a justification for their intuition once the decision has been made, thereby *rationalising* the choice of action that follows.

While decision making by computation is akin to the rational decision making, the other decision making modes allow rationality to be tampered with judgement or intuition, and even be compromised by organizational politics. Burchell et al. (1980) offered a refinement to the rational vs. processual dichotomy that indeed left a lasting mark on management accounting research. Ezzamel and Bourn (1990) for example applied the model to frame their study of the roles of accounting information systems in an organization experiencing financial crisis. More recently, Abernethy and Brownell (1999) investigated how accounting is used as a 'learning machine' in the formulation and implementation of strategic change.

This study will call on Burchell et al. (1980) to frame the discussion of the roles of enterprise risk management. In the case studies we shall meet risk people who make various claims to handle risk by computation. Indeed, the practitioner literature suggests that developments in risk quantification allow risk people to measure risks while the Economic Capital concept promises a common denominator for the aggregation of risks. However, the case analysis presented in chapters to follow will find that many organizational actors consider risk to belong to the realms of inspiration, lobbying or learning. Chapter 3 shows how internal capital allocations lead risk people onto a politically dangerous terrain where they can get mired by the micropolitics of decision making by lobbying. Further, with senior risk officers claiming access to non-quantifiable risk issues that clearly lie outside the scope of computational decision making, even risk people are divided in their reliance on, and use of, quantified risk methodologies (Chapter 6).

Burchell et al. (1980) will also inform Chapter 5. The model demonstrates circumstances under which the traditional notion of decision making (by computation) breaks down. Similarly, Chapter 5 will theorise about conditions under which the traditional cybernetic ideal of management control breaks down, and more complex control practices are warranted.

Another implication of Burchell et al. (1980) will be relevant to the case study analysis. Although in organisational settings we may well find decisions being tampered with politics, judgment, and intuition, and risk control being complex, the ideals of (what amounts to) computation and cybernetic control might still have a hold over practitioners. This is because practitioner and regulatory texts suppose risk decisions (as well as many other accounting decisions) to be made by calculation, and risk control (as well as management accounting) to follow the cybernetic ideal.

2.2.2. ORGANIZATIONAL ACTION, CHANGE AND ADAPTATION

Apart from influencing decision making, accounting calculations have been shown to be constitutive of organizational action, change and adaptation. Swieringa and Weick (1987) argued for example that accounting techniques are powerful because they can initiate and sustain forceful action. Facilitating

organizational change and adaptation is an important facet of the organizational significance of calculative practices.

The focus on the action-generating rather than decision-making roles of accounting gave rise to an interest among accounting researchers in the design of information systems. Information system design was seen as significant, because it affects the ability of organizations to adapt to environmental changes.

One line of thought is expressed by Brunsson (1982). Information systems that filter away uncertainty and inconsistency are considered to be able to motivate people, secure commitments and ultimately, facilitate action. A similar argument was previously put forward by Cyert and March (1963) who noted that accounting and other control systems absorb uncertainty through standard operating procedures permitting work to go on in the face of ambiguity. Dent (1986) adds that such systems '*typically focus on relatively small data sets, are integrated and have minimal redundancy.*'[38]

A different line of thought about the role of information systems was originated by Hedberg and Jönsson (1978). They found it alarming that rational design efforts might have created accounting information systems that tend to evoke a sense of security by filtering away significant amounts of uncertainty and change signals. They argued that accounting systems tend to stabilize organizations by establishing standardized responses to problems. In stable environments such information systems might conserve mental energy and make the behaviour of organizations more consistent over time. However, in changing environments, when uncertainty rises, these systems may cause simplistic diagnoses and organizational inertia that threaten the survival of the firm. Organizations in changing environments, the argument went, need information systems that destabilize. Information systems that pick up a variety of evaluations of the status quo, doubt existing beliefs and generate questions were thought to have the potential to shatter organizational inertia. As for their presumed design characteristics, they '*embody competing data sets, are less integrated and exhibit extensive redundancy.*'[39]

Thus the debate about information system design resulted in two additional viewpoints on the organizational significance of calculative practices. There is an

[38] Dent (1986), p. 151
[39] Dent (1986), p. 151-152

argument that information systems can decrease uncertainty and enable day-to-day organizational action, but potentially can impede long term organizational change and adaptation. The other argument is that information systems can increase uncertainty and facilitate organizational adaptation, possibly by means of creating unsettling devil's advocate systems (Janis, 1982)[40].

Following this theoretical debate, a number of field-based studies have explored the role of accounting in organizational action and change. Analysing three case studies, Hopwood (1987) highlights '*the particular visibilities created by accounting systems and the means by which they (...) shifted perceptions of organizational functioning, mediated the recognition of problems and the options available for their resolution, and infused the patterns of language, meaning and significance within the organization.*'[41] The field studies suggest that the constitutive role of accounting systems is rooted in their ability to '*give rise to an influential language*'[42] which can change the way organizational participants see and perceive their economic reality. Similarly, Dent (1991) highlighted the significance of language creation in the emergence of a new organizational culture in a post-privatisation railway company, a culture based on accounting rather than engineering. Ahrens (1997) further explored the constitutive role of 'accounting talk' in contrasting the management accounting practices of British and German brewers.

These studies suggest that the organizational significance of calculative practices is rooted in their ability to create a language in which organizational participants perceive and think about their economic reality. Powerful calculative languages frame debates and decision making, and can facilitate or impede organizational change.

An important milestone of the organizational significance of risk management is therefore the nature and use of its language. Perhaps risk communications can reduce perceived uncertainty when organisational action

[40] The debate is not entirely polarised around these two viewpoints. Hedberg and Jonsson (1978) arrive at the middle-ground between the two. They propose that by encompassing the design characteristics of both uncertainty decreasing and uncertainty increasing systems, one could design 'semi-confusing information systems' that would allow organisations to switch between the two major behaviour modes that are necessary for organisational survival: stabilization (maintenance) and change (adaptation).

[41] Hopwood (1987), p. 228.

[42] Ibid. p.229.

requires it. At other times, they might increase perceived uncertainty fostering discussions and debate and ultimately change. Indeed, the normative literature asserts that it is in the very nature of risk management that it raises uncertainty by making risk visible to organizational actors. Subsequently, by quantifying and aggregating, risk people can order and prioritise risks, making them appear actionable and controllable.

The case study analysis will show actors who intend to mobilise ERM in its uncertainty increasing role, by playing the devil's advocate, in order to curtail risk-taking action when the tide of risk appears to turn back on the organization. Chapters 5 and 6 will also find another use of risk management. It is to reduce the uncertainty surrounding the strategy of individual business units into measurable risk capital need. By doing so risk people and their allies can advance risk-based performance measures, which may facilitate decision making and organizational action. Either way, the case analysis will emphasise the role of a formal language that is specific to risk people and gives them an independent voice.

2.2.3. STRATEGY MAKING AND CONTROL

Similarly to the understanding of organizational action and goal setting, there are (at least) two popular perspectives on strategy making in the literature. The deliberate strategy perspective draws a line between strategy formulation and implementation. Here accounting practices derive organizational significance from their presumed ability to guide strategic control, the implementation of strategic objectives (Anthony, 1965). The emergent strategy perspective (Mintzberg, 1989) refuses to draw a distinctive line between strategy formulation and implementation, but still maintains that calculative practices are significant. They can be constitutive of the strategy making process (Simons, 1990, 1991). The field studies reviewed in this section encompass both deliberate and emergent perspectives and show how calculative practices can be constitutive of strategy making and control.

Burgelman's field study of the internal corporate venturing process in a diversified major firm (Burgelman, 1983, 1985) found that the strategy-making process encompassed two fundamentally different processes. Apart from a more familiar top-management-driven planning process, the study revealed a second process, which was driven by autonomous strategic activities at the operational

and middle managerial levels of the organisation. Burgelman argues that strategy making may become a process overlaid on the entire organisation encompassing both top-down and bottom-up initiatives. If middle-level managers succeed in conceptualizing the strategic implications of entrepreneurial activity at the operational level and top management gives its consent, then operational-level initiatives may blossom into new corporate strategies. This largely depends on the capacity of middle-level managers to conceptualize the strategic implications of operational-level assessments. Thus the information systems and the calculative practices deployed at grass-roots level are significant. By selecting and presenting relevant information in a language top management listens to and understands, calculative practices may become constitutive of the emergence of new strategies.

Simons (1990, 1991) further argues that accounting and other control systems (also based on calculative practices) may be designed and used with a dual objective: first, to help the implementation of a particular strategy, and second, to foster and (to some extent) control the emergence of new, grass-roots strategies. The evidence from his study in the US health care products industry shows how information systems can be used in different ways. Those that are used 'interactively' focus on key strategic uncertainties and get personal attention from top management. They are an integral part of the management control process and shape the organisational agenda. Interactively used calculative practices lie at the heart of strategic control and are constitutive of strategy formulation (via emergence from grass-root initiatives). Other control practices that are used 'diagnostically' only receive top management attention when outcomes fall outside predetermined control limits.

It is an unresolved empirical question whether enterprise risk management practices get used interactively or diagnostically by top management. Some risk management practices might move beyond the technical to be heard by top management and actively drawn upon in the shaping of strategic decisions and actions. They could be an integral part of the management process (i.e. strategic planning, performance measurement and discretionary decision making). Such risk management functions could be strategic in the sense that they receive top management attention and shape the organisational agenda. However, there is also a possibility of risk communications becoming unwelcome, isolated, and by and large unheard by top management and other functional units. Under these

conditions, risk management would probably fulfil a purely diagnostic 'monitor and alarm' function. However, there is also a possibility for it to lose even the control function and for risk reporting to become a mere 'box-ticking' compliance function responding to a regulatory requirement.

The case study analysis will consider the interactive or diagnostic use of risk management among the indicators of the organizational significance of ERM. Further, Chapter 4 will demonstrate that given multiple control systems, the interactive and diagnostic use of individual controls can alternate over time. Simons (1990) would suggest that this is due to the varying usefulness of the controls to top management under changing strategic circumstances. It will be further argued that an important feature of control systems that draw top management's close attention appears to be their perceived institutional appropriateness. This can also vary over time, shaping the dynamics of control system use and the rise and fall of individual control practices.

2.2.4. ORGANIZATIONAL POWER

When multidivisional organizations are viewed as '*shifting political coalitions competing for organizational resources,*'[43] calculative practices that are implicated in resource allocation can endorse power to certain organizational units while disempowering others. As Bariff and Galbraith (1978) argued: '*the design and operation of an organization's information system (...) will affect the distribution of intraorganizational power.*'[44]

Calculative practices have been shown to be constitutive of power, the ability of certain organizational actors to get others to act in line with their intentions. According to Markus and Pfeffer (1983), the importance of calculative practices derives from the fact that they are used in the allocation of resources[45]. In particular, it is in multidivisional organizations where calculative practices play a role in resource allocation: '*...decisions about the allocation of resources, formerly made across organizations through the operations of markets are now*

[43] Bariff and Galbraith (1978), p.15
[44] Ibid. p. 15.
[45] Salancik & Pfeffer (1974) showed how power accrues to those who provide resources critical to the organization. On the other hand, subunits in organizations use power to influence decisions concerning the allocation of resources –the resource allocation process resembles ' decision making by compromise' (Thompson and Tuden, 1959), in which administrative mechanisms such as accounting are mobilised as ammunition machines (Burchell et al., 1980).

made within organizations using administrative mechanisms. (...) Whether or not this internal allocation is more efficient than market mechanisms, the fact that the multidivisional structure is easily the most popular among the largest organizations (...) indicates the pervasiveness of internal resource allocation and the accompanying financial reporting and control systems. [46]

The most basic source of power is formal authority through structural arrangements. Influential actors thus gain parity with influential other actors. Apart from formal authority, calculative practices at the hand of actors can provide them with power in a number of ways.

First, as Ridgway (1956) has noted, what is measured, gets attention, and what is not measured, tends to be ignored. Similarly, Dornbusch and Scott (1975) argue that evaluating and rewarding are key dimensions of formal authority in organizations. Thus calculative practices, which render an increasing number of aspects of performance to measurement and control, are significant[47].

Second, Pfeffer (1981) noted that an important source of power is the ability to determine which information is to be used in evaluating various alternatives. As calculative practices filter and present information to decision makers, they influence the decision making process by framing and, evidently, biasing the perceptions of decision makers (Kahneman and Tversky, 1979).

Finally, it is the ability of calculative practices to initiate action that is a further source of power. When the action leads to enhanced performance the power of the action initiator is enhanced (Markus and Pfeffer, 1983). Drawing on empirical evidence from Crozier (1964), Hickson et al. (1971) postulated that problem solving is indeed an important source of power. In particular, organizational subunits, which have the capacity to control and reduce critical uncertainties for others, are expected to gain power.

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[46] Markus and Pfeffer (1983), p. 205-206.

[47] Miller and O'Leary (1987) pointed out that the information that calculative practices pass along to the top levels of management is not merely a servant of coercive power. Plausible measures (like variances of actual cost from planned standards) backed by sufficient institutional support can give visibility to performance. In particular, standard costing in the early decades of the twentieth century 'served to render visible the inefficiencies of the individual person within the enterprise' (Miller & O'Leary, 1987, pp. 241.) It is argued that standard costing instils an ethic and provides the basis for a crucial kind of self-discipline, as the deviations of the individuals from a norm, with all their possible causes and consequences, become available for investigation and remedial action (Miller &O'Leary, 1987, pp.262.). In this way individuals are made governable, they display what Foucault called governmentality. Thus calculative measures, benchmarked against norms and standards, become 'the gentlest and yet most pervasive forms of power' (Porter, 1995, pp.45.).

In sum, calculative practices can empower users by giving them the ability to measure organizational performance, control information and the agendas of decision makers, initiate actions, and provide solutions to key uncertainties.

There are at least three reasons why practices of risk management might require much political sensitivity. First, the regulatory intent that risk measurements should guide capital allocations in multi-divisional banking organizations places risk managers potentially in the middle of a political arena. As business unit interest groups wrestle over capital allocations, risk calculations may get used as 'ammunition' serving certain interests or may get contested and discredited by others. Secondly, by adding risk considerations, risk management can (to some extent) redefine strategic planning and performance measurement, endorsing risk people with a form of control that extends beyond the safeguarding of risk limits. Some commentators already envision the possibility of risk management inflicting highly defensive (Power, 2004) and overly risk-averse behaviours on managers (Hunt, 2004). Finally, as senior risk officers receive much institutional backing for organising top-management level committees and decision forums, they might acquire and exercise a significant amount of agenda-setting power.

Whether risk management practices actually endorse users with power is an empirical question. The case study analysis will show both powerful and powerless risk people (even within the same organization) and will explain the uneven distribution of power among different risk officers with reference to the diverse roles they play in their organizations. Furthermore, Chapter 6 will conclude that the alternative patterns of ERM use (that are emerging from the study) endorse users with power from different sources: agenda-setting power in one case, and contribution to performance measurement in the other.

2.2.5. SUMMARY

Enterprise risk management has not arrived in unoccupied territories at most large financial institutions. Given that the traditional business of banking is risk taking, it can be assumed that ERM systems seek to complement or replace previously existing formal and informal control mechanisms. The organizational significance of risk controls can only be grasped by appreciating the interactions and possible tensions between risk management and other organizational control

systems. Starting out from the reference points in the literature reviewed in this section, six tests are proposed for the assessment of the organizational significance of ERM in action.

The first test probes if the risk management function has *formal status* through structural arrangements that would give it visibility and parity with other organizational actors. Given that influential calculative languages frame debates and decision making, and can facilitate or impede organizational change, an important second milestone of the organizational significance of risk management is the nature and use of its *language.* This second test considers if risk people have an independent voice that is specific to themselves, and if they can translate risk analytics into a language that other organizational actors understand. The influence of ERM on *strategy making, performance measurement* (control) and *key strategic decisions* will be queried by the next three tests. This will enable us to assess to what extent ERM can facilitate organizational action, change and adaptation. However, exercising influence on some decisions does not necessarily mean that ERM is repeatedly and regularly consulted by decision makers. To probe this further, an additional test is proposed based on Simons' (1990, 1991) distinction between salient and frequently used *interactive* and less influential and latent *diagnostic* control systems.

Applying the proposed six tests of organizational significance, Chapter 3 will probe to what extent the risk management departments at the case study firms have been successful in achieving a strategic role. Chapter 6 will return to these reference points in order to frame the argument that there are alternative ways in which ERM can achieve organizational significance.

2.3. CYBERNETIC VERSUS COMPLEX CONTROLS - A MANAGEMENT CONTROL THEORY PERSPECTIVE

Applying a management control perspective to risk management research can be both constructive and troubling. On one hand, it can be relatively easily established that risk management designs follow a common management control blueprint – that of cybernetic control. On the other hand, the inclusion of risk controls into a broader organizational control landscape has some potentially far-reaching implications. As risk and return are often conflicting objectives (particularly so in financial services), the suggestions of risk controls can easily be at odds with other control systems.

Indeed, the literature recognises that multiple, competing and even conflicting objectives may well be present within the same organization. This can give rise to the simultaneous application of several control systems, each conceived in the cybernetic way, making the exercise of cybernetic control over individual control objectives problematic. Under such circumstances more complex control practices are called for.

However, the literature regrettably lacks a theory of such 'complex' controls. There is also a shortage of empirical evidence on the control of conflicting objectives in organizations. Chapter 5 will attempt to address both of these challenges. The current section merely tries to establish the case that a management control theory perspective to the study of risk management is applicable.

2.3.1 RISK MANAGEMENT AS CYBERNETIC CONTROL

Popular definitions of management control such as those proposed by Anthony (1965) and Lowe (1971) are rooted in control system theory and describe what one could refer to as the 'traditional' or the 'cybernetic' ideal of control (Lilienfeld, 1978; Hofstede, 1978). In particular, Anthony 's widely quoted definition of management control (*'the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives'*) has been broadened by others to spell out the elements of control. An example is Lowe (1971) who identifies

'*information seeking and gathering, accountability and feedback designed to ensure that the enterprise adapts to changes*' and achieves its overall objectives. Together these two popular definitions describe the cybernetic control ideal: '*a process which uses the negative feedback loop represented by: setting goals, measuring achievement, comparing achievement to goals, feeding back information about unwanted variances into the process to be controlled, and correcting the process.*'[48] In order to be applicable, the cybernetic control ideal presupposes that a number of conditions are met: there is a clearly defined standard or objective, actual accomplishment is measurable, and variance information can be used to intervene. Furthermore, there are demands on organizational arrangements: a division of labour between the controller ('staff') and the controlled ('line management'), a shared understanding of the objectives, as well as motivation to act according to the control model, and effective communication. Taken together, these conditions ensure the presence of 'cybernetic validity'[49] (Beer, 1981). Hofstede (1978) offers a concise set of criteria for cybernetic validity: 1. presence of standards, 2. measurable accomplishment, 3. usable feedback.

A somewhat dated survey, but nevertheless remarkable for its wide historical sweep, Giglioni and Bedeian (1974)'s review of over hundred titles concludes that management control theory between 1900 and 1972 reflected entirely the cybernetic paradigm. More than a decade later, Ezzamel and Dent (1987) assert a similar argument: '*cybernetic concepts form the basis for many of the more traditional management controls, for example, the principle of management by exception, or in a more specific context, budgetary control and variance analysis.*'[50] These practices are well documented in text books and policy manuals.

It can be argued that risk management is yet another control system innovation conceived in accordance with the cybernetic control paradigm. In particular, the cybernetic notion of control is present in the way risk management is prescribed for financial institutions in the normative practitioner literature.

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[48] Hofstede (1978), p.451.

[49] Beer (1981), p. 17 defines cybernetic validity in control systems terms as follows: a process that 'must have a feedback loop in which a standard, a sensor, a discriminator and an effector are present.'

[50] Ezzamel and Dent (1987), p.92.

The regulatory framework, underlying more than ten years of international bank capital regulation, gives risk managers a specialist task: determining the amount of capital ('adequate capital') that the bank should set aside so that it could buffer and absorb unanticipated losses. To this end, the regulators challenge the risk management functions of banks to devise and implement 'adequate' risk measurement methods. Risk measurements are expected to feed into the process of defining what capital levels different banks ought to hold.

Three elements of the regulators' proposed risk management framework stand out, which together establish three conditions of cybernetic validity for risk control: 1. objective, 2. measurability and 3. feedback. Firstly, the regulators provide risk management with the task of deriving clear and stable objectives in the form of '*hierarchical limit systems.*'[51] Paraphrasing Thompson (1967), a hierarchical process is expected, starting with a statement of the overall risk *limit of the organization*, escalating down to lower level risk *limits for the organization.* Secondly, the regulators require risk managers to make the controlled process (the risk profile of the bank) measurable. The Basel Committee strongly recommends firms to develop risk metrics and '*means of aggregating (to the degree possible) their risks.*'[52] Finally, the regulators emphasize the reporting and feedback aspect of cybernetic controls: the risk management framework prescribed includes '*the preparation of risk reports for senior management.*'[53]

Integrated risk management has pioneered a common denominator for all quantifiable risk types – economic capital. From a controlling viewpoint, two questions can now be addressed. First, does the actual capital at the bank's disposal correspond to what is found necessary by the bottom-up risk and capital assessment process? In other words, is the available capital in line with the capital need corresponding to the risk appetite and target credit rating of the bank (expressed as the aggregate economic capital)? In theory, if available capital falls short of the assessment of total economic capital, then the bank should consider raising more capital or finding ways of reducing risk and thus, capital need (possibly by selling risky assets). In the opposite case of capital abundance the bank could think about taking on more risk, or giving capital back to its

[51] Basel Committee on Banking Supervision (2003), p. 1.
[52] Basel Committee on Banking Supervision (2003), p. 1-2.
[53] Basel Committee on Banking Supervision (2003), p. 1.

shareholders. The second question is, in order to avoid wild fluctuations in the actual capital held by the bank, what should be the overall limit for the risk profile of the bank (and individual limits for divisions or risk types)? By setting economic capital limits, the controllers aspire to contain the bank's risk capital need within the bounds of its available capital.

It appears that the quantification of risk is not only an element of the current regulatory (and practitioner) notion of risk control, but it also reinforces a cybernetic conception of control over the total risk profile of banks.

2.3.2 From cybernetic to complex controls

Apart from establishing the cybernetic control ideal in risk management, the economic capital measures have the potential to overcome a major obstacle of risk control: they might bridge the potential communications gap between the risk function and the rest of the organization. Economic capital is expressed in monetary terms and dubbed 'capital' – it should sound familiar to those more comfortable with balance sheets than loss distributions. In effect, economic capital is a translation of arcane risk analytics into the language of accounting. Integrated risk management aspires to make risk visible to other people in the bank who take it – in a language compatible with accounting.

However, in the banking world most attempts at increasing operating profit (e.g. an increase in lending volume, a move to higher-margin credit market niches) tend to increase risk. Thus risk and return are often conflicting objectives. Visualising risk, in the way economic capital does, can make latent conflicts between risk and return become clearly evident. This can challenge the conditions of possibility of the simultaneous exercise of cybernetic control over the risk profile and the profitability of the bank.

Indeed, from a control theory perspective, multiple, competing and even conflicting objectives may well be present within the same organization. This can give rise to the simultaneous application of several control systems, each conceived in the cybernetic way, making the exercise of cybernetic control over individual control objectives problematic. Under such circumstances more complex control practices are called for (Hofstede, 1978; Otley, 1994).

At this stage, the notion of complex control still appears very broad and general. Thus there is a need for theory development in order to explain complex

control phenomena that arise in empirical settings such as the control of conflicting risk and return objectives in financial services firms. Chapter 5 will take on this challenge.

2.4. THE EXTERNAL ORIGINS OF INTERNAL ACCOUNTS

Apart from assessing the organizational roles and significance of ERM in action, the study will also probe what forces (external and internal) shape its development. By identifying powerful external influences it is possible to derive conclusions that might be applicable beyond the confines of the companies observed, and implications for the wider development of enterprise risk management.

Accounting research has borrowed two approaches from organizational theory that proved to be particularly successful in explaining the external origins of internal accounts. These are the contingency paradigm and organizational institutional theory.

2.4.1 THE CONTINGENCY APPROACH

The contingency approach[54], as applied in management accounting research, is concerned with the contextual drivers of the design and use of control systems (e.g. the degree of environmental uncertainty, the given structure, technology or the strategy of the firm). This approach takes a functionalist, rational view on control system design, which it considers as a means of adaptation to the calls of the organization's context. Successful adaptation (i.e. a good organization-context fit) is expected to result in superior financial performance. A major ambition of contingency researchers is to specify the contingency factors that matter. Among them are firm characteristics such as size, age and the type of technology applied. However, a great deal of attention has been paid to external variables such as the degree of environmental uncertainty, hostility (Khandwalla, 1977) and the role of the national culture (Hofstede, 1983). Based on an investigation of firm performance, contingency researchers hope to explain and even predict if and when a fit between a firm's control system and the context is achieved.

Survey-based contingency researchers tend to capture only a snapshot of management control systems, and the dynamics of control systems eludes them. Control systems rise and fall, organisations adopt and abort them. It has been

[54] Chenhall (2003) gives an up-to-date and comprehensive overview of three decades of contingency studies in accounting.

argued that a lack of appreciation of the often fleeting, temporary nature of control systems characterizes much research belonging to the contingency paradigm. In addition, a failure to account for the existence and workings of multiple control systems is also recognised as an important weakness. Survey-based research projects looking for an association or good 'fit' between a certain control system and one or more contextual variables are prone to suffer from a lack of consideration of other control mechanisms. A control system chosen for study may be overlapping with, or complemented by another control system present in the organization. If this is true, then studying the former in isolation from the latter would lead to misleading results. Studying multiple control systems requires an understanding of the possible relationships between different control mechanisms, which could be both complementary and substitution effects.

These weaknesses of survey-based empirical research is somewhat countered by field (or case study) -based researchers who examine multiple control systems over a longer period of time. They explain the observed control packages as a means of adapting to highly uncertain environments or new technologies (Schreuder, 1987; Dent, 1987; Simons, 1990, 1991; Chapman, 1998). Field-based contingency studies have the advantage over their survey-based counterparts in their ability to account for multiple control systems. Such field studies tend to find that control systems do not work in isolation. Dent (1987) and Chapman (1998) for example recognised how informal lateral controls complemented formal accounting controls in firms operating under conditions of high uncertainty. Leaving aside informal controls, Simons (1990, 1991) studied the characteristics of all formal control systems in his case study companies and argued that in successful firms top managers chose one specific control system to monitor key strategic uncertainties while the role of other formal controls was to complement these.

By and large, field-based contingency studies tend to focus on the complementarities of multiple controls, and the politics of control trade-offs is not salient in these stories. They tend to associate the workings of multiple control systems with an organization's efforts to cope with uncertainty. However, control system packages may well turn into a hotbed of rivalry between overlapping control systems where substitution (as well as complementary) effects come into play. In the context of examining multiple control systems, the apparent lack of

focus on the politics of control in contingent control research (be it survey or field – based) is an important weakness.

Contingency research helps the case study analysis by pinpointing factors that can explain the observed patterns in ERM practices. It yields a list of variables that could be considered and applied to the cases during the theorising process. Some of these variables did not fit later patterns, while others proved to be explanatory. For example, Chapter 4 finds that environmental hostility was influential in helping the rise of risk controls. Chapter 5 proposes a number of uncertainty variables arising in control situations for the explanation of the complex control modes observed there. Finally, Chapter 6 adds the calculative culture of the organisations as an additional factor that sheds more light on ERM use.

2.4.2 THE NEW INSTITUTIONALIST APPROACH

An alternative theoretical perspective on the external origins of internal accounts is institutional organizational theory (also known as 'new institutionalism'). It has been borrowed from organizational sociology (Meyer and Rowan, 1977; Powell and DiMaggio, 1991). The institutional perspective shares contingency researchers' concern with organizational adaptation to external environments. However, it differs from it in at least two important aspects. First, institutional theorists consider adaptation both as outcome *and* process while most contingency researchers consider adaptation as an outcome only.[55] Second, in institutional theory the concept of organization-environment fit is not based on any definitions of economic success and efficiency, but merely on organizational survival. From an institutional perspective, successful adaptation as an *outcome* is *not* conceptualised as 'good fit' that is predicted to result in efficiency, but as conformity to societal norms of acceptable practice, which often bears no efficiency implications whatsoever. In other words, adaptation as an *outcome* is compliance with the institutionalised rules and expectations that are expressed by external constituents (e.g. regulators, shareholders, rating agencies, suppliers,

[55] Note that field-based contingency researchers try to overcome this limitation by observing how organization-context fit (contingency theory's definition of organizational adaptation) is achieved.

customers etc.) upon whose support the organization in question is dependent, and is desirable, even if the effort put into compliance reduces the firm's operational or financial efficiency. Institutional theorists express an interest in adaptation as a process too. Adaptation, as a *process*, may range from simple symbolic displays through elaborate rituals of 'doing the right thing' to a genuine tailoring of the structure and the systems of the organization to perceived definitions of institutional appropriateness. Such processes of adaptation are understood as profoundly political and reflecting the relative power of the interests and actors who enact them (Covaleski & Dirsmith, 1988). Investigating management control systems and their relationship with their context from this perspective places the researcher outside the boundaries of the contingency paradigm. Such investigations of the politics of the adaptation process (the politics of the institutionalisation of management control systems, if you will) require the exploration of how the rules, norms and myths (Meyer and Rowan, 1977) in the firm's institutional environment are constructed, and how in the organization they are interpreted, by whom, and through what kind of processes they are adhered to. Management accounting and control research presents a growing number of studies conducted in this vein (Covaleski & Dirsmith, 1988; Ansari & Euske, 1987; Covalevski et al., 1993; Euske & Riccaboni, 1999).

The idea of firms seeking institutional appropriateness has a strong explanatory appeal to the study of 'external origins'. Fligstein (1991)'s historical study agues that successful executives develop conceptions of control that do not only come to dominate their industries but also define appropriate standards of behaviour. Assuming that survival hinges largely upon organisations' conformity with institutionalised rules and norms (Meyer and Rowan, 1977), it can be argued that the rise and fall of particular management control systems depend upon their success of being seen appropriate and legitimate. Thus control systems can become institutionalised myths and advocates of new control ideas can be expected to seek legitimacy and institutional appropriateness.

In the context of multiple controls systems, institutional appropriateness might be a powerful explanatory factor that can set aside dominant control systems from the ones that are temporarily or forever crowded out. For example, in a historical study of control system selection in an Italian bank, Euske and

Riccaboni (1999) explain the adoption of new accounting and control tools with reference to the requirements of the institutional environment of the firm.

The adoption of risk management systems by financial services firms raises questions of institutional appropriateness because, as the normative practitioner literature suggests, the particular ERM practices of firms are scrutinised by external actors, such as regulators, credit rating agencies and shareholders. In this vein, Chapter 4 will argue that apart from the immediate demands of a hostile investor environment, more subtle institutional pressures were also at work in the dynamics of control system selection during the course of the observed rivalry between risk and accounting controls. Further, Chapter 6 will trace out the corporate governance trends that appear to give rise to alternative patterns in the development of ERM practices in financial institutions.

The new institutionalist approach will only be a secondary, complementary framework for the arguments of this study. This is because institutional theorists tend to underplay intraorganizational factors, those that contingency (and other organizationally grounded) researchers so painstakingly try to map. It also struggles to accommodate the micropolitics of the observed organizational processes. Powell and DiMaggio (1991) confirm that their colleagues have paid little attention to how incumbents maintain their dominant positions or respond to threats, especially during periods of crisis and instability. Accordingly, this study aims to bring out the micro-processes and politics that might have shaped the banks' efforts to adopt institutionally appropriate risk control systems.

Given this choice of emphasis, the Thesis does not provide a rigorous analysis of the link between risk management and the wider social and institutional concerns, actors and struggles that surround it. The suggested links will be rather tentative, based on interviewees' accounts of the apparent influence of external regulatory, corporate governance and performance pressures on the risk management practices observed. These tentative links will be cast in the language of institutional organisational theory. In particular, the symbolic aspect of risk management will be highlighted applying the notion of institutional appropriateness. By combining a strong concern with providing an organizationally grounded account of the observed risk management practices and a less pronounced, but inevitable concern with the symbolic aspects of risk

management practices, the above described framework can be labelled as 'organizational-symbolic' (Dutton, 1997).[56]

[56] Dutton (1997) applies four perspectives on her research interest (strategic agenda building). *Organizational-instrumental*, emphasising functionalist, attention-directing aspects. This is similar to the functionalist concerns captured by the 'consulting research genre' (Lukka nd Granlund, 2002). Second, the *organizational-symbolic* perspective, importantly, explicates the features of the observed practice that are symbolic in the sense that they carry meaning for members inside and outside the organization. This perspective overlaps both with the organisationally grounded and the new institutional research. The *individual-instrumental* perspective focuses on the career outcomes for the individuals concerned with the observed practice. Finally, the *individual-symbolic* perspective aims to pick up possible stigmatizing effects.

2.5. SUMMARY

A burgeoning literature of 'consulting research genre' (Lukka and Granlund, 2002) testify to the rise of enterprise risk management. This normative-practitioner literature allows us to distinguish four prominent themes that help us to make sense of the diverse practices that are gathering under the umbrella of ERM: risk quantification, risk aggregation, risk-based performance measurement and the management of non-quantifiable risks. However, there is a gap in the literature regarding the roles that these risk management practices play in organizations: how they obtain organizational significance (if at all) and what impact they have. Furthermore, an understanding of the 'external origins' of ERM is needed.

Accounting research, which has sought to answer similar questions, provides a number of theoretical reference points and useful insights. This chapter pointed to three common areas of interest that characterise both accounting research and the study of risk management in financial organizations.

As it can be expected that risk management would operate differently and have different roles across organisations, the first common area of interest was the roles and organizational significance of calculative practices. The insights from organizational studies of accounting help us to unravel the many facets of organizational significance that can be attributed to calculative control practices: goal setting and decision making; organizational action, change and adaptation; strategy making and control, and organizational power. Based on these, a number of tests were proposed for the assessment of the organizational significance of ERM in action, paving the way for the case study analysis in Chapter 3.

The second area of common concern for researchers of accounting and risk management is the study of management control systems. Applying a management control perspective to risk management research is both constructive and troubling. On one hand, it can be relatively easily established that risk management designs follow a common management control blueprint – that of cybernetic control. On the other hand, the inclusion of risk controls into a broader organizational control landscape has some potentially far-reaching implications. As risk and return are often conflicting objectives (particularly so in financial services), the suggestions of risk controls can easily be at odds with other control

systems. Thus introducing risk management systems adds complexity to the existing control landscape of financial institutions. Given that the management control literature regrettably lacks a theory of such 'complex' controls, studying risk management can potentially enhance our understanding of complex organizational control practices. These considerations introduce Chapter 5, which will address complex controls both from a theoretical and a field-based perspective.

Thirdly, a common concern to accounting and risk management research is the 'external origins of internal accounts'. Contingency and new institutional perspectives were discussed. Management controls can be seen as tools of adaptation to changing environments (as contingency researchers argue) or as the source of institutional legitimacy (as new institutionalist studies argue). However, both the contingency approach and the new institutionalist perspective underplay the grass-roots level processes of organizational control. The ways organizational members advance certain control systems are not central to these accounts, in which the competing agendas and the rival definitions of success and failure often go unobserved. Aspiring to bring out the drama and politics of enterprise risk management, Chapters 4 and 6 will combine the explanatory appeal of organizationally grounded contingency theory and new institutionalism with the richness of a field-based perspective. The resulting organizational-symbolic perspective focuses on the organizational aspects of risk management, while the links to wider societal agendas will merely be tentative.

CHAPTER 3
THE ORGANIZATIONAL SIGNIFICANCE OF RISK MANAGEMENT

> Opinion has a significance proportioned
> to the sources that sustain it.
> *Benjamin Cardozo*

The previous chapter gave a selective academic literature review. It pinned down a number of theoretical reference points, which are to frame the arguments advanced in this study. In particular, organisationally grounded studies of calculative practices and management control, as well as institutional organisational theory inform the research. Organizational studies of management control (e.g. Hopwood, 1983; Simons, 1987; Dent, 1991; Ahrens, 1997; Chapman, 1998) offer valuable insights about the roles control systems play in organizational life, and explain control system design and use with reference to organizational characteristics and the micropolitics of control.

Drawing on the researcher's field work, this chapter is a first step in exploring the roles risk specialists play in the management of two large banks. The differences found in the case studies, at this stage, will be explained by the micropolitics of risk management. The chapter argues that risk management as a control activity is inherently political. For instance, by assessing the risk profile of business units, risk people can propose changes to internal capital allocations. This would allow them to influence planning and control. Nevertheless, risk people may easily land in the middle of a battlefield where different business units with conflicting profit and capital interests combat for or against radical changes in the internal definition of capital adequacy. Whether or not risk managers can influence strategy making and control depends on their political skills and alliances. It will be shown that *three types of risk managers* are emerging with different ambitions, political skills and alliances. This opens the door for diverse possibilities in which ERM may contribute to strategy and control. In particular, two markedly different patterns of organizational significance will be explicated.

The chapter is organized as follows. The first section summons up the theoretical reference points relating to the organizational significance of calculative practices. In particular, the six tests developed in Chapter 2 will be recalled. Their applicability will be further illustrated with reference to Dent (1991), a classic study on how a newly introduced control function acquired an influential organizational role in a privatised railway company. Then the case descriptions will be presented, followed by discussion and conclusion.

3.1. TESTING THE ORGANIZATIONAL SIGNIFICANCE OF A CONTROL FUNCTION

A common theme was pursued in the two case studies. A new organizational function (risk management) appeared, it claimed visibility and a number of roles in organizational life, while interacted with other long-existing organizational groups. This theme is not alien to accounting and management control research. In particular, Dent (1991) describes a newly appointed group of 'business managers' (management accountants) who gradually redefined the ways in which their organization, a privatised railway company, was internally understood and managed.

Chapter 2 put forward a number of indicators of the organizational significance of calculative and control practices. This chapter applies these tests in probing to what extent a particular functional group, risk management, has obtained strategic significance:

1. Formal status through structural arrangements: Has the function created formal reporting lines? Has it got a senior representative at top management level? Has it achieved parity with influential organizational functions?
2. New language: Has the function created a new or complementary interpretation of the organizational reality? Has it got a distinct vocabulary and methodology?
3. Redefinition of planning: Has the function changed (or contributed to a significant change in) the planning process?
4. Redefinition of performance measurement: Has the function changed (or contributed to a significant change in) the way performance is measured and rewarded in the organization?
5. Influence on key strategic decisions: Is the function involved in the discussion of top management-level strategic choices (e.g. acquisitions, financing)?

However, exercising influence on some decisions does not necessarily mean that the function in question is repeatedly and regularly consulted by decision makers. To probe this further, an additional test is proposed based on Simons' distinction between salient and frequently used (interactive) versus latent (diagnostic) systems (Simons, 1990, 1991):

6. Interactive use: Does the function provide regular information about some of the key strategic uncertainties that receive personal attention from top management?

Dent's (1991) analysis confirms the applicability of the proposed tests for the purpose of describing the rise of a control function to organizational significance. The study is framed as a change process that led to the transformation of a railway organization's culture among the senior management elite from the old 'railway' culture (operations orientation) to a more desired 'business' ethos (bottom-line orientation). The chain of events he observed amounted to an evolutionary change process in the course of which the business managers '*gained influence and gradually converted others to their image of the business railway*'[57].

The study depicts the strategic potential and cultural influence of the observed management accounting function through a number of stages that correspond well to the above suggested tests of organizational significance. A crisis situation led to the introduction of a formal business management (managerial accounting) function. *Structural and reporting arrangements* gave the new function status and parity with existing operations managers. By translating dialogue on operational and engineering concerns into the *new language* of the 'bottom-line', the business managers provided '*new accounting representations of the railway as a series of profit and loss accounts.*'[58] This allowed them to *redefine planning and performance measurement* by placing both into the accounting framework. Resistance ensued and the business managers had to fight to consolidate the new organizational reality. Battling over *key strategic decisions*, they found institutional support from the top of the organization. The business managers staged one victorious contest after the other against their rival engineering colleagues. Eventually, a new organizational culture took shape that gradually crowded out the old engineering staff and management practices. An accounting ethos took root, and its guardians (the business managers) assumed a leading influence on the strategy and control aspects of the organization's life. The graduations that signified the '*emergence of a new organizational reality*' (Dent, 1991) can also be viewed as milestones on a road to organisational

[57] Ahrens and Dent (1998), p.21
[58] Ahrens and Dent (1998), p.21

significance. The case suggests that it was the combined effect of acquiring formal status, proliferating a new language, redefining planning and performance measurement as well as d hoc influence on important discretionary decisions that pointed to the strategic significance of the new business management function, and more importantly, to the emergence of a new business culture.

Overall, this chapter will probe to what extent the new risk management departments have been successful in achieving a supposedly strategic role in the two observed banks. The analysis does not assume that strategic significance is a unique outcome that would follow from the above described sequence of events. The graduations described may not necessarily be sequential, some of them might be independent from the rest. Therefore it is assumed that different patterns of strategic significance might exist. Following the case descriptions (Section 3.2 and 3.3), the Discussion section will apply the proposed six tests of organizational significance.

.2. CASE 1 - FRASER BANK

3.2.1. BACKGROUND

Frasers' impressive all-marble-all-glass headquarters towering in the heart of the City of London cast a permanent shade on an impossibly narrow street that has been home to many banks since medieval times. Only the location suggests that Frasers is one of the oldest banks in the UK – the building is a tribute to modern architecture and the giant world clock in its reception area speaks of the global aspirations of the bank. Despite priding itself on an international presence, the bank has a strong domestic focus. For example it has recently acquired a financial services company in order to further strengthen its position in the UK market. The step was criticised by the financial press: Frasers was feared to be weighed down under the burden of integration costs and unrealised synergies. At the time of the start of the case study research the bank was in the middle of an ongoing group-wide efficiency review, and the structural overhaul of many of its central functions including marketing, IT, back-office services and risk management.

3.2.2. THE INTRODUCTION OF RISK MANAGEMENT

Frasers turned to modern risk management techniques in the wake of a significant loss that it had suffered (first time in its 300-year history) during the early 90s UK credit crisis. It was the first European bank that adopted a default probability-based credit assessment methodology and a Value-at-Risk based approach for its total loan portfolio and market risks. Having consulted some of the American banks that pioneered modern risk measurement methods, the techniques were implemented by a leading overseas risk consultancy and by the investment banking arm of the Group. From early on, strategic planners at Frasers recognised the potential of risk measurements in creating what was seen as an economic view of profits.

3.2.3. ECONOMIC CAPITAL AND THE PLANNING PROCESS

Having talked to Strategy people at Frasers, it appeared that the calculation of Economic Capital figures was an embedded part of the annual planning process. In the course of preparing medium term strategic alternatives

and the relevant pro-forma profit and loss statements, the business units calculated the amount of Economic Capital each alternative would need. Economic Capital was seen as the basis of calculation of the capital charge that was necessary for arriving at the 'economic (value added) profit' offered by different strategic alternatives. Then it was up to the Strategy function to review the alternatives for individual business units and (in consultation with them) to select the appropriate mix of business unit strategies, looking for the set of strategies that would optimise the overall performance of the Group. In these discussions the bottom-line figure (Economic Profit) reflected a pro-forma net profit less a charge on the allocated Economic Capital. The appropriateness of the capital charge figures had been reviewed and approved by the Economic Capital team, initially located within the planning department. The objective was to express the risk profile of the business units in the light of different strategic alternatives and to require them to earn an economic profit over and above the capital charge warranted by their risk profile. So risk considerations fed into the planning process in the form of Economic Capital charges and these formed a constraint on the profit-maximising objective functions of the business units.

However, by the time the selected and proposed strategic alternatives reached the Executive Board, the Economic Capital charges were aggregated with other operating expenses and thus turned invisible. Board members only saw the pro-forma P&L statements relating to the strategic alternatives put forward by the Strategy team for review and sign-off. As far as Board members could see it, the Economic Capital charges were not made explicit: they were absorbed into the 'operating expenses' cost category. The explicit representations of risk in the Board-level strategic plan were estimates for loan provisions (another accounting cost category) and separate calculations for the regulatory capital requirements for the loan portfolio. Economic Capital, with all its claimed potential to grasp the risk profile of the business units, did not get visibility in these discussions.

But this was less of a concern to the risk people. In the mid-90s an anomaly appeared around the economic capital allocations: the method in use did not allocate out to the business units all economic capital that the bank as a whole needed. Continuing business growth required continuing total economic capital growth, however, the methodology in place did not have the appropriate scaling factor for increasing business unit capital allocations sufficiently – hence an

increasing amount of economic capital was left unallocated at the centre. There were sentiments in the Economic Capital team that some business units took on disproportionately high risk without having been charged for it. Risk people considered it a mere technical problem. Armed with a fresh finance degree from a renowned business school, in 1999-2000 the leader of the Economic Capital team consulted his previous professors, recruited three more finance graduates and set out to find a corporate finance solution.

3.2.4. CHANGING ECONOMIC CAPITAL ALLOCATIONS

In less than a year's time the Economic Capital team came up with a new economic capital approach that was promoted as 'a leading edge' methodology both internally and outside Frasers at several conferences. Having tested it in a couple of small business units, the Head of Economic Capital asked for support from the large business units. He found resistance. One of the largest business units claimed that the new model suggested unacceptably high capital allocations to them. They called the technical credibility of the new method into doubt: the risk manager was challenged to provide evidence that there was another major bank that had successfully applied a similar methodology – an impossible task given the uniqueness of the approach[59]. The technical ingenuity of the innovation turned out to be a double-edged sword: not only the business units, but the risk manager's own superiors would have preferred to see a precedent for its successful application. At the time the Economic Capital team was based in the planning function. They reported to the Head of Corporate Planning, and not to the Risk Director. Placed outside the risk function, isolated from understanding ears, the leader of the Economic Capital team was not able to secure backing from the top of the organisation. In a situation where one of the most powerful business units was opposing the change, the Economic Capital team leader was in a politically weak position, no matter how convincingly he argued his case for

[59] Most banks use statistics-based (VaR-type), data-intensive approaches to Economic Capital that make arguably unrealistic assumptions of the statistical distribution of loss events. The problem is that only market losses follow a relatively 'well behaved' distribution, while credit losses present serious exceptions that 'mess up' the statistical assumptions, and operational risk –given its broad nature and the lack of data- defies distributional representation. The alternative method dispensed with VaR wherever possible in order to avoid its deficiencies. Instead, it was based on corporate finance principles, it viewed risk through betas and focused on the assessment of the cost of financial distress in case of 'worst-case scenario' events.

technical 'leading edge.' What initially appeared to be a difference in technical opinions soon came to be rumoured as the risk manager's "crusade" or "personal vendetta" (depending on which side one tended to agree with) against the large business unit that had decided to stand its ground firmly against any radical changes in existing capital allocations. After two years of futile attempts at *'selling the methodology internally,'*[60] the Head of Economic Capital and all the technical people of his team left the bank.

However, there remained continuing and growing capital allocation anomalies, which eventually drew the attention of top management.[61] Worries were voiced about the likely disapproval of regulators and investment analysts of a continuing trend:

'We feared at some point the market was going to turn around and say to us: "You are not allocating out [x bn], that's really odd. Why is that?" That's what we thought the worst scenario is going to be.'[62]

A new manager was appointed at the end of 2001 to review and improve the old Economic Capital methodology. (Appendix 1 shows a chronological ordering of the appointments and departures described here, as well as an indication of the sequence of interviews.) A complete reorganisation of the risk management function served as a backdrop to the rebirth of the Economic Capital team. A new Group Risk Director was appointed as of the beginning of 2002. He separated the management of the different risk categories (credit, market, operational etc.) into a sub-department and set up another sub-department that was responsible for Group-level risk reporting and calculations for capital allocation. The latter hosted the new Economic Capital team that now had support not only from the sub-departmental Director, but also from the Group Risk Director. Significantly, the latter was a member of the executive board.

Notwithstanding the respect he had for the technical skills of his predecessor, the new Head of Economic Capital took a less revolutionary

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[60] Assistant Director, Group Strategy and Planning, Fraser Bank

[61] The 2002 annual report showed that 8% of the group's average economic capital was held at the group centre, unallocated to business units. Another analysis showed the allocation of average economic capital to risk types. Again, the same 8% remains unallocated to risks, it was shown as held at the centre. (Detailed Reference to Annual Report is omitted due to confidentiality agreement.)

[62] Assistant Director, Group Strategy and Planning, Fraser Bank

approach to the issue of change. He appreciated the political sensitivities of his task right from the beginning:

'Everyone said, yes, let's get it [Economic Capital] more accurate. But they wanted to minimise their portion of the more accurate pie. So there was a tension.'[63]

He decided not to abandon the existing method, but rather to improve it. He was prepared to compromise on technique in order to devise a politically acceptable change in capital allocations. Armed with a PhD in nuclear physics and a former career and good relations with the large business unit that resisted the previous change attempt, he was both technically and politically fit for the task. He called for setting up a senior cross-functional team to guide the Economic Capital project, and this steering group had the representatives of the powerful business units as well as the Group Risk Director and the Group Finance Director on it. At the time of making contact with him in the autumn of 2002 he was preparing the sign-off request for a new Economic Capital method that was built on what might have been the closest to a group-wide consensus. The new approach resembled the '*industry average*'[64] as far as the methodology was concerned. It did not suggest radical capital allocation changes for any particular division. Nevertheless it solved the anomalies caused by the previous method by increasing capital allocations across the board. It was signed-off in November 2002 with unanimous support.

3.2.5. MANAGING THE RISK SILOS

As part of the reorganisation of the risk function, in 2001 a Director of Risk Reporting was appointed too. He was responsible for channelling all risk information (with the exception of the Economic Capital figures) from the business units through his team at the corporate centre up to the Board. In particular, he was responsible for communicating the aggregate market, credit and operational risk profile of the Group. At the beginning of the year he was full of plans as to how to introduce information about '*intrinsic risks in businesses*' and '*matters of group-level significance*' into the formal board-level risk reports.

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[63] Head of Economic Capital, Fraser Bank
[64] Assistant Director, Group Strategy and Planning, Fraser Bank

In the summer we met again and he expressed much disappointment and frustration. He noted that by the time his risk report reached the Executive Board, its content was filtered through so many committees that the Board faced only a '*sterilised, not very exciting*' report as one of many items to sweep through on a busy agenda. Complaining about a '*toothless risk function*', he noted that there were also problems with the bottom-up information flows: business unit risk managers shielded risk information from the centre forcing him to resolve himself to a role of '*constantly being out on fishing expeditions*' for information. Another element of the 'toothless-ness' was that risk reporting did not channel into important strategic decisions, for example there was no contribution from the risk function to the due diligence of the recently acquired mortgage lending company. Risk people's lack of influence on this strategic decision was also noted by the Head of Economic Capital who gloomily added:

'If there had been one [a formal risk analysis], probably it would not have been important [to the decision making process].'[65]

Comparing the role of the risk managers (ideally) to that of a '*medieval jester*', the Director of Risk Reporting gave voice to aspirations to challenge existing beliefs:

'Risk by definition (like audit) sits outside the culture of an organisation as a whole, it has to. And the more important it becomes to a business that everybody sings in tune the less space is given for any kind of business voice. And it becomes very difficult for a risk manager (at any level from talking to a trader to talking to the Chairman of the bank) to challenge. The skill is challenging without causing offence.' [66]

However, he concluded that his position did not allow him to challenge others and to influence key strategic decisions. He left the company at the end of the year.

Having talked to planners in Group Strategy, it appeared that strategy people see the value added by risk people only in terms of their input to the planning process: the prescription and co-ordination of the calculation of the appropriate Economic Capital charges across the Group. Accordingly, the strategy people supported the introduction of the improved Economic Capital technique by

[65] Head of Economic Capital, Fraser Bank
[66] Quotes from Director of Risk Reporting, Fraser Bank

helping to '*draw question marks all over the old methodology*'[67] and promoting the new approach as credible.

Operating on the borderline between the risk and strategy function there was a manager within Group Strategy, who was responsible for liaising with the risk people. Given that the two functional groups were located on adjacent floors at headquarters, he could personally make contact, and cultivated both formal and informal interactions. He explained about the uneasy symbiosis in which strategy and risk people lived:

'Most of the people doing strategy don't understand risk. Most of the risk people don't understand strategy. (...) People who do strategy know they have to work out economic profit and they know they have to work out how much risk is involved, but they are not very interested in it. They are more interested in income and what is going to happen to the market place. They don't want to get involved with risk all the time. The risk people spend all this time on calculating how much risk they have got and they don't look at the bigger picture. Getting both sides to talk to each other is the hard part.'[68]

Apart from supporting the new Economic Capital project with all the influence he could muster, this manager was also responsible for setting the agenda for the executive board meetings. He was concerned with translating risk analytics into a language Board members could understand, and this language was framed in the terminology of value-based management (encompassing notions of strategy and accounting, but no specialist 'risk talk'). Hence the rather condensed (*'sterilised'*) format in which he expected risk information to be presented.

It appeared that the risk managers had indeed set off on a 'long and winding road' towards organizational significance at Frasers. Some had dropped out and have been replaced by others. Communicating information from the different risk silos (Risk Reporting) had failed to grab top-level attention. By redefining economic capital charges the risk function (Economic Capital team) seemed to have the potential to influence the strategic planning process. Indeed, calculating the relevant risk capital charges for different strategic alternatives was an integral part of the planning process that was considered to be of great value by strategy people. However, at the time of this study this influence was invisible to the Board, whose attention was guided by more conventional accounting

[67] Assistant Director, Strategy and Planning, Fraser Bank
[68] Assistant Director 2, Strategy and Planning, Fraser Bank

representations of the bottom line and the risk implications of strategic alternatives.

3.3. CASE 2 - BWT

3.3.1. BACKGROUND

BWT Group was created as a result of a merger between two domestic banks: one was then in trouble, the other one was the healthier and stronger rescuer. The Group focuses on private, retail and investment banking and has grown to be one of the largest domestic banks in Switzerland. The international presence and expansion of its private and investment banking operations ensured that BWT Group earned a reputation as a major player in the global financial services industry. A vision of global expansion underpinned a growth strategy that resulted in the group acquiring a 150-year old Swiss insurance company ('Division X'), which is itself an international business with a presence in 16 countries. The acquisition of Division X aimed at reducing overall business risk through diversifying into the insurance business that was new to the bank. At the same time the move promised to realize the potential of integrating banking and insurance services - the concept of 'bancassurance' was a popular idea that the financial services sector had been toying with since the 80s. The acquisition was hailed by analysts and commentators at the time.

Not long after the 1990s equity-market merry-go-round came to a halt and the stock-market indices of the world started a downward spiralling plunge, BWT Group found itself yet again in the heat of media attention. However, this time the commentators cast clouds over the soundness of the financial health of the bank. Accordingly, the next year saw heavy write-offs in the Group accounts due to equity revaluations and a weakening of the group's capital base. In particular, concerns were raised about Division X's capital position. Only a capital injection from the Group saved the insurance company from the embarrassment of breaching regulatory capital ratio requirements.

The acquisition of Division X came to be viewed as a major and costly strategic mistake. Like many European insurance companies at the time, Division X was heavily exposed to the falling stock markets and instead of diversifying the business risk BWT Group carried, the acquisition resulted in the Group's increased exposure to the equity markets. A second capital injection into Division X was announced a few days before the researcher's first arrival in Zurich in October 2002. (The case study was prepared about the commercial banking arm

of BWT Group - this (non-investment banking) part of the Group will henceforth be referred to as 'BWT'.) The researcher entered the field with some awe due to the apparent economic difficulties of the bank.

"There is a busy square in the centre of Zurich that knots several of the city's tram lines together. It also hosts two arresting office buildings, one of them is a classical palazzo - the headquarters of BWT Group. Installed in a café with a view on the floodlit building gleaming in the wet darkness of the October evening, on the eve of my arrival I prepare a brief summary of the latest news surrounding BWT's situation. The picture that emerges from the fragments offered by the financial press is gloomy. In fact it seems to be a passable illustration of a risk manager's nightmare: risks have been materialising in all risk categories. The bank has not only been suffering from market risk that hit hard its insurance business. Credit risk manifests itself in the bank's granularity to a bankrupt [Swiss airline] and a prominent Swiss businessman's troubled financial empire. As for operational risk, the Group faces problems such as the recent clashes with financial regulators in the US and Japan, the reported weakness of internal controls, the uncertainties and grievances that followed two major reorganisations in the last five years and the frequent criticism of the Group's corporate governance model. Further, a perceived major shift in insurance risk has become a concern to all insurers, and the bank's insurance business also faces the problem of rising insurance claims. Finally, strategic risks are to be considered as critics draw question marks over the soundness of the bancassurance strategy and the competitiveness of BWT's private banking business. Some even suggest that a weakening balance sheet made the Group a natural candidate for take-over. These are indeed challenging times for the risk management function."[69]

3.3.2. THE INTRODUCTION OF RISK MANAGEMENT

The risk management function at BWT was called Strategic Risk Management. The Chief Risk Officer explained the reason for the choice of the name of his function as follows:

'One of the things we have been struggling with over the last couple of years is how best to integrate meaningful high-level risk information into the

[69] Summary based on research diary notes, 6 October 2002

strategic planning process. ... The reason why the risk management function is called 'Strategic' is that the purpose should really be top-level coverage.' [70]

These were troubled times for BWT and he saw his task in creating a risk management function that communicates risk information of strategic significance to the Board.

After the completion of a PhD on risk-based internal audit, he joined the investment banking arm of BWT Group where he rose through a series of derivative trading and treasury management jobs to become the right hand of the CEO of the investment bank. When the latter was appointed Group Chief Risk Officer, he became his deputy and was also asked to introduce and head a new risk management function within BWT, the clearing banking arm of the group. These two appointments followed the announcement of an embarrassingly large loss that BWT Group suffered during the 1998 Russian financial crisis. Despite the fact that it was not the only financial institution that gravely burnt itself at the time, the loss was internally viewed as a serious risk management failure, and led to a group-wide initiative of reviewing and amending existing risk management systems. Based on a blueprint developed by the investment bank, the two senior group-level risk officers briskly set out to introduce a new risk management function in BWT with a toolkit that was consistent across the Group.

Though BWT sees itself as an *'innovative, flexible'*[71] organization, there was hardly anybody who did not have an ironic comment on the frequent structural changes that have taken place since the merger that was the birth of BWT Group (e.g. *'Don't ask - we are in the middle of an almost daily reorganization, he-he...'*[72]). Strategic Risk Management was set up in late 2001. It was one of six departments in what was called the CFO (finance) Division of the bank. The Chief Risk Officer reported to the Chief Financial Officer of BWT as well as directly to the Group Chief Risk Officer. This, and the fact that he also had a group-level function (second-in-command to the Group CRO), gave him parity with the Chief Financial Officer of BWT, and with the heads of the banking and insurance business units.

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[70] Chief Risk Officer, BWT
[71] Director, CFO Division, BWT
[72] Head of Operational Risk Controlling, BWT

Though structurally not directly linked to the BWT Executive Board, the risk function secured visibility and status in front of the board by calling to life and setting the agenda of a monthly Risk Management Committee. Strategic Risk Management was not on its own staging this board-level risk forum: it was in conjunction with the Credit Management function (which was also part of the CFO division). Not unusual for a large lending institution, Credit Management was far the largest department in the corporate centre pulling together lending information from an army of 1,430 staff located mostly in the branches. The risk function, with its 30 or so Zurich-based staff, secured a joint visibility with a long-existing and powerful function:

'We say we want to discuss employee benefit schemes in Switzerland or we want to discuss issues of banking secrecy or whatever we think is of importance to those guys.'[73]

The claim that the risk function orchestrated board-level risk discussions that were distinctly strategic in their nature, appeared to be in a sharp contrast to the risk people's plight at Frasers who did not have such an opportunity.

Since its introduction in late 2001, the evolution of Strategic Risk Management at BWT has been following two recognisable streams. First, the assessment and control of risks is undertaken by three sub-departments (Market Risk Controlling, Credit Risk Controlling and Operational Risk Controlling). At the time of the first field trip (October 2002) all of them were engaged in the development of new risk measurement techniques – these were meant to replace or complement the existing toolkit. Secondly, based on the risk measurements provided by the three risk management silos, the Economic Risk Capital sub-department determines the amount of capital to be allocated to each risk category and the aggregate amount of Economic Risk Capital that BWT and each of its subsidiaries ought to hold. Strategic Risk Management has secured Board-level visibility to the results of both of these activities.

At first sight it appeared that the risk management function had the ears of the Board at BWT. Does this mean they had quickly risen to a strategic role? The next sections will show that 'visibility' means different things for the Chief Risk Officer, for the risk people responsible for the definition of economic capital and for those in control of the risk silos. Also, having gained Board-level visibility

[73] Chief Risk Officer, BWT

does not mean that risk management is coupled to organisational action, and BWT's risk function has encountered various technical and organizational difficulties, which have stalled some of their initiatives.

3.3.3. ECONOMIC RISK CAPITAL AND THE PLANNING PROCESS

Apart from the monthly Committee, there was another forum where the Chief Risk Officer presented the Executive Board of BWT with formal risk reports: it was the final discussion and the sign-off meeting of the strategic business plan. As of 2002, the annual business plan explicitly specified the proposed capital allocations to each business unit and to the bank as a whole. Apart from being asked to sign off the business plan, the Board was also requested to formally accept the risk appetite of the bank. Risk appetite was expressed as the amount of aggregate ERC.

This development was a significant contrast to the case of Fraser Bank, where accounting representations absorbed risk information such as Economic Capital. The language of risk in the boardroom of Frasers was accounting (loan provisions). It appeared that at BWT the risk function had not only put risk on the agenda of the Board, but also introduced a new language for its discussion. In the new language of risk, Economic Risk Capital[74] was the common denominator to describe the risk profile of the organization as a whole or a part of it. Theoretically, economic capital figures can be compared across the business units of a given bank and they indicate differences in risk-taking capacities. Economic capital figures can also be compared with planned profit estimates to indicate the amount of minimum profit the business units are required to earn in order to deliver economic value. BWT's ERC was presented to Board members as 'the constraint to strategy' – it was a measure which had the potential to generate and stir strategic discussions.

[74] Fraser Bank's Economic Capital and BWT's Economic Risk Capital (ERC) denoted the very same risk management concept, which was described under the name of Economic Capital in Chapter 2. Although the techniques of calculating Economic Capital at the banks were conceptually identical, there were grave differences in the assumptions they used. The heterogeneity of assumptions underlying economic capital calculations stems from the specific situation of the different banks, making it impossible to compare the results of these risk calculations across the industry. To emphasise the lack of direct comparability, the study retains the specific names of the economic capital tool as applied in the banks.

The researcher requested four interviews at the Strategy and Controlling department in order to see what information they got from the risk people and to what extent they accepted that ERCs (should) form a constraint on strategies.

Strategy and Controlling was a neighbouring department to Strategic Risk Management only in its visual representation in the organisational chart (both were in the CFO (finance) division). In reality, they were located in different office buildings that were far apart enough to hinder informal communication between strategy and risk people. As for formal communications, there was little evidence for interaction between them.

The Strategy and Control department dealt with a dual task: firstly, there was a team of 'thinkers' who evaluated the qualitative aspects of plans and performed scenario analysis; secondly, there was a team of 'controllers' (management accountants) who evaluated the accounting aspects of plans and monitored their implementations.

The director heading the 'thinkers' team did not see much contribution from the risk people:

'The trouble about the interface between risk and strategy is that at the very high level, there is a very simple list of risks to look at from a strategy perspective. ... Then somebody goes there to do all these detailed models, the ERC thing and all that, and you have to think where you add value. If it is the basis for capital allocations, that's fine but...in the end, generally speaking, risk at a very high level is very simple and straightforward. '[75]

This comment reminds one of the planners' attitude at Frasers – they needed the risk function to perform only the economic capital calculations as an input to the planning process, but did not involve the risk people into the strategic analyses they undertook for top management.

However, at BWT the ERCs were not an embedded part of the planning process (while at Frasers they were). The management accountants, who orchestrated the quantitative planning process, expressed doubts whether capital charges mattered at all, especially in 2002-2003, when the bank faced financial troubles:

[75] Director, Head of Strategy and Projects, BWT

'The only theme now is to get back to profitability. Ninety percent of the focus is on P&L, net operating profit. ERC is calculated, together with all the ratios, [...] but at the moment these get a low weight in decision making.'[76]

Given the pressures on the bank to increase its profitability, strategy people doubted if managers' attention should be focused on anything other than the conventional accounting profit. In other words, they felt that risk-return considerations needed to be biased by concerns about returns. Viewed from the top of the organisation this left the issue of integrating strategic planning and capital management an unresolved, open issue. A director from the finance division voiced this as follows:

'What was highlighted this year [2002] is that the link between risk management and strategic business planning is not working: things like the constraints of growth, in the form of limited capital, are not integrated in strategy. ... The actual capital constraints of going ahead with a particular business plan are ... not well understood.'[77]

ERC was developed and promoted actively in the Group, and in particular, it was toured around among top management at a time when external stakeholders raised concerns about the bank's capital adequacy. According to the director from the finance division, the risk function had been successful in heightening management awareness of capital management issues:

'In the September divisional conference the buzz word was "getting business planning and capital processes working closely together.'[78]

However, at least two things prevented ERCs from reaching the level of integration with planning that they did at Frasers. Firstly, strategy people were not convinced ERCs added value to the planning process (the focus of which was return to profitability in a turnaround situation), and to discussions about the key strategic concerns of top management. From their point of view, risk management was not to be an 'interactive control' (Simons, 1991). Secondly, the methodology of ERC calculations had not fully taken root yet. At Frasers it took years of development and negotiation to settle on the technique (and on the results it calculated).

[76] Director, Strategy and Control, BWT
[77] Director, CFO Division, BWT
[78] Director, CFO Division, BWT

3.3.4. MULTIPLE DEFINITIONS OF CAPITAL ADEQUACY

The ERC method at BWT appeared in early 2002. Initially it did not cause much discussion and debate, which is not surprising given that (as opposed to Frasers' practice) ERC was not meant to be part of performance measurement – it just aspired to become an element of the planning process. However, towards the end of the year the Head of the ERC team proposed to make ERC a control tool to oversee the process of keeping the risk profile of Division X at bay – the insurance unit's excess risk taking had caused many of the Group's troubles at that time. The ERC team had a strong argument: the historic ERC measures had picked up the worsening capital and risk trends at Division X well before any accounting representations did so. The Head of the ERC team had confidence in the technique he proposed. It was a ratio that related the theoretical risk profile measure, Economic Risk Capital, to the actual accounting capital. But he was not sure if it was to be accepted as a management control tool:

'You cannot beat all problems with only one ratio, there are other KPIs [key performance indicators] that need to be applied. But I think this is a good ratio in order to discuss the strategy of [Division X]. ... We expect [Division X] to oppose to that.'[79]

And rightly so. A tentative suggestion at a top management meeting to elevate ERC to a controlling role by including it in profitability calculations took the risk people into the realm of politics immediately, as observed by a meeting participant afterwards:

'We sat together at the CFO roundtable [where the CFOs of each division were present], and the Insurance [unit] particularly was against using Return on Economic Risk Capital as a measurement, certainly as a performance indicator.'[80]

A cross-functional panel was set up to investigate the issue (with representatives from Strategy and Controlling, the ERC team and Division X). Finally the Chief Risk Officer decided not to advance the proposal of the ERC team to the Board in 2002, neither has he done so since. When asked on this in late 2002 (and again throughout 2003), neither the Chief Risk Officer, nor the

[79] Director, Head of Economic Risk Capital, BWT
[80] Director, CFO (Finance) Division, BWT

Director of Group Risk Reporting, nor the Group Chief Risk Officer saw ERC ripe enough for such a prominent role. They talked about '*the need to create buy-in from the business units ... and to resolve some difficult technical issues.*'[81]

However, an alternative explanation emerged by taking a closer look at the micropolitics of capital allocation. As it happened, ERC did not live in unoccupied territory at BWT: it co-existed with an old capital measurement and allocation methodology. The capital figures produced by the old method were called 'Respectability Capital.' Its proponents were accounting people and it belonged to the realm of the Strategy and Controlling department where it was used as a denominator for Return on Equity calculations. In effect, with ERC the risk people invaded the territory of planners and accounting controllers.

As its name suggests, Respectability Capital aimed to express the amount of capital that the bank ought to hold in order to remain 'respectable' in the eyes of the regulators, credit rating agencies and investors. Respectability Capital was based on accounting calculations: in effect, it was a scaling up of regulatory capital. Arriving at Respectability Capital figures for the bank as a whole (and for its business units) required an appreciation of the institutional pressures weighing on the bank, as well as judgement, even intuition, all of which was condensed into a rule of thumb (scaling up accounting capital) that ensured the appearance of 'calculations' taking place. Although ERC figures had been calculated for the business units and, to mark the end of the annual planning process, for the bank as a whole too, they had not yet gained predominance over the Respectability Capital figures. A simple rule of thumb determined the relationship between the two different measures of capital adequacy: whichever of the two turns out to be higher for a given subsidiary was taken as the 'adequate' figure.

ERC seemed to be technically better founded because of the more sophisticated statistics-based calculations that underlie it, yet Respectability Capital was expected to die hard. There appear to be several reasons, depending on which theoretical angle one considers it from. First, during the assessment of Respectability Capital explicit consideration is given to what might be regulatory and rating agency expectations of capital adequacy that the Group needs to live up to. Second, carrying the powerful image of 'respectability' in its name,

[81] Director of Risk Reporting, BWT Group

Respectability Capital provides a strong sense of capital adequacy, prudence and legitimacy through its allusion to institutional appropriateness (the institutionalist argument).

Secondly, the accounting people (in particular the management accountants in the strategy department) appeared to 'prefer' Respectability Capital and were not in favour of the possibility that ERC might become a basis for control and performance measurement, which would be the case if ERC took predominance. This can be interpreted as suggestive of occupational struggles between the Controlling (management accounting) function and the risk management group. In such struggles the language applied by different professional groups become significant and, possibly, serve as sources of power. As Dutton (1997) notes, '*in an organizational context, intentional and unintentional usage of language to frame an issue mobilizes different groups of managers to invest in the issue. These framings, in turn, reflect different understandings of an issue and result in different patterns of attention allocation.*'[82] The power of language is that it mobilizes action and it may influence who gets involved in an issue's resolution. In this case risk people furthered the notion of Economic Capital, which (at a time of capital adequacy concerns) did not fail to draw attention from top management. However, the Controlling people were not consulted about the methodology, neither did they attend organisational forums where Economic Capital was presented. They furthered more traditional notions of capital adequacy, which were based on accounting numbers. Into the capital adequacy discussions they brought regulatory solvency ratios (in case of Division X), and Respectability Capital (for the banking units). Into performance and profitability discussions they brought accounting profit measures and return on equity calculations. They too were able to get the ears of top management. It appeared as if the two groups were competing on the definition of an abstraction (capital adequacy) that would allow the generation of practical techniques (for capital adequacy determination and control). This accords with Abbott (1988)'s vision of interprofessional competition, the stake of which is control of (abstract) knowledge and its application. Top management's application of the 'higher of' principle for the

[82] Dutton (1997), p.90.

selection between the competing measures of capital adequacy can be viewed as a *compromise* signalling top management's reluctance to favour or ignore either perspective.

Thirdly, these were troubled times for BWT, the company had continued to disappoint investors for a second consecutive year. In 2002 financial analysts drew question marks over the financial health of the whole Group. Subsequently BWT lost its target AA credit rating. Top management felt the heat of external attention as the national banking regulators started to ask for more detailed information about the internal management of the bank in the course of the quarterly meetings they hold with BWT. As it happened, the ERC method indicated a smaller capital need for most business units than what was suggested by the old prudent approach. Given the heat of attention paid to the capital adequacy of the bank, it would have been very difficult to switch from Respectability Capital to a smaller ERC. The rule of taking the higher of the two appeared to be a conservative approach that satisfied external regulators (the functionalist / contingency view).

Fourthly, ERC was not based purely on computations either. Its operational risk capital element was rather judgemental - according to one account it was a matter of intuition ('*best guess*'[83]). It is difficult to conduct a technical debate between two judgmental (or inspirational) techniques and even more difficult to reject one of them in favour of the other (the bounded rationality argument).

Despite the fact that ERC had not crowded out the old approach to capital adequacy, it had not suffered a defeat. A group-level risk director explained that the two capital measures were best to be viewed as complementary:

'This 'higher of' concept says, well, we have done the best we could with our ERC model, but there are facts in life that we can't capture. There is a respectability capital you need in order to keep your business partners, in private banking it is higher than ERC, so that's what we allocate. While in [the investment banking arm of the group] you have huge fights..., it was well received here [in BWT].'[84]

[83] Head of Operational Risk Controlling, BWT
[84] Director of Risk Reporting, BWT Group

Having talked to a director from the finance division, the impression was that in BWT ERC has gained a reputation of serving as a *'plausibility check'* – perhaps it even rationalised the Respectability Capital allocations.

This alone may have ensured that ERC was there to stay. Avoiding a battle for exclusivity against the notion of Respectability Capital, risk people continued promoting ERC as a plausibility check while raising capital awareness in the organisation. But this alone would not make ERC an embedded part of the planning and control process:

'ERC is a plausibility check, if you will. The risk management function is responsible for doing that plausibility check, but ... those numbers are not used in day-to-day management. When we start bringing it out as a management tool, as a performance measure, there are problems and issues.'[85]

Strategy people remained unconvinced that ERC was a credible computational tool for capital allocations. Another reading of this is that they may have considered the ERC team to encroach on their territory of competence and influence. Capital adequacy and performance concerns, voiced by both internal and external actors (e.g. regulators and analysts) gave the opportunity to risk people to offer new abstractions in these areas. They had to compete with the Controlling function for the ears of top management. This intraorganisational power struggle was played out in the form of an inteprofessional competition (Abbott, 1988). At stakes were the questions of who had control over capital management and performance measurement, when and how.[86] Abbott (1988) emphasises that it is such jurisdictional disputes that determine the history of the professions. It appears that 'jurisdictional disputes' can arise even in the micro-context of a single organization, frustrating (or not as the case may be) a functional group's ambitions to achieve strategic significance. Although at BWT risk people had achieved a certain amount of influence in (re)defining the notion of capital adequacy, they had not managed to redefine planning and performance measurement.

[85] Director, CFO (finance) division, BWT

[86] 'Since jurisdiction is the defining relation in professional life, the sequences that I generalize are sequences of jurisdictional control, describing who had control of what, when and how. Professions develop when jurisdictions become vacant, which may happen because an earlier tenant has left them altogether or lost its firm grip on them.' (Abbott, 1988: 3)

3.3.5. MANAGING THE RISK SILOS

As for the assessment, monitoring and controlling of the different risk types, BWT's four risk management teams (Market Risk Controlling, Credit Risk Controlling, operational Risk Controlling and the Economic Risk Capital team) were jointly responsible for producing a monthly risk report that was presented to the Executive Board (Risk Management Committee).

The monthly executive risk report was a thick document. Its production took a long time and it tended to be a month out-of-date by the time it hit the Board agenda. Its content followed a blueprint from the investment banking arm of the Group. The report was very data-intensive and it forced the risk people to reach out to other departments for data and analysis. Having been a small department, they saw their reporting role in the selection, ordering and summary of risk information that was collected and analysed elsewhere in the organisation where there were more data processing capacities. Subsequently, the ERC team added the calculations of Economic Risk Capital to each risk category. Finally, a one-page executive summary was added with the '*key highlights*'.

Inside the report there were dozens of charts graphically representing risk exposure lists, trends as well as risk limit breaches from all over the bank (no subsidiaries or functions are exempt from data provision), arranged neatly under the headings of market risk, credit risk and operational risk.

Most risk people seriously doubted whether all this information got read. As one of them put it, '*We would like it if the receivers of our analysis came back to us with questions. But they don't.*'[87] Having asked executives from the strategy department and the CFO (finance) division, it became apparent that the problem was that the key strategic risk concerns of top management were not quantifiable, hence the sceptical answer: *'You would not think that the central risk function should have a big impact on strategy'.*[88]

Thus it appeared that the production of risk reports served to satisfy a regulatory expectation (the need to produce board-level risk information), however, risk reporting was decoupled from actual use. Board discussions deviated from the content of the risk report towards more 'strategic' issues. Strategic discussions were at this time outside the formal reporting coverage of

[87] Team member, Market Risk Controlling, BWT
[88] Director, CFO (finance) Division, BWT

risk people and those issues got very little (if any) representation in the monthly risk report. Having recognised this, the CRO's aspiration for the future was to solve the problem of providing '*meaningful high-level risk information*' to the Board. Chapter 5 and 6 will further elaborate on the extent to which he managed to do so, and on the ensuing implications for the strategic significance of the risk function.

3.4. DISCUSSION

This section summarises the contrasts and similarities between the risk functions and their location, visibility, influence and relations with strategy people that were found in the case studies. The analysis is an initial snapshot that was taken based on information collected in 2002 and early 2003. The results that are discussed here remained valid until the end of the data collection period. Some aspects will be further elaborated on in chapters to follow, in order to add a longitudinal aspect to the study.

Structurally, risk management was a staff function in both banks. At Frasers the new Risk Director was a member of the executive board, while at BWT the Chief Risk Officer orchestrated regular risk meetings with top management. This allowed them to participate in top management discussions of non-technical nature. In this way, the heads of risk management departments (henceforth called '*senior risk officers*') may (or may not) have an *informal influence* on key strategic issues.

The *formal influence* of risk management manifested itself in two ways. First, there were risk specialists who deal with the measurement, reporting and diagnostic control of the typical risk silos (market, credit, operational). These people will be referred to as '*risk silo specialists*' in order to emphasise that their function is primarily technical. Secondly, there is a separate team in each bank that dealt with the definition of 'economic' capital with the purpose to incorporate these into strategic planning as capital constraints. They also had ambitions of extending this role to performance measurement and control. While at Frasers Economic Capital allocations were already part of an iterative planning process and bonuses were attached to 'economic profit', at BWT both of these remained next year's challenge. This third group of risk managers will be called '*risk capital specialists.*'

Both risk silo specialists and risk capital specialists produced *input to Board reports*. Risk silo specialists put together regular risk reports about the risk silos. Risk capital specialists produced and (at Frasers only) guided the calculations of capital charges for the business planning process. These economic capital charges may get explicit *visibility* in the top management-level discussion

of strategic plans (as in the case of BWT, at a time of heightened internal and external concerns for capital adequacy) or may get absorbed by more conventional accounting representations of risk (as in the case of Frasers).

The relationship between the risk people and the strategic planners (who use accounting language) sheds further light on the issue whether the strategic and control potential of risk management was to be fully realised. *Structurally*, risk and strategy were in different divisions with two different reporting lines and directors at Frasers, while in the same division at BWT. Despite this, the integration between the two functions was more advanced at Frasers and only developing at BWT. From a *personnel* point of view at Frasers both the risk and the strategy departments were in the same building on adjacent floors that enabled informal communications, and there was a strategy manager appointed to formally liaise between the two functions. At BWT the two functions were so distant from one another that location prevented informal communications and there was nobody with a formal coordination role.

However, the key to the integration between the risk and the strategy functions lay in the *relationship between the risk management and planning processes*. At Frasers top management and the planning people applied value-based management and other accounting concepts for internal planning, control and performance – planners needed risk capital specialists to provide capital charges to different strategic alternatives. At BWT the focus of strategy and management control was on the profit aspect of performance and capital charges were not considered relevant for orchestrating a turnaround situation, even though capital awareness had increased due to financial hardship.

The *relationship between risk management and discretionary decision making* was obstructed on both sides by the fact that strategy people considered key strategic uncertainties to lie outside the realm of risk people and did not involve them in the analysis of key strategic alternatives (e.g. acquisition decisions). Note that at both banks the senior risk officers were seeking ways to expand their currently informal influence on such decisions. In case of BWT there was emerging evidence that senior risk officers, having acquired agenda-setting power, were able to exercise informal influence on some key strategic decisions. (Chapter 5 and 6 will expand on this.)

It seemed that both risk people and strategic planners intended to shape the language and content of board-level discussions of strategic uncertainties as they provided input to the strategic plans and the presentation of these to top management. However, there was an uneasy symbiosis between the two functions. The following table describes the different visibility and influence that risk people have gained in the two banks.

	Frasers	**BWT**
Context	Group-wide efficiency review, Refocusing on economic profit	Economic hardship, capital adequacy concerns, focus on net profit
Language of Board-level discussions of strategic uncertainties	Accounting, 'strategy'	Accounting, 'strategy', specialist risk talk (ERC)
Risk management and planning	Integrated	Not integrated
Risk management and performance measurement	Integrated	Not integrated

The results suggest that gaining visibility and infiltrating the language of board-level discussions with specialist risk-talk are neither necessary nor sufficient for risk management to effectively influence strategic planning and control. At a time of economic hardship and worries about capital adequacy risk management can be called upon for explanations and reassurance, but not necessarily for solutions. Risk management was found influential when it was actively called upon by strategic planners who integrated economic capital with a modern, value-accounting based approach to planning and performance measurement. However, this influence may well be invisible to the Board if their attention is guided by more powerful strategy people (planners) and more conventional accounting representations of both the bottom line and the risk implications of strategic alternatives.

These findings help us to assess to what extent the observed risk management functions have succeeded in achieving a strategic role in terms of the five tests proposed in the first section of the chapter. It can be shown that despite similarities in the risk reporting and management techniques used, the two risk functions have conquered different heights of organizational significance. The following table illustrates this point.

The risk function at...	Frasers	BWT
Formal status	Evidenced	Evidenced
Language creation	Evidenced	Evidenced
Redefinition of strategic planning	Evidenced	No evidence
Redefinition of performance measurement	Evidenced	No evidence
Influence on key strategic decisions	No evidence	Evidenced
Interactive vs. diagnostic control system	Diagnostic	In some aspects Interactive (e.g. ERC/Respectability Capital interactively used during capital adequacy crisis), otherwise Diagnostic (risk silo management)

Risk reporting was introduced in the wake of a crisis in both banks. The appointment of senior risk officers and the establishment of reporting channels to the Board gave *formal status* and visibility to their reports. Both risk functions were successful in introducing a new *language of risk* (e.g. value-at-risk, economic risk capital), and they regularly produce specialist risk information for top management as well as the Board.

At Frasers the notion of economic capital fills in a gap in value-based management: it offers a risk-based measure of capital charges. Here risk management effectively redefined the planning process and subsequently, performance measurement. However, the influence of the risk function stops short of key strategic decisions that are in the realm of the more powerful planning function. Risk management is not seen by top management as addressing their key strategic concerns – it is used as a diagnostic (monitor and alarm) control system, rather than an interactive one.

The language of economic risk at BWT has so far failed to redefine the planning and performance measurement processes – the notion of value-based management is not pronounced here as yet. Contrasting to what was found at Frasers, the influence of senior risk people on certain major strategic decisions is possible, but has been limited to the informal role that the heads of the risk function play at top management discussions (where they set the agenda). However, the senior risk officers' aspiration to incorporate 'meaningful high-level

risk information' in formal risk reporting remains a challenge. Nevertheless, due to the capital adequacy concerns that for some time overhung BWT's strategic choices, the risk function has recently been frequently called upon to provide information about developments in the risk and capital profile of the business units. It is fair to say that evidence was found for the interactive use of risk reports provided by 'risk capital specialists'. Such an interactive use of the risk management system has indeed increased risk and capital awareness throughout the organization. However, Chapter 4 will show that top management's personal attention to this particular aspect of risk management (economic risk capital trends) was not sustained. Chapter 6 will further argue that the interactive use of risk management subsequently occurred as a result of senior risk officers exercising their agenda setting power and influence at board-level meetings that they themselves called into life. In the meantime, the reports of risk silo specialists have been used diagnostically.

The findings pronounce the functional differentiation that risk management has been undergoing at the two banks. It is likely that the emergence of three distinctive groups of risk managers (risk silo specialists, risk capital specialists and senior risk officers) is a more general phenomenon and that the three groups display different strategic and control potential. This raises an important implication for those who regulate risk management in the banking sector – the expectations made on the risk management function should consider the different capabilities and weaknesses that risk silo specialists, risk capital specialists and senior risk officers possess.

3.5. CONCLUSION

It appears that risk management's road to organizational significance took different directions in the two banks. However, three types of risk managers have emerged at both organizations. The following table describes their characteristic traits that transpire from the case studies. It shows that the differentiation of the risk function mirrors the varying aspirations of risk officers – the three emerging groups of risk managers seek to conquer different heights of organizational significance. Further, the functional differentiation of risk people is indicated by the different technologies (languages) and decision making methods (Burchell et al., 1980) they apply.

	Risk silo specialists	**Risk capital specialists**	**Senior risk officers**
Focus on	Risk types	Business units	Both
Language used	Statistics-based risk assessments (e.g. value-at-risk)	Economic risk capital requirements and allocations	Both
Aspired influence on planning	Not involved	Direct involvement in economic capital allocations Constraining strategic plans	Informally involved
Control aspiration	Monitor and alarm control over the risk silos	Control of business units via performance measurement	Heading these initiatives
Strategic aspiration	Diagnostic role: Directing attention to problem areas	Diagnostic role: Directing attention to problem areas	Interactive role (Playing the devil's advocate at the Board)
Decision making method used	Computation, judgement	Computation, judgement, intuition, lobbying	Computation, judgement, intuition, lobbying
Political sensitivity of their assessments / decisions	Low	High	Depending on whether dealing with risk analysis or economic capital allocations (Low or high)
Political support needed from	CRO	CRO, Planners	Planners Board

The first group (*'risk silo specialists'*) consists of those who are engaged in measuring and assessing different risk types. However, their reports on adherence to risk limits often fail to grab the attention of top management, even where they get a direct access to the Executive Board. This is because the risks that concern the Board tend to be of a more elusive, strategic or regulatory nature, and hence, for the time being stay outside the reach of *risk silo specialists*.

However, the production of the quantitative risk estimates is not redundant. Another group of risk managers (*'risk capital specialists'*), concerned with the calculation of economic (risk) capital, find it a necessary input. The process of arriving at capital allocations incorporates much judgement, intuition and organisational politics. Indeed, an increased political sensitivity to the consequences of their decisions (e.g. capital allocation changes) distinguishes risk capital specialists from their risk silo peers. In their efforts to align internal definitions of capital with external expectations, while steering among the profit/capital interests of different business units carefully, risk capital specialists may gain support from the planning people who seek to draw the attention of business units to currently popular economic ('value added') profit considerations. The provision of economic capital charges may become an integral part of the strategic planning process where the influence of risk people would manifest itself through their ability to constrain different strategic alternatives. Once economic capital charges become an integral part of the planning process, risk capital specialists appear to be just a step away from a strategic control role: an influence on planning may lead on to an influence on performance measurement, assuming that value-added profits are made a basis for accountability. This requires the alignment of planning and control principles between top management, strategy and risk people. However, *risk capital specialists* are in a politically very sensitive area. They can easily upset the power balance in a group of companies. They also have to be prepared to live in an uneasy symbiosis with the strategy people who can support them in their efforts to redefine definitions of capital allocations but on the other hand can deny them top-level visibility.

This leaves *senior risk officers* with a dilemma. It is generally believed that risk management needs to solve some difficult technical problems related to the controlling of risk silos and the calculation of economic capital. However,

investing resources in more technical developments would only facilitate the production of more and more 'elegant models', but would not bring risk people necessarily closer to be involved in key strategic decision making. Securing access to and visibility by the Board has enabled *senior risk officers* to exercise informal influence on some strategic concerns. However, their influence on major strategic decisions has been limited. Their favoured role is that of the devil's advocate (challenging and questioning existing beliefs in order to prepare the organization to fend off possible adversities). Chapters 5 and 6 will revisit and evaluate senior risk officers' ambition to solve the problem of incorporating 'meaningful high-level risk information' into formal risk reporting.

So far it appears that whether risk people can conquer the heights of strategic significance they aspire for hinges upon a number of challenges specific to each group. *Risk silo specialists* need to make risk limits a timely rather than a delayed control tool, reported in a sufficiently concise manner, in order to grab top management's attention and to fulfil a strong diagnostic control role. *Risk capital specialists* need to align external capital expectations with the internal profit/capital interests of the bank in order to exercise influence on planning and maintain a diagnostic control role over the performance of business units. *Senior risk officers* aspiring for an interactive control role over key strategic uncertainties need to forge a stronger relationship with the strategy people (planners and the members of the executive board) whom they have to convince that the risk management function can contribute to the analysis of risks that resist statistical representation. It is unclear whether the task of reporting on key strategic uncertainties (that are not necessarily quantifiable) would land with risk silo specialists or risk capital specialists - it may even lead to the emergence of yet another team with hybrid skills operating on the borderline between the risk and the strategy & planning functions. Chapter 6 will elaborate on the role of senior risk officers in the discussion of non-quantifiable risks, and on how they mobilise information for this purpose.

A parallel can be drawn between the strategic aspirations (and related frustrations) of senior risk officers and the ambitions and frustrations of UK management accountants created by the rise of Strategic Management Accounting

(SMA).[89] SMA advocates Bromwich and Bhimani (1994) urge that '*accountants should cooperate with others who 'own' other information relevant to strategy.*' However, they note that '*other managers may not wish to share this information and may doubt whether conventional management accounting approaches can portray it correctly.*'[90] They cite empirical evidence suggestive of the 'great efforts' needed by all within organizations in order to achieve the requisite cooperation between accountants and managers.

To conclude, this chapter has pointed at two diverging patterns of organizational significance on the part of the risk management functions observed. In one case (demonstrated by Frasers) risk management becomes integral to the formal planning and performance measurement process, while remains neutral in the discussions of key strategic decisions that emerge outside the planning cycle. In the second case (demonstrated by BWT), risk management is incidental as far as the formal planning and control cycle is concerned, however, senior risk officers may still acquire agenda-setting power to influence the discussion of key strategic uncertainties and participate in top management-level decision making.

Given that the emergence of the three types of risk officers occurred in both cases, the role of individual risk officer groups in the different patterns of organizational significance needs to be explicated in chapters to follow. The analysis of the strategic significance of ERM will be continued in Chapter 5 by investigating the role of risk officers in the control of conflicting risk and return objectives. Finally, Chapter 6 will assert that the two patterns that this chapter tentatively picked up signify the existence of alternative patterns in the use of ERM practices. This will be explained with risk officers responding to different corporate governance pressures and different calculative cultures. But beforehand, adding an organizational-symbolic dimension (Dutton, 1997) to the study, the next chapter will consider some of the external influences that shape the dynamics

[89] Strategic Management Accounting is the label given to a specific vision of the development of management accounting. It was particularly popular in the 90s at the time of (mainly US but also UK) concerns with the relevance of accounting in business organizations in the face of fierce economic competition from Japanese companies. SMA advocates believe that one of the key challenges of management accountants is to provide 'relevant accounting information configured in a way in which it can be used for strategy [formulation and decision making].' (Bromwich and Bhimani, 1994:149)

[90] Bromwich and Bhimani (1994), p. 148.

of top management's use of risk controls. We do this by focusing on the micropolitics of divisional control in one of the banks where risk and accounting controls interacted with one another.

CHAPTER 4

RISK MANAGEMENT AS A POLITICAL AND INSTITUTIONAL PHENOMENON – THE CASE OF DIVISIONAL CONTROL IN BWT

'Leadership has a harder job to do than just choose sides. It must bring sides together.'
Jesse Jackson

Enterprise risk management has not arrived in unoccupied territories at most large financial institutions. Given that the traditional business of banking is risk taking, it can be assumed that ERM systems seek to complement or replace previously existing formal and informal control mechanisms. Indeed, at Fraser Bank the risk management function appears to have complemented the formal planning and performance measurement system by resolving capital allocations and feeding capital charges into the planning and control process. At BWT, however, risk management failed to get integrated with the formal planning and control cycle.

The previous chapter suggested that the micropolitics of risk management (at least in part) explains this difference. The allocation of risk capital is an evidently political process, which was orchestrated by Frasers' risk capital specialists (eventually, after a disastrous initial attempt) with tact and skill. However, BWT's risk capital specialists encountered opposition from the Strategy and Controlling department who were the guardians of the planning process, operated accounting controls, and emphasised a rival concept (and tool) for the determination of capital adequacy. Despite the fact that senior risk officers enjoyed similar formal status and parity with senior planning and control staff at both banks, at Frasers they were able to build alliances with the planners, at BWT they were not.

This chapter takes a closer look at the relationship between accounting and risk controls within BWT. It argues that what appears to be a distribution of power and influence between two functional groups is subject to a dynamic process, 'the rise and fall of control systems' within an organization. Further, it

will be argued that the rivalry (or alliances) between functional groups (risk management and accounting) may well be shaped by external factors. That is, the apparent organizational significance of risk management and accounting within an organization may vary over time according to changing influences from the institutional environment.

As it happened, the field research at BWT coincided with a period of financial crisis and recovery during which environmental hostility mounted and ebbed, institutional pressures became pronounced and fell away. In particular, these forces were observed to shape the control of BWT's troubled business unit, Division X. By explicating the role of risk management and accounting controls in divisional control over the troubled insurance unit, the chapter finds that risk controls rose in prominence during the crisis and fell out of management favour subsequently, while accounting controls from headquarters took dominance over the business unit. Applying Simons' (1990, 1991) distinction of interactive vs. diagnostic use of control systems, the chapter shows risk management functioning in both capacities. The observed patterns of risk management use correspond not only to particular organisational characteristics (as Simons postulated), but also to institutional pressures. Accordingly, the symbolic and legitimising aspects of interactive control use are emphasised. In particular, it will be argued that interactive controls send signals not only to members inside the organisation, but also carry meanings for influential stakeholders and onlookers outside the organisation too. This result adds a longitudinal as well as an organizational-symbolic dimension to our understanding of the organizational significance of a control function, and in particular, to Simons' (1990) theory of top management's use of control systems.

4.1. DIVISIONAL CONTROL AS A MULTIPLE CONTROL PACKAGE

The chapter traces the workings of a multiple control system that has been employed by BWT over the last five years. The focus is on the divisional control over a particular business unit, Division X, which was exercised by a package of four control systems, two at headquarters' level, two in the division itself. While BWT is a Zurich-based financial services group with global presence, the division itself is also a large financial institution: one of Europe's leading insurance companies.

Just before the researcher's involvement with the company an unexpected dramatic shift took place in the insurance unit's environment and the organization's control practices over this business unit broke down. Having caused a serious blow to the financial health of the entire group, the survival of the business unit came under threat. Change and adaptation were required from both the division and the parent organization. Divisional control came to the foreground of top management's attention and went through a number of changes due to the changing relationships between the control systems that contributed to it.

Before specifying the divisional control package, a brief note on divisional control is warranted. Following Ezzamel and Hart (1987), divisional control is taken here not only to include the means by which central management monitors and evaluates the performance of company divisions, but it is also viewed as a subset of a broader organisational control system. Hence divisional control incorporates not only financial controls but other formal (and informal) controls as well. In the present case the rise of firm-wide risk management within the group added another formal control system to an initially predominantly accounting-based divisional control practice. Informal relations came into play prominently during the period of crisis and became gradually less frequent in the recovery period.

In order to specify the control system package, the study applies Anthony (1965)'s distinction between control process and control systems. The *control process* exercised by the control system package consists of the headquarters' activities concerning controlling and governing the division. *Control systems* are

defined here as the information sources / functional areas that the control activities were mainly based on. Four control systems were found instrumental in divisional control: 1. accounting control at headquarters, 2. risk management control at headquarters, 3. accounting control in the division, 4. risk management control in the division.

The case is based on fifty-four in-depth interviews at BWT and Division X conducted over the course of a period of two and a half years. Senior finance, lending, strategy, controlling (management accounting) and risk staff, as well as two persons from the Group Executive Board were interviewed (up to three times) in the study. Within the boundaries of confidentiality, they provided historical and other documentary evidence (annual reports, presentations, internal reports) as well. Considering the coincidence of the research horizon with one of the deepest crises BWT has undergone, access was provided with an unexpected openness and generosity.

The following three sections are devoted to the description of the main contextual events and the politics of divisional control. The events, that have taken place since the acquisition of Division X, fall roughly into three subsequent stages: 1. pre-crisis, 2. crisis and 3. recovery. These stages served as a back-drop to the observed divisional control practices, but did not fully explain those. Later on, a separate analysis of the complementary and substitution effects that were set in motion in the multiple control system will be furthered for the explanation of the observed control practices.

4.2. ACTIVATING A MULTIPLE CONTROL SYSTEM

To recoup, BWT Group was a major player in the global financial services industry. A vision of global expansion underpinned a growth strategy that resulted in the group acquiring a 150-year old insurance company (Division X), which was itself an international business with a presence in 16 countries. The acquisition of Division X aimed at reducing overall business risk through diversifying into the insurance business that was new to the bank. At the same time the move promised to realise the potential of integrating banking and insurance services - the concept of 'bancassurance' was a popular strategic idea that the financial services sector had been experimenting with since the 1990s. [91] Structurally, BWT Group was managed as a group of two main organizations, the first being the investment bank, the second being a combination of the insurance company and a traditional universal bank with private, retail and corporate banking services. The study is about this latter organization – BWT. In the management structure Division X was a business unit of BWT, and both of them were managed independently from the investment banking arm of the Group.

The events that took place since the acquisition of Division X fall roughly into three subsequent stages: 1. pre-crisis (1997-2001), 2. crisis (2001-2003) and 3. recovery (2003-2004).

4.2.1. PRE-CRISIS (1996-2001)

The acquisition took commentators by surprise.[92] Nevertheless, an optimistic market sentiment about BWT Group's future had helped the company

[91] 'Bancassurance' means the integration of banking and insurance services at the operations level. In an article printed on 15 November 2002 the Financial Times reviewed the developments in European banks' bancassurance strategies: 'In the 1990s, banks such as Lloyds TSB in the UK (...) bought life assurance companies to help drive revenue growth by selling pension products to existing customers. However, plummeting stock markets over the past 12 months have forced many banks in the UK and Switzerland to inject capital into their life assurance arms. This is to maintain solvency levels required by regulators as well as support new business.' ('Bancassurance: Underselling their best assets', by Jane Croft, Financial Times, 15 November 2002)

[92] The Economist appeared to be surprised in a 1997 article titled '[BWT] gets the merger bug' and asked 'If you only need a glass of milk, why buy the cow?' The merger was seen as a possible forerunner to a new wave of acquisitions in the European financial services sector. Another 1997 commentary in The Economist pondered the question: 'A big Swiss bank plans to buy a top insurer. Does the future of banking belong to the financial conglomerate?'

to quadruple its market capitalisation following the acquisition of Division X, over a mere four-year period.

These first three years of realising the *'bancassurance strategy'* were also referred to in the annual reports as a *'merger process'* between the Bank and the insurance company. However, integration between the two companies (and the other four business units) remained low. Interviewed by a bankers' magazine towards the end of this period, the Group CFO voiced a commitment to a decentralised group structure: *'We believe in our structure and the autonomy which it grants to the business units.'*

A separate legal entity, based in a town other than the Swiss financial centre - BWT Group's headquarters are in Zurich -, Division X had its separate governing offices. In one of their main buildings (Division X had two headquarters at the time, one for the life business, the other for non-life business) visitors were welcomed by a tall marble panel rooted in front of the entrance which proudly featured Division X's logo and read *'welcome to the global headquarters of [Division X's company name].'* Even during the next period of crisis, when visiting the building, the researcher found nothing in the reception area that would have given away the fact that the insurance company was a subsidiary of another financial institution. Copies of Division X's annual reports and newsletters were displayed, but there was nothing of BWT Group.

Cultural artefacts aside, some organisational theorists argue that the level of divisional integration can also be inferred from the quality of collaboration existing amongst the organisational units required to achieve unity of effort (Lorsch and Allen, 1973). The bancassurance strategy required such unity of effort, but by the time this research project started, it was internally regarded as a failure.

'You cannot sell car insurance as part of banking advice. It just doesn't work,'[93] BWT's director of the management accounting function (controlling) asserted. He saw the reason for integration problems in three factors. First, there was a significant difference in compensation schemes at the operational staff level. Second, there was the human resources problem of employing people who are capable of selling insurance as well as *'300 products on the banking side.'*

[93] Director, Head of Controlling, BWT

Finally, the difference in cultures seemed a very prominent issue: he talked of *'tough, aggressive, hard-selling'* insurance sales people and *'back-office type insurance bureaucrats'* vs. bankers who play a more *'advisory role'*.

Several other people commented on the existence of *'two cultures'* – described further by a director from BWT's CFO division as follows:

'Coming from banking, [Division X] is a little bit negative, a little bit slow moving, not as responsive, whereas the banking side is more proactive and responsive.'[94]

There were anecdotes too, one of them told by the strategy director as follows:

'Their [Division X's] culture is very different due to the different background of the people. For example their share of academics is much lower than ours. They are less academic, more down to earth. Insurance is a sales thing and banking is an advisory thing. Bankers are here to manage a relationship, it is a long term thing. I went on Friday to a meeting of [the CEO] with the insurance team. He received a list of questions and comments from them. They were like 'our way is that we have simple rules, be honest, be in the office before 8 o'clock...' – nobody here talks about when you have to be at the office.'[95]

On the insurance side people also perceived a cultural gap that manifested itself in the difference of the two business models:

'A banker lends money and hopes he gets it back. An insurer takes on money and hopes he will never have to pay it back.'[96]

This caused a perception within the Division that

'there are not many guys there [in BWT] who understand our business.'[97]

Thus it is concluded here that differentiation, rather than integration characterised the structure of the 'bancassurance' group. Throughout these years Division X delivered strong performance. This gave an assurance to BWT that Division X was on the right track. Although the business environment was perceived as *'volatile and challenging'*[98], it did not appear hostile. A confidence about Division X's outlook was often expressed; for example the 1998 annual report commented optimistically that *'[Division X] finished the business year on a*

[94] Director, CFO (Finance) Division, BWT
[95] Director, Head of Strategy, BWT
[96] Head of Strategy, Division X
[97] Head of Investment / Risk Management, Division X
[98] Annual Report, Division X, 1998

high note.' Further, the environment was favourable, with investors keeping BWT Group in high regard, resulting in the company's spectacular three-year stock market performance in which it quadrupled its market valuation.

4.2.2. CRISIS (2001-2003)

World stock markets peaked in March 2000. As the 1990s equity-market merry-go-round came to a halt, and stock-market indices world-wide started their downward spiralling plunge. BWT Group found itself yet again in the heat of media attention. However, this time the commentators cast clouds over the soundness of the financial health of the bank. The next year saw heavy write-offs in the Group accounts due to equity revaluations and a weakening of the Group's capital base. In particular, concerns were raised about Division X's capital position. Only repeated capital injections from the Group saved the insurance business from the embarrassment of breaching regulatory capital ratio requirements.

Some even suggested that a weakening balance sheet made the Group a natural candidate for take-over. Reports of *'investor scepticism'* and the Chief Executive *'battling for survival'*[99] at shareholders' meetings show that a dramatic shift took place in the environment, which was not only a matter of turbulence, but hostility as well.[100]

The acquisition of Division X came to be viewed in the investor community as a major and costly strategic mistake. Like many European insurance companies, Division X was heavily exposed to the falling stock markets and instead of diversifying the business risk BWT Group carried, the acquisition resulted in the Group's increased exposure to the equity markets. Investor and press hostility was expressed in relation to Division X as many commentators put the blame for the group's financial troubles on the insurance division. Many were puzzled by the impairment practices common to insurers which caused a time

[99] Quotes are taken from the Financial Times. No detailed reference can be given for confidentiality reasons.

[100] Khandwalla (1977)'s taxonomy of environmental variables is deployed here. Among others, he distinguishes between turbulence (risky, unpredictable, fluctuating, ambiguous environment) and hostility (stressful, dominating, restrictive environment).

delay between the occurrence of losses and the emergence of the bad news.[101] Disappointed investors claimed that *'the group's balance sheet was 'polluted' by the erosion of the capital cushion in [Division X]'* and many would have liked to see *'the insurance arm spun off.'* Others sceptically added that this may not be possible given that *'Division X looks increasingly like a poison pill.'*[102]

This stressful year of environmental hostility saw the departure of several top-level managers on both the banking and the insurance side. New Chief Executives were appointed who were under enormous institutional pressure to turn around the fortunes of the group. It is notable that it was not the increase in environmental turbulence that distinguished the crisis period from the previous years. BWT Group had always considered its environment *'challenging'* and *'volatile'*[103] and this was not the first time it posted losses in the 90s. Recurring speculations of take-over threats (hanging over either the insurance unit or the entire group) and repeated calls for reassessing the bank's strategy put the pressure of immediate action and change on management. Such an environment can therefore be viewed as not only turbulent, but hostile too.

Managers in Division X came under a dual pressure: both from the environment and BWT. One of them commented:

'On the insurance side we have improved a lot, we are a much better company than five years ago. Nevertheless we get punished from the outside for our bad [investment] results.'[104]

On the banking side, Division X's initial low integration became particularly visible. For many, it came to be viewed as part of the problem that led to the crisis. The Director from the CFO division observed:

'[Division X] was too independent. It was not recognised that despite the fact that all the group central functions worked well with banking [i.e. the banking divisions], it was not the case with insurance.'[105]

This was a time of reconsideration of many of the assumptions that underpinned BWT's management practices and strategy. For example, the strategy director reflected on the situation as follows:

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[101] An example from the FT: 'Falling equity markets have produced further insurance losses in the second quarter, *even though [Division X] has now reduced its equity exposure and bought portfolio protection.*' (Highlights by me)

[102] Quotes are taken from the Financial Times

[103] These words were recurring in annual reports in the second half of the 90s.

[104] Head of Financial Risk Control

[105] Director, CFO (finance) Division, BWT

'There was a famous quote from [the ex-CEO] before [BWT] acquired [Division X]. He said: 'you don't have to buy a cow if you want a glass of milk.' And then he bought the cow.

[AM: 'Bancassurance looked to be a good concept at the beginning of the 90s, it appears less so now.']

The issue is how well you could have recognised the strategy risk then. The overall mood in the 90s was that we have to be modern and new things, blablabla. Now the psychology is different. The problem is how can you be rational when there is such an underlying trend? For me this is the first time that I have come to reflect back on such things from such a position.'[106]

While the long term future of the bank and the insurance unit were discussed by a new management team, speculations about several possible (and contradictory) actions in relation to Division X were abundant among managers. There was a widespread expectation of control tightening over the business unit (or else the sale of it). In the meantime, a correction in the investment strategy and a reduction of the market risk profile of the insurance unit took place. The new Chief Executive of BWT personally steered and monitored a defensive 'stop-loss' strategy. Personal (informal) controls over the insurance unit intensified from the banking side as BWT's CEO became directly involved with the insurance company's investment management function.

4.2.3. RECOVERY (2003-2004)

Although a downgrade from an international rating agency was an additional blow, investors started to recognise that *'[BWT] is seeking to draw a line under the worst year in its 146-year history. Analysts concluded that the troubled banking group had quantified the remaining financial uncertainties overhanging the group and its underlying performance was starting to recover.'*[107] BWT's next planning cycle took place under the watchful eyes of regulators, credit rating agencies, investors and the financial media. Thus the pressures mounting on BWT remained high. In this sense the environment stayed stressful, dominating and restricting (Khanwalla, 1977) – it was still hostile.

[106] Director, Head of Strategy, BWT
[107] Quote taken from the Financial Times

Ten months into the planning cycle of this stressful year, when asked about what was happening in relation to Division X, the strategy director at BWT replied:

'We are asking a lot of questions about how to continue, what is best structure for [Division X], how can we devise the best country portfolio for [Division X], how we can achieve a combined ratio of less than 100%.'[108]

He was more optimistic than many of his colleagues:

'I think [Division X] is a fantastic thing because it is so easy to drive up profits. Most of the current losses are due to investment results. Impairments stop if you reduce your equity quota and the market stops going down. Then you realise gains. Then we return to profitability, it will recover nicely.'[109]

However, the Head of Controlling, who was responsible for short-term planning and management accounting (controlling) at BWT, was more cautious in his outlook. He described the budgeting process of the year as particularly difficult:

'On the insurance side we have a turnaround situation and on the banking side everybody is reorganising all the time. (...) At the moment [the budgeting process] is lose-lose. [Laughs.] Everybody has to lose budget for next year. There was a huge fight on the cost cutting decision, but not between one department against the other. It was between the CFO and everybody else. We ended up with cost cutting across the board. (...) The only theme now is to get back to profitability. 90 percent of the focus is on P&L, net operating profit.'[110]

Tightening control over Division X as a management decision emerged as controlling people reflected on the cultural differences between the two companies:

'Bankers are more up to speed with change, if a decision is taken it gets implemented straight away. If you make a decision on the insurance side and you go there to implement, they start discussing whether it makes sense or does not make sense. It is rather hard to implement there and to bring them up to some speed...'[111]

Given the sense of urgency for recovery action to be implemented in the insurance unit, the Bank took several measures to curb Division X's autonomy. Lorsch and Allen (1973) point to three major sets of integrative factors:

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[108] Director, Head of Strategy, BWT
[109] Director, Head of Strategy, BWT
[110] Director, Head of Controlling, BWT
[111] Director, Head of Controlling, BWT

integrative devices (e.g. budgets and other paper systems, committees, task forces, direct managerial contact); integrative effort and decision-making processes. As will be shown below, all these integrative factors were activated.

Two central control functions were active in proposing new ways of control (and integrative devices) over the division: management accounting (controlling) and risk management. The accountants devised a new reporting template. This asked for information that was compatible with the Bank's reporting practices, but stretched the internal reporting capacities of the business unit considerably. Division X controllers recognised it as a hybrid reporting format and came to refer to it as *'the bancassurance view'*:

'Insurance is a fundamentally different business model than banking and so we look at things differently. We look at our costs differently, our investment income is integrated much more into our technical results [technical explanation given]... it is a very integrated P&L we deal with. What we are thriving for is to have a good understanding of our business in the insurance view. When we are asked to look at a bancassurance view there is some mapping that takes place to reflect the banking view. It is very difficult to us to manage the results on two different views.'[112]

Managers outside the accounting function of Division X also commented on the changes in divisional reporting practices:

'They [BWT] ask for information now that has never been asked before. Information that only the CEOs of [Division X] and the country units used to have. It was never the idea that we centrally decide and control cost by cost type. We always were interested in the cost ratio (premiums over cost) only, but now [BWT] are asking for much more detail and it causes some kind of information overload. There was a comparative study and we are shown as second after [French insurer] in the level of detail we ask for.'[113]

As apparent from the above, the accountants were implementing a cost-based reporting and control platform.

The risk people had a different agenda which was formulated by a task force they set up that worked together with Division X managers. A participant of the task force explained:

'The situation of [Division X] has changed dramatically since the beginning of the year. Management who used to work in banking took over control at

[112] Head of Financial Management, Division X
[113] Head of Financial Risk Control, Division X

[Division X]. They found themselves in a new environment and did not feel comfortable in it. Everything was challenged. In August/September the task force was set up to assess the risk, the risk capacity and the managerial and organizational challenges at [Division X]. It was led by [the CRO of BWT], the CFOs of the two insurance units[114] and the Head of Investment Management. We reported to the CEO.'[115]

The central risk control function came up with an agenda that was outside their technical scope (taken in the narrow sense of risk control), it included managerial and organisational issues. Risk people furthered a proposal that was separate from, and complementary to, the cost concerns of the management accounting function. Further, Division X's risk committees were adjusted to include senior representatives from BWT. The central risk function collected and reported risk information about Division X among the key highlights of the regular board risk reports.

In sum, in the wake of the crisis, a so far latent divisional control system package, containing formal accounting and risk practices got activated. The case evidence supports the conclusions of other field studies of multiple control systems in at least two aspects. First, it highlights the role of informal controls in periods of high uncertainty (Dent, 1987, Chapman, 1998). At the time of crisis bank executives personally intervened with the affairs of the subsidiary, making informal control an important element of controlling the division. Second, there also appears evidence in support of Simons (1991)'s proposition: at a time of crisis, top managers use more than one formal control system interactively. In this case accounting controls and risk controls became activated and supplied bank executives with frequent and regular information (obtained from reports, committee meetings and phone conversations) about the cost and risk indicators of Division X. As a result Division X, a previously semi-autonomous business unit, was losing its independence.

Apart from informal (personal) controls, four control mechanisms were found instrumental in divisional control: 1. accounting control at BWT, 2. risk management control at BWT, 3. accounting control in the division, 4. risk management control in the division. The following sections take a closer look at

[114] Though one legal entity, Division X was managed in two business units - the Life and the Non-Life Insurance units

[115] Vice President, Economic Risk Capital and Capital Management, BWT

the workings of this control system package and unravel its complementary relations as well as its tensions and rivalries.

4.3. THE POLITICS OF DIVISIONAL CONTROL

This section examines how, in the wake of the crisis, accounting and risk controls were working on tightening the Bank's grip over the troubled business unit. It will be shown that the crisis offered the opportunity to both accounting and risk people at Swiss Bank to impose their controlling blueprints on Division X. The ensuing politics is explicated and explained with reference to institutional organisational theory.

4.3.1. TIGHTENING ACCOUNTING CONTROLS

Every business unit at BWT sends monthly profit and loss data to the central management accounting function ('Controlling'). Pre-crisis, during the years of its semi-autonomy, Division X was an exception. Due to the nature of insurance accounting, the insurance unit did not close the accounts monthly, only at half-year. It was notable that to a large extent management accounting at Division X overlapped with financial accounting:

'In insurance we do not have proper management accounting. We only have financial accounting... [AM: (Shocked) Oh. So how do you manage?]... (Laughs) There is a department called Financial Management and they are in charge of management accounting.'[116]

In 2000 BWT Group switched from Swiss GAAP to US GAAP. Division X, with its own decentralised international divisions, was affected too. The Head of Financial Management at the insurance unit explained:

'I feel that we have really tightened the controls in our countries. Historically, before we implemented US GAAP, it was very much a decentralised approach. Ever since 2000 when we did the restatement to US GAAP, that's when the trend started. Now we are requiring all the countries to be on the same accounting standard, before that everyone submitted their local statutory accounts and we made the necessary adjustments to these to consolidate reports according to Swiss GAAP. Now everyone does US GAAP. It requires that you establish consistent assumptions across countries, though they vary a bit according to their market environment.'[117]

[116] Head of Financial Risk Control, Division X
[117] Head of Financial Management, Division X

Given that each business unit produced local statutory as well as US GAAP accounts, the latter became the common system for internal accounting in Division X. Not until the crisis were quarterly or even more frequent reports required in a systematic way.

And not until the heavy write-offs went through Division X's accounts was BWT alarmed about the crisis. But then urgent, detailed and frequent accounting information was required. Initially, the Head of Controlling at BWT expressed frustration with Division X's accounting controls:

'When we ask [Division X] questions that bankers are used to ask, we are often surprised that they haven't got any reasonable answers to them. The insurance business is managed differently. We are working on tying them more in. But they are rather slow.'[118]

His counterpart at Division X had a different view:

'Within two years, first of all we switched to US GAAP, then [BWT] asked for quarterly [reporting], and now they are asking for monthly, so it has been an enormous cultural change for [Division X]. We have done a lot and the countries [Division X's international business units] have accomplished a lot. But you really need to understand the impact of this because you can really drown if you are continuously asking for information. We already provide monthly reporting and we need to improve the quality of that. From a [BWT] perspective they are able to close daily, but it is different in an insurance company.'[119]

She accepted head office controllers' need for more frequent and more detailed information. However, delivering the required information presented not only technical difficulties, but also the need to overcome the reservations that divisional managers held about the relevance of the so called '*bancassurance view*' that BWT imposed on them. One of them commented:

'We spend a lot of time every month on management reporting, twisting numbers into this bancassurance view, which is not particularly relevant to us.'[120]

The Head of Financial Management at Division X was instrumental in resolving such tensions and building a collaborative relationship between the two controlling departments:

'I still don't understand the [BWT] structure exactly, who is responsible for what, so we have instigated a workshop so we can better understand. Because

[118] Head of Controlling, BWT
[119] Head of Financial Management, Division X
[120] Head of Strategy, Division X

my team would get called from various people and it changes and I don't know where they are coming from and why they ask what they are asking. If we had a better understanding of why they need something it would be much easier to explain what has happened or even to accept the tight deadlines that are often given to us. If I get a call from someone I have never worked with before, and I don't know really how that individual fits into the overall structure, it can be frustrating. So we really try to develop a good relationship with those people.'[121]

Later, during the period of recovery, the Head of Controlling at BWT expressed much satisfaction with the success of implementing the 'bancassurance view' as an information gathering and control platform:

'P&L for insurance has been fixed and people there are telling us what we are looking for and they understand what they should do for their own business.'[122]

Important to this success were the informal controls that *complemented* the formal accounting systems. First, a personal relationship, based on frequent contact between the two heads of the accounting functions was formed and it helped to clarify problem areas, as argued by Division X's Head of Financial Management:

'They own us, they need to understand. So what I don't enjoy is when they say, 'you need to provide this by this and this time'. I see no value in that. I say 'let's talk about that, why do you need it?' I think the team that now does it [the Controlling function at BWT] is much better than the team before the last structural change. We have a much better working relation with them.'[123]

Though personal contact became less frequent during the recovery period, a good work relationship remained. BWT's Head of Controlling asserted:

'...[Dot] is the head of controlling in [Division X] which makes things easier. I used to be on the phone with her once a week or every second week and now it is probably once a month or so.'[124]

Second, staff contact between the two departments was also often personal (BWT people habitually asked for information on the phone).

BWT's controllers dictated the parameters of an accounting control system that transformed the divisional control considerably and increased the level of integration of Division X. A 'bancassurance' view *complemented*

[121] Head of Financial Management, Division X
[122] Head of Controlling, BWT
[123] Head of Financial Management, Division X
[124] Head of Controlling, BWT

Division X's own insurance accounting-based control. At the time of crisis the 'bancassurance' reporting framework became an *interactive control* (Simons, 1990) - top managers at BWT used it frequently and regularly. Within Division X the 'bancassurance' platform was initially unwelcome, but the presence of informal controls assuaged tensions and *complemented* the formal controls. Though 'bancassurance' might have remained unrealised as a strategy, it was succeeding both as a control system and an integrative device.

4.3.2. TIGHTENING RISK CONTROL

According to its original remit risk management is concerned with securing compliance with international bank capital regulations – the function defines the *minimum regulatory capital* that the bank should hold. This is believed to serve as a buffer that can absorb fairly unlikely, though not extreme losses, should they occur.

Whether or not a financial institution holds sufficient capital in order to weather nasty storms is also a major concern of rating agencies, investors and of the banks themselves. The minimum regulatory capital is rarely seen as adequate to obtain the AAA or AA grades from credit rating agencies, which would secure funds at lowest cost. Financial institutions would typically need to hold more capital than is stipulated as the regulatory minimum. It is also understood that banks with a higher risk profile need more capital than lower risk peers in order to secure the same favourable credit rating. But how much more? Recent developments in firm-wide risk management address exactly this question by measuring risk and quantifying capital need with respect to the risk profile of the bank.

Thus the risk management functions in large innovative banks have created their own (internal) definition of capital adequacy in the form of *Economic (Risk) Capital (ERC)*. Economic (risk) capital is the amount of total capital (including the minimum regulatory requirement) that corresponds to the overall capital need perceived by the bank (Morrison, 2002). It is typically derived from the requirements of a target credit rating that the bank wishes to obtain.

BWT's risk management blueprint was developed by the investment banking arm of the group and it was deployed as a *'comprehensive and consistent*

framework'[125] for the management of risk and capital. In this framework ERC was the common denominator for risk. The objective was to produce ERC measures for each quantifiable risk category (market, credit, operational). These were then aggregated not only by risk type, but also by business unit. Finally, the total ERC for BWT and the Group was devised as well.

For its own risk management purposes in retail, private and corporate banking, BWT started to implement this risk management blueprint in the years preceding the financial losses at Division X. By this time Division X had been two years into their implementation of the blueprint.

Risk people at Division X took pride in the fact that they had been at the forefront of the roll-out of the new risk management framework, and they also contributed to it:

'[Division X] started in 1998 and the others started in 1999-2000. The goal was to have a common denominator in terms of risk and to have the same methods for measuring credit risk, market risk, and insurance risk. Our contribution was the Insurance ERC. In the insurance business it was quite a new concept. Traditionally the notion of risk in insurance is quite different from that in an investment bank.'[126]

In the 1999-2000 annual report, for example, there is a separate section devoted to Division X's risk management framework: *'[Division X] is a business unit with many years of experience and success in the insurance business. It has developed outstanding skills in managing all the risks associated with selling insurance policies.'*[127]

Initially the two risk control functions were separate, they did not share a common framework (due to BWT's later start to adopt the blue-print), and worked as *complementary* in the overall risk management framework. As the implementation of the investment bank's risk management blueprint progressed, risk control practices converged on the two sides. As BWT's risk reporting practices got formalised, the central risk function assumed control over the workings of Division X's risk controls. This became even more pronounced during the period of the crisis and the recovery stage.

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[125] This is a recurring expression in annual reports and internal documents that describe the framework.
[126] Head of Financial Risk Control, Division X
[127] Annual Report 1999-2000, Division X

Similarly to the Bank's accounting controllers, the risk controllers pressed for more information too. However, it was a conflict-ridden, difficult and tense situation. The Bank's Chief Risk Officer explained:

'It is dangerous to run an insurance company with people who don't understand it. It is even more dangerous to run an insurance company with bankers who don't know that they don't understand it. We have been very careful that we don't create banking type solutions for the insurance business. Nobody questions that they understand insurance. What we question is that they understand the markets. [...] You can try to convince them [Division X, about the relevance of information requested by the Bank] and that's what we did. When we saw they did not deliver, people got frustrated and said 'let's stop the discussion'. Then we changed the people.'[128]

As part of several personal and structural changes at Division X, a new Chief Risk Officer was appointed there to head the insurance unit's risk controls. His co-operative and constructive approach towards BWT accommodated the parent company's requirements, and thus contributed to restoring trust in Division X's internal controls. The working practices of the risk function at Division X were adjusted to mirror those at BWT's. While previously only the risk reporting templates were identical, now Division X's risk committee structures, meeting agendas, reporting and committee frequencies became identical too. The new CRO was required to report not only to his own CFO, but also directly to the CRO at BWT. With BWT's CRO regularly attending Division X's risk management committee meetings, formal risk controls were *complemented* by informal (personal) control. Division X's CRO was accommodative of the changes and commented on the increased personal involvement of BWT's CRO with Division X's affairs positively:

'This is for me a very good way to involve our shareholder in the important issues. I think it is a huge step forward. It means transparency on our side, so he [BWT's CRO] sees everything that is of concern to risk people in [Division X]. He is also taking on responsibility in that he sits here - he is part of what is going on. He has a chance to give his opinion and even if he doesn't give his opinion he has been part of what has been decided and it is more difficult for [BWT] to say to [Division X]: 'You did it wrong.'[129]

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[128] Chief Risk Officer, BWT
[129] Chief Risk Officer, Division X

The risk controls were used intensively during the process of reducing Division X's risk profile. Further, ERC was used as a tool to communicate the decreasing risk profile of the group to the outside world that was disapproving of the perceived weakening of the group's capital base. For example, the 2002 and 2003 annual reports disclosed the Group's 'Key Risk Trends', and ERC was featured *'showing substantial reduction in equity exposures.'*[130] Over the last five years, BWT's annual reports gave more and more space to the description of the Group's risk management framework. While the 1999 annual statements devoted 10 pages to the risk controls, during the next few years the amount of information disclosed had tripled. [131] In the wake of the crisis, ERC was not only disclosed, but it was also proudly advocated as the flagship technology of the risk management function: *'In our industry, economic capital represents the emerging best practice for measuring and reporting all quantifiable risks.'*[132]

Deployed in investor communications, risk controls sent not only signals that the crisis was passing, but also conveyed a subtler message: that an innovative, firm-wide, consistent and homogeneous risk reporting and control framework was being implemented in the Group.

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[130] 2000-01 Annual Report, BWT Group

[131] There appears to be an industry trend of risk disclosure among increasing number of banks in the late 90s. Jorion (2002) observes that while 'few banks disclosed [risk information] before 1995', by 2002 'most major financial institutions [...] publish their VaRs on an annual or quarterly basis.' (Jorion, 2002:912) Further, a comparison with Fraser Bank shows that BWT was not unique in increasing the volume of its disclosed risk information (and the length of the description of its risk management organisation) in its annual statements.

[132] BWT Group Annual Report 2003

4.3.3. ENHANCING LEGITIMACY AND THE USE OF ACCOUNTING AND RISK CONTROLS

We have seen that both in the accounting and in the risk control areas a process of making Division X's practices similar to those of BWT took place. From an institutional perspective, this is not surprising: it has been observed that in conglomerates subsidiaries are compelled to adopt accounting practices, performance evaluations etc. that are compatible with the policies of the parent corporation (Coser, et al., 1982). Why? DiMaggio and Powell (1983) argue that homogenisation increases the legitimacy of the organization. Increased legitimacy stems from institutional appropriateness, which means compliance with prevailing institutionalised rules and norms, whether they are set by a parent company, regulators or emerge as a result of industry practices. As financial troubles draw question marks over the legitimacy of the organization's management and procedures, regaining legitimacy is particularly crucial for organisational survival in the wake of a crisis. As far as evidence is concerned, Czarniawska-Joerges (1988) furthers this argument in explanation of her study of a Swedish organisation, which, in response to economic decline, resorted to control tightening. The motivation for control tightening was postulated to be management's desire to enhance their legitimacy. *'By tightening control, they are able to show, to both external and internal observers, first, that they are still in control (by making it more visible); secondly, that they are reacting to crisis (in ways that are legitimate for them as official controllers); and thirdly, that the crisis will soon pass.'*[133]

Likewise, in a hostile environment (Khandwalla, 1977), the management of Swiss Bank strove to enhance their legitimacy in the eyes of many external stakeholders (regulators, analysts, rating agencies, peers etc.). Similarly to the Swedish case, a control tightening over Division X took place. BWT imposed its accounting and risk control mechanisms on the division. Apart from gathering banking-style information for decision making, they also impressed upon external observers that legitimate control practices were in place. While the accounting

[133] Czarniawska-Joerges (1988), p. 417.

(cost) controls gained legitimacy from their very own commonness (Hopwood, 1983), the risk controls gained legitimacy from their claimed innovativeness.

The politics of the control tightening over Division X was intense. In an institutional reading of the case, Division X's management also needed to increase their legitimacy in the eyes of the top management at BWT who for a while considered disposing of the business unit. BWT executives were initially mistrustful and showed little tolerance to resistance at Division X. A new management at the insurance unit was appointed. The new heads of the accounting and risk controls at Division X put much effort into assuaging tensions by embracing the control tightening process and welcoming and encouraging the personal involvement of BWT's controllers in it. By giving up the autonomy of their control practices, and making them similar to those of BWT, Division X gained transparency and legitimacy – just what its survival required at the time.

4.4. THE POLITICS OF CONTROL SYSTEM RIVALRY

The crisis offered challenges and opportunities for BWT's controllers. Both accounting and risk controllers perceived a control failure to which they reacted with making Division X's formal controls similar to those at Swiss Bank. A multiple control system was formed and interactively used at the time of Division X's crisis. However, due to the different nature of accounting and risk controls, they did not always agree with one another. There were a number of contests in the multiple control system. In the first one the recognition of Division X's financial troubles and the timing of the corrective action were at stake. In the second contest, which took place around the asset-liability and capital management of the insurance unit, the risk controls challenged the economic rationale behind the accounting controls. However, it was not economic rationale that was the source of control legitimacy, but institutional appropriateness. This explains why accounting controls (with their powerful institutional appropriateness in the insurance world) came to dominate in strategic decision-making. The readjustment of Division X's strategy, and the recapitalisation of Division X's weakened balance sheet illustrate the point.

4.4.1. RECOGNISING THE CRISIS

The risk control function at Division X had picked up a worsening trend in the equity portfolio of Division X well before the losses went through the accounting system. However, corrective action took place only after it became clear that the P&L account suffered. This apparent disregard of the risk controls in favour of the accounting controls puzzled risk people: 'We have done a lot of soul searching around the [Division X] situation. How could that happen? It always showed up in the scenario reports: a massive equity market ERC. Why was there no action?' [134]

When asked the same question, the CRO gave a Delphic reply that implied the presence of deeper organizational or institutional forces:

[134] Director of Group Risk Reporting, BWT Group

'My first assumption is that people who have been running a business for years are not stupid. If they don't look at certain things, there are reasons why they do not look at certain things.'[135]

Two explanations emerged. The first one held responsible the institutional environment and its pressures, while the second one was a criticism of insurance accounting.

As for the institutional environment, Division X's crisis was not unique to itself. Most European insurers had been overexposed to equity markets and they all suffered investment losses. It appeared that the delayed reaction to the deterioration in the equity markets was an industry problem. At the time of the 1990s stock market boom an intense price competition started as insurance companies subsidised price-competitive insurance products with equity gains.[136]

Later, after stock markets peaked, many insurers still felt that they were locked in to their equity positions as otherwise they could not sustain competitiveness, should stock markets recover. This appeared to have been the case at Division X too. The Chief Risk Officer of the insurance unit explained:

'It was clear to me that our risk capacity was over-stretched. We had Investment Committee meetings, where we indicated that our risk capacity is not sufficient and therefore we should reduce exposure, but the Head of Investment Management held the general market view, which was optimistic. The problem was that in the industry everyone was confident that a major crash could not occur [again]. With hindsight it was a considerable misjudgement. But it was clear from the data what the risk situation was. (...) To defend the decision-makers, one has to say that the industry was very closely looking at the competitors. Nobody was in the position to say 'now we get out of equities' before everybody did the same. If you go away from the herd you are facing massive risk. If you had done it 3 years ago you would have lost your competitiveness in a short time. So it was totally clear we do whatever the competition was doing. (...) It is not possible that an industry goes bankrupt. The regulation has weakened substantially, the accounting rules were adjusted for valuations and so on. In times when everybody has a problem, there are

[135] Chief Risk Officer, BWT

[136] According to an FT analysis, in the highly competitive insurance market 'insurers used their equity gains to smooth earnings and support policy-holder pay-outs.' ('Falling stocks bad news for European insurers' in: The Financial Times, 18 July 2002)

solutions. In times when you deviate from all your competitors, there is no solution for you.'[137]

This moral hazard-type problem in the insurance industry has got an institutional explanation. The crisis appears to have been the result of increasing investor, rating agency and regulatory concerns, which together shifted the notion of institutional appropriateness from high equity quotas to a reduced equity exposure. Gradually, a sector-wide consensus was built around the necessity of cutting equity exposures.

At the same time, the holes that were caused in the balance sheets of insurers by their investment losses had to be plugged as there are strong regulatory rules to be met about capital adequacy. The role of rating agencies as quasi-regulators (enforcers of the regulatory solvency requirements) was evident in this case. On 21 June 2002 the Financial Times reported that BWT '*was forced to inject Pounds [xx] million into [Division X], its insurance subsidiary, in order to stave off a liquidity crunch at the unit. [...] [BWT] said it had put the cash into [Division X], which has been expanding rapidly in recent years, to ensure the group met solvency requirements and would be able to continue to write new business at current levels. The move came as one of the leading international credit rating agencies voiced concerns over insurers' financial positions as a result of the current stock market downturn.*'[138]

Some of Division X's risk controllers held the nature of accounting controls responsible for delaying action in the wake of the worsening investment position:

'...And there was no change in investment strategy. The problem here, and this is highly related to the way insurance companies do accounting, in 2001 [Division X] showed a profit of 1bn. Looking at these figures you would not believe it. This is pure accounting! The accounting allows insurance companies to show losses in the P&L only, but not on the balance sheet. From the outside world, looking at P&L, you get delayed information: impairment occurs after 3-6 months of 'staying below market value'. But you cannot impair earlier. If you want to do so, you have to sell stock and buy it back. The accounting representation is delayed and distorted.'[139]

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[137] Chief Risk Officer, Division X
[138] The Financial Times, 21 June 2002. Article title not given due to confidentiality reasons.
[139] Head of Financial Risk Control, Division X

This criticism of the pre-crisis accounting control system of Division X emerged as BWT's accounting controllers furthered their alternative for divisional control and the 'bancassurance view' came to dominate the insurance accounting view.

With the benefit of hindsight, risk controls were more successful in detecting the insurance company's crisis than accounting controls. This has increased the status of the risk function. The visibility of the risk people increased further as they were active in crisis management, and communicated the decreasing risk trends to external and internal observers successfully. Having been used interactively by top management at the time of the crisis, risk controls have achieved parity with the accounting controls, and some risk people set their eyes on taking a more strategic role in controlling Division X going forward.

4.4.2. MANAGING THE CAPITAL OF DIVISION X

Capital management, the assessment and monitoring of capital adequacy was a subject that became critical in the wake of Division X's financial crisis. The business unit had to be recapitalised and its capital adequacy had to be monitored. Capital management turned out to be an area in divisional control where the risk controls and the accounting controls interacted with one another. But there were no complementarities offered – it was a case of control rivalry.

In the Risk Management review of the 2003 annual report of BWT Group the central risk function suggests that ERC's appeal is to complement accounting-based discussions: *'It is called 'economic' capital because it measures risk in terms of economic realities rather than regulatory or accounting rules.'* [140] Internally, it appeared that risk people furthered an 'economic' view because they saw it as superior to the 'accounting' view on capital adequacy. The risk function set out to capitalise on the perceived success of ERC in detecting Division X's increasing risk profile and weakening capital base in a more timely manner than accounting controls did.

The risk function at BWT set up a task force to investigate various alternatives for controlling Division X's capital adequacy going forward. The

[140] Annual Report 2002-3, BWT Group

project team identified several possible approaches to the assessment of capital adequacy of the insurance company, as explained by a member of the taskforce:

'The situation is really complex. We looked at accounting, the regulatory requirements, and the measures of risk. We dealt with several measures of risk. The basic statement is that we have US GAAP [solvency ratio], EU solvency[ratio], S&P solvency [ratio] and ERC and statutory solvency and they show the risks differently.' [141]

It was notable how risk people blended the language of risk with that of capital adequacy. By this, they in effect claimed expertise in the capital management area, which prior to the arrival of the ERC ratio was considered to be an accounting-based issue. [142] Thus regulatory and rating agency ratios, even the US GAAP solvency ratio are taken here as measures of 'risk' – *de facto* capital adequacy.

Further, ERC was shown as 'economic' (in the sense that it marks the entire balance sheet to market) and contrasted with the rest of the measures, which were regarded as 'non-economic' for their failure to mark to market. US GAAP solvency, with its half-hearted approach to marking to market was also considered as non-economic:

'Economically, we have [on the balance sheet of Division X] assets with 20-30 years duration, but we also have liabilities with duration of 50 years. With US GAAP, every interest rate change matters. We have long duration of assets, if interest rates go up, we lose value from the assets, but it leaves the liability side alone, so our equity shrinks'. [143]

In US GAAP, assets are marked to market, while liabilities stay at book value. Consequently, the market value of the asset side of the balance sheet changes with interest rates, and so changes the capital too. Interest rate volatility creates the volatility of the capital on the balance sheet.

The task force argued that risk controls (ERC) and US GAAP-based accounting controls created conflicting incentives. On one hand, in order to match the asset side with the long-term liability side, risk management would require the increase of the duration of the asset side. On the other hand, the management team

[141] Vice President, Economic Risk Capital and Capital Management, BWT

[142] For the measurement of capital adequacy, the ERC ratio related available capital to ERC, which was risk people's proxy measure of the total risk profile. Meanwhile, accounting solvency ratios use revenues and growth as the proxy measures for the riskiness of an insurance company.

[143] Vice President, Economic Risk Capital and Capital Management, BWT

of the insurer, who are incentivised based on US GAAP performance, would prefer to reduce the volatility of the capital due to interest rate changes, thus would prefer shorter assets, or decreasing asset duration. This conflict around the asset-liability management of the insurance company prompted the risk people not only to challenge the legitimacy of accounting controls over capital management, but also to draw question marks over the primacy of accounting controls in performance measurement. As the previously quoted member of the taskforce put it:

'In my view the biggest problem of this organisation is that somebody sometime ago decided to manage it on a US GAAP basis and not on an economic basis. When they moved the accounting from the old Swiss GAAP to the US GAAP they also decided to move the management incentives on a US GAAP basis too. That means we have not much focus on the economic view and on the ERC.' [144]

It is worth noting that insurance accounting is contested even in the accounting world. Horton and Macve (2000, 2005) track how standard setters have been developing proposals for standardising accounting for insurance companies. They point out that the working group of standard setters does recognise the same anomaly described by BWT's risk specialists: '*while the investments that insurers hold are already accounted for by 'marking to market' to varying degrees in different countries, their insurance liabilities are not generally accounted for at current value. At present, therefore, the results and reported net assets ('shareholders equity') of many insurers (and particularly of US insurers under US GAAP) are subject to greater volatility than would be if the 'matching' of the value of their asset and liability positions were properly reflected in their financial statements.*'[145] The contested nature of US GAAP for insurance accounting is emphasised further by the observation that '*even in the USA, there is widespread acceptance that the current package of GAAP that has accumulated over the last twenty years or so for insurance business is no longer adequate.*'[146] Horton and Macve (2000) argue that so far the working group has failed to produce a set of proposals that '*will command support in actuarially sophisticated countries.*' Consequently, based on '*a considerable body of opinion*

[144] Vice President, Economic Risk Capital and Capital Management, BWT
[145] Horton and Macve (2000), p. 2.
[146] Horton and Macve, (2000), p. 4.

in the industry', they predict that '*by default, universal adoption of current US GAAP for insurance accounting will be the inevitable result (because 'it is there'), at least for global companies that are listed across international capital markets.*'[147] However, it was not until 2004 that the IASB issued IFRS4 on Insurance Contracts. The standard was approved by only eight members of the fourteen-member Board, suggesting its contested nature. Furthermore, the IASB's insurance accounting standard setting project continues – IFRS 4 marked only the end of 'Phase I'. Horton and Macve (2005) sceptically comment: '*Despite a plethora of very lengthy discussion papers and exposure drafts, so little tangible progress has been made since the IASB launched its project in 1997 that the prospects for a timely completion of Phase II of the IASB's project must still seem remote. [...] Moreover, the difficulties, both technical and political, highlighted by the insurance project, in conjunction with those relating to 'financial instruments', have in turn cast more fundamental doubts on the standard setters overall approach to accounting standards...*'[148]

BWT's risk expert who was a member of the taskforce, which reviewed Division X's capital adequacy and the alternative ways of controlling it going forward, did not question the external legitimacy of the US GAAP-based accounting controls:

'[The accounting controllers'] point of view is that 'this is what we publish, so it is important.' If we ask ourselves, 'can we act against the accounting standards?' the answer is no, the analysts and the rating agencies would not recognise [accept] that. The underlying question is whether we add more value by managing the company on economic principles? Would this show up in the accounting sooner or later? Or we don't bother?'[149]

His boss, the Head of the Economic Risk Capital team, agreed:

'... the question arises if you want to steer the business from an accounting or an economic perspective. Following public opinions, it is more accounting driven because of the problems highlighted by the rating agencies in public.'[150]

It appears that even though the risk people challenged the economic rationale of the US GAAP-based accounting control system, they did not

[147] Horton and Macve (2000), p. 4.
[148] Horton and Macve (2000), p. 14.
[149] Vice President, Economic Risk Capital and Capital Management, BWT
[150] Director, Head of Economic Risk Capital, BWT

challenge its institutional appropriateness. This was so even thought US GAAP for insurance accounting, as argued by Horton and Macve (2000), was coming increasingly under attack even in the world of accounting standard setters.

4.4.3. STRATEGY ADJUSTMENT

The crisis situation presented risk people with an opportunity to enter a more strategic role. Re-capitalising Division X required a number of strategic adjustments – a complete reshuffling of Division X's country portfolio, based on capital considerations. The top management at BWT showed an unprecedented interest in capital management issues, as perceived by a director from the CFO (finance) division:

'Capital issues driving business decisions – that's a little bit new. The focus is so much on capital management now. This situation highlighted that we need a better way of, or more aggressive, or proactive capital management, if you will. So the term 'capital management' you could see on various executive protocols, presentations etc. [Leafs through presentations piled on the table] As for issues of capital management, whether that be in the quantitative calculations of a certain risk position... or issues like 'gee: how do we reduce our capital need, do we need to get rid of some non-core businesses?' - I think the management awareness at every level in the organisation, up to the Board is very-very heightened.'[151]

In the ensuing strategic readjustment process some risk controllers assumed a proactive role. A review of the capital adequacy of the international subsidiaries of Division X was to pre-empt a series of divestitures that aimed at easing the capital burden of BWT Group.

The Economic Capital team at BWT intended to capitalise on the enhanced credibility of the risk technologies that were the basis for elevating risk controls into the role of a strategic decision making tool:

'In the past no one perceived [Division X] as a risky business. We always wondered why the ERC for [Division X] was so high. People doubted if the methodology applied for [Division X] was right. It was only in 2002 when risk management was regarded better at [Division X]. I think the ERC methodology,

[151] Director, CFO Division, BWT

the concept of ERC is now much more credible than before and has more credibility in Division X than in banking.'[152]

The risk controllers at BWT proposed an 'economic' measure for the assessment of the capital adequacy of business units – it was called the ERC ratio (compares the total ERC of the business unit with its available capital): 'This is the best way to monitor the risk taking capacity. You cannot beat all problems with only one ratio, there are other KPIs (key performance indicators) that need to be applied. But I think this is a good ratio in order to discuss the strategy of [Division X].'[153]

Due to a strong technical rational behind the ERC ratio, its application in divisional control was welcome by risk controllers in the insurance unit as well:

'Now we have limits on stand-alone ERCs but I would prefer to have limit on the ERC ratio. If we have enough capital, why would we bother about increasing risk? It is the [lack of] capital base, which should make us bother about risk.'[154]

Although the idea of applying the ERC ratio as a strategic decision-making tool was appealing, not everyone among the risk people was convinced. There were unresolved technical issues (e.g. the calculation of available 'economic' capital; setting a target for the ratio). Apart from these technical concerns, the CRO had reservations of a very different nature.

These came to the foreground when the ERC ratio was put forward as a strategic decision-making tool in the case of the disposal of one of Division X's subsidiaries. Another example of the Bank's tightened grip over the business unit, the divestiture decision was made by BWT's board. The senior risk controller who advocated the ERC ratio recalled:

'In the [divestiture] case we highlighted that the risk situation was tense in terms of the ERC ratio. But then [the CRO] said we have to understand why ERC was giving that signal. I said it was because the ERC convention was to take a haircut on deferred acquisition costs, just like on goodwill and other intangibles [when calculating available economic capital]. Then he said, well, maybe we made a mistake in applying the haircut! When we eventually presented it at the

[152] Director, Head of Economic Risk Capital, BWT
[153] Director, Head of Economic Risk Capital, BWT
[154] Head of Financial Risk Control, Division X

Risk Management Committee the decision was already made. Maybe it gave an additional confirmation...'[155]

However, considering the wider political implications of deploying the ERC ratio in such a strategic role across the Bank, it appears that the cautious approach of the CRO was less to do with technique. He explained:

'I think we have gained quite a good understanding of what ERC is and what ERC is not. Having said that, we have also achieved quite a good understanding of where we can actually use ERC and where we cannot use ERC. To give you an example, I think in the strategic planning process ideally you would say 'take the businesses, take the ERC those businesses would consume, look at the ERC ratios, and rank them.' That's the naïve solution. Unfortunately this does not work... [AM: Why not?] ...because of the interdependencies. You have a couple of nasty details once you go back to reality such as legal set-up, such as regulatory restrictions, and such as the question of how interdependent a business is.'[156]

In brief, the 'economic' aspect of the ERC ratio would have required a consideration of the interdependencies that existed among the business units: they relied on each other's capital strength. Mapping the interdependencies into the ratio, with so much uncertainties surrounding the exercise, could arguably have been a matter of judgement and politics (Burchell et al., 1980). The potentially political nature of taking interdependencies into consideration had precedent at BWT. Historically, the Group had once experimented with value-based management[157], an 'economic' divisional control technique that ran into a similar problem: the existence of interdependencies made the calculation of capital charges contested. The politics of mapping the interdependencies into that previous 'economic' (value-based) performance measurement framework was intense. Resistance from a powerful business unit coupled with other factors led to the abortion of the VBM implementation. The fact that the current CEO of BWT was formerly the head of this powerful banking unit, is suggestive that the decision to keep the ERC ratio out of strategic control and divisional performance measurement was as much political as technical.

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[155] Director, Head of Economic Risk Capital, BWT

[156] Chief Risk Officer, BWT

[157] Value-based management focuses on the economic value added or residual income in comparing and measuring business performance. The value added is the difference between the operating profit and a capital charge to reinforce the fact that managers create value if and only if their business unit earns a return in excess of the cost of capital.

4.4.4. RECAPITALISING DIVISION X

There was another political consideration: the accounting control function firmly resisted the deployment of the ERC ratio as a divisional control tool. Their opposition was rooted in a different cause: they defended the economic rationale of the accounting controls. Once ERC as a controlling tool had gained a higher profile with its ability to track the worsening capital and risk profile of Division X, risk people often contrasted this success with the perceived inadequacy of the accounting-based controls over Division X's solvency. The Head of Controlling had a different viewpoint:

'Anybody who would have been interested in reading the numbers could have learned a lot out of them without any fancy calculations of ERC.'[158]

Further, the controlling department had already a control tool for the measurement of Division X's capital adequacy. It was the EU solvency ratio[159], which derived its legitimacy from its US GAAP basis and the fact that it was a well-established regulatory tool:

'There is a solvency ratio in place, which is the regulatory requirement; it has to be greater than 150%. It is based on US GAAP. This is the main tool of statutory regulation. The EU solvency ratio has not got ERC in its numerator, it reflects the accounting view [of capital]. The denominator is a certain percentage of net premiums written. If premiums go up, the denominator goes up and the ratio decreases. [AM: So what happens if they [Division X] breach the solvency ratio limit?] There was a capital injection in June, a capital injection in September; they have to focus on businesses which are well capitalised.'[160]

As accounting controllers saw the ERC ratio not as a complementary, but as a *competing* control tool, they resisted it. From their point of view there was an accounting control available for the Division's capital adequacy, the merit of which was seen in its institutional appropriateness, the way it directly responded to institutional requirements.

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[158] Head of Controlling, BWT

[159] In 2002, the European Union Commission published a directive (commonly referred to as the 'Solvency I Life Directive') which served to update the capital requirements for EU authorised insurers and friendly societies. This Directive is wide-ranging in its scope, affecting both the regulatory minimum capital that an insurer must hold, and also how it calculates the total amount of capital that it has available. The solvency ratio (or solvency margin) requires a minimum surplus capital that insurers need to hold over and above a percentage of net premiums written.

[160] Head of Controlling, BWT

Due to the realities of the politics of control, the risk function was prevented from the deployment of the ERC ratio in divisional control. Division X's recapitalisation was led by accounting controls. Also, the subsequent reconsideration of Division X's country portfolio and the wave of divestitures of the weakly capitalised businesses were driven by accounting-based solvency considerations.

The politics of control that unfolded suggests that instrumental to the success or failure of competing control systems is the extent to which they were able to respond to the legitimating demands of the external environment. In the case of the capital management of the insurance business, risk people bowed in front of the higher institutional appropriateness of accounting controls.

It is worth noting that the discrepancy between the 'economic' and the 'accounting' world is specific to the insurance industry, due to the particulars of insurance accounting and insurance regulation. Division X's risk people remained critical about the implications of accounting controls for capital management:

'As a conclusion of this, the rating agencies and the regulators will need to rethink their approach. On one hand, in good times when share prices are going up, we should include additional capital charge for a riskier investment strategy. Probably [Division X] would have needed in the 90s more capital than was required by the external environment. And today the requirement should be less.'[161]

At BWT the task force set up by the risk function accepted the realities of the institutional environment, but did not acknowledge full defeat. Its spokesperson concluded:

'I forgot to mention that one point we said was to educate the outside world about the shortcomings of the US GAAP. That was actually a key point.'[162]

One should note that the IASB's ongoing project for standardising insurance accounting might gradually erode the supremacy and institutional appropriateness of US GAAP for insurance accounting. However, BWT's case suggests just how influential US GAAP was considered even by those who were critical of it, at the time of the study.

[161] Head of Financial Risk Control, Division X
[162] Vice President, Economic Risk Capital, BWT

4.5. DISCUSSION AND CONCLUSION

This chapter sought to explore the changing context and internal dynamics of a multiple control system acting as divisional control. The study probed why certain control systems become implicated in divisional control and organizational change while others get substituted or marginalised.

Contingency research has yielded a number of results that appear to answer the question. Simons (1991) for example argued that at times of increased environmental hostility top management resorts to using more than one control systems interactively, and we have evidence from Chapman (1998) that the role of informal controls complementing formal accounting systems intensifies under conditions of high uncertainty. The case of divisional control provided similar evidence. In the observed crisis situation top management indeed took advantage of both accounting and risk controls, they personally got involved with the running of Division X, and the role of informal interactions between the headquarters and the business unit was to complement the control tightening that was taking place, as well as to assuage the tensions that went with it.

Regrettably, the contingency perspective stops short of explaining the dynamics that took place within the multiple control package (containing accounting and risk controls both at BWT and Division X). Divisional control became a terrain where risk and accounting controls did not only complement each other (as contingency theory suggests) but also competed with each other for prevalence. To understand this aspect of the use of multiple controls, the chapter adopted a political and institutional perspective.

It has been argued that the rise and fall of particular management control systems depend upon their institutional appropriateness and their capability of legitimising the organization that adopts them. As external requirements change, the definition of institutional appropriateness shifts as well, and new control systems become implicated in organizational change and action.

Pre-crisis, Division X had accounting and risk controls that were unique to itself within the Group. Its accounting controls were characterised by the particularities of insurance accounting and its risk controls pioneered risk technologies that were adequate for the insurance business. Division X's

accounting and risk controls possessed institutional appropriateness in the insurance world.

The financial crisis seriously damaged the legitimacy of the insurance unit's accounting controls as a basis for divisional control. Further, Division X needed to enhance its legitimacy in the eyes of BWT's top management who for a while considered disposing of the business unit.

At the same time, amongst widespread speculations of the weakening of the entire group's capital base and take-over threats, the whole group needed to increase its legitimacy in front of external observers such as regulators, peers, investment analysts and rating agencies.

The new accounting control system (bancassurance) helped Division X to regain its legitimacy within the group. By adopting a US GAAP-based accounting control system for internal controlling purposes (as well as for external financial reporting), BWT, an international group of companies, appealed to notions of accounting harmonization and increased transparency. Also, the implementation of a firm-wide, 'consistent and comprehensive' risk management system, with economic capital as its flagship-technology, corresponds well with recent initiatives in international banking capital regulation.

Taking the argument further, it was due to their institutional appropriateness that both the new (bancassurance) accounting control system and the risk management system were used interactively during the crisis and high environmental hostility. This relaxes the rather strong assumption that Simons (1990, 1991) makes about top management's knowledge of key strategic uncertainties and their deliberate choice of matching control systems to be used interactively. According to an institutional reading of control system selection, it was not a deliberate strategy, but merely the objective of (re)gaining legitimacy and securing organisational survival that led to the activation of an institutionally appropriate control system package. What Simons considers as top management's choice of interactive controls, is here argued to be the result of a competition among control systems for visibility and dominance by demonstrating institutional appropriateness.

During the period of recovery, it became more evident that control systems do indeed compete for visibility and dominance by striving to enhance their legitimacy. In the areas of crisis recognition and capital management, risk

controls challenged accounting controls. The risk controllers appealed to economic rationale and advocated the 'economic' view of the organization as an alternative to the 'non-economic' accounting (US GAAP) view. However, furthering an 'economic' view took risk people out of the realm of economic calculations to the arena of organizational politics.

It would be hard to argue that the risk controllers' view of capital adequacy (as opposed to the one of accounting controllers) was intrinsically more 'economic'. Similarly, it would be hard to establish that accounting controls (furthering US GAAP solvency) were fundamentally non-economic. Instead it appeared that risk controllers and accounting controllers furthered merely alternative and competing representations of the economic reality of the firm. Risk people's claim of having the ability to express the 'economic' realities of capital adequacy went hand in hand with their dismissal of US GAAP's 'un-economic' nature. Nevertheless, this was a rather ideological campaign. For accounting controls also claim an economic view. The contested nature and difficulties of insurance accounting standard setting (Horton and Macve, 2000, 2005) show that the accounting community itself is divided about what that economic view should be. This suggests that there might be room for various approaches to insurance accounting, all of which can merely approximate a complex and hard-to-capture economic reality.

Given that the accounting and the risk controls sent conflicting signals, the politics of multiple controls intensified. This was because controls that send conflicting signals are not complementary any more – they offer substitution to each other. The question of the ERC ratio's deployment in controlling Division X going forward was a salient example of the politics of multiple controls. The politics of multiple control was played out in a series of contests.

First, risk people were competing for legitimacy by disputing the economic rationale of the accounting controls. They succeeded in discrediting Division X's pre-crisis accounting controls at BWT, but it was not the risk function, but BWT's own accounting control function that capitalised on this. The new bancassurance template was moved swiftly in the space left open as the old insurance accounting controls were pushed into the background in divisional control.

Second, the 'economic' approach required a consideration of the interdependencies of the business units that relied on each other's capital strength – an issue of judgement and negotiation. This meant that any economic approach (be it economic capital allocations or value-based management) to capital management or performance measurement faced the challenge of negotiating through the implications of interdependencies. At BWT, value based management had been stalled due to such difficulties, and the risk controllers (for the time being) kept away from the politics of resolving the interdependencies.

Finally, risk people claimed influence in the capital management of the insurance division – where they encroached upon the territory of accounting-based controls. Given that in the insurance industry the regulation of capital adequacy builds on accounting technologies (e.g. the prominence of the 'US GAAP solvency ratio'), accounting controls possess institutional appropriateness. BWT's risk controls complied with a fundamentally different regulatory regime: that of banking capital adequacy. The 'economic capital' view, though legitimate in the banking world, proved to be conflicting with the accounting view, then appropriate in the insurance world.[163] As for the capital management of the insurance unit, risk controllers had to bend in front of the higher institutional appropriateness of the accounting controls.

BWT's case has intriguing policy implications for the regulation of bancassurance companies. Combining banking with the insurance business, these organizations must comply with both banking and insurance regulatory regimes. Given the current direction of international banking regulation, banking supervisors reward the firm-wide implementation of risk controls (The Basel Committee, 2001; Morrison, 2002), and firm-wide risk management (alias ERM) is emerging as a 'world model' in financial institutions (Power, 2004). Enterprise risk management promotes the extension of the 'economic capital' view on the entire financial organisation. However, as the case has shown, such firm-wide risk management attempts may well run into difficulties in the insurance part of

[163] As noted previously, Horton and Macve (2000) draw attention to the fact that disputes about US GAAP for insurance did exist at the time. Thus, in the world of standard setters there was no unique 'accounting' view. However, the perceived institutional appropriateness of the US GAAP was quite dominant. This is likely to change due to recent development in international accounting standard setting. Horton and Macve (2005) reflect on the IASB's efforts to 'establish the credibility of international standards *vis-à-vis* US GAAP.' (Horton and Macve, 2005:10).

bancassurance groups. In this case, where accounting controls measure capital adequacy and ensure regulatory compliance, the risk controls lose their institutional appropriateness. The case study showed how the risk controls challenged accounting controls in the insurance unit... in vain. The control systems ended up confined to where they possessed institutional appropriateness. Consequently, firm-wide risk management (and risk controls) did not make a difference in the control of the insurance division where the accounting controls prevailed. Due to the conflicting definitions of regulatory appropriateness in the banking and the insurance world, bancassurance groups have to live with a balance of controls, which frustrates the ideal of firm-wide risk management. This warrants a reconsideration of regulatory expectations about the role of risk management in bancassurance groups.

The case of the divisional control over BWT's insurance company suggests that in the presence of conflicting regulatory expectations risk controls bowed in front of the accounting controls that enjoyed a higher institutional appropriateness. However, given the currently contested nature of insurance accounting in the world of standard setters, it is plausible that the institutional appropriateness of current accounting controls will eventually shift according to a new accounting view, which might be yet another economic representation of risk and capital adequacy in the insurance world. As multiple representations of the economic are possible, the institutional appropriateness of control systems (be they 'risk' or 'accounting' controls) is liable to shift, creating opportunities for different actors, inside and outside the organisation,[164] to become implicated in the definitions of capital adequacy and performance. The next chapter further probes how risk controls stand up to accounting controls in the face of other conflicting pressures. In particular, it will address a very general conflict of objectives that troubles many financial services firms: how to deal with conflicting profit-seeking and risk management initiatives.

[164] Horton and Macve (2005) draw attention to the increasing responsibility of the auditors in the accounting practices of insurance companies, in particular, the role of auditors in providing assurance on the full balance sheet and capital adequacy calculations (traditionally the role of actuaries.).

CHAPTER 5

RISK MANAGEMENT AND THE EMERGENCE OF COMPLEX ORGANIZATIONAL CONTROLS

'Man is a rational animal who always loses his temper
when he is called upon to act in accordance with
the dictates of reason.'
Oscar Wilde

Chapter 3 described the alternative patterns of strategic significance that the observed risk functions displayed: one required risk management to become an integral part of planning and control (at Frasers), the other was based on the senior risk officers' active involvement with key strategic decisions that were discussed outside the formal planning cycle (BWT). In both cases the influence of risk officers hinged upon the nature of alliances they were able to form with planners and controllers. Management control, from this account, appeared to be about the operation of a multiple control package where accounting and risk controls competed for relevance and managerial attention.

Chapter 4 provided an organisational-symbolic explanation (Dutton, 1997) for the rise and fall of individual controls in multiple control packages. The interactive use of risk controls (e.g. the frequent and regular attention devoted to risk controls, the creation of task forces and committees) was both instrumental and symbolic. It carried meaning for members inside and outside the organization. It signalled top management's commitment to tightening control over the underperforming business unit. Chapter 4 further emphasised the micropolitics of control. Risk and accounting controls appeared to be complementary during the crisis period (when both got interactively used for a while). However, in the redefinition of divisional control, going forward, they became rivals to each other. In particular, the politics of divisional control intensified when risk controls and accounting controls signalled conflicting implications for the capital management of the insurance unit – at that stage they claimed to substitute each other.

This chapter is based on the observation that risk management and accounting controls can give conflicting signals to organizational actors - and not

only in specialist cases confined to bancassurance groups. Minimising risk and maximising return are often conflicting objectives in business organisations, particularly so in financial services.

Indeed, it is well-recognised that multiple, competing and even conflicting objectives may well be present within the same organization. This can give rise to the simultaneous application of *several control systems, conveying often confusing and even contradicting signals*. Under such circumstances a gap might open between traditional notions of management control and the actual control practices that surface.

Otley (1994) and Otley et al. (1995) have argued that although traditional controls may in principle be applicable for large hierarchical manufacturing organizations, contemporary changes have resulted in more complex control practices. They attribute the rise of complex controls to the increased uncertainty in the operating environment of many firms. This, it is argued, has led to a reduction of the power of traditional control systems: the ability of cybernetic models to determine and monitor means and ends has decreased. Given a perceived shortage of empirical evidence and a need for more detailed conceptualisation of complex controls, Otley et al (1995) call for more empirical and theoretical research.

This chapter will argue that the simultaneous application of traditional controls might also create an operating environment in which the very notion of cybernetic control can get compromised. It has been argued that the blueprints of both risk management and accounting controls are essentially cybernetic. Their simultaneous application, however, might result in control situations in which goals and cause-effect relationships can be highly ambiguous. Such situations can be expected to give rise to apparently complex, non-cybernetic applications. The aim of this chapter is to improve our understanding of this complexity.

The inclusion of formal risk controls into the organizational control landscape gives a new visibility for the risk aspect of the old risk-return dilemma. If risk and return are conflicting objectives, then the suggestions of risk controls can easily be at odds with other return-oriented control systems. This can be expected to make organizational control ridden with confusing signals, problems and complexity. The role of risk management in influencing the strategies that organizations deploy to cope with the newly visible risk-return dilemmas

therefore adds an additional facet to our understanding of the organizational significance of ERM.

Following Argyris (1976) the chapter applies the distinction between three types of theories. Firstly there are the traditional *normative theories* (for example that of cybernetic control), which can be found written up in textbooks and in the normative literature. Individual practitioners have an enthusiasm for some of these theories, which they hold as '*espoused theories*'. People report espoused theories as the basis for their actions. They often do so even when the actual actions defy conformity to the cited models. This is because '*the empirical fact to date is that very few individuals can routinely act on their espoused values and skills, yet they are often unaware of this situation*'[165]. Argyris observes that individuals create designs that they do not follow but that they believe they do follow, while they are also unaware of this discrepancy. Consequently, the actual *'theories-in-use'* can differ significantly from the espoused theories (Argyris, 1995). In such cases espoused theories serve as the rationalization of actions.

The objective of the chapter is threefold. First, it aims to uncover the normative and espoused theories that were cited as relevant to the control of risk and return objectives in the case study companies. The cases of BWT and Frasers will be revisited. It will be argued that the cybernetic notion of control has a strong hold not only in the normative risk literature (c.f. Chapter 2), but also over the risk practitioners at the case study banks.

The second objective of the chapter is to offer field study evidence for the presence and workings of the cybernetic control ideal in risk management. The cases are suggestive of the conceptual power of the cybernetic control ideal, however, the actual practices observed appear to be distinctly non-cybernetic.

Thirdly, the chapter attempts to conceptualise the apparent theories-in-use. This conceptualisation is somewhat speculative, but by attempting it we can draw attention to the mismatch between the normative (regulatory) prescriptions of risk management, the espoused theories that practitioners report to hold, and the actual observed practice of controlling risk and return in financial organisations.

The chapter is organised as follows. The first section reviews a body of theoretical literature on cybernetic control practices and argues that the cybernetic

[165] Argyris (1995), p. 22.

control ideal has influenced risk management blueprints. The second and third sections turn to the case studies. They trace out the espoused theories that practitioners held about risk control, and the realities of actual risk control when it appears in the context of controlling both risk and return objectives. Finally, the Discussion section aims to formalise the apparent theories-in-use by demarcating the features that distinguish them from the espoused theories.

5.1. RISK MANAGEMENT AND THE CYBERNETIC CONTROL BLUEPRINT

Popular definitions of management control such as those proposed by Anthony (1965) and Lowe (1971) are rooted in control system theory and describe what one could refer to as the 'traditional' or the 'cybernetic' ideal of control (Lilienfeld, 1978; Hofstede, 1978). In particular, Anthony 's widely quoted definition of management control (*'the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives'*[166]) has been broadened by others to spell out the elements of control. An example is Lowe (1971) who identifies '*information seeking and gathering, accountability and feedback designed to ensure that the enterprise adapts to changes*' and achieves its overall objectives. Together these two popular definitions describe the cybernetic control ideal: '*a process which uses the negative feedback loop represented by: setting goals, measuring achievement, comparing achievement to goals, feeding back information about unwanted variances into the process to be controlled, and correcting the process.*'[167]

In order to be applicable, the cybernetic control ideal presupposes that a number of conditions are met: there is a clearly defined standard or objective, actual accomplishment is measurable, and variance information can be used to intervene in a timely manner. Furthermore, there are demands on organizational arrangements: a division of labour between the controller ('staff') and the controlled ('line management'), a shared understanding of the objectives, as well as motivation to act according to the control model, and effective communication. Taken together, these conditions ensure the presence of 'cybernetic validity'[168] (Beer, 1981). Hofstede (1978) offers a similar, but more concise set of criteria for cybernetic validity: presence of standards, measurable accomplishment, usable feedback.[169] The presence of standards, and the behavioural conditions (such as the shared understanding of the standard, motivation to respect it etc.) ensure that actors are supposed to follow an overriding objective, or at least a set of

[166] Anthony (1965)
[167] Hofstede (1978), p.451.
[168] Beer (1981), p. 17 defines cybernetic validity in control systems terms as follows: a process that 'must have a feedback loop in which a standard, a sensor, a discriminator and an effector are present.'
[169] Hofstede (1978), p. 457.

complementary, non-conflicting goals, thus cybernetic control is theoretically possible.

A somewhat dated survey, but nevertheless remarkable for its wide historical sweep, Giglioni and Bedeian (1974)'s review of over hundred titles, concludes that management control theory between 1900 and 1972 reflected entirely the cybernetic paradigm. More than a decade later, Ezzamel and Dent (1987) assert a similar argument: '*cybernetic concepts form the basis for many of the more traditional management controls, for example, the principle of management by exception, or in a more specific context, budgetary control and variance analysis.*'[170] These practices are well documented in text books and policy manuals.

Chapter 2 pre-empted the argument that risk management is yet another control system innovation conceived in accordance with the cybernetic control paradigm (2.3.1.). In particular, the cybernetic notion of control is present in the way risk management is prescribed for financial institutions in the normative practitioner literature.

Three elements of the regulators' proposed risk management framework stand out, which together put the three conditions of cybernetic validity (objective, measurability and feedback) on the risk management agenda. Firstly, the regulators provide risk management with the task of deriving clear and stable objectives: '*From a decision making perspective, (...) risk management typically involves the establishment of hierarchical limit systems and risk management committees to help determine how to set and allocate such limits.*'[171] Paraphrasing Thompson and Tuden (1959), a hierarchical process is expected, starting with a statement of the overall risk *limit of the organization*, escalating down to lower level risk *limits for the organization.*

Secondly, the regulators require risk managers to make the controlled process (the risk profile of the bank) measurable: '*Common tasks for dedicated risk management functions include the development (...) of common definitions and metrics for risk throughout the firm. (...) The Working Group believes that supervisors and regulators should continue to monitor and support(...) firms'*

[170] Ezzamel and Dent (1987), p.92.
[171] Basel Committee on Banking Supervision (2003), p. 1.

efforts to develop means of aggregating (to the degree possible) their risks.'[172] This presupposes the existence of risk quantification methodologies that address different types of risks consistently and thus can aggregate them into a single measure.

Finally, the regulators emphasize the reporting and feedback aspect of cybernetic controls: the prescribed risk management framework includes '*the preparation of risk reports for senior management.*'[173] The regulators observe that accordingly, '*many firms have invested (...) in centralized information systems to help keep track of risks within the firm.*'[174]

It also appears that the very same control ideal has left a mark on the risk management guidelines in the corporate governance literature too. The influential COSO document, which outlines the *Enterprise Risk Management Framework* (COSO, 2003), recommends that the risk control process includes objective setting, event identification, risk assessment (c.f. measurement), risk response as well as reporting and monitoring (c.f. feedback). This model of organizational risk management can be recognised in subsequent corporate governance publications, such as the one recently issued by the Institute of Directors (Institute of Directors, 2004)[175].

From a controlling viewpoint, two questions can now be addressed. First, does the actual risk profile of the bank correspond to what is found necessary (and acceptable) by the board of directors? The second question is, how to articulate the necessary and acceptable level of risk-taking, metaphorically also known as the 'risk appetite' of the bank? These questions have eluded banks for a long time. It is the invention of risk measurement metrics that can be aggregated across different risk types (c.f. economic capital) that makes the ideal of cybernetic control look practicable in the financial services sector. The developments in the risk measurement technology thus reinforce the cybernetic control ideal by (apparently) creating the conditions of possibility for it in the risk management area.

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[172] Basel Committee on Banking Supervision (2003), p. 1-2.
[173] Basel Committee on Banking Supervision (2003), p. 1.
[174] Basel Committee on Banking Supervision (2003), p. 1.
[175] The IoD advocates a four step control process consisting of policy setting (c.f. objective setting), risk assessment (c.f. measurement), risk treatment and risk monitoring (c.f. feedback).

Accordingly, the normative practitioner literature echoes the regulatory and corporate governance models of risk control. In this literature new risk management metrics gain legitimacy by their claimed ability to help practitioners exercise the prescribed control cycle over the risk profile of their institution. Even the critics of the literature accept the plausibility of cybernetic control over risk, uncritically. Their concern rests with the reliability and the robustness of the measurement techniques that the normative literature advocates. For example Danielsson (2001) mounted a critique on Value-at Risk on the grounds that *'current risk modelling technology still is in the early stages of development, is lacking the robustness of risk forecasts, and produces excessively volatile risk forecasts.'*[176]

Significantly, the normative literature's concern is with the quality of risk modelling *per se*, and not with the control logic that the techniques are supposed to serve: *'If risk modelling is not done with great skill and care, the risk forecast will be unreliable to the point of being useless. Or even worse, it may impose significant but unnecessary costs on the financial institution, due to the misallocation of capital and excessive portfolio rebalancing.'*[177] This quote is based on the implicit assumption that risk models are used in the cybernetic way by practitioners – the results of the models are supposed to determine the capital allocations and the corrective actions, such as portfolio rebalancing. There remains a great deal of optimism in the normative literature about the possibility of creating the measurement models that make the cybernetic ideal practicable, as suggested by Danielsson (2001)'s concluding remarks: *'A risk model which incorporates insights from economic and financial theory, in conjunction with data during crisis, has the potential to provide much more accurate answers... [...] Risk modelling does, however, serve a function when implemented correctly internally within the firm...'*[178]

The next section turns to investigate to what extent the cybernetic design principles (apparently embedded in the normative and regulatory literature) transpired in the actual risk management practices of the two case study organisations.

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[176] Danielsson (2001), p.20.
[177] Ibid., p.20.
[178] Danielsson (2001), p.21.

5.2. 'REFLECTIVE' RISK CONTROL AT BWT

As explained in Chapter 3, the development of the risk management function at BWT resulted in three separate types of risk officers. The first group of *risk silo officers* was organized in three sub-departments (Market Risk Controlling, Credit Risk Controlling and Operational Risk Controlling). During the course of the study all of them were engaged in the development of new risk measurement techniques. Secondly, based on the risk measurements provided by the three risk management silos, the Economic Risk Capital team determined the amount of capital to be allocated to each risk category and the aggregate amount of Economic Risk Capital (ERC) that BWT and each of its subsidiaries ought to hold. By promoting the importance of setting limits for the overall risk that the group (and its individual subsidiaries) took, these *risk capital specialists* strived to add further risk controls to the management of organizational life. Finally, *senior risk officers* had secured Board-level visibility to the results of both of these activities. As Chapter 4 demonstrated, risk reports got frequent attention from top management at the time of economic crisis, however, there was little evidence for the continuing interactive use of formal measurement-based risk controls. Senior risk officers started to deploy their agenda-setting power for the discussion of non-quantifiable risk issues instead.

5.2.1. THE ESPOUSED THEORIES OF RISK CONTROL AND CAPITAL MANAGEMENT AT BWT

The blueprint that the risk management function followed was articulated not only by several interviewees, but also by internal policy documents, presentations, and the annual reports of BWT. The 2001 Annual Report described a risk management framework that was very much in line with the industry standard set by the normative-regulatory literature:

'[BWT Group] has developed an integrated framework of best-practice risk management, risk policies, methodologies structure and infrastructure. [BWT Group] is *linking risk management and performance measurement* using an Economic Risk Capital framework, with Economic Risk Capital usage as the common denominator for all major risks. Together with a proactive risk

management culture and the appropriate qualitative and quantitative tools, this *economic capital management framework supports decision-making by senior management* at [BWT Group], thus *linking risk management to the Group's shareholder value strategy*. [...] In addition, [BWT Group] is closely following the development of the new BIS capital adequacy framework...'[179]

This overall blueprint is indicative of the espoused theory of risk control which was reported to shareholders by BWT's risk department. According to this description, risk management was linked to capital management as well as to key strategic decision making. Next we turn to the espoused theories that were communicated in the course of the research interviews, both about the link between risk control and capital management (this such-section), and the other supposed link between risk control and strategic decision making (the following sub-section).

The director who was responsible for risk communication at group level explained the risk management framework as follows:

'In an organisation like ours there is a hierarchy of limits. There is an overall ERC for [BWT], [the investment banking arm of the Group], and limits for certain risk areas, for example private capital exposures. Then it goes down to divisions, and risk categories to prevent risk concentration in certain risk buckets. Most of them are in terms of ERC but some of them are VaR. It goes down to the individual trading desk. At the board level, to be frank, the limit is not extremely tight. Unless we have a major change in our risk profile you would not expect that the limit is breached. We also have warning flags. If risk reaches 90% [of the limit] we discuss it. We want to create a feedback process so that issues are [discussed] at the right time.'[180]

By establishing the hierarchy of limits, BWT Group set the *risk limit of the organization*, as well as *risk limits for the organization*. This reported design feature corresponds to the first condition of cybernetic validity. In addition, a feedback process was designed, based on 'warning flags' and a vertical reporting chain that went up to the Group Board. This design feature appears to echo another cybernetic design principle (feedback). The risk profile of the '*risk buckets*' (business units, risk categories and even individual trading desks) was quantified, apparently in accordance with the cybernetic principle of

[179] BWT Group Annual Report, with emphasis added by the researcher. No page number given for confidentiality reasons.
[180] Director of Risk Reporting, BWT Group

measurement. There seemed to be an agreement in BWT about the desirability of measuring risk. This was said to be primarily motivated by concerns with capital management.

Capital management became a prominent issue during the economic crisis that saw a marked weakening of the group's capital position. Regulators and rating agencies expressed doubt whether the available capital base of BWT sufficiently covered its risk profile, especially with respect to its troubled insurance company Division X. In 2002 this business unit suffered substantial investment losses. The group repeatedly injected additional capital into Division X in order to alleviate the weakening of the insurer's balance sheet.

Such capital management concerns paved the way for new risk measures that could simultaneously indicate the amount of risk taken and the corresponding amount of capital that the bank (and its business units) ought to hold. A director from the CFO division explained:

'In the wake of [Division X's] capitalisation issue and the current economic environment there has been a lot more focus on capital management... on knowing, understanding, being able to report on a more frequent basis what our capital position is, what influences it, what kind of scenarios could happen and what measures are possible. Of course when we were discussing Division X's capital, the obvious question was, what can we do to alleviate [the situation]... Capital issues driving business decisions – that's a little bit new. The focus is so much on capital management now. This situation highlighted that we need a better way of, or more aggressive, or proactive capital management, if you will.'[181]

Three measurement techniques emerged with the promise of simultaneously indicating the risk profile and the capital need of the bank. The first one was called the 'Respectability Capital' – it was a multiple of the minimum regulatory capital that the bank ought to have held. In effect, it indicated a safer cushion than the minimum capital. However, the explanation given for the origin of the multiplier that determined the extra margin of safety was not technical. A risk officer put it as follows:

'The multiplier is a matter of judgement: how much the market expects you to hold.'[182]

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[181] Director, CFO Division, BWT
[182] Team member, Economic Risk Capital team, BWT

The other two risk (and capital) measures appeared to be more technical. One of these was value-at-risk, the measure that was well established in the normative risk management literature and text books. The other was Economic Risk Capital (ERC), which, according to BWT's risk officers, was emerging as the flagship (normative) technology of the risk measurement process in the financial services industry:

'In our industry, economic capital represents the emerging best practice for measuring and reporting all quantifiable risks.'[183]

Economic risk capital was seen to be replacing value-at-risk (VaR), a perhaps more arcane, and older language of risk communication. The Director of Group Risk Reporting explained:

'Here traditionally only the trading book has been captured using VaR. With ERC we have other risks as well, so this is more comprehensive. We started to use it for the banking book, credit risk, emerging markets, even insurance underwriting, so it is much more comprehensive in terms of what it captures. (...) It should allow for more meaningful discussions with senior management and the Board who are not familiar with the specifics of VaR ...I mean they are not familiar with the specifics of ERC either, but at least with ERC risk is expressed in a common unit, as consistently as possible. Yes, it is a starting point for meaningful and good discussions at senior management level because it makes risk buckets comparable... whereas with VaR you always get into the technical details. It is a bit geeky, although conceptually the same.'[184]

The following table summarises the main differences seen in the two measures of risk and capital adequacy, which constituted one of the espoused theories of risk measurement among the risk people.

	ERC	VaR
Scope of application	More comprehensive (applicable for both the banking and the trading book)	Trading book only
Assumptions	Parameters fixed across risk buckets	Parameters are changed according to users' needs
Expected impact	Meaningful and good management discussions	Technical discussions
Overall assessment	Suitable for senior management / Board	'Geeky'

Table 2. Two measures of risk

[183] BWT Group Annual Report 2003
[184] Director of Risk Reporting, BWT Group

From the reports of these risk practitioners it transpires that the espoused theory of risk control at BWT resembled the cybernetic design in its aspirations. The espoused theory included limit setting, measurement and feedback. However, it also became apparent that there were competing risk measurements. In order to exercise control through measurement, there was a need for an agreement on a single measurement technique. This happened in two steps, according to another elaboration of the espoused theory of risk control.

First, the ERC metric was furthered to replace the apparently more arcane VaR measure in the risk control process. Risk officers were aware that the difference between the two was mostly semantic. ERC was in effect the application of the VaR technique to all risk areas (rather than just in the market risk silo), according to a common confidence level, which made the measures comparable across different risk types.

Second, the Respectability Capital was calculated in parallel, and compared to the ERC. The higher of the two was then considered as the measure of the risk profile and the corresponding capital need.

This is suggestive of an espoused theory of risk control in which capital management has become closely intertwined with risk control.

5.2.2. *THE ESPOUSED THEORIES OF RISK MANAGEMENT AND STRATEGIC CONTROL AT BWT*

The development of ERC was driven not only by capital management considerations (i.e. establishing a means of setting capital limits, tracking risk measurements and providing a feedback mechanism), but also by the intention to direct the attention of other organizational members to risk issues in the course of the strategic planning, decision making and control process. As one senior risk officer put it:

'We are the risk conscience of the bank. We have to be very sensitive to risk, to see risk where others don't.'[185]

Being the '*risk conscience*' of the bank even appeared explicitly in the mission statement of the risk department at BWT:

[185] Head of Market Risk Controlling and Asset Liability Management, BWT

'Mission – Act as the independent "risk conscience" and policy enforcer for [BWT] for all risks that could have a material impact on the firm in an integrated and comprehensive fashion. [186]

Designing risk communication and getting ERC acceptable as a strategic control device in the eyes of the board (and other organizational members) was a major challenge for the risk function. ERC was put forward as a tool to control the overall risk profile of the organizational strategy:

'What we changed this year are two things. First, we said: risk has to be an explicit topic in the strategic business plan. So you can't just say 'we are planning to grow retail banking by 4% and private banking by 6%.' You have to make it explicit what the risk levels are going to look like. [AM: How do you express risk level? In the form of ERC?] Yes, ERC. That's a fundamental change. (...) What we also said was: the board of directors does not only have to approve the strategic business plan, but it also has to approve the risk appetite... in the form of an overall ERC limit for the Group. At least conceptually that's how you integrate risk in the strategy. It is another story whether it actually flies.' [187]

This is suggestive of the presence of both the espoused theory and the a gap that might open between this and its application, in the mind of the CRO.

The espoused theory of risk control that was considered in the above quote is about the integration of risk management and strategic control. Having defined the overall risk limit of the organization, the risk function admittedly set out to escalate risk limits down for capturing and capping the risk content of lower-level strategies and divisional business plans. Bringing the risk calculations into the strategic planning process was (reportedly) an important element of this espoused theory.

To the ERC team the attraction of breaking down the overall risk limit to lower levels of the organization was that it created an apparent option to use it as a strategic control tool at divisional level. The head of the economic risk capital team reported the following driving theory:

'My vision of the integration between risk and strategic business planning is to do variance analysis - to get the business managers to justify if they either exceed the planned risk or they haven't exploited the risk that has been planned.' [188]

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[186] Internal document, BWT, October 2002
[187] Chief Risk Officer, BWT
[188] Director, Economic Risk Capital, BWT

It appeared that within two years' of the establishment of the formal risk function at BWT, ERC was advocated as the key tool to communicate risk in the organization and to control the risk profile of the business units. Risk capital specialists saw its value in that it rendered the risk aspect of business performance to quantitative scrutiny and control. Their efforts to translate risk analytics into the language of economic capital made it possible that risk measures were comparable with accounting measures of performance and financial health.

Among the risk people there was a perception that because of the trade-off between profit and risk targets, there was a need to integrate them both into a common control framework. Accordingly, within the risk function two approaches were debated. The first one can be called the 'ratio approach', the second one the 'value based management (VBM) approach.'

The ratio approach furthered the notions of risk-adjusted profitability and risk-adjusted capital adequacy. Risk adjusted profit would be captured by comparing net profit with ERC (Return on ERC). Risk adjusted capital adequacy would be measured by the ratio of actual capital over ERC (in BWT this is called the 'ERC ratio'). The latter was strongly promoted by BWT's risk capital specialists, who were advocating it at divisional level as well:

'Now I have limits on stand-alone ERCs but I would prefer to have limit on the ERC ratio. If I have enough capital, why would I bother about increasing risk? It is the [lack of] capital base, which should make us bother about risk.'[189]

The *value based management (VBM) approach* involved the calculation of a capital charge and netting it off against divisional profit measures. Although a seemingly standard residual income method, the VBM approach had a twist. The capital charges were not based on accounting (book) capital amounts. Instead, they were to be derived from the economic capital measures – reflecting *risk-adjusted* capital amounts. In other words, the calculation of capital charges was to be based on the total risk profile of the business units, rather than on the historically determined capital amount they carried in the books. This means that the notion of 'charging business units for the capital they used' was to become equivalent with another notion: 'charging business units for the risk they took.' The risk-adjusted residual income was called Economic Profit.

[189] Head of Financial Risk Control, Division X

All three measures (Return on ERC, the ERC ratio, Economic Profit) were calculated and put forward by the economic capital team of BWT for the control of the risk-return profile of business units. However, none of these approaches have become control practices as envisioned in the espoused theories.

5.2.3. A 'REFLECTIVE' APPROACH TO RISK CONROL

This section turns to some of the actual capital management and strategic control practices that were observable during the course of the study.

Having derived a set of approaches to capital management and performance measurement, senior risk officers sought to influence organizational action in these areas. To this end they set out to educate influential managers about the nature of risk control. The CRO explained:

'We have to convince line management. They have to believe in it. [...] So it is the Executive Board members who first have to understand what the ERC does and does not do and how you can measure it. The big advantage of it, compared to Respectability Capital, is that this is the only thing we have so far to cover risk. We might not like it, it might not be comprehensive, but it is the best thing we have.'[190]

ERC and the espoused theories of its application were toured around in the organisation. However, the presence of an alternative measure of risk and the corresponding capital amount –Respectability Capital – caused much confusion. A director from the CFO Division recalled:

'Coming from an engineering background, I was struggling with the terminology. This methodology change [ERC] was introduced earlier this year, I think it was March when [Peter][191] came and gave a presentation to our managerial board about the 'higher of' and that there would be an interest charge on excess capital coming from the Group, etc. As it happens the model tends to point to the Respectability Capital.'[192]

After the investment management debacle the ERC calculations showed a lesser amount than the Respectability Capital approach, in particular, in the case of the troubled business unit Division X. The risk people saw the reason in the fact that by this time a stop-loss strategy had significantly reduced Division X's risk profile, which was reflected in a decreasing ERC trend. Nevertheless, under

[190] Chief Risk Officer, BWT
[191] The head of the Economic Risk Capital team, original name concealed.
[192] Director, CFO Division, BWT

the watchful eyes of regulators and rating agencies the management control department continued to calculate the Respectability Capital measure, and applied the 'higher of' principle in order to signal the capital need of the group (and its business units).

ERC was visible, but was not viewed as the sole indicator of the absolute amount of capital need. Instead, it has started to take a curious meaning, explained by a member of the CFO roundtable[193] as follows:

'My feeling about it is that the ERC is more like a plausibility check, if you will. The risk management function is responsible for doing that plausibility check, but [...] those numbers are not used in day-to-day management.'[194]

'That plausibility check which has been introduced through a comprehensive calculation of Economic Risk Capital, based on adding our risk positions into this, is a hugely valuable thing. It gives a confirmation of the [appropriateness of] respectability capital allocation.'[195]

This suggests that at least for some senior executives, in a situation where the group was under pressure to demonstrate its capital strength, ERC became a measure that increased their confidence in the Respectability Capital amount. The calculation of ERC and the application of the 'higher of' principle rationalized the use of an apparently much less technical, more judgmental measure for capital management decisions.

BWT's case is suggestive of a gap between a currently popular normative theory of capital management (BIS 2003b) and an alternative espoused theory of capital management. The latter was converted into practice, suggesting that in this case the espoused theory conformed to the in-use design (or vice versa). This practice of capital management applied risk calculations as a rationalisation ('plausibility check') of the capital targets that were arrived in a judgmental, perhaps even intuitive way, second-guessing regulatory and rating agency expectations.

Strategic control proved to be another area in which the in-use designs of risk control defied the cybernetic control ideal. Interestingly, in this case the in-

[193] The CFO roundtable was an occasional meeting that was attended by the divisional and group-level CFOs of BWT Group.
[194] Director, CFO Division, BWT
[195] Director, CFO Division, BWT

use practice of risk control also differed from the espoused theories held by BWT's risk officers.

By measuring the risk profile of the ongoing activities (or the risk content of the proposed divisional strategies), risk people sought to contribute to discussions about strategic decisions and strategic planning. Risk officers claimed access to strategic control on the basis of being able to compare the risk content of business units with the actual (or proposed) returns that their activities yielded. Such comparisons immediately brought into surface the fundamental problem of value-creation in banking: namely, the conflict between risk and return. The head of the economic capital team asserted:

'You can't increase profit and increase volume without increasing risk. Otherwise where should the profit come from? Particularly in the lending business, what kind of product do you sell without taking risk?' [196]

The visibility of the conflicting risk and return objectives made the simultaneous use of risk limits and profit targets problematic. Minimising risk and maximising return appeared to be conflicting objectives. In order to resolve the trade-off, it transpired that risk control should not act in isolation, but in a fashion that recognises the return side. This has become an espoused theory that was held in the risk function:

'...But isn't that what management is about? You have that tension [between risk and return]. It is about striking a good balance between risk and return and allocating our risk capacity to the areas where you have good return. That's a good feature [of risk management], to make this transparent.'[197]

The dilemma of risk and return could potentially be resolved by fusing the conflicting risk and return objectives into a single risk-adjusted control objective, as was apparent in the espoused theories of risk-return control such as the ratio-approach and the VBM-approach. However, as Chapter 4 showed, these risk-based performance measures were slow to take root in BWT.

Indeed, the bank had a history of paying attention to the conflicting risk and return objectives sequentially (rather than simultaneously), swinging attention from one to the other as circumstances warranted. The example of the lending business is presented below, followed by the structural arrangements put in place

[196] Director, Economic Risk Capital, BWT
[197] Director of Group Risk Reporting, BWT Group

by senior risk officers which aimed at detecting excessive risk taking while not curbing risk-taking behaviour otherwise.

Lending was a business area characterised by clear risk-return trade-offs: the riskier the client, the higher the profit margin on the loan. A director from the Credit Management department called attention to the apparent conflict between the lending and the risk management departments:

'In the past you basically had the sales organization...their targets were defined by volume, like 'increase your market share by x% next year.' They did not care about risk. Then you had the risk management. They said, 'OK, we want to avoid doing business in those areas, we want to reduce our exposures here'... The two sides were uncoordinated in the bank.'[198]

This caused the bank a control debacle in the 90s. Focusing on the growth objective, it had followed an offensive strategy in the mortgage market with apparently little regard to the increasing exposure to the real estate market. Then a real estate crisis occurred, and the bank suffered heavy losses. Management's attention swung to the risk aspect: 'In the last 4-5 years it was really the risk side which defined where the bank should go in terms of lending. It was to a lesser extent the business side. Of course they had their strategic business plans and so on, but you know, it depended on the risk appetite of the bank.'[199]

More recently, in the wake of the weakening of the group's economic performance, in a turnaround situation, another attention swing occurred:

'The new Chief Executive Officer focuses rather on revenues. Increasing revenues is not a bad thing. Everybody knows how they could improve revenues, it is a target very easy to communicate to the businesses. (...) Now the targets are clearly on Return on Equity (ROE) and the equity component is irrelevant of the risk. There is a clear focus on return rather than on risk.'[200]

Accordingly, the management accountants who orchestrated the quantitative planning process expressed doubts whether risk capital charges mattered at all at the time:

'The only theme now is to get back to profitability. 90 percent of the focus is on P&L, net operating profit. ERC is calculated, together with all the ratios, return on equity, return on ERC, but at the moment these get a low weight in decision making. [Division X] is deep in the red, so there is a discussion about how

[198] Director, Credit Management, BWT
[199] Director, Credit Management, BWT
[200] Director, Economic Risk Capital, BWT

we bring it back to profitability again. (...) I agree we should have more focus on ERC when the company is running well enough but not in a turnaround situation. On the insurance side we have a turnaround situation and on the banking side everybody is reorganising all the time...'[201]

Both agenda shifts occurred in response to unfavourable circumstances. In the 90s a persistent clamp-down on risk-taking took place in the wake of a credit crisis. Apparently the emphasis was on decreasing the risk profile of the lending portfolio (even though the control methods through which this was monitored were pre-ERC credit management practices). The recent shift to an expansionist strategy occurred in response to the underperformance of the insurance division and institutional pressures for improving the Group's economic performance. Controlling the risk-return trade-off appeared to be a matter of selective crack-down on each objective, as they became pressing.

Although not consciously embracing this apparent theory-in-use, the risk management function was realising the importance of timely crack-downs:

'In the past often they only paid attention to the risk side once risks started to materialise, if you were losing money. Now it is changing, there is a new paradigm: risk is much more transparent. Risk should be more visible before something [bad] happens.'[202]

The CRO drew a similar lesson from previous control failures:

'What happened in 2002, looking at the results, obviously something went wrong, otherwise we would not have lost [X bn]. Now whether it was risk management or something else that went wrong, that's a different story. We knew the risk position that we had, we presented the risk position to senior management, to the Board of Directors, everybody was aware of it. So it is not that we did not know. We just did not do anything about it or not fast enough. That was pretty similar to the situation in Russia in 1998. Everybody knew that we had that position, it was even part of the conscious strategy (...) to be one of the largest players in Russia. It was here on the table. But nobody asked the questions. Is this really what we want? Are you really aware that if interest rates go up or if we have a crash in Russia we are going to lose our shirt? Whose function is it to bring up these questions? That's risk management. What we are here for is to bring up honest questions.'[203]

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[201] Director, Strategy and Controlling, BWT
[202] Director of Group Risk Reporting, BWT Group
[203] Chief Risk Officer, BWT

Senior risk people were turning the risk committee meetings into a forum where they could discuss and challenge underlying business assumptions:

'We say we want to discuss employee benefit schemes in Switzerland or we want to discuss issues of banking secrecy or whatever we think is of importance to those guys. We set the agenda. If I set the agenda I can go to management and if they say 'no, that's not an important topic' – that is usually a good indication for me that it was the right topic. That's how it works.'[204]

Senior risk officers at group level started to look beyond the risk silos in order to find problem areas to which they would have to alert the attention of the executive and supervisory boards. This approach set example for senior risk officers within the business units too. For example, the post-crisis CRO of Division X instigated '*special risk reviews*' to be presented at Risk Management Committees by line management staff on topics as diverse as foreign exchange risk and specific strategic issues. The business unit CRO was conscious of playing the devil's advocate at these meetings ('My role is not to be a nice guy'[205]), and sought out issues that would have implicated excessive risk-taking:

'If I schedule a topic for this management committee, nobody says no. If somebody says no, I am going to be suspicious very quickly.' [206]

Being a decidedly innovative, opportunistic organization where new strategies were allowed to emerge and opportunities were seized, BWT was a bank not afraid of risk-taking. However, this resulted in an uneven growth pattern characterised by bold risk-taking followed by a crack-down on risk when risk-taking proved excessive and damaged the bottom-line. In this respect BWT resembles Mintzberg and Waters (1982)' entrepreneurial firm where cycles of strategic 'sprints and pauses' were reflected in switches between an opportunistic entrepreneurial mode and a more reflective planning mode, resulting in hectic, uneven growth.

The selective crack-down on profit and risk objectives appears to be associated with the strategic spurts and halts of the organization. It can also be associated with the contested status of risk measures that were put forward by the risk capital specialists for controlling the risk-taking capacity of business units.

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[204] Chief Risk Officer, BWT
[205] Chief Risk Officer, Division X
[206] Chief Risk Officer, Division X

'Control by selective crack-down'[207] appeared in a control environment that was characterised by uncertainties around both means and ends. First, the mutually exclusive risk-return objectives put top management in a dilemma. Secondly, the presence of multiple measures of risk, and a rule of thumb that produced a hierarchy among them (the 'higher of' principle), suggest that there were cause-effect uncertainties about the risk measurement (and risk prediction) process too. The presence of such uncertainties defies cybernetic validity and would theoretically question the applicability of the cybernetic control ideal. Empirically, the control pattern that emerged in the face of these uncertainties appears to be non-cybernetic. It was a process where learning about a hard-to-understand phenomenon (the risk-return trade-off inherent in new strategies) took place at the same time as managing it. Instead of demanding technical 'rigor', this control style required the practitioner to be 'reflective' (Schön, 1992) and intuitive (Burchell et al., 1980).

Indeed, senior risk officers at BWT call into mind Schön's 'reflective practitioners' (Schön, 1992) who manage by 'reflection-in-action', an artistic process which requires more than technical expertise. It involves experience, trial and error, intuition and muddling through. [208]

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[207] Control by *selective crack-down* is a term coined by political scientist Andrew Dunsire (Dunsire, 1990). In a decision environment, where two mutually exclusive goals put the controller in a dilemma (and several potentially competing constraints result in a *polylemma*), the controller may choose to maintain control by '*selective crackdown on one goal at a time, 'steering the equilibrium*'' (Dunsire, 1990: 9). He also called this control style '*collibration.*' Collibration is associated with notions of 'compensation' and 'redressing the balance' (*libra*, lat. means 'scales'). Hood (2001) explains this control style as a means of deliberately juxtaposing countervailing forces. He further argues that '*since it requires no general underlying stable consensus on goals, [collibration] makes much lower demands on social rationality*' (Hood, 2001: 215) than earlier control system theory models. Conceptually not alien to the literature of political science, collibration as a theoretical construct has been furthered to explain how real-life political systems handle conflicting policy-making tasks (Hood, 2001). However, collibration has not been recognised as a control practice in organizational settings, nor has it been furthered as an explanatory construct in organizational theory.

[208] Schön talks of the 'reflective practitioner' (Schön, 1992) as opposed to the 'technical expert' otherwise known as the 'rigorous practitioner'. The argument begins with the observation that practitioners face the dilemma of rigor vs. relevance. Some, out of concern with 'rigor' build practices around formal, analytic models, convert problematic situations to well formed problems, so that they can exercise technical rationality. This 'positivist' epistemology of practice is contrasted with an alternative epistemology that deliberately immerses itself in what Schön calls the 'swampy lowland' of practice: confusing but crucially important situations, which are out of the reach of 'rigorous' practices built around the use of formal, analytic models. In these circumstances skilful practitioners manage by 'reflection-in-action', which may take the form of on-the-spot problem solving, theory-building or re-

This conceptualisation of the theory-in-use is at odds with the espoused (and normative) theories of control over the risk return trade-off. BWT's risk officers cited the ratio approach and even the value based management approach when asked about the integration of risk management and strategic planning, even though some of them made it clear that they treated these with a pinch of salt, as did the CRO:

'One of challenges we have with the business units is to come up with a common agreement about the right way to do it [the integration of risk management and strategic planning]. VBM is one possibility, but you have to be careful it does not become a religion. People who really believe in it, for them it is pretty close to religion. Personally, I think it is a good tool.'[209]

Talks of such conventional (normative) ways of dealing with the risk return trade-off led to discussions of the technical challenges of risk-based performance measurement. For example, the CRO mentioned the problem of defining the weighted average cost of capital (WACC) for each business unit, as a major challenge in the VBM framework:

'Coming back to your original question, yes, you can use ERC for EP [Economic Profit], but you still have to solve your WACC question. And it needs to be established from business unit to business unit. Conceptually, it is easy, but if you really want to do the calculations, it becomes pretty nasty.'[210]

These technical asides punctuated the descriptions of what appeared to be a more ad hoc, experimental and intuitive approach to managing the risk-return trade-off. The apparent pattern of controlling the risk-return trade-off (here conceptualised as control by 'selective crack-down') did not depend on solving the technical challenges of risk-based performance measurement.

Chapter 3 argued that BWT exemplifies a pattern of strategic significance to be gained by the risk function through senior risk officers' access to top-level discretionary decision making. Following a number of control debacles, senior risk people used their agenda-setting power to discuss non-quantifiable ('strategic') risk issues at top management meetings. By mobilising line management knowledge to bear relevance on these issues, they played the devil's advocate in the face of risk-taking strategies.

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appreciation of the situation. It requires 'professional artistry', experimentation, learning and an awareness of the limits of 'rigorous practice.'

[209] Chief Risk Officer, BWT

[210] Chief Risk Officer, BWT

Thus the nature of the influence of senior risk officers on controlling the risk-return trade-off (in strategic decision making) was not in line with the espoused theories of risk-based performance management. However, the senior risk officers of BWT were gradually creating structural arrangements that allowed them to influence strategic decisions in another way. This took place outside the formal planning and performance measurement cycle, in the risk management committees, where they set the agendas. Here senior decision makers learned about, and reflected on, risk issues at the same time as making decisions about them, in much the same way as Schön's 'reflective practitioners' learn to cope in complex situations (Schön, 1992).

5.3. QUASI-CYBERNETIC RISK CONTROL AT FRASER BANK

One of the oldest and largest banks in the UK, Fraser Bank resembles BWT Group in that it offers universal banking services. Structurally, it is segmented into five product divisions (retail banking, private banking, corporate lending, investment banking and the credit card business), and the business units enjoy substantial autonomy.

Fraser Bank turned to modern risk management techniques in the wake of the largest loss that it suffered in its 300-year history during the early 90s UK credit crisis. It was the first European bank to adopt a default probability-based credit assessment methodology and a Value-at-Risk based approach for its total loan portfolio and market risks.

At the time of the case study the formal risk management function was going through a major structural overhaul. After an essentially organic development phase in the first ten years of its functioning, the risk management department had formed a complicated web of committees, teams and individuals - each working on diverse topics such as information systems maintenance, risk analysis, governance and policy, insurance, and data protection. Although Frasers had a reputation for 'leading edge' risk management initiatives among its peers, it appeared that internally the risk department showed two faces to other organizational members. It had a team of risk experts who performed and reported risk analytics to outsiders and the executive board, while there was also a group seen by others as bureaucratic:

'Part of the problem with [Fraser's risk department] is that it is just a huge burden on the Group - in the sense that by its nature risk management build risk policies upon risk policies upon risk policies and reporting upon reporting upon reporting. Until the point when the business is suffocating under all of this and there is a revolution. Look at the regulator. The FSA and Basel and all the rest of it. Policies are pouring in. This is nonsense. (...) A lot of people in the large risk management teams in big banks are, to my mind, not very dynamic. It is all about policies. It is a cottage industry. So I would characterise half of the risk people as not adding much. If you started an enterprise from scratch you would

not have them in the business. The other half is the one coming up with the leading edge risk policies.'[211]

There was a consensus among the risk people that analysts placed a premium on Frasers' share price due to the high reputation of the risk function.[212] Maintaining this 'leading edge' position became an important priority as the realisation came that further organic and policy-driven growth may be a threat to it.

With the arrival of a new Risk Director, an attempt was made to rationalise the risk department. Four risk silos were established (credit, market, non-financial and compliance risk) and separately, an additional team that was responsible for deriving economic capital measures for the risk content of business unit plans. These five teams formed a sub-department that was very similar to BWT's formal risk function. The difference was that in the case of Frasers there remained additional (though 'streamlined') specialist teams taking care of specialist projects that the risk department had instigated during its organic growth period (e.g. a data warehouse, governance and policy work).

5.3.1. The espoused theories of risk control at Fraser Bank

The reorganisation of the formal risk function was part of an ongoing group-wide efficiency review, and the structural overhaul of many other central functions from marketing to IT. These structural changes were the reflections of a fundamental change in management and control that had been initiated at the top of the organization as Fraser Bank was switching to value-based management (VBM) principles. The Chief Executive Officer was a passionate advocate of shareholder value:

'Positioning [Frasers] among the leading value-creating companies world-wide is my highest priority. (...) Managing for value is not a one-off change initiative. It is an enduring way of running the enterprise.'[213]

The VBM imperative was communicated to the organization:

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[211] Assistant Director, Group Strategy and Planning, Fraser Bank

[212] I could find no empirical proof for this sentiment. It was probably based on the widespread reputation that Fraser, an early adopter, earned in the area of risk management. The 2004 Annual Report, for example, reminds the reader of the long history of risk expertise in the company. It is stated that the risk framework '*builds on the analytical capability developed and used within [Frasers] since the mid 90s.*' (Page number not quoted for confidentiality reasons.)

[213] Chief Executive, Fraser Bank, quoted in an internal training document

'Our governing objective is to maximise shareholder value over time and at any point of time.'[214]

A sense of urgency was added when the executive board set the group goal of '*doubling value every four years.*'[215]

As the reorganisation of the risk function took place against the backdrop of the group-wide VBM implementation, risk management was (re)developed as a pillar of the new control framework. The espoused theory of risk control was communicated in the Annual Reports with reference to important milestones in the development of Anglo-Saxon corporate governance. The 2001 and 2002 Annual Reports asserted that the '*risks are identified, measured and monitored [...] in a manner consistent with the requirements of the 'Internal Control: Guidance for Directors on the Combined Code'*", referring to the guidelines first outlined by the Turnbull committee. The 2003 Annual Report reported that the risk management framework was in line with the COSO (2003) document that advocates the Enterprise Risk Management agenda. The espoused theory of risk control at Frasers (as communicated to shareholders) adopted the essentially cybernetic notion of risk control that is implied by these corporate governance models. The espoused risk management design principles echoed the ingredients of cybernetic validity. In particular, the risk framework was based on the risk appetite as approved by the Board (c.f. objective), risk assessment (c.f. measurement), and a control process that '*ensures that risks are regularly monitored and the corrective action can be taken in a timely manner*'[216] (c.f. feedback).

The link between modern corporate governance standards, the normative theories of risk control and the blueprint that Fraser Bank was implementing was made explicit by comments such as the following, communicated by the Director of Risk Reporting:

'Now that the Board has expressed a financial risk appetite - post-Turnbull, post-Enron -, the risk reporting should back that up, it should demonstrate that the way the limits apply to risk are consistent with the risk appetite of the Board of Directors. [AM: Does this financial risk appetite include market and credit risk?] Yes. The intention is to define something similar to non-financial risks as well but

[214] Internal training document, Fraser Bank
[215] Internal training document, Fraser Bank
[216] 2003 Annual Report, page number not quoted for confidentiality reason.

then it becomes very difficult with issues like 'do we have any appetite for regulatory non-compliance?' [...] These [non-financial risk] issues are not very technical, more subjective. The issue is to identify some quantitative measures that we can assess on a regular basis. So we can gain some confidence that we comply with the appetite for risk in that area.'[217]

Economic capital was becoming the common denominator metric for risk at Frasers. According to the 2002 Annual Report, this was the metric by which risk specialists measured aggregate risk by type, ran risk limit setting systems and allocated capital to each business corresponding to its risk profile.

Nevertheless, a similar espoused theory of risk control transpired from the interviews as well. The head of Economic Capital explained the risk framework as follows:

'We obviously get involved with risk appetite. We make sure that we have one unit of measurement across the bank of unexpected loss, which is Economic Capital, and then we use that to allocate out the risk appetite. (...) This is the report that we send to [the board] – a monthly brief summary. [Leafing through the risk report:] It is practically a dashboard saying this is how this or that business unit is using up its economic capital.'[218]

The calculation of the risk content of different business plans and business units created new visibilities and had the potential of bringing previously latent risks into the open. The espoused theory of risk management deployed the idea that risk officers represented an increasingly loud voice of risk conscience:

'I think the risk manager is the conscience of the company. Sales people bring everything in [from the street], and the risk manager is the common sense conscience saying, it is not as good as it looks. So the risk manager has two major functions. One is to educate sales people and to bring risk to life. The second is to be technically good enough to know when the risk is not captured or miscalculated. To this end, one needs to understand the convention, everything that has been done about risk. But the value of the risk manager is giving interpretations of loads of facts that are relevant for [Frasers].'[219]

This espoused theory was similar to the one at BWT in that it adopted the notion of 'risk conscience' and the ambition to educate non-specialists about risk.

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[217] Director of Risk Reporting, Fraser Bank
[218] Head of Economic Capital, Fraser Bank
[219] Head of Economic Capital, Fraser Bank

While at BWT there was a plurality of alternative espoused theories (and techniques) of risk control, capital management and performance measurement, at Fraser Bank there appeared to be a single risk management approach that prevailed. The '*risk organisation*' was developed to '*support the Value Based Management principles of the Group.*'[220]

In this VBM context Economic Capital was the measurement that was deemed to be able to express the risk profile as well as the corresponding capital need of the various business units and the Group. In this framework there was a dual role for risk management. Through a single metric (Economic Capital), risk assessments were linked not only to capital management, but also to strategic performance measurement. In particular, risk capital specialists held this as the espoused theory of risk control, as related by the head of the function:

'So that is the first part of the job, figuring out how much we would lose [in an unexpected loss scenario], how much capital we should hold [to cover unexpected loss]. The second part is to provide information of the risk-adjusted performance of the business. Economic Profit (EP) inherently needs Economic Capital because you have to adjust your profit by the risk that you have taken in order to reach that profit.'[221]

The economic capital measures were seen to be key in determining the capital need ('the risk appetite') *of the organization,* and the hierarchy of risk limits *for the organization.* Also, economic capital measures were put forward for monitoring and feedback in the form of risk reports to the board. This espoused theory among the risk specialists reiterated the essentially cybernetic conception of risk control that was detectable in the annual reports. The espoused theories of risk control, as reported in the annual statements[222] and in the interviews, echoed contemporary regulatory and corporate governance guidelines (c.f. normative theories) on risk control.

5.3.2. A 'QUASI-CYBERNETIC' APPROACH TO RISK CONTROL

The economic capital framework at Fraser Bank was designed with considerable technical rigour to allow risk capital specialists to join discussions

[220] Annual Report 2001
[221] Head of Economic Capital, Fraser Bank
[222] During the research project the annual statements for the period of 2001-2004 were reviewed.

on capital adequacy and to contribute to the evaluation of the proposed strategic plans and business performance.

As for capital management, it was espoused that economic capital limit breaches should not occur. If a limit was being approached, corrective action would be taken either in the form of risk reduction (by the business unit concerned) or by the raising of additional capital. In practice economic capital limits were set and monitored closely. However, the method of calculating the limits was regarded as fluid by the decision makers. The director responsible for the risk policies of the group explained:

'What happens if the bottom-up assessment [of economic capital need] is higher than the book value? Well, we have a tolerance range which says you can't measure these things down to the last penny anyway. So if it comes within 120% then we are happy, if it comes over 120% then we need to either review the amount of risk we are taking or we need additional capital.'[223]

This suggests that the control style appeared to be based on the cybernetic logic, in particular, corrective action took place with reference to a limit. However, the limit that eventually mattered was a secondary one – it allowed a certain amount of flexibility around the originally set limit. The 20% tolerance range suggests that decision makers had less than full confidence in the risk measurements or that they did not intend to act upon the risk measurement signals blindly. Some senior risk officers even suggested that a certain amount of subjectivity in risk control was desirable, given the assumption-driven nature of risk assessment. The risk policy director gave the following example:

'The important point about it is that very small changes in the assumptions make very big differences in the answers. And who knows... I just had an encounter with risk yesterday, looking at Economic Capital for the retail portfolios. One of the things that came through was that the Economic Capital you came up with was dependent on the number of cohorts that you used. So we have ten grades of counterparty. If you use 10 grades of counterparty you get much less economic capital than if you use 20 grades.[224] [...] One of the concerns I have with [Thomas[225]] is that I think he believes in his figures too much.'[226]

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[223] Director, Group Risk Policy, Fraser Bank

[224] The degree of refinement of the counterparty credit risk categories changes the shape of the credit loss distribution curve. Higher refinement is achieved by applying more credit grades. More grades result in a loss distribution that has a 'fatter' tail on the low frequency - high loss end of the distribution. Consequently, the 99.97 % cut-off point (or any other confidence level)

During the second year of the case study there was a significant change in capital management at Fraser Bank – the internal capital allocation methodology was overhauled. This was another example of risk specialists compromising the measurement principle of cybernetic validity, while they still upheld the notions of objective setting (risk capital allocations should reflect risk limits for business units) and feedback (reporting on the risk profile of business units).

There was a history to the change. The previous risk capital allocation methodology took into account that diversification benefits existed in the Group, which were reflected by an amount of capital that was not allocated out to business units but was held at the centre. However, in the course of the years a larger and larger capital amount remained unallocated, as the bottom-up risk aggregation process came up with increasingly lower capital need than the available capital. To the risk capital team it became apparent that the capital allocation method either consistently overestimated diversification benefits or did not account for an increasing amount of risk taken by the business units. This was feared to have caught the eyes of analysts, who could have drawn question marks over the famed robustness of the risk methodology at Fraser Bank. A manager from the strategy department (who had worked in the risk capital team at the time when these concerns surfaced) recalled:

'That's when the problems started. I joined [the economic capital] team in June 199x. At that time there was already [Xbn] pounds surplus. The method in 1995 did not capture all the risks the group had – we did all the credit risk and the market risk, but there were loads of other risks not picked up (for example our half-share of a company in [Tunis] had no capital allocated to it etcetera). So [Robin[227]] started to say that part of the [Xbn] was undiscovered risk, or risk not covered. But the top-down capital was growing faster than [Robin] and I could discover assets to allocate capital to. Although we were plugging the hole with the risks we discovered, the water was pouring in at the top. So the way we reported it was: bottom-up capital is [... bn]. The surplus we said we held for growth. It was another way of explaining away surplus. We feared at some point

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will result in a higher economic capital amount than the same cut-off point would on a 'less fat' distribution tail.

[225] Reference to the Head of the Economic Capital team, name disguised for confidentiality reasons.

[226] Director, Group Risk Policy, Fraser Bank

[227] The then head of the Economic Capital team.

the market was going to turn around and say to us: you are not allocating out [Xbn] (or whatever), that's really odd. Why is that? That's what we thought the worst scenario is going to be.'[228]

A new capital allocation methodology was proposed by the head of the economic capital team. However, he encountered fierce resistance from some of the business units whose share of the total capital would have consequently increased disproportionately. A 'two-year battle' ensued, recalled by the previous witness as follows:

'[Robin] thought he needed an army of information to convince [Division A]. He was trying to say, what's the beta of [such a] bank? How do I adjust that for the fact that [Division A] don't do some of those activities? Meanwhile [Division A] got their two or three clever guys together in order to come up with their methodology and to convince the [Division A] chief executive that [Robin] does not know what he is talking about. Or vice versa: the [Division A] political machine saying we cannot accept that capital figure even if he is right – there was this campaign of creating enough smoke and trouble over it so that no one will come to a conclusion. And that was the two-year battle really.'[229]

The pressure became so great that the whole economic capital team migrated away from the bank and a new manager was tasked with the challenge of resolving the conflict around the new capital allocation methodology. This manager was appointed at a time when his task became seen as imperative by the Chief Executive of the Group, so he enjoyed the political-institutional support that his predecessor lacked. He chose a consultative, consensus seeking approach, which he recalled as follows:

'[The Chief Executive] said, everyone knows we cannot hold [Xbn] at the Centre. In the current environment it does not work. So everyone said, yes, let's get it more accurate. But they wanted to minimise their portion of the more accurate pie. So there is a tension between the two. By setting the objective and clarifying the rules there was less room for people to move. That's not to say you don't get people arguing and so on but the rules keep people straight. And you

[228] Assistant Director, Group Strategy and Planning, Fraser Bank

[229] Assistant Director, Group Strategy and Planning, Fraser Bank. The 'two-year' battle was a sensitive topic at Fraser Bank at the time of the study. I interviewed the then Head of Economic Capital (here referred to as 'Robin') who was, I later learned, preparing for his resignation from the bank. Given the sensitivity of his position, I was not allowed to record these interviews. However, his views on the events were closely echoed by the above quoted strategy manager, who was then a member of his team. The Director of Group Risk Policy had a more distant view, and it was in line with this recollection too.

keep it all consistent. By sitting around a table, instead of one-to-one negotiations you end up with group negotiations. The best minds in business bank and in [the investment bank] came up with the methodology, so they cannot argue on technology. Each business unit was represented by risk managers and lenders, one representative of both to make sure we took in both the technical risk perspective and the market perspective.'[230]

This process took the best part of the year, but eventually produced a capital allocation methodology that was accepted as a basis for risk capital allocation and limit setting in the Group.

The above described production of the capital allocation methodology suggests that risk control at Fraser Bank was heavily reliant on an acceptable measurement tool. However, the production of internal (and external) legitimacy for the method-in-use was not a purely technical affair. Similarly, the use of the risk capital limits allowed some fluidity into the control framework.

It is suggested here that this control practice (in the capital management area) is therefore quasi-cybernetic – it was based on cybernetic principles, but was bent to accommodate the political and institutional realities of the control context.

This quasi-cybernetic control style was present in the control of business unit plans and performance as well. Here the control of the conflicting return and risk objectives was at stake. Two divisions were mentioned in particular: the credit card and the mortgage lending businesses.

As for the credit card business, a strategy manager was pondering what might be the consequence of creating a visibility for such conflicts as follows:

'The strategy of the [credit card division] may be proven wrong by the risk people. The terminology is 'near prime' – they are going for the near prime market. These are people who are very bad dealing with their finances. In the credit card world they are very profitable customers. In the risk world they are risky customers. If there is a credit crisis the first people who are going to stop paying their credit cards are the near prime customers. Historically, [the credit card division] does not have many near-prime customers; it makes its money without them. Strategically, should it be in that market? (...) We have a strategy versus risk issue here that is not clear yet.'[231]

A similar dilemma arose in the mortgage lending business:

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[230] Head of Economic Risk Capital, Fraser Bank
[231] Assistant Director, Strategy and Planning, Fraser Bank

'The way [this product] works – salesmen love it. The risk manager has to ask: is it as good as it looks? It is, but there are elements that are worse than it looks. We don't know exactly.'[232]

The initial reaction to these dilemmas was an effort to learn about the cause-effect uncertainties that surround them. The head of the Economic Capital team explained:

'You have to be practical - even though most risk managers are completely impractical. You have to know what is possible, and try to be sensible, err on the side of caution. (...) You cannot stop the business from working. (...) So the risk manager has to be careful and say: let's put it out, but in a contained fashion, so we can live with it if it goes wrong. The salesman says, I just want as much of it as possible. So we said, let's run it for a few years and then let's have a look at it. (...) So what we take to [the executive board] is – we run it for a year as it is and then reconsider.'[233]

In Fraser Bank's case there was a very practical reason why risk people were keen on learning about the new business initiatives. Risk people were trying to capture the risk profile of the new businesses by applying the economic capital framework. Rendering the new risks to measurement required the reduction of the cause-effect uncertainties surrounding the new products, which were initially high. A strategy manager commented:

'[Decision making] is supposed to be done on a risk-adjusted basis. So [the credit card business] has to prove that the premium they charge will cover the extra capital charge that [the economic capital team] are going to make.'[234]

With regards to the mortgage lending product, there was again an attempt to quantify the risk content of the venture:

'The problem is we can't service it. The systems were put together for a much smaller operation. (...) So we have to hold economic capital against operational risk as a result of our system failures.'[235]

These quotes suggest that the conflicting risk and return objectives were gradually forced into, and dealt within, a common control framework. Fraser Bank resolved the conflict between risk and return by integrating them in the *value-based management framework.* Risk measurements were fed into the calculation of Economic Profit, which was the key target performance measure.

[232] Head of Economic Capital, Fraser Bank
[233] Head of Economic Capital, Fraser Bank
[234] Assistant Director, Strategy and Planning, Fraser Bank
[235] Head of Economic Capital, Fraser Bank

The rationale was (to paraphrase an internal training document) that business units only created value when they made profit that was greater than the cost of economic capital invested.

However, economic capital was not only a measure of the risk profile of business units and their proposed business initiatives. Its allocation to business units also reflected the competing risk and return interests inherent in the organisation. Thus the economic capital allocations mirrored and confirmed the existing power balance in the Group.

The espoused cybernetic design principles were echoed by the actual practices of risk limit setting and the regular reporting of business unit risk taking to decision makers who made strategic, capital and performance management decisions based on the feedback. However, the measurement aspect was only quasi-cybernetic in the sense that it was not a purely technical matter, but one of political negotiations and compromise.

It is the subjective, assumption-driven nature of the risk measurement techniques that allowed room for discussion and debate. However, Fraser Bank also had the culture that allowed for such negotiations to take place. The bank is known for (and admittedly fosters) a consensus-seeking and risk-aware culture, in which constant negotiation and compromise-seeking behaviour were the norm. A strategy manager commented:

'So there is a huge process: before we make decisions we try to consider all the impacts. Decisions at [Frasers] take a long time to happen. One of our friends who left some years ago had this comment: American banks have the mentality 'let's just do it and worry about the impacts afterwards'. Whereas [Frasers] tends to worry about the impacts before it does anything. We are not very big on taking a chance. Having said that, we do not necessarily always make good decisions. One of the consultants said about us that rather than 'ready and fire', we are always 'ready, ready, ready, aim, ready and fire.' That definitely is a cultural issue. The culture of risk is good: we are very-very risk oriented.'[236]

Characterised by a preference for even growth and calculated strategic moves, Frasers appeared to be associated with a very different approach to risk and return from that of BWT. The ability of the risk function to express the risk

[236] Assistant Director, Strategy and Planning, Fraser Bank

profile of the business units in the language of accounting made it possible to integrate and discuss the risk and return implications of business plans in one framework. The successful implementation of the value-based management framework in the organization gave risk people the opportunity to contribute to capital management, planning and performance measurement, and to the negotiation process that sought to resolve the risk-return dilemma. Chapter 3 described this as an alternative pattern of strategic significance that the risk function gained via its political aptness in the capital allocation process. By resolving capital allocations within the group, the risk function contributed to the emergence of a quasi-cybernetic control style over the conflicting risk and return objectives.

5.4. DISCUSSION

Both banks have embarked on enterprise-wide risk management projects that sought control not only over individual risk types but also over the 'cost of risk' and the risk taking capacity of their business units. The espoused theories (Argyris, 1976) of capital management and performance measurement in both banks responded to the increased institutional appropriateness (and the normative-regulatory guidelines) of risk management. Accordingly, risk capital specialists set out to contribute to management control in the areas of capital management and performance measurement. They furthered what was essentially a cybernetic ideal: target (limit) setting, measurement and feedback.

In both banks there was a formal risk management function with a similar division of labour. The risk silos were dealt with by specialist teams. In addition, there was a separate team in both banks that was responsible for translating risk analytics into what was becoming the common metric of risk: economic (risk) capital. Economic (risk) capital was put forward as a basis for the essentially cybernetic control design that underpinned the risk management framework at the banks. Thus, in both cases risk limits were set for the overall organization as well as for lower-level 'risk buckets', all in terms of economic capital.

However, at BWT the economic capital measure was seen as contested. It had a competitor in the form of a more judgmental, though legitimate, approximation of capital need (Respectability Capital). In the espoused theory of risk control there was a rule of thumb ('the higher of' principle) that ordered the two measures into a hierarchy, so that the higher of the two would indicate the risk profile and the corresponding capital need. Further, risk people envisioned two approaches for the control of the risk profile of the business units – the ratio approach and the value-based management approach. Accordingly, risk-adjusted return on capital and Economic Profit measures were developed for the *ex-ante* assessment of business plans and the *ex-post* measurement of performance.

At Fraser Bank there was one single metric for the assessment of the risk profile (and capital need) of the business units. It was developed in the context of a value-based management framework that was consciously chosen for the control of business unit performance in the Group. It is notable that while at BWT it was the espoused theory of risk control that advocated the value-based management

framework, in Fraser Bank it was the other way round. The value-based management ethos led to a complete redesign of the risk control process.

At both banks the risk capital team had considerable difficulties with the implementation of a particular aspect of cybernetic control - the measurement principle. As a result a gap emerged between the espoused theories of risk control and the actual practices.

Historically, BWT's rapid growth was punctuated with occasional set-backs, calling into mind Mintzberg and Waters (1982)' entrepreneurial firm which alternated between an opportunistic entrepreneurial mode and a more reflective planning mode, resulting in hectic, uneven growth. Accordingly, at BWT strategic choices were made either principally based on return considerations (at a time of sluggish economic performance) or predominantly based on risk considerations (at times of risk materialisations). This was in line with a control pattern whereby profit and risk objectives were discovered gradually by organizational participants and considered sequentially, as circumstances evolved. As the risk control and decision making process was seen as intertwined with (rather than conditional on) the process of learning and reflecting about the risks, it was noticeable that apart from computations, a fair amount of *judgment* and *intuition* were present in the control process (Burchell et al., 1980).

This was apparent in both the areas of capital management and the discussion of business initiatives. In capital management the decision makers considered the risk calculations as a rationalisation ('plausibility check') of the capital targets that were arrived in a judgmental, perhaps even intuitive way, second-guessing regulatory and rating agency expectations. In the strategic control area it was the example of the lending business that is suggestive of a rather non-cybernetic control approach. Senior risk officers were learning when and how to orchestrate attention swings by selectively using risk information at top management meetings. They relied on intuition and judgment in the setting of the agendas for these decision making forums. The control style of 'selective crack-down' can thus be put forward as theory-in-use, in order to formalise the apparently non-cybernetic control practice. The emerging picture of the senior risk officer is not merely that of a technical expert – it is akin to what Schön described as the 'reflective practitioner' (Schön, 1992).

Fraser Bank's strong value-based management imperative and politicised, consensus-seeking culture set the scene for a quasi-cybernetic control process. Due to the performance implications of capital allocations, the exercise of measuring the risk profile of business units gave rise to much discussion and debate. The perceived need to revise the existing methodology was driven by Fraser Bank's sensitivity to the expectations of its institutional context. The external expectations were seen as technical – Fraser Bank aimed to have a methodology that would further its reputation as a market leader in the risk management area. However, the external expectations were complemented by a number of internal expectations about the implications of the change in the capital allocation methodology. The conflicting risk-return interests of different business units had to be resolved as part of the same exercise. Given the subjective nature of the risk measurement process, there was room for business unit risk experts to negotiate the assumptions of the economic capital model, expressing the business unit view of their risk profile. This led to a quasi-technical, consensus-seeking measurement process. The resulting capital allocations, targets and limits thus emerged via compromise, to some extent tampering computations (Burchell et al., 1980). Technical expertise was combined with political aptness on the part of the risk practitioners who orchestrated these control and decision making processes.

Espoused theories of risk control	***BWT***	***Fraser Bank***
Risk management's self-definition	'Risk conscience'	'Risk conscience'
The organization of risk management	Segmented by risk silos, ERC team	Segmented by risk silos, EC team
The metric of risk	Respectability Capital *and* Economic Risk Capital (ERC). A rule of thumb orders the two metrics into a hierarchy.	Risk analytics, Economic Capital (EC) as common denominator
The age of economic capital methodology at the time of research	1-2 years (little history)	6-7 years (history)
Value based management	Weak VBM ethos	Strong VBM ethos
Espoused theory (and tool) of control over conflicting risk-return objectives	Ratio approach (Return of ERC, ERC ratio); Value based management approach (Economic Profit)	Value based management approach (Economic Profit)

Theory-in-use	*BWT*	*Fraser Bank*
Apparent control style over conflicting risk-return objectives	Control by selective crack-down.	Quasi-cybernetic control (subject to group-wide consensus - political agreement).
Related decision making style	Decision making by judgment and intuition (Burchell et al., 1980)	Decision making by computation and compromise (Burchell et al., 1980)
The risk officer as...	Reflective practitioner' (Schön, 1992)	Technical expert with political aptness

Table 3. Summary of case discussion points

Table 3 summarises the discussion points that describe the espoused theories of risk control, as well as the in-use theories that are put forward for the explanation of the observed practices.

5.5. CONCLUSION

A cybernetic conception of control underpins much management control system thinking. However, in today's complex organizations the simultaneous application of cybernetic control systems to multiple and conflicting organizational objectives presents controllers with rather complex control situations. Under such circumstances more complex (non-cybernetic) control practices have been anticipated (Hofstede, 1978; Otley, 1994).

In particular, Otley (1994) attributes the rise of complex controls to the increased uncertainties in the operating environments of many firms. In such circumstances the conditions for cybernetic validity may get undermined, reducing the ability of control systems to determine and monitor means and ends. This chapter has argued that uncertainties that might frustrate the cybernetic ideal can be found within the firm itself, independently of the perceived uncertainty of the operating environment. Specifically, considerable cause-effect and means-ends uncertainties (Thompson, 1967) can surround a measurement technique that is espoused to be the tool of cybernetic control. Such uncertainties may also lead to the weakening of the cybernetic validity of a control system, giving rise to non-cybernetic ('complex') control practices. The case study part of the chapter focused on empirical manifestations of such non-cybernetic controls.

Due to a particular regulatory framework, the notions of risk and capital adequacy are converging in the banking world. This, at least in some companies, led to the translation of risk analytics into the language of Economic Capital. Having a 'risk conscience' that speaks the more familiar language of accounting offers a bridge over the communication gap that has so far excluded risk people from strategic planning and performance measurement discussions.

However, some uncertainty around the economic capital methodology arose at both banks. In BWT it was the presence of cause-effect uncertainties that did not allow ERC to become accepted as the sole indicator of risk content and capital adequacy in the bank. The cause-effect uncertainties were resolved via the application of another, judgmental indicator ('Respectability Capital'), and a rule of thumb that created an ordering between the two. This led decision makers to view risk control as a matter of judgment, intuition and learning. The apparent

practice of risk control was described with reference to the notion of control by selective crack-down (Dunsire, 1990). In orchestrating the apparent attention swings, in the practices of decision making the role of judgment and intuition (Burchell et al., 1980) was emphasised. The risk officers, who appeared to exercise this control style by creating formal structures for it, still did so with reference to the espoused theories of risk control that echoed the cybernetic ideal. However, some of the senior risk officers were more conscious of the mismatch between the espoused and the actual practices – they accepted it in a way that makes them akin to Schön's 'reflective practitioners' (Schön, 1992).

In Fraser Bank there was a strong external (and eventually, internal) drive to resolve the uncertainties that surrounded the economic capital methodology. The company had a value-based management ethos and a desire to demonstrate excellence in risk technologies. Linking risk calculations to capital management, planning and performance measurement required the improvements in the Economic Capital methodology. However, due to the implications for target setting and performance measurement, during the production of risk assessments a great deal of means-ends uncertainties arose among the business units in the group. The resolution of these uncertainties took place in a process that included decisions to be made by compromise, to some extent tampering computations (Burchell et al., 1980). The risk practitioners who could successfully manage this process appeared to be technical experts with considerable political aptness.

The study has pointed to an emerging re-conceptualisation of value-based management in the espoused theories of control over the risk-return objectives at the banks. In the normative literature on VBM the calculation of capital charges based on the historically determined capital amount that a firm carries in the books. The point of departure in the espoused theories of risk-return integration in the banks was that the capital charges were supposed to be based on the total risk profile of the business units. This means that the notion of 'charging business units for the capital they employ' was becoming equivalent with another notion: 'charging business units for the risk they take'.

This 'risk-adjusted' approach to VBM advocates the integration of the two sides of the risk-return trade-off into one measure (Economic Profit). In practice, this allows controllers to look for compromise between the conflicting objectives. As by doing so the controllers are likely to disturb the power balance of the

organization, much depends on their political skills and on the credibility of the technologies they deploy in the negotiation process. Compromise, if found, would manifest itself in an overriding risk-adjusted performance target. The experience of Fraser Bank indicates that the successful implementation of risk-based control is proving to be a formidable political task for risk managers. It requires a willingness on their part to carry through intricate discussions among the business units over risk capital allocations.

In the absence of a risk-based performance measurement framework (or the willingness or political backing to establish one), risk managers have one forum left to channel risk concerns into strategic discussions: the risk committee meetings for which they set the agenda. BWT's example showed that in this manner a more 'reflective' control style might emerge. This can be viewed as an alternative non-cybernetic control mode, entailing senior risk officers to orchestrate timely attention swings, as and when required, among the decision makers.

The chapter also observed that the non-cybernetic risk control styles were associated with ERM's alternative patterns of gaining strategic significance (chapter 3). Risk management, when integrated with planning and performance measurement, gave rise to the possibility of quasi-cybernetic control over the risk-return objectives. However, lacking access to the formal planning and control cycle, senior risk people were found to strive for a more 'reflective' control style. Having gained agenda-setting power, and playing the devil's advocate, senior risk officers were become instrumental in the emergence of what might be the entrepreneurial firm's alternative to controlling the risk-return trade-off, control by selective crack-down.

Nevertheless, the espoused theories of risk control (and the cybernetic ideal) were still influential. They guided the formal structures of the risk organisation at both banks, and fuelled the ambitions of risk practitioners. The cybernetic control ideal also helped practitioners to make sense of the challenges of capital management and performance measurement. It also gave them a short-hand way of explaining their actions to outsiders - senior management, investment analysts, regulators and the researcher. The cybernetic control ideal thus remains influential not least because it offers practitioners a way to rationalise their actions.

While this chapter benchmarked actual practices to the espoused theories of risk control, the next chapter will examine the alternative patterns of strategic significance in the context of the normative notions of Enterprise Risk Management. To the extent the normative notions of ERM guide espoused theories, ambitions *and* have influential institutional origins, the patterns observed might be expected to surface in other organizations too.

CHAPTER 6

ENTERPRISE RISK MANAGEMENT, CORPORATE GOVERNANCE AND CALCULATIVE CULTURES

'When they come downstairs from their Ivory Towers,
Idealists are very apt to walk straight into the gutter.'
Logan Pearsall Smith

'We are all in the gutter, but some of us are looking at the stars.'
Oscar Wilde

This chapter aims to bring together what the previous chapters have found about the organizational significance of risk management. It also probes to what extent the findings might be suggestive of wider developments in the financial services sector. So far the organisational significance of risk management has been argued to stem from the *micropolitics* of ERM and its relations with planning and control (chapter 3), its *institutional appropriateness* (chapter 4) and its *role in the control of conflicting risk-return objectives* (chapter 5).

Chapter 4 concluded that risk management had become endemic to organizational life in the banking sector, not least because of its high institutional appropriateness. Risk officers, who drew a distinction between the 'accounting' and the 'economic capital' representations of risk, were found to further the 'economic' view. They developed the Economic (Risk) Capital framework, to give an 'economic' representation to risk, and to place risk management and the issue of capital adequacy on an 'economic' basis.

However, chapter 3 and 5 have made the case that, although in place at both banks, the Economic Capital framework played very different roles. While at Frasers it was an integral part of strategic planning and control, its contribution at BWT was more controversial. The Economic Capital framework was actively called upon to answer questions of capital adequacy at the time of the crisis of BWT's troubled business unit Division X. However, in the normal course of the planning and control cycle its impact was secondary. BWT's senior risk officers

sought to make a strategic impact operating outside the boundaries of the Economic Capital framework.

This chapter argues that the above difference might be suggestive of the current co-existence of alternative models of Enterprise Risk Management in the financial services sector. Digging below the surface of the loosely defined enterprise-wide risk practices, one finds variations in the specific conceptualisations and uses of risk management in individual organizations. This chapter proposes that in a given organisation various risk management practices form a constellation, *the risk management mix,* which corresponds to the particularities of the organisation and its context. As for the content of the risk management mix, four increasingly clear types of risk management ideal types are surfacing. These are Risk Silo Management, Integrated Risk Management, Risk and Value Management, and Strategic Risk Management. It can be expected that in practice these four types emerge in combinations, constituting at any organization the risk management mix. However, it is not argued that the risk management mix is entirely firm-specific. Instead, this chapter proposes that systematic variations in ERM practices exist.

The chapter revisits the cases of BWT and Frasers. This time the objective of the case study presentation is twofold. Firstly, the cases illustrate the four risk management ideal types and show how they form a the 'risk management mix' in a given organisation. Secondly, the chapter attempts to explain the differences in the two risk management mixes pointing towards firm-specific and institutional pressures.

In particular, following on Power (2003b)'s notion of calculative cultures, it is proposed that senior risk officers develop 'personal philosophies' about the 'manageability' of risks. While there appears to be much consensus on the manageability of certain risks (e.g. market risks), the issue of non-quantifiable risks and that of internal capital allocation are contestable. They fall into a grey area where it is a matter of organizational politics and managerial discretion whether it is the risk function, or others, who exercise influence over them (if at all), and in what way.

Further, the chapter emphasises the role of institutional pressures in the selection and use of ERM practices. Above all, the influence of two powerful

contemporary corporate governance concerns will be implicated in the analysis: the *risk-based internal control imperative* and a strong *shareholder value drive.*

The chapter is organised as follows. The first section outlines and explains four types of risk management, with reference to their institutional origins, techniques and ambitions. Recognising that the notions of 'integrated' and 'strategic' risk management are already in existence, and used interchangeably, along with similarly loose adjectives such as 'enterprise-wide' and 'holistic', the chapter will attempt to (re)define and distinguish the two concepts (Integrated and Strategic Risk Management) for the purposes of the analysis presented here. Next, by presenting the case studies, the chapter describes and explains developments in the risk management mix of the studied banks. Some of the observed risk management types were found to co-exist and compete even within the same organisation, representing (not always mutually exclusive) alternatives. A discussion of the implications for the further development of enterprise risk management will form the conclusion.

6.1. FOUR TYPES OF ERM

Many observers, commenting on the development of risk management in financial institutions, highlight the increasing spread and codification of risk practices under the fashionable term Enterprise Risk Management (ERM). International bank capital regulation and corporate governance are two areas where the prominence of ERM is observable. So much so, that Power (2003a) wonders if ERM might be emerging as a *'world model': 'If we were to imagine the creation of a new banking organization, we know that it could not be founded without rapidly adopting the mission and principles of ERM...* '[237]

In particular, ERM is being prescribed by the new international bank capital regulatory framework (Basel II). The Basel Committee, leading the reform of banking supervision, endorses enterprise risk management as an umbrella notion that can accommodate the techniques required for bank capital adequacy calculation: '*...integrated firm-wide approaches to risk management should continue to be strongly encouraged by the regulatory and supervisory community.*'[238]

ERM is also encrypted in corporate governance texts, prescribed as best practice by landmark reports from the North American Treadway Commission and the UK Turnbull Committee. Europe is likely to follow, with Germany already in tow with the Control and Transparency Act (KonTraG).

Still, enterprise risk management remains a rather elusive and under-specified concept. Its broad definition (e.g. COSO (Treadway Commission), 2003) is an umbrella to diverse risk management techniques and arrangements, so long as they create the image of consistent and comprehensive application. Just like Lam (2000) and Gilbert (2004), ERM advocates typically outline a set of risk management tasks and envision a 'framework' for the treatment of these under the auspices of an appointed senior risk officer. This requires the prioritisation and the ordering of the various elements into a control cycle (as described by corporate governance advocates and regulators) with recognisable structural and personnel arrangements.

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[237] Power (2003a), p.10.
[238] BIS (2003b), p.2.

Making sense of these developments is a challenge. What follows is an attempt at 'unbundling' enterprise risk management. Building on the four risk management themes reviewed in Chapter 2 (risk quantification, risk aggregation, risk-based performance measurement, the management of non-quantifiable risks) four ideal types of risk management are proposed, all of which qualify as 'enterprise-wide', but vary in terms of their focus and purpose.

6.1.1. TYPE I: RISK SILO MANAGEMENT

Chapter 2 gave a brief introduction to the advances in the risk measurement capabilities of financial institutions (Garside & Nakada, 1999; Marrison, 2002). At the heart of the first risk management ideal type, Risk Silo Management, is *risk quantification*, the rendering of more and more types of risk susceptible to quantification, measurement and control. Thus *Risk Silo Management* can be defined as the measurement and control of market, credit and operational risks in 'silos', across the institution.

The most frequently cited technique of Risk Silo Management is *Value-at-Risk.* It is a statistical measure of unanticipated loss, derived from the loss distributions of different risk types that institutions track (e.g. market losses, credit losses, operational losses, insurance losses). The data that feeds into the Risk Silo Management models vary in nature across risk types.[239]

Advances in Risk Silo Management have increasingly influenced the design of the international bank regulatory framework. The so called Basel rules require banks to set aside regulatory capital that must reflect the amount of risk they take, calculated as the aggregate of risks measured in the risk silos. The current regulatory framework is being replaced by a new one ('Basel II'), which recognizes recent developments in Risk Silo Management while challenging

[239] Due to their frequency of change, market risk data are abundant. They are apparently distributed in a quasi-normal fashion, and thus lend themselves for the calculation of value-at-risk in a fairly straightforward manner. Credit risk data are derived from the analysis of the loan portfolio. Due to less frequent changes, credit loss data are often simulated. The simulations are based on macroeconomic scenarios and the suspected effect of these on the loan portfolio, in the light of the default probabilities calculated for each loan title. However, generating credit loss data requires much judgment, for example, in the process of the random macroeconomic simulation or in the determination of loss-recovery rates. The resulting loss distributions are typically non-normal (Marrison, 2002), nevertheless, a maximum probable loss ('credit-at-risk') is possible to derive. Operational risk presents risk silo managers with the greatest quantitative challenge. Most institutions are still in the early stage of learning about operational losses by establishing databases that collect information on risk materializations. At this stage only the more frequent operational risks lend themselves to modelling.

banks that are lagging behind in terms of their risk measurement capabilities. Basel II differs from Basel I in two respects. The first difference is in the recognition of risk silos it advocates to be measured - along with market and credit risk, it now includes operational risk as well. The second difference is in the measurement options that are outlined for banks. These stretch the measurement capabilities of even the most advanced banks, especially with regards to the advanced measurement approach (AMA) to operational risk. Thus the Basel II framework is emerging as an important driver of further Risk Silo Management initiatives within banks.

The emergence of the new Basel II framework (due to the consultative approach taken by the Basel Committee) has taken place in the furore of loud industry debates. The international regulators started working on the new standards in 1998, but the projected date of the new framework's entry into enforcement has been slipping for years. The current intention of the Committee is that regulators will begin applying Basel II on a test basis in early 2007 and then fully implement it in January 2008 (Paletta, 2005).

In recognition of the various industry viewpoints coming from a broad mix of domestic and international financial institutions, Basel II has enabled a range of approaches to be implemented ('basic', 'standardised' or 'advanced measurement' approaches)[240]. By this an apparent methodological plurality has been introduced in the credit risk and operational risk areas of Risk Silo Management.

Industry surveys suggest that despite the noticeable methodological pluralism, the advanced measurement approach (AMA) delivers reputational and efficiency gains to adhering institutions. A recent survey suggests that banks pursuing AMA '*believe their choice of approach would reduce their capital requirements, [and] agreed that their adopted approach would improve their*

[240] The Basel Committee offers two major options to users (BIS, 2003a). On one hand, with respect to credit and operational risk, banks can chose to remain compliant with the 'standard' regulatory framework that places less demand on their internal risk systems - this is called the 'standardized approach.' On the other hand, the Basel Committee now recognises that some banks might have more 'advanced', internal risk measurement capabilities, and proposes the second, 'advanced measurement approach', also known as 'internal model-based'. This allows qualifying banks to use their internal models for the calculation of each risk silo capital element. Note that the calculation of market risk capital is unchanged from Basel I (e.g. Model Approach including Value at Risk for the market risk capital element).

credit rating systems, process quality and management of operational risk.'[241] Thus the AMA approach being taken by financial institutions to signify good practice over and above the 'basic' and 'standardised' approaches. However, a recent FSA report observes that the realisation of institutions' AMA aspirations, at least in the operational risk area, '*is generally still at a conceptual stage.*'[242] Nevertheless, there is a sentiment in the financial services industry that current advances in Risk Silo Management are being motivated by institutions' desire to show compliance with the new regulatory framework.

6.1.2. TYPE II: INTEGRATED RISK MANAGEMENT

Risk aggregation has been a challenge for risk practitioners for a long time. This was largely due to the variety of risk measures applied to the different risk silos, and the correlations that exist between risks. The recent development of a common denominator measure for market, credit and operational risks, enables firms to aggregate their quantifiable risks into a total risk estimate. As has been stated in previous chapters, the emerging common denominator of quantifiable risks is called Economic Capital.

The Economic Capital framework gives rise to a new risk management ideal type, *Integrated Risk Management.* It is defined here as a risk management approach that applies the Economic Capital framework for the measurement, comparison, aggregation and control of risks.

The Basel Committee has legitimised the Economic Capital methodology that in the last decade has emerged as best practice among practitioners (see for example Marrison, 2002). But the real institutional force behind the spreading of Economic Capital in the industry is the rating agency community. Banks tailor Economic Capital not to a regulatory standard, but to the capital adequacy expectations coming from rating agencies. Economic Capital is the measure of the maximum probable loss that the bank must appear to be able to withstand in order to justify its target credit rating.

Given that rating agency opinions concern different banks to different extents, Economic Capital (or its promise) appeals primarily to banks that wish to maintain a high credit rating. For example, firms rated AA by S&P have

[241] KPMG (2004), p.8.
[242] FSA (2003), p17.

historically defaulted with a 0.03% probability over a one-year horizon. If a bank aims for an AA credit rating, then the corresponding capital level (Economic Capital) is the amount required to keep the firm solvent over a one-year period with 99.97% confidence (Garside & Nakada, 1999). Given the higher confidence level applied, the 'economic' capital amount is to be higher than the regulatory minimum.

The influence of the rating agencies is apparent in the widespread industry discussions about the potential (or illusionary) gains resulting from AMA compliance. It has been believed that banks with advanced measurement systems will be able to demonstrate less capital need than postulated as minimum regulatory capital under the current framework. Some large banks (with advanced risk management systems) would expect their costly capital burden to ease. However, rating agencies have their own expectations about bank capital adequacy. Some argue that the rating agency expectations are as binding as regulatory ones. A banking industry magazine for example asserts that '*without the agencies' blessing, any capital reductions granted by the regulators will be meaningless.*'[243] It quotes a senior rating agency figure from Moody's Investor services: '*If banks say, 'We are holding all this excess economic capital, and we want to eliminate it,' that could certainly increase the risk profile of the bank.*'[244] A representative of Standard and Poor's made similar comments: '*If a bank is at an A rating level, and they substantially decapitalize from there, its rating could drop.*'[245]

The role of rating agencies as quasi-regulators thus extends beyond the enforcement of minimum capital adequacy rules. In some cases they provide (and impose) even stricter capital expectations and extra scrutiny.

It is not suggested that Integrated Risk Management is a necessary evolutionary step after Risk Silo Management. For example, the take-up rate of Economic Capital among Swiss canton-banks is very low and they continue to show little interest in it.[246] The explanation lies in the particular circumstances (historic traditions) of these banks - Swiss canton-banks typically reserve 200% of

[243] Paletta (2005), p.1.
[244] Paletta (2005), p.1.
[245] Paletta (2005), p.1.
[246] I owe this to a senior manager of the Association of the Swiss Canton Banks whom I met in London in July 2004.

the minimum regulatory capital. It is plausible that banks which by tradition hold capital levels well above the regulatory minimum would see little benefit from the fine-tuning of their capital levels via the use of Economic Capital.

6.1.3. TYPE III: RISK AND VALUE MANAGEMENT

Recent works in the risk management literature advocate the idea of using risk-based internal capital allocations for performance measurement and control. The possibility of introducing *risk-based performance measurement* in banks has emerged as a result of developments in risk quantification and risk aggregation. It also appears to coincide with the rise of the shareholder value concept in corporate rhetoric, as well as with general concern with the quality of reported earnings in the mid 90s (Arnold & Davies, 2000; Hunt, 2003).

The type of risk management that is able to feed the performance measurement ambitions of the advocates of shareholder value has gone well beyond the original remit of Risk Silo Management or even that of Integrated Risk Management. It is put forward as the third risk management ideal type, *Risk and Value Management*, its distinguishing aspect being a strong shareholder value rhetoric.

Although the concept of shareholder value (or as it was previously referred to, residual income) dates back to the beginning of the 20th century, its wide-spread incorporation into management thinking has only recently gained momentum. This is largely to do with the renewed efforts of business schools and consulting firms that are advocating shareholder value and Value Based Management (the revival of the residual income concept is often associated with Stern et al.,1995).

The application of VBM in large financial institutions requires the allocation of capital to centres of accountability (for example, to business units), and then the measurement of their performance relative to the capital allocations (Hall 2002; Marrison 2002; Jameson 2001; Haubenstock & Morisano 2000). Given that capital allocations supposedly reflect risk taking, business unit performance is becoming measured relative to the quantifiable risk they incur.

Pushing these performance measurements down to business units, products and even transactions gave rise to ambitious claims as to what risk management can do in order to enhance shareholder value. Risk pricing, risk

transfer, portfolio risk management (as in Lam, 2000) are the most frequently advocated possibilities in the literature.

There is also case study evidence on VBM implementations from major British, Dutch and US banks (Davies, 2000; Bruggnik & Buck, 2002; Barton et al., 2002, respectively). The joint consideration of risk and profitability in a common performance measurement framework[247] is an application of value based management that is specific to the financial services sector. At the same time, it represents an application of risk management that is equally specific – Risk and Value Management may be favoured by certain banks while doomed to fail in others.

6.1.4. TYPE IV: STRATEGIC RISK MANAGEMENT

We have seen how the ascent of the shareholder value concept gave rise to a specific ideal type of risk management, Risk and Value Management. This section focuses on the impact of another powerful notion, heralded by corporate governance advocates, that of risk-based internal control.

The reports from the Treadway Commission (COSO, 2003) and the Turnbull Committee (ICAEW, 1999), which are important milestones of Anglo-Saxon corporate governance, advocate ERM as a framework for capturing risks that are material from the point of view of the achievement of the strategic objectives of the enterprise. According to the Treadway Commission's recent authoritative definition, ERM is *'... a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risks to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.'*[248] Apart from the measurable risk silos, this conception of ERM encompasses risks that cannot be readily quantified or aggregated. These non-quantifiable risks include, for example, the risks of strategic failure, environmental risks, reputational risks and operational risks that materialise only rarely. Recent developments in corporate

[247] Theoretically, Risk and Value Management offers two broad approaches to risk-based performance measurement in banks. The *ratio approach* relates risk-adjusted profit to economic (risk) capital (RAROC). The second, *shareholder value added* approach calculates the residual income left after subtracting a charge on economic (risk) capital from profit.
[248] COSO (2003), p.6.

governance have emphasized the importance of monitoring and managing these risks.

As a result, there have been calls for the risk management framework to be gradually expanded to incorporate non-quantifiable risks in addition to those that can be quantified. Here we define this 'strategic' version of ERM as the fourth risk management ideal type: *Strategic Risk Management.*

However, what lies beyond the management of quantifiable risks, is not specified. We have a picture of risk managers casting their nets wide to catch non-quantifiable risks that '*keep senior management awake at night*'[249]. Ironically, this fuzzy, undetermined risk management practice is what most likely attracts the fashionable adjectives 'enterprise-wide', 'holistic', and 'strategic', which are used interchangeably.

The management of non-quantifiable risks is not statistics-based. Advocates talk of the role of judgement, experience and intuition, comparing it to strategic decision making. Even the recommended techniques, such as scenario analysis and decision tree methods, are borrowed from the strategy and decision making literature (Pickford, 2001).

To sum up, this section has outlined four types of risk management that all have 'enterprise-wide' ambitions. A summary of the discussion is presented in Table 1.

[249] Playing on Hunt (2003), p.83.

	Risk Silo Management	Integrated Risk Management	Risk and Value Management	Strategic Risk Management
Institutional background	International regulation of bank capital adequacy	Rating agency expectations of bank capital adequacy	The rise of the shareholder value imperative	The rise of risk-based internal control (Anglo-Saxon and German corporate governance)
Related theme in the literature	Risk quantification	Risk aggregation	Risk-based performance measurement	The management of non-quantifiable risks
Focus on	Measurement and Control of risk silos; Calculation of minimum regulatory capital; Tuning capital to the regulatory standard	Assigning a common denominator of risk to the risk silos (Economic Capital); Fine-tuning capital to a given solvency standard; Risk limit setting	Calculation of shareholder value created; Linking risk management with performance measurement	Inclusion of non-quantifiable risks into the risk management framework; Providing senior management with a 'strategic view' of risks
Techniques	Loss distributions; Value-at-Risk; Credit rating models; Standardised and Advanced measurement approaches set by regulators	Economic Capital	RAROC; Shareholder Value Added; Risk pricing; Risk transfer; Portfolio risk management	Scenario analysis; Sensitivity analyses; Judgement and analysis

Table 1. Four ideal types of enterprise risk management

Whether these risk management archetypes represent transitory stages in what might be called the evolution of ERM, or are permanent variants representing alternatives to firms, is an empirical question. The subsequent two sections revisit the two case studies, presenting field-based evidence for the apparent clustering of the ideal types in distinct *risk management mixes*.

6.2. THE RISK MANAGEMENT MIX AT BWT

To recoup, a surge of risk projects took place at BWT at the time of the case study. BWT Group, after a number of high-profile mergers in the late 90s, was consolidating its risk systems by implementing a blueprint devised by the investment banking arm of the group.

However, BWT was also suffering a downturn in its profitability. By updating its risk management systems BWT signalled to both internal and external stakeholders that it had got to grips with the situation[250], and, in particular, with its troubled business unit, Division X. The new risk function displayed a wide array of risk practices that gave rise to the possibility of exercising all of the four types of risk management outlined in the previous section. However, BWT's 'risk management mix' was a specific combination of these, as will be shown next.

6.2.1. RISK SILO MANAGEMENT AT BWT

The three risk silo sub-departments had a shared mission: to 'act as the independent "risk conscience" and policy enforcer for [BWT] for all risks that could have a material impact on the firm in an integrated and comprehensive fashion.'[251]

This mission statement carries multiple ambitions: apart from the usual exercise of Risk Silo Management, the aspiration of Integrated Risk Management ('integrated and comprehensive') as well as that of Strategic Risk Management (dealing with 'all risks that could have a material impact') are present. In order to understand the use and balance of these risk management types in the mix we need to look at them closer.

At the time of the start of the field work, in the market risk silo, the development of Value at Risk for non-conventional investment products was the major preoccupation. Risk people saw their role in providing a service to traders, with whom they were housed together in separate offices from all other risk officers. The head of market risk controlling explained:

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[250] Literally - BWT had issued Group Risk Processes and Standards, abbreviated as GRIPS...
[251] BWT, internal document

'It is not my job to decide whether or not we should make a deal. It has never happened that traders cannot take a deal because we are not able to calculate a risk. We are helping them to understand what they do. (...) I see myself as providing a service for the traders and the treasurers.'[252]

Market Risk Controlling saw its challenge in the quantification and tracking of risk that the traders took. However, the emergence of innovative new products (the so called Alternative Investment products), demanded the invention of a measurement new methodology:

'Our job is to deliver a measure of risk. How we are doing that is our business. (...) The big issue for us... in our trading book the majority of the risk does not come from traditional trading products, but from Alternative Investments... basically hedge funds that are sold to our private clients. BWT is providing the market maker function for these products. The Alternative Investment products on our book behave very stably over a long time, then all of a sudden their value can decline quite considerably. The most common example is LTCM. One reason for its collapse is that they invested in non liquid titles. Illiquidity is not covered by market risk, Value-at-Risk methodologies. '[253]

The new methodology was Value-at-Risk-based, but was packaged under the ingenious title of 'Ast*AIRx.*'[254] 'AstAIRx' was a significant success, not least because its initial messages pleased the traders who perceived that the previous risk limits were too conservative with regards to Alternative Investments:

'While the old method produced a VaR of around [20m], the new tool gives around [10m].[255] Risk appears to be half. The trading department is more than happy of course. They say: we always knew the risk is not that big.'[256]

However, risk people remained cautious about the interpretation of their measurements:

'Do you think the risk management tools are really accurate? The Value-at-Risk model particularly for Alternative Investments is based on a lot of assumptions. I was always afraid that we go for the accuracy of the risk that we have recognised and do not realise that there are huge risks, which are not covered at all. (...)I am absolutely convinced that [AstAIRx] is better than the old method, so why not use it. (...) [The old method] was really-really basic. That's why we overstated risk, we could see that from backtesting.'[257]

This pragmatic attitude to risk quantification among market risk officers is all the more striking, given that the literature suggests that the market risk area

[252] Head of Market Risk Controlling, BWT
[253] Head of Market Risk Controlling, BWT
[254] Pseudonym for confidentiality reasons
[255] The real numbers are, for confidentiality reasons, disguised
[256] Head of Market Risk Controlling, BWT
[257] Head of Market Risk Controlling, BWT

provides risk managers with the most confidence in their calculations. While most market risk people are expected to be '*calculative idealists*' (Power, 2003b), BWT's risk silo officers appeared closer to be '*calculative pragmatists*', in that they regarded numbers as attention-directing devices with no intrinsic claims to represent reality. For them risk models made Value-at-Risk trends visible for management purposes and helped to steer behaviour in the right direction.

This calculative pragmatism generally characterised the control of all risk silos at BWT. An understanding emerged that in a large organization, where there is a hierarchy of limits, lower-level risk limits can be fluid, negotiable, and adjustable for the needs of the business. During an afternoon spent observing the work of the members in the market risk team the researcher came across a market risk chart, which showed an increasing trend of market VaR, with a step function of the limits, climbing up in parallel. This chart was shown to several risk people. The Chief Risk Officer's response revealed that risk control involved much learning on the side of the controllers:

'(AM) I saw this chart about the VaR limits on Alternative Investments. (Draws.) When I saw it my first reaction was, oh my god...

(CRO)...they don't respect the risk limit, the limit just tracks the risk?

(AM) Exactly.

(CRO): (smiles) First, this is still part of the overall limit that has been accepted by the Board – that has never been exceeded. It [the overall limit] is relatively large. The one you were looking at is a sort of sub-limit. If you look at those positions, I would not call them trading positions as such because it is not the trader who decides whether he wants to have them or not. But I think the environment is relatively stable and we understand the dynamics. If we go back to that chart, the big question is to what extent you actually understand the dynamics of the beast you are looking at. If you have a very good understanding of the beast then probably a thermostat approach [AM: to control] is not bad.'[258]

On the nature of risk control, he added:

'It is not so much a question of stable versus unstable [environment]; it also could be a question of how well you understand what is actually going on. '[259]

The extension of calculative pragmatism into the practice of control at BWT shattered the boundaries of traditional notion of cybernetic control. Risk limits were used as indicative, breaches triggered negotiations whether limits

[258] Chief Risk Officer, BWT
[259] Chief Risk Officer, BWT

should be adjusted to accommodate the risk taking, and the process was considered as part of learning about the dynamics of risk.

This suggests that 'learning about the beast' might imply slackening off on risk limits and letting the business-side (to a certain extent) run with the risk. Further, on the part of risk officers, it also involves orchestrating timely attention swings, in case risk taking should be contained. In the market risk area there was a hierarchy of limits, with higher-level limits being less and less flexible. However, the case of Division X showed just how difficult it can be to orchestrate swings between the profit and the risk sides. The CRO commented:

'I believe in the quality of our risk management function, absolutely. But you have to be honest enough to check if something went wrong. What happened in 2002, looking at the results, obviously something went wrong, otherwise we would not have lost [1bn]. (...) We knew the risk position that we had, we presented the risk position to senior management, to the Board of Directors, everybody was aware of it. So it is not that we did not know. We just did not do anything about it or not fast enough.'[260]

Risk people realised they needed to be able to give more timely and firmer signals to the decision makers – they needed early warning indicators. Responding to the perceived need for early warning systems, the credit risk silo controllers devised a warning indicator, which was expected to give more timely signals of emerging problems. A crude measure it was, its simplicity compensated by the pragmatism of the credit risk controller:

'Here is something very interesting and important to me. The migration matrix. This is part of risk calculation. (...) We take the ratio between up- and down-gradings [both measured as percentages of the loan portfolio] and if it is lower than 1 – it says that there are more down-gradings than up-gradings. It means if you are below 50% you tend to have more risk in the portfolio. It doesn't say anything about the amount [of risk]. However, the trend is interesting. The big picture behind it can be recession or recovery, you are not sure, but it is an indicator for me. (...) My function is to show the problems.'[261]

The operational risk silo also displayed much calculative pragmatism. On the face of it, risk officers in the operational risk controlling area were developing Key Risk Indicators that would render operational processes to measurement and control.

However, the director of the silo remained cautious about the use of risk measurements:

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[260] Chief Risk Officer, BWT
[261] Director of Credit Risk Controlling, BWT

'(Director, OpRisk): It is not as easy as in case of market risk or credit risk. I don't know if I should put all my effort into risk measurement to quantify [given that] when it really happens my figure would be for sure completely wrong. So why should I put all my resources into something that is senseless? I am not a fan of the quantitative approach in OpRisk. If you look at the losses, most of them are based on human behaviour – now how do you measure it?' [262]

Given the doubts about the plausibility of the quantification of operational risk, the controller's informed judgement based on experience was the key to operational risk control. The operational risk silo aimed at pushing responsibility for operational risk down to business unit and line management level. Based on his extensive operational experience and relations within the bank, the operational risk director cultivated an advisory and collaborative, rather than policing role over the business unit risk managers, which encouraged them to report operational losses (over a certain threshold, as and when they occurred) into a loss database. This was then used for preparing 'risk reviews', thereby turning risk control into a learning exercise. The CRO confirmed:

'(CRO): I have doubts whether you actually can define things such as key risk indicators on operational risk. Maybe the thing kind of evades as soon as you start measuring it. Which is not bad – then you have solved at least your perceived problem. Instead of this, however, I agree with [the Director of Operational Risk] that it is highly judgemental. It is a question of how you can bring in that judgement. What you also have to see whenever we talk about operational risk... in [Operational Risk Controlling] there are four or five people, but this is just the tip of the iceberg, because operational risk is a line management function. They have to set up their procedures and processes in an appropriate way so that these things do not happen. (...) Then the question becomes, if you want to do something on operational risk on a firm-wide basis, which I think we agreed, what is the most meaningful thing you do with a couple of people? I think it has to do with risk reporting and risk reviews. Let me give you an example on risk reviews. It is to evaluate accidents. So we say we had a case X, it costs us 5 million, now what can we do to prevent it from happening in the future?

(AM): Is that learning from mistakes?

(CRO): Yes, exactly.'[263]

It appears that Risk Silo Management at BWT was characterised by the exercise of a great deal of *calculative pragmatism*. Risk controllers respected the inherent need for risk taking in the banking business. But they recognised the additional need for learning about the dynamics of risk. Thus limits and risk

[262] Director of Operational Risk Controlling, BWT
[263] Chief Risk Officer, BWT

management objectives emerged in a flexible, fluid manner, as senior management made decisions about risk taking following not only risk measurements, but also experience, judgement and intuition. There were cycles of spurs and halts on risk taking, whereby business strategies were enacted in a relatively *lassaiz faire* manner, up to a point where risk was judged as excessive and got clamped down.

6.2.2. Strategic Risk Management at BWT

BWT's senior risk officers, it seemed, extended this calculative pragmatism to risks that are considered as lying outside the Risk Silo Management framework. By the inclusion of these risks into the remit of the risk people, the intention was to move beyond Risk Silo Management towards Strategic Risk Management. Pondering the monthly board risk report, the CRO reflected:

'(CRO): If you look at the Key Exposure Report, it tries to cover all significant risks in a more or less comprehensive fashion.

(AM): You mean all significant risks that are quantifiable?

(CRO): Absolutely – that's the big caveat. The big risks today are: are we running the right strategy or not? What do we do with private banking going forward? Should we grow retail banking [domestically] or rather abroad? Now, how do you integrate these into the monthly report?'[264]

It is remarkable that BWT's senior risk officers claimed access to the discussion of corporate-level strategies. When the researcher suggested that by doing so, the risk people might be encroaching upon the territory of the strategy and planning function, the CRO gave a brisk reply:

'Not if you have a Chief Risk Officer. Because that's what you pay him for.'[265]

At the time the Strategy and Planning function was sceptical about the possible contribution risk people could make to strategy analysis. A few months later it emerged that the risk function sought to render strategic uncertainties to scenario analysis, in order to deal with problems that were on the borderline between strategic planning and the risk silos, between non-quantifiable and quantifiable risks. The senior risk officers of BWT Group (the CRO of BWT, the

[264] Chief Risk Officer, BWT
[265] Chief Risk Officer, BWT

CRO of the investment bank, and the Group-CRO) treated this as part of their personal agenda:

'(CRO): We [the 3 CROs of BWT Group] have discussions about what the most dangerous things that could happen are, we put together a report to the board about these and what we do against them. (...) It could be the quality of the [domestic] lending portfolio, given its sheer size. It could be the impact of an interest rate increase on the asset portfolio of [Division X]. It could be further erosion, further defaults in the energy sector in the US.

(AM): So this is really a bird's eye view, looking at the business from the top.

(CRO): Right. It is a 30,000 feet view of the world.'[266]

Senior risk officers thus looked beyond the risk silos, scanning a '30,000 feet view' of the organizational landscape, in order to find problem areas to which they would have to alert the attention of the executive and supervisory boards. This Strategic Risk Management approach set example for senior risk officers within the business units too. For example, the post-crisis CRO of Division X instigated '*special risk reviews*' to be presented at Risk Management Committees by line management staff on topics as diverse as foreign exchange risk and specific strategic issues. According to the meeting schedules, quantitative risk analyses received 15-30 minutes of attention, while special risk topics were discussed for 45-90 minutes.

'(CRO, Division X): 'My role is not to be a nice guy. If I schedule a topic for this management committee, nobody says no. If somebody says no, I am going to be suspicious very quickly. The people [invited to hold presentations on specific issues] know that there is no value in undermining it because they are going to talk in front of the Chief Executive Officer, not just to me. (...) If risk management has a strong opinion on certain risk profiles, it is more difficult for top management not to consider it.'[267]

It appears that in the same way as in BWT, the risk framework, originally Risk Silo Management, was augmented by Strategic Risk Management within Division X too. Accordingly, the business unit CRO perceived an increase in the profile of the risk committee meetings for which he set the agenda.

The growing strategic influence of senior risk officers was acknowledged by other members of the executive board meetings, who recognised that the nature of CRO power was informal. As the Chief Credit Officer of BWT commented:

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[266] Chief Risk Officer, BWT
[267] Chief Risk Officer, Division X

'(CCO): [The CRO's] organization is relatively new. This year I feel his influence has increased. I am part of these [executive board-level] meetings. In my opinion, his influence in strategic discussion and decision [making] has increased. He contributes on a regular basis and he has his own opinion, ja.

(AM): Would he contribute with information he gets formally from his own people [the risk department]?

(CCO): Ha! (Laughs) He has different sources. That's good. I mean even sources like discussions with people between four eyes, when he just talks to important people in the organization, informally. As I said he has different sources.' [268]

The background and qualifications of the CRO might be indicative of his orientation towards the alternative information sources that he was perceived to draw upon. His background (and doctorate) in risk-based internal audit suggest a sensitivity to non-quantifiable risks, and an approach of looking for these at their source by calling upon line management. His superior, the CRO of BWT Group, was the author of a practitioner book that detailed an internal control-based methodology to operational risk management.

6.2.3. INTEGRATED RISK MANAGEMENT AT BWT

Apart from the activities of risk silo controllers and senior risk officers, a third group deserves attention in the risk function – the Economic Risk Capital team. At the time of the financial downturn of the company there were heightened stakeholder concerns regarding BWT's capital adequacy. In late 2001 the ERC team was tasked with working out an economic capital methodology.

The resultant ERC methodology brought integration to the quantifiable set of BWT's risk management framework. ERC was calculated for each risk silo and trends were reported monthly to the board. ERC has gained authority as an indicator of worsening capital trends, as was learned from Division X's crisis. As a result of using ERC as a common denominator of risk, it became possible to aggregate risk across risk silos, in order to calculate the risk profile of the group, or the projected risk profile, based on planning forecasts. With ERC becoming a tool to declare the risk appetite of the group, Integrated Risk Management was, apparently, in place:

'What we changed this year are two things. First, we said, risk has to be explicit topic in the strategic business plan. (...) What we also said was, the board of directors does

[268] Chief Credit Officer, BWT

not only have to approve the strategic business plan, but it also has to approve the risk appetite, in the form of an overall ERC limit for the Group.'[269]

In addition, ERC was used in investor communications, not least to signal the advanced risk management capabilities of BWT, which allowed it to 'integrate' risk measurement, given that ERC was reputed to be the best practice common denominator of risk in the financial services sector.

6.2.4. Risk and Value Management at BWT

Subsequently the ERC team realised that it could contribute to strategic planning, control and performance measurement in a much more 'integrated' fashion. In the early 2000s there was talk at group level of an imminent Value Based Management implementation. Risk capital controllers saw this as an opportunity to establish what would have been Risk and Value Management. The CRO saw it as a way of 'integrating risk management and strategic planning', which was the subject of much of our initial talks:

'One of the challenges we have with the business units is to come up with a common agreement about the right way to do it [integrating risk and strategy]. VBM is one possibility, but you have to be careful it does not become a religion. People who really believe in it, for them it is pretty close to religion. Personally, I think it is a good tool.'[270]

But it was the head of the ERC team who championed the move to establish a link between risk management, planning and control in what would amount to a Risk and Value Management framework:

'What we should have done last year is to verify that the business plan is consistent in terms of profit and volume, growth assumptions, because we can use risk as a plausibility check in order to see whether the planning process has considered all the relevant aspects. For example, you can't just increase profit and volume without increasing risk. Otherwise where should the profit come from? '[271]

However, in the wake of the dawning financial problems of the group, VBM has been taken off the agenda. As the director then responsible for VBM implementation explained wryly, '...the VBA [Value Based Analysis, BWT's internal jargon for VBM] numbers didn't look very good, there were big losses. Then management decided not to report it externally, only internally, at group-level.'[272]

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[269] Chief Risk Officer, BWT
[270] Chief Risk Officer, BWT
[271] Director, Economic Risk Capital, BWT
[272] Director, Group Accounting & Reporting, BWT Group

With a stalled VBM implementation, the ERC team struggled to find a point of linkage with the strategy and control departments:

'We could calculate Economic Profit, but if we did, nobody would want to have it in the Strategic Business Plan that goes to the board. (...) Controlling for example does not support it.'[273]

There were two problems. First, capital allocation was seen as a politically sensitive exercise, requiring careful communication both internally and *vis a vis* external stakeholders. The second issue was that by relying on each other's capital strength, there were interdependencies between the business units. Attempting to quantify these in an economic manner was a major challenge that the ERC team struggled with. The economic capital calculations, although indicative of trends, were judged as insufficient to reflect the absolute risk profile of individual business units.

Finally the CRO abandoned the idea of integrating risk management and strategic planning and control in a VBM framework. Instead, Strategic Risk Management was salient, with senior risk officers exercising influence on strategic decision making in a much more pragmatic, informal fashion.

6.2.5. THE CRO AS 'L' EMINENCE GRIS'

BWT displayed a wide exemplar of best practice in risk management, which could have given rise to all of the four risk management types described in Section 2. Risk Silo Management, Integrated Risk Management and Strategic Risk Management emerged as clearly visible in the risk management mix, furthered by risk silo controllers, risk capital controllers and senior risk officers, respectively. It appeared that Risk and Value Management struggled and to date failed to take root at BWT. Why?

The characteristic feature of risk management in BWT was the strong calculative pragmatism it applied to risk quantification. Risk silo control was turned into a learning exercise. This approach to control created the ground for the exercise of Strategic Risk Management.

However, the calculative pragmatism that helped risk silo control and fed the strategic aspirations of senior risk officers became a hindrance to the ambitions of risk capital controllers. Deploying risk calculations in performance

[273] Director, Economic Risk Capital, BWT

measurement required 'trust in numbers' (Porter, 1995). As the ERC methodology struggled to gain sufficient credibility for becoming a basis for performance measurement, the archetype of Risk and Value Management was doomed at BWT.

Strategic Risk Management emerged as an alternative way to link risk management and strategic decision making, even though that took place outside the formal planning and control cycle. It appeared that at the time of the case study, the risk function lacked in-house strategic capabilities. Strategic information had to be channelled to the risk committee meetings directly from line management. Senior risk officers exercised their influence and accumulated power formally, through agenda-setting, and informally, via knowing influential others.

This left the risk function with a structural anomaly. Due to the existence and dedication of the ERC team, it had the capabilities for Integrated Risk Management and risk capital specialists furthered the notion of integrating risk and strategy in what would have been a Risk and Value Management framework. However, the integration of risk management and strategy took place in a much more informal way. In this loose Strategic Risk Management setting there was no formal capability within the risk function that would provide senior risk officers with strategic information. This conjures up a medieval metaphor for the Chief Risk Officer: that of the 'Eminence Gris', acting behind the scenes, powerful, but left to his own resources and, essentially, lonely.

6.3. THE RISK MANAGEMENT MIX AT FRASER BANK

On the face of it, Fraser Bank's risk management practices resembled those at BWT. Risk was measured, managed and reported by silos and business units, giving the impression of enterprise-wide coverage. There was a separate Economic Capital team and a Risk Director, who sat on the executive board. Out of a crowded committee structure, quarterly and monthly risk committee meetings emerged, with timely and increasingly formalised reporting practices.

6.3.1. RISK AND VALUE MANAGEMENT AT FRASER BANK

What was strikingly different in Frasers, however, is a strong Value Based Management ethos, which was instigated in 2000, with implementation well under way at the time of the start of the case study. Although the risk management department had been in place for some ten years by then, the VBM initiative led to a complete overhaul of the central risk function. Its mission was restated in terms of '*supporting the [Fraser] Group Strategy*' by '*providing better support to [business unit] risk management*' in anticipation of '*a direct effect on economic value creation.*'[274] Frasers was aiming for the implementation of a Risk and Value Management framework, in which the risk people were tasked with the '*granular attribution of Economic Capital*'[275] to business units.

What this meant in practice was a formal integration of business planning, performance measurement and economic capital allocation, the latter under the auspices of the risk management function, as explained by strategy and planning people as follows:

'The businesses put forward their proposals having linked in with [the central risk management department] and [the] Economic Capital [team]. They generate appropriate figures upon which we make the choices about where to bet the bank. The calculations are done by the businesses initially. They work it through with [the] Risk [department]. (...) There is a methodology provided by Risk that the businesses must use in order to calculate Economic Capital.'[276]

The Strategy and Planning function then negotiated the alternative plans through with the business units, in an attempt to optimise risk-adjusted

[274] All quotes from a presentation by the Group Risk Director titled 'Creating an expert team'
[275] ibid.
[276] Assistant Director, Strategy and Planning, Fraser Bank

profitability across the group, until an agreement was reached with each of them. The agreed plans were then presented to the executive board, where the focus of discussions was Economic Profit. The Economic Capital charges were aggregated into operating costs in these pro-forma financial statements. In other words, risk calculations were an integral part of the planning process, but the actual figures used for the capital charges were not explicitly shown to the Executive Board.

6.3.2. Strategic Risk Management at Fraser Bank

Some senior risk officers, however, expected greater visibility and voice in strategic decision making. The director of risk reporting, for example, envisioned a different role for his function. With a hint of irony he likened the role of the risk manager to that of the *'medieval licensed jester, allowed to be more sceptical about what is going on'*, constantly challenging existing assumptions and views, and scrutinising strategic decisions before they are made. Such a 'licence' would have given rise to Strategic Risk Management. However, this was not to happen at Frasers – risk officers with strategic ambitions got marginalised.

Reflecting on the case, three reasons might account for this. First, the very idea of Value Based Management and the value-focused, *in extremis* single-minded culture it imposes, proved to be a hindrance to the senior risk officer with strategic ambitions:

'[The] Risk [function] by definition, like audit, sits outside the culture of an organization as a whole, it has to. And the more important it becomes to a business that everybody sings in tune the less space is given for any kind of business voice. And it becomes very difficult for a risk manager, at any level, either talking to a trader or talking to the Chairman of the bank, to challenge. The skill is challenging without causing offence and if the trading manager and the Chairman are wise they listen. But it is also possible to get carried away by trying to drive the corporate culture and by a general desire from everyone to get there, that any kind of challenge is not welcome, even if it comes from the risk function (...) whose role is to challenge.'[277]

Second, it appeared that at Frasers the centre of power concentrated on staff who furthered the Risk and Value Management framework. This favoured the Strategy and Planning function, as was perceived by risk people:

'The Strategy and Planning function are the guardians of the executive committee and as a result they don't actually want conflict.'[278]

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[277] Director of Risk Reporting; Fraser Bank
[278] Director of Risk Reporting; Fraser Bank

Senior risk officers did not possess the agenda-setting power that their counterparts at BWT did. As a result, this particular senior risk officer at Frasers concluded, *'[This] does not feel like a toothsome risk function'*, and after a wave of reorganization that washed him further on the side he left the organization.

Finally, and perhaps most significantly, it was the commitment of risk people to risk quantification that prevented them from framing strategic issues outside the main risk silos in a way that would have allowed them to voice their opinion. The above-quoted senior risk person defined the problem as follows:

'These non-financial risk issues are not very technical, more subjective. The issue is to identify some quantitative measures that we can assess on a regular basis. So we can gain some confidence that we comply with the appetite for risk in that area, even if we haven't managed to articulate it yet for some reason.'[279]

Referring to the balanced scorecard idea, he further iterated:

'There is nothing new under the sun. Instead of slogans, the way we manage is to keep track of measurements and target metrics. We track these and adjust behaviour to improve metrics to the desired level. (...) The issue is to identify some quantitative measures that we can assess on a regular basis.'[280]

Ten months later his boss, the Risk Policy Director, opened our first conversation with a line in very much the same spirit:

'If you want to manage risk, you have to quantify it'.[281]

This approach is strikingly different from the calculative pragmatism displayed among several risk officers at BWT. It is closer to what Power (2003b) calls *calculative idealism*, represented by adherents aiming to '*induce correct economic behaviour in the light of [the] risk measures.*'[282]

However, the strategic issues in which risk people wanted a voice defied quantitative measurement. Hence, the insistence to control these risks via measurement frustrated the archetype of Strategic Risk Management. In order to further explore the extent of this calculative idealism among the risk officers, a look at Frasers' Risk Silo Management is warranted.

6.3.3. RISK SILO MANAGEMENT AT FRASER BANK

Frasers operated with risk silos similar to those found at BWT: market risk, credit risk and operational risk (also referred to as '*non-financial and*

[279] Director of Risk Reporting; Fraser Bank
[280] Director of Risk Reporting; Fraser Bank
[281] Director, Risk Analysis and Policy; Fraser Bank
[282] Power (2003b), p.14.

compliance risk'). The risk methodologies had a decade-long history: they had been evolving since 1993. The central risk function was also the custodian of a loss data warehouse that supported the continuous development of quantified risk measurement approaches and back-testing.

Characteristically of the calculative idealism at Frasers, the progress of the risk function was assessed by judging how advanced the quantification methodologies were. The Risk Policy Director, whose long tenure at the bank made him qualify as '*the institutional memory*' (as he liked to call himself), recollected:

(Director, Risk Policy): 'Initially there was a market risk management team and a credit risk management team. But even the market risk management team was not very professional, we did not have a proper measurement system. We did have crude measurement systems.[...] Market risk was managed by the treasurer. The head of credit – well, his job was regarded as taking big lending decisions. Operational risk at that stage wasn't really talked about. [...] [Risk management] has been evolving since 1993. First we made the management of market risk more professional, so it is much more structured and quantified. Then we made credit risk more quantified. The job of the Chief Credit Officer became quite different. Even though he was still quite involved in big decisions, his job was to manage the portfolio rather than individual credits.'[283]

Frasers was the first European bank to implement Value-at-Risk in the market risk area, together with the quantitative credit rating of the entire lending book, leading to the application of modern portfolio theory to the credit risk profile. In the bank's committee structure there was a separate body devoted to discussing and updating the methodologies in use.

During the years, Risk Silo Management has gradually become a quasi-line management function. As risk management got pushed down to the business units, it became more and more difficult to tell whether the risk function at business unit level was a staff or line management activity, the distinction was blurred. The Risk Policy Director explained:

'You need to go down to the business units as that is where the real risk management takes place. All we do is set policies and constraints and measurement systems. (...) One of the post-1992 principles was that risk has to be managed as close to where the risk is taken on as possible. So you have your credit risk management process integrated with lending. The market risk managers also sit on the trading floor next to the people who are taking the risk. (...) So, the real risk management is in the dataflow and

[283] Director, Risk Analysis and Policy; Fraser Bank

conversation that takes place between risk management guys and the traders or people who are taking on the risk. '[284]

This decentralised approach left the risk people at the centre with responsibility for the methodologies used at business unit level, but distanced them from the businesses at the same time. Business unit risk managers developed '*double loyalties*', sometimes shielding their business from outside inquiries, which made it even more difficult for headquarters risk managers to see into their affairs, reinforcing the decentralised nature of Risk Silo Management.

Talking to senior risk officers revealed that underneath the calculative idealism of the process design, there was a fair amount of pragmatism when it came to application. The director of risk reporting, for example, liked to remind others of the '*insufficient amount of subjectivity*' that the risk processes entailed. The Risk Policy Director came to think of risk in terms of two dimensions: the extent of measurability and the extent of liquidity (to what extent one can trade/hedge/insure the risk). He considered the risks that were high on both dimensions to be market and credit risks – these he regarded as well under control. Risks that were low under both dimensions (strategic and legal risks) he regarded as problematic from the point of view of risk management. Finally, he placed operational risk in between – the operational risk team, at the time of the study, was engaged in working out a quantified methodology for the assessment of material risk concentrations. Figure 1 is a copy of the chart the Risk Policy Director drew as illustration.

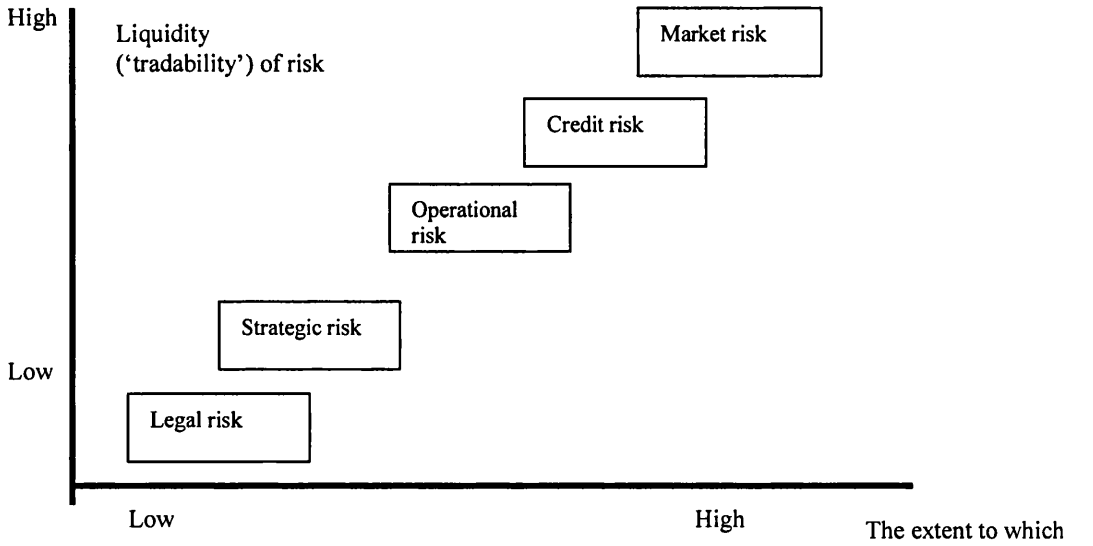

Figure 1. Mental mapping of risks at Fraser Bank

[284] Director, Risk Analysis and Policy; Fraser Bank

This mental mapping of the risks helps to explain why risk people at Frasers ultimately kept away from getting involved with the management of non-quantifiable risks, and concentrated on the risk silos.

6.3.4. Integrated Risk Management at Fraser Bank

Crucial to the workings of Risk and Value Management at Frasers was the existence of an Economic Capital framework:

'Economic Profit inherently needs Economic Capital because you have to adjust your profit by the risk that you have taken in order to reach that profit. So that's how we link to the rest of the Group and Strategy and Planning in terms of providing cost of risk [the product of Economic Capital times the cost of equity, for each business unit]. That's how we feed into the Finance and Strategy areas.'[285]

A separate Economic Capital team was set up, initially within the planning function. Later the risk capital controllers got transferred to the risk department. They provided risk management services in two ways. First, the Economic Capital framework helped determining the risk appetite of the group, as well as contributed to risk limit setting within the organization:

'The other element that we obviously get involved with is risk appetite. Making sure that now we have one unit of measurement across the bank of unexpected loss, which is Economic Capital and then we can use that to allocate out risk appetite.'[286]

Secondly, the Economic Capital framework was used for fine-tuning the capital level required by the group in order to maintain its AA credit rating:

'...your point is, what happens when the bottom-up assessment [of risk capital need] is higher than the book value [of available capital]... Well, we have a tolerance range which says you can't measure these things down to the last penny anyway. So if it comes within 120% then we are happy, if it comes over 120% then we need additional capital.'[287]

This twofold contribution was a significant step toward Integrated Risk Management. What bestowed the Economic Capital framework with the image of being 'integrated' was Economic Capital's status as a common denominator and language of risk. It expressed and made comparable risk taken by the business units and the group.

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[285] Head of Economic Capital, Fraser Bank
[286] Head of Economic Capital, Fraser Bank
[287] Director, Risk Analysis and Policy; Fraser Bank

Applying Power (2003b)'s definition, calculative idealism also entails the following: *'While practitioners under this approach may be short-term pragmatists, they (...) worry constantly about the 'robust' and 'hard' nature of (...) risk analysis.'*[288] Indeed, characteristic of the calculative idealism of risk people at Frasers was the amount of concern they devoted to maintaining the 'leading edge' reputation of their risk methodologies, including that of the Economic Capital framework.

There was a widespread conviction across risk officers as well as non-risk people at headquarters that external constituencies rewarded Frasers for having 'leading edge' risk practices. Debates on methodology were sparked by concerns that this leading technical position might be eroded:

'Back in the 90s I think Frasers had a really good methodology. The perception we had was: some American banks were further down the road than we were, but we were ahead of the UK banks. I think we have got to the point where there is this big upheaval: there is a big question mark about whether our risk methodology is up to scratch. With Basel II going on, the feeling is that everyone is catching up, I assume it is the impetus to the current debates. (...) We can't afford having any of the analysts or anyone else saying we have a bad methodology.'[289]

During the course of the study the researcher was witness to the complete overhaul of the Economic Capital methodology. It was a process with extreme political sensitivity, which has consumed an entire Economic Capital team before a second lot of risk capital officers finally managed to negotiate it through. Chapter 5 showed how the creators of the new methodology derived much credibility from the procedural fairness and political appropriateness that characterised the implementation. Their success was also due to the perceived technical competence that was deployed in the process, appealing to the calculative idealism of the people involved.

By successfully maintaining the internal credibility of the ERC framework risk capital officers ensured that both Integrated Risk Management as well as Risk and Value Management rested on a solid foundation.

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[288] Power (2003b), p.14

[289] Assistant Director, Group Strategy and Planning, Fraser Bank

6.3.5. THE PARADOX OF GETTING THE POLITICS OF RISK MANAGEMENT RIGHT

The evidence suggests that Fraser Bank's preference for resolving conflicting risk and return objectives was via negotiation in a characteristic Risk and Value Management framework. The resulting agreements represented the compromise that was expected to be reached within Frasers' consensus-oriented culture. Reconciling competing risk-return interests across the business units in the course of the planning process was a formidable technical and political exercise that risk capital controllers gradually learned to resolve.

Maintaining credible risk capital allocations for the purpose of risk-return optimisation required a great deal of political aptness on the part of risk capital controllers. However, their contribution to the workings of the Group's Value Based Management framework was so endemic that it became taken-for-granted and invisible in the eyes of top-level decision makers. Hence the paradox of getting the politics of risk management right: by doing so, the risk function turned invisible - a mere cog in the wheel of value creation.

6.4. DISCUSSION

Both BWT and Frasers have embarked on implementing risk management practices with an aspiration to apply these consistently and coherently across their organization. Accordingly, it can be claimed that these projects furthered the notion of Enterprise Risk Management. However, it appeared that ERM took very different shapes in the two banks.

Instead of a recognisably common risk management framework, ERM proved to be a particular risk management mix in both organizations. In this respect ERM is not unique.

It is a noted characteristic of a number of management accounting practices that they appear to be an assembly of various normative elements. Activity Management (Gosselin, 1997) and the Balanced Scorecard (Kaplan and Norton, 1996, 2001; Speckbacher et al., 2003) are but two examples. From this perspective, although ERM is unique in the specifics of its technology and its initial focus, its scope and development might warrant parallels with other management control innovations. In particular, Gosselin (1997) distinguishes three levels of Activity Management: Activity Analysis, Activity Cost Analysis and Activity Based Costing. The levels build on each other in the sense that activity analysis, the identification and classification of activities, paves the way for cost analysis. ABC takes activity cost analysis further by tracing costs to products. ABC is also advocated to establish a link between cost analysis and various aspects of profitability measurement and strategic decision making (e.g. customer profitability assessment). This latter, strategic application of ABC is often distinguished as a further level of Activity Management, adding yet another idea to the assembly of AM practices. Gosselin (1997) present empirical evidence that the implementation of ABC often does not progress further than the implementation of activity analysis or activity cost analysis. Gosselin postulates this is because Activity Management is an assembly of practices that offers adopters several opportunities for selection and revision.

Similarly, based on Speckbacher et al. (2003)'s classification, the evolution of the Balanced Scorecard (BSC) has also resulted in a set of normative practices that offer firms choice between different implementation patterns. The BSC assembly contains multidimensional performance measures, cause-effect

modelling, and strategy maps (Kaplan and Norton, 2001). The addition of new normative elements has led to the transformation of the original BSC ideal type (which was a performance measurement system) to more strategic models (e.g. the scorecard aligned with strategy via causal links, the scorecard as a strategic management system[290]). Empirical evidence shows that BSC implementations rarely reach these strategic variants – they merely reflect multi-dimensional performance measurement (Speckbacher et al., 20003, Ittner and Larcker, 2003). As in the Activity Management case, it is the assembly nature of the BSC that allows adopters several opportunities for selection and revision.

This chapter has argued that ERM is an assembly of a number of firm-wide risk management ideal types. Its original presentation (Risk Silo Management) appears to specialise on a problem not addressed by previous management control practices. However, the ERM assembly has been complemented by applications that aim to link with strategy and performance management. It appears that assemblies of practices do not only give rise to different conceptual and implementation patterns. They also appear to be developing (at least conceptually) towards becoming more 'strategic'.

This section compares and contrasts the risk management mixes, and the resultant control practices, which appeared in the two banks. It seeks to explain these by exposing the underlying calculative cultures.

6.4.1. THE RISK MANAGEMENT MIX

BWT's ERM mix allowed only senior risk officers to link up with strategy via their influence on key strategic decisions. Accordingly, BWT's risk management mix displayed Risk Silo Management, Integrated Risk Management and Strategic Risk Management, furthered by risk silo controllers, risk capital controllers and senior risk officers, respectively. Risk capital controllers furthered the ideal of Risk and Value Management in vain.

At Frasers it appeared that Risk and Value Management was a prominent element of the mix, resulting in a link between risk management and planning and

[290] Speckbacher et al. (2003) distinguishes three types of Balanced Scorecard. Type I – the BSC as a multi-dimensional performance measurement system. Type II – the BSC is linked to strategic objectives via cause-effect modelling. Type III – the BSC as a strategic management system, which is linked with strategy implementation (via defining objectives, action plans, results) and reward systems.

performance management. Further, Integrated Risk Management and Risk Silo Management defined the territory of risk officers. In this organization Strategic Risk Management, the idea of extending the risk managers span of control to non-quantifiable risks, was frustrated.

The case studies suggest that the ERM assembly appears to offer two alternatives for the linking of risk management to strategy – either to discretionary decision making or to planning and performance measurement.

6.4.2. CONTROL PATTERNS

Both banks grappled with conflicting risk and return objectives. A control pattern of '*selective crack-down*' (Dunsire, 1990; Hood, 2001) was evidenced at BWT. The orchestration of timely attention swings between the competing risk and return objectives became a challenge that senior risk officers took on. This explains the appeal of Strategic Risk Management within this context. Curiously, senior risk officers did not possess an expert information and support system within their departments that would have formalised this risk management type. Instead, information was channelled directly from line management to the risk committee meetings in the form of specialist presentations. By exercising agenda setting power and by cultivating personal contacts within the organization, senior risk officers were able to collect and disseminate information. However, their influence on decision makers was rather informal and difficult to trace, making BWT's senior risk officers appear to be the modern counterparts of the *Eminence Gris*. Division X's example showed that at times of crisis, this influence on strategic decisions became even more prominent, lending Strategic Risk Management the status of *interactive control* (Simons, 1990, 1991).

Fraser Bank's preference for resolving the conflicting risk and return objectives was via decision making by compromise (Burchell et al., 1980). Backed by a strong shareholder value ethos, Risk and Value Management rose as a rather political but nevertheless effective framework for the joint management of conflicting objectives. It also warranted a considerable level of integration between the strategic planning and the risk management functions. The Integrated Risk Management framework was the source of Economic Capital allocations that fed into the planning and performance management process both at the level of the group and the business units. However, as a mere cog in the wheel of value

creation, the risk function lacked the visibility and voice that would have allowed senior risk officers to influence key strategic decisions. In any case, most of them considered strategic risks outside the remit of the quantified risk management framework. Their mandate was understood as measurement-based control over quantifiable risks, latent, taken-for-granted and drawing the attention of top management only at times of control breaches – a *diagnostic control* (Simons, 1990, 1991).

6.4.3. CALCULATIVE CULTURES

In order to determine the remit of risk management and the corresponding risk management methodologies, the senior risk officers of the study had to decide to what extent they regarded risk numbers as representing economic reality.

The interview material suggests that BWT's senior risk officers regarded the risk numbers as attention-directing devices with little intrinsic claims to represent reality. They saw their contribution in helping to steer line management behaviour in the right direction. Further, in a control setting where conflicting risk and return objectives wrestled with one another, senior risk officers sought to direct the attention of decision makers to issues that warranted priority at any given time. This calculative pragmatism can in part be located in the professional background and convictions of the CROs of BWT (the Group CRO was the author of a practitioner book that detailed an internal control-based methodology for operational risk management, and his deputy, the CRO of BWT, had a doctorate in risk-based internal audit).

At Frasers it appeared that risk officers displayed a great deal of *calculative idealism* in that they aimed to represent the cost of true economic capital based on high quality data and they worried constantly about the 'robust' and 'hard' nature of their risk analysis. This calculative idealism was challenged in the process of allocating out the Group's capital to business units. A whole team of risk capital controllers was consumed before it became clear that calculative idealism had to be combined with political shrewdness. Frasers' very own organizational culture imposed a constant consensus-seeking behaviour on decision-makers. Hence, in the process of risk capital allocations, risk people's calculative idealism was toned down to the extent that the next economic capital

team was willing to compromise their preferred technique for the sake of reaching a compromise between the competing risk-return interests within the group. Nevertheless, by involving 'experts', the language of these negotiations remained technical. Different Economic Capital allocation methodologies wrestled with each other, representing the different risk-return interests of business units– until a final compromise was achieved. The quasi-technical process of decision making by compromise (Burchell et al., 1980) gave risk capital allocations sufficient credibility to become integral to strategic planning and performance management at Frasers.

The existence of different calculative cultures, based on the evidence presented here, is detectable in the attitude of senior risk officers to the outputs of risk management models in use. Apparently, senior risk officers develop 'personal philosophies' about the 'manageability' of risks by quantitative models. While there appears to be much consensus on the manageability of certain risks (e.g. market risks), the issue of non-quantifiable risks and that of internal capital allocation are contestable. BWT's senior risk officers, who had doubts about the use of quantitative models in these contested locales, chose to define their area of competence broadly (encompassing risks outside the quantifiable risk framework). Conversely, senior risk officers at Frasers, who had more confidence in the reliability of the risk models, were able to make them work in the contested locale of capital allocations and performance measurement. However, by doing so they confined their area of influence to that of measurable risks. This underlines the role of managerial discretion (at least in part) in the selection and use of ERM systems.

6.5. CONCLUSION

In the financial services sector ERM is thought to embody a set of risk practices that increasingly appear clustered together, even though they encompass such wide-ranging techniques as Vale-at-Risk and Economic Capital models, as well as qualitative methods for non-financial risks. The normative-practitioner literature suggests that, taken together, these risk management approaches increasingly constitute 'best practice' that more and more organizations aspire to implement (e.g. Lam, 2000; Gilbert, 2004).

This chapter reiterated the argument that innovations in ERM techniques increasingly cluster around four themes: risk quantification, risk aggregation, risk-based performance measurement and the management of non-quantifiable risks. Each of these themes represent different ambitions and objectives that risk officers might pursue, giving rise to four risk management ideal types. These all have enterprise-wide ambitions, and can be viewed as the building blocks that constitute the 'risk management mix' in a given organization: Risk Silo Management, Integrated Risk Management, Risk and Value Management and Strategic Risk Management.

Taking a field perspective (as in previous chapters), the chapter further investigated the risk practices of the two banks, BWT and Frasers. Each bank appeared to possess a risk management mix that was specific to them. However, the underlying currents that caused these patterns may be instructive in other cases too.

Power (2003a) postulated that two prominent institutional notions drive the rise of Enterprise Risk Management: the shareholder value imperative and the risk-based control imperative. These represent different approaches to corporate governance. The first emphasises the role of ERM practices in the measurement of shareholder value, and in the advancement of managerial practices that are designed explicitly to promote shareholder value via performance measurement. The notion of risk-based internal control emphasises the role of ERM practices that are designed around the strategic objectives of the firm and further the achievement of these via internal (formal and informal) controls.

These undercurrents are detectable in the case studies. It appears that BWT's ERM was more of a reflection of the risk-based internal control imperative. It can also be argued that Frasers' ERM mix primarily corresponded to a strong shareholder value management concern. Thus the cases might be suggestive of two alternative patterns of ERM taking shape in financial institutions.

The shareholder value imperative appears to drive a particular model of ERM characterised by a risk management mix in which Risk and Value Management is a salient element (*'value-based ERM'*). This model of ERM is contingent on a vision of uniting and controlling risk and return objectives in a common framework. Although calculations might be tempered by political consensus-seeking behaviour (i.e. the resolution of the risk-return trade-off is achieved by compromise), this model presumes a great deal of *calculative idealism* on the part of adherents. It requires the quantification of both the risk silos and the risk capital need of business entities. Hence risk management's remit is defined in terms of the *quantifiable risks*, and its concern with non-financial risks extends beyond the risk silos only as far as risk quantification is possible. The strategic significance of this risk management model is derived from its close integration with strategic planning and performance management, but as a control function, it is fundamentally *diagnostic*.

	Value-based ERM	**Strategic ERM**
Salient element in the risk management mix	Risk and Value Management	Strategic Risk Management
Span of risk control	Quantifiable risks (risk silos)	Quantifiable as well as non-quantifiable risks (risk silos and beyond)
Resolution of conflicting risk-return objectives	By quasi- cybernetic control - Trade-off set by compromise in the Risk and Value Management framework	By selective crack-down - attention swings orchestrated applying Strategic Risk Management
Top management's use of risk controls	Diagnostic use of the entire risk management mix	Interactive use of Strategic Risk Management
The strategic significance of risk management	Derived from the integration of risk management with planning and performance management	Derived from influencing top-level decision making
Calculative culture	Calculative idealism	Calculative pragmatism
Case study example	Frasers	BWT

Table 2. Contrasting the two models of ERM

On the other hand, the risk-based control imperative can be associated with a different model of risk management: one with a risk management mix in which Strategic Risk Management is prominent ('*strategic ERM*'). This model is contingent on a vision that risk and return need not be controlled in a common framework, because the organizational actors who take risk are different from those who try to minimise it. There is an intrinsic tension between them, which can (at best) be controlled by *selective crack-down on competing agendas*. In this model risk people are not expected to get in the way of risk-takers when expansion is desirable. Risk officers see their role in orchestrating timely attention swings when the tide of risk is about to turn back on the organization. Taking a great deal of *calculative pragmatism*, risk officers quantify risks, but exercise control in a flexible manner, allowing the renegotiation of lower-level risk limits, when the interest of the business requires. This approach requires risk officers to possess considerable knowledge of the businesses whose risk-taking they monitor. Senior risk officers are keen to acquire business insight in order to voice their opinion on risk issues that are *beyond the quantifiable risk framework*. They derive strategic significance from influencing high-level strategic decision making, by responding to the concrete concerns of top management at any given time. In this model Strategic Risk Management is used *interactively* (by top management), in the formal context of the risk management committee where the senior risk officers set the agenda. Table 2. contrasts the two models of ERM.

Apart from emphasising the influence of institutional pressures, the cases also highlight that there is scope for managerial discretion in the workings of ERM systems. First, the role of senior risk officers was evident in the politics of risk management. At Frasers senor risk officers had to orchestrate the process of capital allocations with political sensitivity and tact. At BWT senior risk officers amassed both agenda setting and informal power in order to become influential in the discussions of strategic issues.

Second, it was, to some extent, a matter of managerial choice whether the risk-based internal control or the shareholder value imperative shone through the ERM models we described. Apparently, senior risk officers developed 'personal philosophies' about the 'manageability' of risks by quantitative models. While there appeared to be much consensus on the manageability of certain risks (e.g. market risks), the issue of strategic risks and that of internal capital allocation

were contestable. Senior risk officers at Frasers, who had more confidence in the reliability of the risk models (c.f. 'calculative idealists'), were able to make them work in the contested locales of capital allocations and performance measurement. This task was legitimised in the organisation by a strong value-based management culture, which was driven by the shareholder value imperative.

However, BWT's senior risk officers who had doubts about the use of quantitative models in these contested locales (c.f. 'calculative pragmatism') chose to define their area of competence broadly, encompassing risks outside the quantifiable risk framework. To them the risk-based internal control imperative gave institutional support as it is driven by the idea that controls ought to aim at the strategic objectives of the firm.

The chapter also emphasised that ERM is not unique in the sense that it appears to be an assembly of risk management ideal types. A common pattern in control system innovations might be that they appear to constitute a hotchpotch of practices that take distinct patterns. Later applications invariably seem to assume a 'strategic' role. The linking of initially confined, highly specialised or 'technical' practices to strategy is a phenomenon that appears to characterise numerous management innovations (c.f. Strategic Management Accounting, ABC/M, 'Type 3' Balanced Scorecard, Strategic Risk Management).

It is remarkable that, given the empirical evidence, few ABC and BSC implementations are strategic. In contrast, the ERM mixes (in the case of BWT and Fraser Bank) did possess some 'strategic' significance.

This study furthers the view that, in order to realise the strategic potential of assemblies, advocates need to demonstrate both political aptness and institutional appropriateness. Interpreting the cases of BWT and Fraser Bank from a symbolic-organizational perspective suggests that, given contemporary corporate governance trends, both the 'value-based' and the 'strategic' models of ERM have institutional backing. Having illuminated some of the politics of risk control, the study suggests that strategic ERM advocates need to possess informal and formal (e.g. agenda setting) power, while value-based ERM advocates need to get the politics of capital allocations right, in order to realise the strategic potential of the ERM mix.

The distinction between the 'value-based' and the 'strategic' models of ERM is somewhat artificial. It is proposed to highlight the alternative patterns of strategic significance that ERM in action (in the cases described) appears to possess. It is hoped that the distinction might also be useful in generating further research questions. The final concluding chapter will attempt to outline some questions for further research.

CHAPTER 7

CONCLUSIONS AND DIRECTIONS FOR FURTHER RESEARCH

'In real life, unlike in Shakespeare, the sweetness of the rose depends upon the name it bears. Things are not only what they are. They are, in very important respects, what they seem to be.'

Hubert H. Humphrey

This thesis was motivated by the belief that organizationally grounded accounts of enterprise risk management would usefully inform the risk management discourse, and would also enhance our understanding of the workings of management controls *in situ.*

The study set out to make sense of enterprise risk management and to investigate what form(s) ERM takes in organisations. The following questions were addressed: What roles does the management of risk come to serve within organisations? How does it relate to existing strategic planning and control systems? Is risk management complementary to the existing practices of financial management and control, or is it in competition with those for managerial attention and use?

The aims of the research were twofold. Based on extensive fieldwork with two stock exchange listed large banking organisations, it probes the roles that ERM has come to play in them. It also set out to explain the observed practices of ERM.

7.1. UNDERSTANDING THE ROLES OF ERM

Digging below the surface of the loosely defined enterprise-wide risk practices, there appear to be variations in the specific conceptualisations and uses of risk management in individual organizations. The study offers the following explanations.

By relating the normative-practitioner literature on ERM to the observed risk management practices in the case study companies, the study has proposed the explanatory construct of the '*risk management mix.*' It has been argued that in a given organisation various risk management practices form a constellation, the

risk management mix, that corresponds to the particularities of the institution and its context. As for the content of the risk management mix, four ideal types of risk management were identified. These were 1. Risk Silo Management, 2. Integrated Risk Management, 3. Risk and Value Management, and 4. Strategic Risk Management. Although all of these were observable in both case study banks, Chapter 6 showed that the focus and ultimate use of their risk management mix differed markedly.

Secondly, six tests were proposed for the assessment of *the organizational significance* of ERM in action. The first test probed if the risk management function had *formal status* through structural arrangements that would give it visibility and parity with other organizational actors. Given that influential calculative languages frame debates and decision making, and can facilitate or impede organizational change, an important second milestone of the organizational significance of risk management was the nature and use of its *language*. This second test considers if risk people had an independent voice that was specific to themselves, and if they could translate risk analytics into a language that other organizational actors understood. The influence of ERM on *strategic planning*, *performance measurement* (control) and *key strategic decisions* was queried by the next three tests. Further, to see if ERM was repeatedly and regularly consulted by decision makers, an additional test was proposed based on Simons' (1990, 1991) distinction between salient and frequently used *interactive* and less influential and latent *diagnostic* control systems. Applying the proposed six tests of organizational significance, Chapter 3 probed to what extent the risk management departments at the case study firms have been successful in achieving a strategic role.

Thirdly, the study called upon *institutional organizational theory* (Powell and DiMaggio, 1991; Meyer and Rowan, 1977) in that it argued that risk management's visibility and use by top management was partly attributable to its *perceived institutional appropriateness* - its ability to legitimise the organization. Chapter 4 argued that the observed patterns of risk management use within the same organization changed according to the dictates of institutional pressures (coming from regulators, investors and rating agencies) over a period of boom, bust and recovery. It has also been argued that the perceived institutional appropriateness of risk management can shift under different circumstances

within the same organisation, being higher when capital adequacy concerns rise (leading to interactive risk control use), but ebbing away as the more conventional accounting representations of performance take over in the post-crisis period (resulting in diagnostic risk control use). Taking a step back from the two cases, Chapter 6 related the entire risk management mix of the organisations to two distinct corporate governance agendas, the shareholder value imperative and the risk-based internal control agenda.

Finally, the notion of *complex organizational controls* was investigated in an attempt to explain the patterns of control over the conflicting risk and return objectives at the two banks. Chapter 5 developed the argument that the inclusion of risk controls into a broader organizational control landscape raises questions about the simultaneous application of risk and profit control systems, which, given the risk-return trade-off, can convey confusing and even contradicting signals. The chapter described the espoused and apparently in-use theories of controlling the complex risk-return situation. Having compared and contrasted the ways in which the case study firms exercised control over conflicting risk and return objectives, the different practices observed were conceptualised as '*control by selective crack-down*' in BWT's case and '*quasi-cybernetic control*' at Fraser Bank.

7.2. THREE TYPES OF RISK OFFICERS, FOUR TYPES OF ERM, TWO PATTERNS OF STRATEGIC SIGNIFICANCE

Three types of risk managers have emerged at both organizations. The differentiation of the risk function mirrored the varying aspirations of risk officers. It also mirrored four risk management ideal types that pose different challenges to the risk management staff in banks. Accordingly, the functional differentiation of risk people was indicated by the different technologies they applied and the different roles they fulfilled.

The first group ('*risk silo specialists*') consisted of those who were engaged in *Risk Silo Management*, the measurement and assessment of different risk types. Grappling with the challenges of data collection and *risk quantification*, they produced voluminous reports on adherence to risk limits. However, they struggled to grab regular attention of top management – their role was, at best, diagnostic

(Simons, 1990). This is because the risks that habitually concerned the Board tended to be of a more elusive, strategic or regulatory nature, and hence, stayed outside the reach of *risk silo specialists.*

The production of the quantitative risk estimates allowed risk managers to address the problem of *risk aggregation.* Another group of risk managers emerged (*'risk capital specialists'*), who were concerned with *Integrated Risk Management.* Based on a common denominator for risk (economic capital), risk aggregation allowed risk capital specialists to assess the risk profile of the institution, set limits, and do the same for individual business units. This opened up the route for the integration of return and risk concerns in a single framework, *Risk and Value Management.* Furthering the theme of *risk-based performance measurement,* this requires aspiring institutions to arrive at risk-based (economic) capital allocations to their responsibility centres. In practice economic capital allocation incorporated much judgement, intuition and organisational politics, and was taken up by the risk capital specialists of Fraser Bank only. Here a strong value based management ethos paved the way for risk capital specialists to align internal definitions of capital with external expectations. It was through the provision of economic capital charges that ERM became an integral part of the strategic planning and performance measurement process. This required the alignment of planning and control principles between top management, strategy and planning staff, and the risk people. However, *risk capital specialists* had to be prepared to live in an uneasy symbiosis with the strategy people who supported them in their efforts to redefine definitions of capital allocations but on the other hand denied them top-level visibility.

Securing access to and visibility by the Board has enabled *senior risk officers* to exercise informal influence on some strategic concerns. However, their influence on major strategic decisions has been limited. Their favoured role is that of the devil's advocate - challenging and questioning existing beliefs in order to prepare the organization to fend off emerging adversities. This required them to put *non-quantifiable risk* issues on the agenda of top management (e.g. non-recurring operational risks, reputational, legal and strategic risks). Only at BWT had senior risk officers the agenda setting power to do so. It was through the provision of information about non-quantifiable risks that senior risk officers furthered the ideal of *Strategic Risk Management.* However, the sources of

information they called upon were in the line management, which they accessed informally – the form of CRO power appeared to be informal.

The case study analysis has pointed towards two diverging *patterns of organizational significance* on the part of the risk management functions observed. In one case (demonstrated by Frasers) risk management becomes integral to the formal planning and performance measurement process, while remains neutral in the discussions of key strategic decisions that emerge outside the planning cycle. In the second case (demonstrated by BWT), risk management is incidental as far as the formal planning and control cycle is concerned, however senior risk officers acquire agenda-setting power to influence the discussion of key strategic uncertainties and participate in top management-level decision making.

Thus the organizational significance of risk management appears to hinge upon *the organizational significance of the risk manager.* It is a characteristic of the current development of ERM that there are multiple possibilities for its practice in organizations. It seemed that the organizationally significant risk officers responded to different corporate governance pressures and fostered different calculative cultures.

7.3. EXTERNAL INFLUENCES ON INTERNAL ERM PRACTICES

The choice of listed banking organizations for study allows us to consider a host of stakeholder pressures on the observed ERM practices. In particular, regulatory, shareholder, rating agency, and internal managerial influences were shown to influence ERM in action.

First, the preoccupation of risk managers' with bank capital adequacy was argued to be a response to pressures from the regulatory and the credit rating agency community. By gradually aligning the requirements for minimum capital adequacy with the measured risk profile of the banks, *regulators* are challenging *risk silo specialists* to render more and more risks to measurement. So much so, that current requirements for internal credit and operational risk models stretch the data and measurement capabilities of even the 'most advanced' banks. A burgeoning regulatory and practitioner literature has institutionalised the concern of adherents with *risk measurement.*

In response to *rating agency* expectations of capital adequacy, another type of risk managers *risk capital specialists* aspire to fine-tune bank capital to a required solvency standard that would allow banks to maintain a target credit rating. *Risk capital specialists* thus respond to what amounts to a quasi-regulatory pressure from external agencies that have a powerful influence on the cost of funding of financial institutions. Their concern with *risk aggregation* has been inscribed in normative texts that promote economic capital as their flagship technology.

Further, the observed *risk capital specialists* and *senior risk officers* were shown to have wider objectives, to get involved with strategic planning and performance measurement, and with the board-level discussions of key strategic uncertainties, respectively. These ambitions were linked to a discourse on *risk-based performance measurement* and the *management of non-quantifiable risks* in the practitioner literature. The first was further related to the rise of the *shareholder value imperative*, and the second to the *risk-based internal control* agenda in contemporary corporate governance that endorses ERM as a strategic control system.

7.4. MAKING SENSE OF ERM IN ACTION – PATTERNS FOUND

In brief, BWT possessed an ERM function that corresponded to the corporate governance concern of *risk-based internal control.* Here the remit of ERM included 'strategic' and 'operational' risks that were not quantifiable – the salient element in the risk management mix was Strategic Risk Management. Senior risk officers assumed a role in high level *strategic decision making* and exercised influence on decisions that were outside the remit of financial risk management. In particular, their ambition was to restrain excessive risk-taking resulting from expansionist business strategies. Under this ERM practice the conflict between risk and return initiatives was *controlled by selective crack-down* on one agenda at a time. Senior risk officers' recognition of the need for orchestrating timely attention swings between risk and return objectives made their role critical in the emergence of this control pattern. Apart from the risk-based control imperative, this type of ERM was associated with a pragmatic, non-religious, experimental approach to risk measures (*calculative pragmatism*), the *agenda setting power* and informal influence of senior risk officers, and the strategic spurs and halts of an *entrepreneurial*, opportunistic organization.

Fraser Bank was driven by a strong shareholder value imperative. Here risk managers become involved in the *strategic planning and performance measurement* process, and the salient element in the risk management mix was Risk and Value Management. ERM's input to the planning process was the quantitative assessment of the risk profile of alternative business units and strategies that allowed the organization to optimise the competing risk and return objectives. Critical to the integration of risk management and planning, risk people here recognised and tactfully managed the micropolitics of risk profile attribution, contributing to an alternative approach to the control over the risk-return trade-off, resulting in a *quasi-cybernetic control practice.* Promising a more even growth, the resolution of the risk and return trade-off within a VBM framework was in line with the rather conservative, consensus-seeking and *cautious* strategies of the institution. Here risk people placed the emphasis on the robustness and accuracy of the risk models applied (*calculative idealism*). However, this resulted in the remit of ERM becoming confined to financial and

quantifiable risks, and senior risk officers did not get close to the discussion of non-quantifiable strategic risks.

From these accounts ERM appears to be an assembly of risk management ideal types, constituting what the 'risk management mix' that varied across the organisations. By linking the observed patterns of organisational significance (and the differences in the two risk management mixes) to organisational characteristics as well as wider institutional pressures, the implications for the further development of enterprise risk management were traced out. It has been argued that the cases might be indicative of alternative tracks in the development of enterprise risk management and might also be indicative of similar patterns in other organisations.

7.5. REFLECTIONS ON THE RESULTS AND DIRECTIONS FOR FURTHER RESEARCH

Taking a step back from the above, in an attempt to give an altogether more rounded interpretation, the implications of the study will be considered from two different theoretical perspectives. In particular, this section will look at the results first from a contingency viewpoint, then from an institutional perspective. It will also trace out further questions for research.

7.5.1. ERM AS AN OUTCOME (THE CONTINGENCY VIEW)

A number of factors were brought to bear relevance on the roles of ERM in action. Firm specific characteristics, such as the strategic (growth) path followed by the institutions, the presence or absence of value-based management, as well as their calculative cultures (calculative idealism vs. calculative pragmatism) were implicated in the analysis. However, these relationships remain at the level of identifying associations. It is a characteristic weakness of the contingency approach that it stops short of causal explanations.

Nevertheless, finding factors that appear to systematically vary with the observable practices is important. As Weick (1995) argues, theory is a continuum rather than dichotomy, and theorising is the process of approximation, the road to what eventually become established as 'theories'. The process of theorising consists of abstracting and selecting factors that are deemed explanatory (while omitting and discarding others are equally important steps), relating them to each other, explaining, and synthesizing. The attempts at summarising the empirics in tables (e.g. the characteristics of the three types of risk officers; the comparison of 'value-based' and 'strategic' ERM), arranged according to a number of contingencies, thus represent the first tentative steps in the theorizing process. Size and strategy, two of the most frequently investigated contingency variables, have not been featured prominently in the study. The reason is that size did not seem to differentiate between the two banks, given the similarity of their market

capitalisation.[291] Strategy as an explanatory factor is treated with caution in this study. The theoretical framework did not suppose that organisational actors are rational and deliberative with respect to strategy making. It did not presume the existence of deliberate strategies, which could be regarded as contingencies in the analysis (as is the case in contingency research frameworks such as Simons, 1990, 1991, Gosselin, 1997). Still, a difference in the apparent (c.f. 'emergent') strategies of the organisations was indicated (e.g. an innovative first-mover approach vs. a cautious, steady growth pattern). However, this distinction was merely painted as part of the backdrop against which the observed control practices crystallised, and no causal links have been suggested (i.e. whether these strategic patterns were causes or consequences of the observed control patterns).

The distinctions between the three types of risk officers and the 'value-based' and the 'strategic' models of ERM are both artificial. They were proposed to make sense of the various risk management aspirations held by different actors that previously had been looked at as a homogeneous sets of ERM practices and risk officers. Furthermore, these distinctions can be useful in generating further empirical research questions. Three such questions are outlined.

The first question would aim to verify if the distinctions between the four different risk types, three types of risk officers and the two diverging risk models are valid. A *survey of a larger sample* of financial institutions could be used to explore the risk management mix in different organizations and to see what patterns they take and what the driving factors of the emerging clusters are. It is likely that other variables that were not exposed in the present study will surface. In particular, size could be a significant differentiating factor. For example, the small Swiss canton-banks are reportedly concerned with Risk Silo Management, but so far have not taken interest in the Economic Capital framework that would bring Integrated Risk Management or Risk and Value Management in the risk management mix. Therefore it should not surprise us if we found no risk capital specialists in such small banks, or if the risk management function was not even

[291] It was noted that BWT's business portfolio included an insurance company, while Fraser Bank had disposed of its insurance business before this study commenced. This mismatch did introduce a difference in the content of the case study analysis. In particular, the insurance industry crisis in 2002 caused major problems in BWT. The upheaval gave opportunities for different control groups within the organisation to become implicated, and the resulting dynamics of control system complementarities and rivalry (between risk and accounting controls) was explicated in Chapter 4.

formalised, but a mere addition to some long-existing other function (e.g. credit management).

The second question seeks to investigate if a special case of risk management would still comply with the distinction between the value-based and the strategic models. It is suggested that that *the treatment of operational risk* in the risk management models could be further explored. Operational risk is a particular risk issue that poses different challenges to the postulated risk management models. Given the current Basel II framework, under the definition of operational risk one finds both quantifiable and non-quantifiable risks. Financial institutions need to apply a rather loose regulatory definition to devise a set of operational risks that are relevant to them. With the amount of flexibility offered in Basel II, it is likely that organizations will cherry-pick issues for inclusion into the remit of the operational risk controller. Based on the distinction between the two risk management models ('value-based' vs. 'strategic'), one would expect that with time the management of operational risk will take different routes, depending on which ERM model it conforms to. The following hypotheses can be postulated:

The value-based model of enterprise risk management corresponds to firm contexts where the influence of the shareholder value imperative prevails. Here business units and products would be expected to earn economic returns over the charge they receive for their risk content, including operational risk. This reasoning would call for the quantification of operational risk, to the extent that Economic Capital can be allocated to it. Given its concern with capital allocation, this model would be likely to favour top-down approaches to the management of operational risk. In short, it is expected that among the numerous methodologies around, quantitative, top-down approaches to operational risk are to evolve within the context of the value-based model of ERM.

The strategic model of risk management is likely to define operational risk in a much wider sense, including many issues that lie outside the quantifiable risk framework. Given risk officers' concern with the timely identification of possible faults in the workings of business units, bottom-up approaches can be expected. The quantification of operational risk here could become secondary to the understanding of the sources of it. Instead of charging business units for the operational risk they take, risk officers would seek to check the soundness of the

processes in place. Less quantitative, bottom-up, process-based approaches to operational risk are expected to surface here.

Thirdly, further research into *the dynamics of the risk management models* is warranted. Longitudinal studies of risk management models are necessary to confirm the validity of the variables that drive different risk management models. They would be useful in deciding to what extent the models proposed as alternatives are mutually exclusive. Given the seeds of Value-Based Management already sown in BWT, it is possible that another management team or a turn in the institutional pressures may bring a paradigm change in the future. Equally, should the VBM project fail to deliver the expectations attached to it, the value-based model of risk management may get discredited in Frasers. This could result in yet another overhaul of the risk management function and a redefinition of its role. Talking of such shifts is highly speculative, even though it is likely that any particular risk management mix or model would be a dynamic phenomenon and subject to change. However, from a contingency perspective one would argue that the incidents that shape the patterns in the development of risk management practices are systemic, rather than erratic, and can therefore be explained by careful studies of the underlying currents.

7.5.2. ERM AS A SOURCE OF INSTITUTIONAL LEGITIMACY (THE ORGANIZATIONAL-SYMBOLIC VIEW)

Strategic Risk Management appeared to be the salient component in BWT's risk management mix, and it was the key source of the strategic significance of the senior risk officers. In this organization Risk and Value Management was a frustrated initiative on the part of risk capital controllers, who nevertheless produced an Integrated Risk Management framework.

From an institutionalist perspective ERM was less of a new form of strategic control in the organization, than a demonstration of BWT's *adoption of institutionally appropriate risk management techniques* to the outside world. This legitimising property of applying 'best practice' Integrated Risk Management techniques came to be especially important at the time of Division X's crisis when rating agencies and investors cast doubt about BWT's capital strength and ability to contain risk. Here a process of intra-firm institutionalisation took place. In a hostile environment (Khandwalla, 1977), the management of BWT imposed its

accounting and risk control mechanisms on the division. Apart from gathering banking-style information for decision making, they also impressed upon external observers that legitimate control practices were in place. We have seen that both in the accounting and in the risk control areas a process of making Division X's practices similar to those of BWT took place. From an institutional perspective, this is not surprising: it has been observed that in conglomerates subsidiaries are compelled to adopt accounting practices, performance evaluations etc. that are compatible with the policies of the parent corporation (Coser, et al., 1982). Why? DiMaggio and Powell (1983) argue that homogenisation increases the legitimacy of the organization. Increased legitimacy stems from institutional appropriateness, which means compliance with prevailing institutionalised rules and norms, whether they are set by a parent company, regulators or emerge as a result of industry practices. While the accounting (cost) controls gained legitimacy from their very own commonness (Hopwood, 1983), the risk controls gained legitimacy from their claimed innovativeness.

What this case added to a new institutionalist appreciation was its *emphasis placed on the politics of multiple control.* Powell and DiMaggio (1991) confirm that their colleagues have paid little attention to how incumbents maintain their dominant positions or respond to threats, especially during periods of crisis and instability. This study showed risk and accounting controls not merely as striving for institutional appropriateness, but also described them as competing for top managerial attention, visibility and strategic significance.

The study brought out a *dilemma that bancassurance firms face* in the wake of recent developments in the banking and insurance regulatory environments. Given the current direction of international banking regulation, banking supervisors reward the firm-wide implementation of risk controls (The Basel Committee, 2001; Morrison, 2002). However, as Chapter 4 has shown, such firm-wide risk management attempts may well run into difficulties in the insurance part of bancassurance groups. Here, where accounting controls measure capital adequacy and ensure regulatory compliance, the risk controls lose their institutional appropriateness. The case study showed how the risk controls challenged accounting controls in the insurance unit without success. The control systems ended up confined to where they possessed institutional appropriateness. Due to the conflicting definitions of regulatory appropriateness in the banking and

the insurance world, bancassurance groups have to live with a balance of controls, which frustrates the ideal of firm-wide risk management. This warrants a reconsideration of regulatory expectations about the role of risk management in bancassurance groups, leaving scope for policy-oriented research in this area.

Moving on to an institutionalist interpretation of the observed patterns of strategic significance displayed by the risk functions, the role of corporate governance pressures warrants a pause. The shareholder value imperative and the risk-based internal control agenda have created new definitions for institutionally appropriate ERM practices, which, given the difference of emphasis between the two corporate governance notions, might diverge.

On one hand the shareholder value imperative gave rise to a distinct literature on risk-based performance measurement, and the ideal type of Risk and Value Management. It was related to the observed risk management mix described as 'value-based.' On the other hand it is the risk-based internal control agenda that brought about a separate strand in the risk management literature promoting the ideal type of Strategic Risk Management, which displays a concern with the management of non-quantifiable risk issues. This line of corporate governance thinking was related to the observed risk management mix described as 'strategic.'

However, it is an admitted weakness of the thesis is that the above links are rather tentative. A rigorous analysis of the relationship between actual risk management practices and the promotion of corporate governance agendas in the wider institutional context must be the subject of further research in the area.

7.5.3. ERM AND THE MANAGEMENT CONTROL LITERATURE

Perhaps most ambitiously, the research aimed to build bridges between organisationally grounded management control studies and the subject of risk management. Although applying highly analytical techniques that are alien to conventional management control approaches, enterprise risk management belongs to an increasing number of management innovations that aim to 'improve' strategic control in organizations. Thus ERM echoes the ambitions of recent innovations such as Value Based Management, the Balanced Scorecard and Activity Management.

The research also suggests that ERM is not unique among management control innovations in the sense that it appears to be an assembly of risk management ideal types. It appears to be a common feature of recent control system innovations that they are constituted by an assembly of practices. Various normative techniques are being advocated in different combinations under the umbrella of the very same management control concept. Distinct conceptual clusters have emerged in the Activity Management assembly (Gosselin, 1997) and in the evolution of the Balanced Scorecard (Speckbacher et al. 2003). Thus the proposed co-existence of four ideal types of risk management is conceptually similar to the existence of three levels of Activity Management and the distinction between three types of Balanced Scorecard.

Later variants within the same assembly seem to assume a 'strategic' role. The eventual aspiration to link initially confined, highly specialised or 'technical' practices to strategy is a phenomenon that appears to characterise the development of not only ERM, but other management innovations too (c.f. ABC/M, 'Type 3' Balanced Scorecard, Strategic Management Accounting).

The clustering of techniques within the same assembly is not merely conceptual, it appears in actual organisational settings too. In practice it appears that assemblies of management control innovations offer practitioners opportunities for selective implementation, revision and switching between the different sub-groups of techniques within the same assembly (Gosselin, 1997). It is remarkable that given the empirical evidence, few ABC and BSC implementations are strategic. In contrast, the ERM mixes (in the case of BWT and Fraser Bank) did possess 'strategic' significance. This study furthered the view that in order to realise the strategic potential of assemblies, advocates needed to demonstrate not only technical competence and institutional appropriateness, but also a great deal of political aptness. The organisational significance of management control practices appears to hinge upon the organizational significance of the management control practitioner.

7.5.4. LIMITATIONS OF THE STUDY

The study of two organisations enabled the researcher to get close to the field where risk managers operate. The small sample offers the possibility of acquiring a familiarity with the actors and events that appeared to be relevant to

the understanding of ERM in action. Thus it is hoped that the study was able to bring out the specificity of the particular contexts in which the observed risk managers functioned. However, the small sample size means that a trade-off had to be made. In order to reach to the depths of the cases, the researcher compromised on the breadth of the research project. A study of other organisations is warranted before one can draw out the implications of the presented research results for a more general understanding of ERM in the financial services sector.

It is worth noting that there have been much debate in the organizational literature if at all '*rich stories*' can produce '*good theoretical insights on their own.*'[292] This study sides with the position voiced by Ahrens and Dent (1998) who argue that '*the answer depends in part on one's definition and understanding of the term "theory". Too easily, we feel, are rich stories rejected as "non-theoretical", because people forget that theory can be speculative.*'[293] However, past methodological debates caution against the power of rich stories, some even claim that the power of deep studies is an illusion. As Eisenhardt (1991) warns, '*contextually rich stories lure people into thinking that they know more than they do.*'[294] Thus the explanations conveyed in this study are only some of a possibly large number of interpretations, and reflect the particular reading of the researcher.

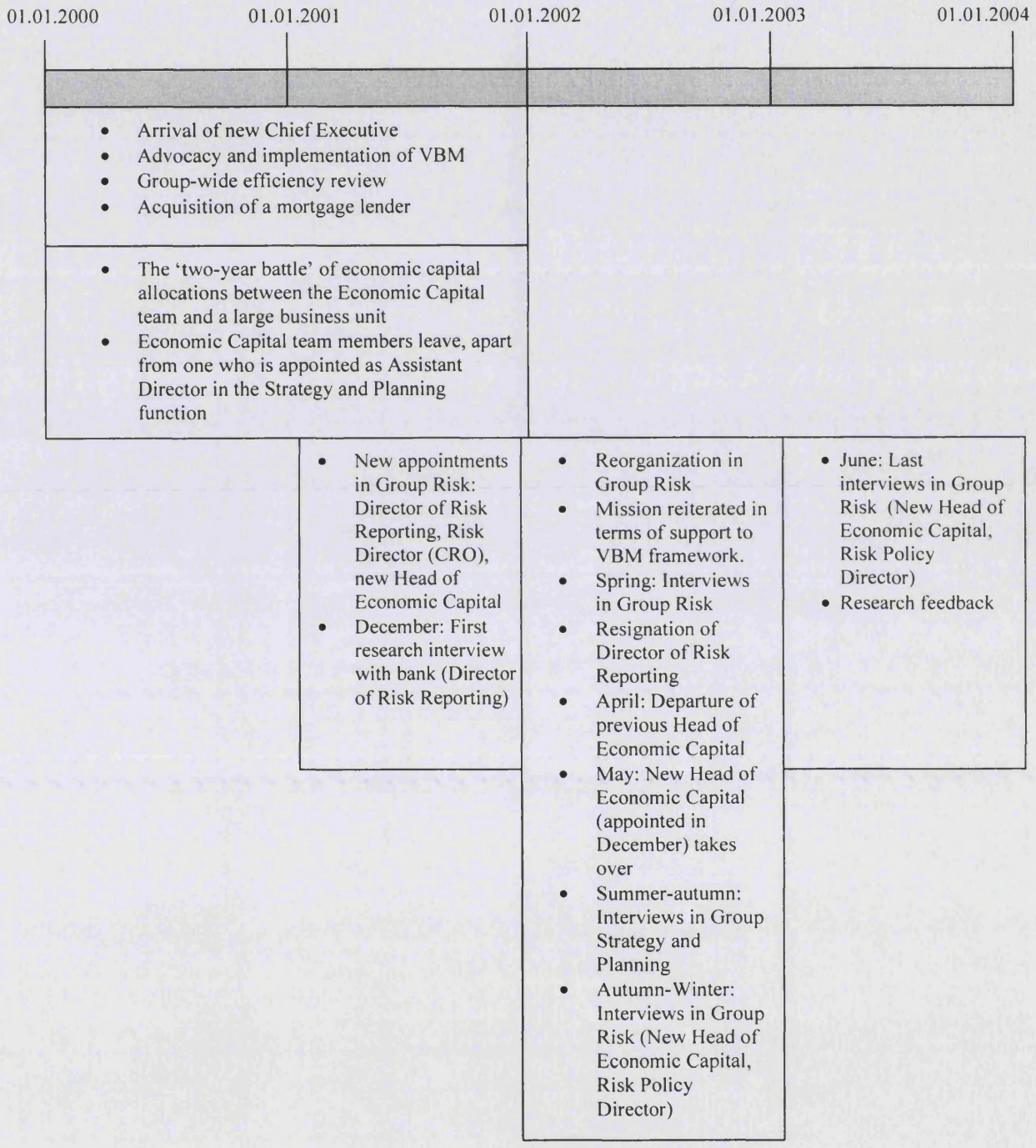
Another potential weakness of the study is that the theoretical framework deliberately underplayed the institutional aspects of risk management in action. Apart from pointing out some tentative linkages between the observed internal practices and their apparent external sources, the focus of the study was on the roles of ERM within the confines of the organisations observed. Miller and O'Leary (1990) acknowledge that '*for certain purposes intra-corporate models can be very fruitful.*'[295] However, they argue that '*to achieve a full picture of innovation we need to identify the ways in which diverse types of events – institutional, technical, political, moral – are linked together to provide the conditions which make certain types of innovation possible.*'[296] As far as the

[292] Ahrens and Dent, 1998, p.7.
[293] Ibid.
[294] Eisenhardt, 1991, p. 626.
[295] Miller and O'Leary (1990), p. 481.
[296] Ibid.

constellation of the diverse external sources of ERM practices is concerned, the study probably leaves much to be desired. In particular, we need more understanding of the processes of the conceptual invention (Miller and O'Leary, 1990) of enterprise risk management and its varied practices. These take place in and outside the confines of the individual organisations, in a number of political, regulatory and professional arenas. The study merely indicates that regulatory, rating agency and corporate governance pressures appear to influence the fate of ERM initiatives in organisational settings. It also suggests that powerful concepts originating in academia (such as the notion of cybernetic control) have a strong hold over practitioners, even thought they may be unaware of those. However, further research is needed on these wider constituencies and actors, as well as on the dynamics, discourses and interactions that take place among them. Only then can we get closer to understanding the linkages between ERM and the social processes that furnish its development.

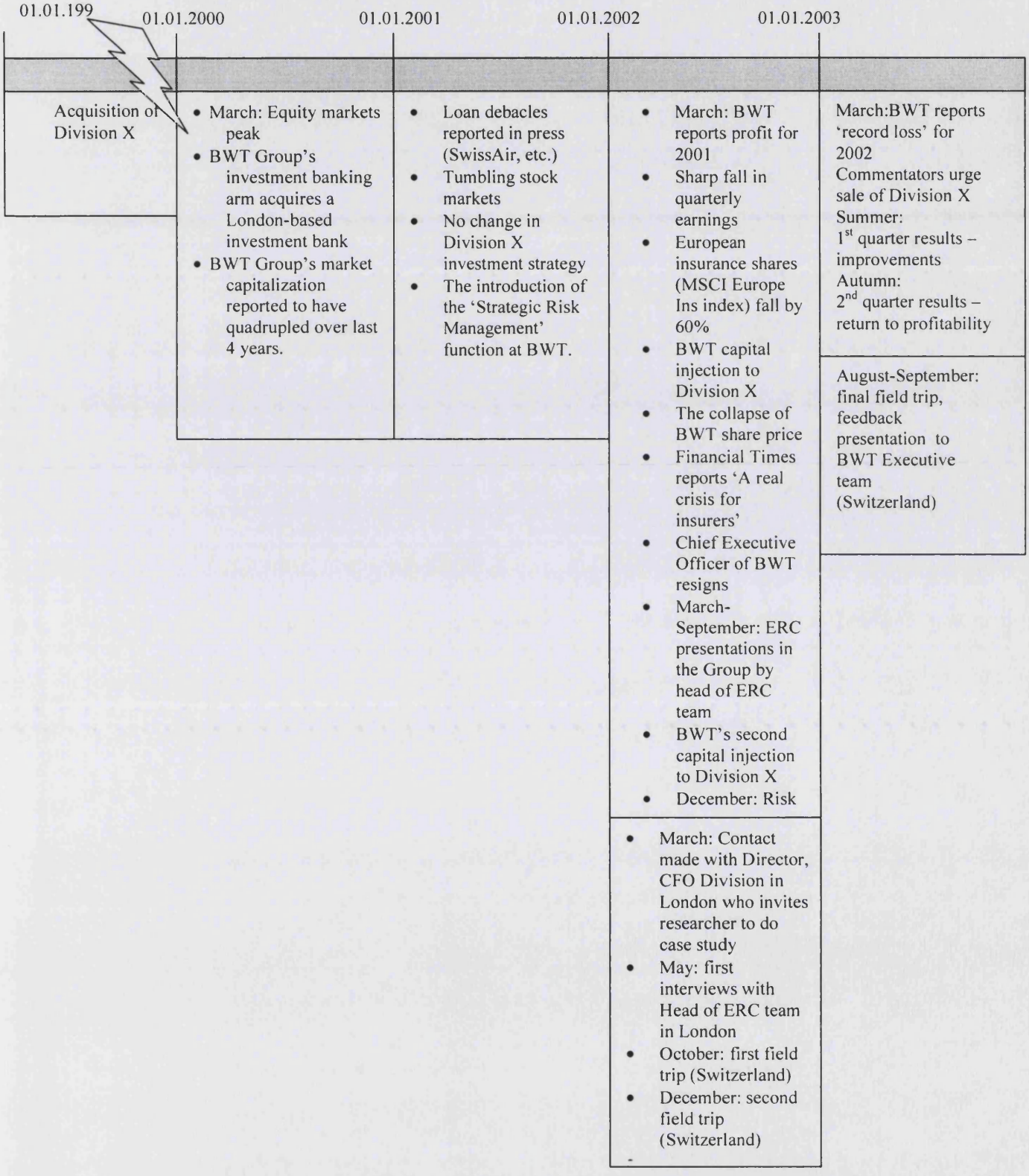
APPENDIX 1

FRASER BANK - TIMELINE



APPENDIX 2

BWT - TIMELINE



APPENDIX 3

LIST OF INTERVIEWS

LIST OF INTERVIEWS AT BWT

	Interviewee's functional position	Date
1	Head of Economic Risk Capital	26 May 2002
2	Head of Economic Risk Capital	01 June 2002
3	Head of Strategy & Projects	07 October 2002
4	Director, CFO Division	07 October 2002
5	Head of Economic Risk Capital	07 October 2002
6	Head of Operational Risk Controlling	08 October 2002
7	Head of Operational Risk Controlling	08 October 2002
8	Market Risk Controlling: Team members	09 October 2002
9	Head of ALM/Market Risk Controlling	09 October 2002
10	Head of Market Risk Controlling	09 October 2002
11	Head of Credit Risk Controlling	10 October 2002
12	ERC and Capital Management	10 October 2002
13	Head of Economic Risk Capital	10 October 2002
14	Director, CFO Division	10 October 2002
15	Head of Strategy & Control	11 October 2002
16	Head of Credit Portfolio Management	11 October 2002
17	Chief Risk Officer	14 October 2002
18	Head of Asset Liability Management, Division X	14 October 2002
19	Head of Financial Risk Control, Division X	14 October 2002
20	Head of Economic Risk Capital	09 December 2002
21	ERC and Capital Management	09 December 2002
22	Director of Group Risk Reporting	09 December 2002
23	Director, CFO Division	09 December 2002
24	Head of Financial Risk Control, Division X	10 December 2002
25	Head of Corporate Development, Division X	10 December 2002
26	Head of Asset Liability Management, Division X	10 December 2002
27	Head Strategy and Projects	10 December 2002
28	Chief Risk Officer	11 December 2002
29	Head of Credit Risk Controlling	11 December 2002
30	Head of Operational Risk Controlling	11 December 2002
31	Head of Market Risk Controlling	11 December 2002
32	Director of Legal & Compliance	12 December 2002
33	Head of Regulatory Reporting	12 December 2002
34	Group Chief Risk Officer	13 December 2002
35	Director of Group Risk Reporting	13 December 2002
36	Head of Economic Risk Capital	13 December 2002
37	Chief Risk Officer, Division X	13 December 2002
38	Head of Financial Management, Division X	13 December 2002
39	Head of Management of Closed Blocks, Division X	13 December 2002
40	Head of Economic Risk Capital	01 September 2003
41	Director of Group Risk Reporting	01 September 2003
42	Chief Risk Officer	01 September 2003
43	Head of Strategy & Projects	02 September 2003
44	Head of Operational Risk Controlling	02 September 2003

45	Head of Credit Risk Controlling	02 September 2003
46	Head of Strategy & Control	03 September 2003
47	Chief Risk Officer, Division X	03 September 2003
48	Group Chief Risk Officer	04 September 2003
49	Director, CFO Division	04 September 2003
50	Director, Group Financial Accounting	04 September 2003
51	Head of Credit Portfolio Management	05 September 2003
52	Chief Credit Officer	05 September 2003
53	Head of Economic Risk Capital	28 September 2004
54	Head of Operational Risk Controlling	28 September 2004

LIST OF INTERVIEWS AT FRASER BANK

	Interviewee's functional position	**Date**
1	Risk Management Team meeting	19 October 2001
2	Director of Risk Reporting	20 December 2001
3	Head of Economic Capital (previous)	06 February 2002
4	Head of Economic Capital (previous)	15 April 2002
5	Director of Risk Reporting	10 May 2002
6	Director of Risk Reporting	18 June 2002
7	Assistant Director 3, Group Strategy and Planning	30 May 2002
8	Assistant Director 2, Group Strategy and Planning	30 July 2002
9	Director of Risk Reporting	12 September 2002
10	Assistant Director 2, Group Strategy and Planning	23 September 2002
11	Assistant Director, Group Strategy and Planning	24 September 2002
12	Head of Economic Capital	21 October 2002
13	Assistant Director, Group Strategy and Planning	05 November 2002
14	Head of Economic Capital	05 November 2002
15	Director, Group Risk Analysis and Policy	22 November 2002
16	Head of Economic Capital	22 November 2002
17	Director, Group Risk Analysis and Policy	27 November 2002
18	Director, Group Risk Analysis and Policy	06 December 2002
19	Director, Group Risk Analysis and Policy	19 June 2003
20	Head of Economic Capital	19 June 2003
21	Assistant Director, Group Strategy and Planning	19 June 2003

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