

**Dual use of budgeting in uncertainty contexts:
Explorative study of senior sales and marketing managers**

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April 2008

Acknowledgements: We are grateful to T. Hopper, W. van der Stede, K. Lukka, R. Simons, H. Norreklit, V. Malleret, and two anonymous reviewers who provided comments on previous drafts.

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Abstract

For many companies, budgets are a key instrument to control behaviour, relying on individual target-setting and performance evaluation based on accounting performance measures. However, in perceived environmental uncertainty (PEU) situations, budgeting faces two difficulties: setting realistic objectives in a poorly predictable context while at the same time achieving a fair performance evaluation when uncertainty has affected results and their controllability.

Based on prior accounting literature and Simons' framework (1990, 1995), we explore the use of budgets in PEU situations in a qualitative study. We conducted a field-based study and interviewed 14 senior sales and marketing managers from various industries, using projective techniques imported from psychological research.

Our field results confirm an interactive use of budgets in PEU situations and highlight two practices: (1) intense interactive debate and dialogue at all organisational levels, both at target-setting time and throughout the year; and (2) additional use of non-accounting, more subjective performance evaluations. However, we also find that beyond this interactive use, budgets remain important for short-term performance evaluation and achieving the company's global budgetary objectives. Work-based arrangements facilitate this "dual use" of budgeting. Our findings suggest that a process of *mutualisation*—risk- and effort-sharing—takes place, emphasising achievement of the company's overall budgetary objectives promised to the shareholders. This process fosters a more collective, global management of uncertainties while simultaneously allowing individual performance evaluation.

Keywords: budgeting - uncertainty – perceived environmental uncertainty (PEU)-interactive control system (ICS) – sales and marketing managers.

1. Introduction

In many large companies, budgets are a key control device, relying on individual target-setting and performance evaluation based on accounting performance measures. Accounting literature on environmental uncertainty has emphasized the limits of budgeting (Govindarajan, 1984; Brownell, 1985; Williams, Macintosh and Moore, 1990). In a fast-changing, unpredictable environment, budgeting faces at least two difficulties: setting realistic objectives in a poorly predictable context while at the same time achieving a fair performance evaluation when uncertainty has affected results and their controllability (Hartmann, 2000).

Consequently, the use of budgeting as a control device, which increases pressure on management, should be limited in perceived environmental uncertainty (PEU) situations. However, studies that have examined the effects of uncertainty on budget emphasis have produced conflicting findings: some have shown a limited use while others increased use of budgeting-based measures for performance evaluation in PEU situations.

Besides, uncertainty increases the need for organisational flexibility, as firms must be able to adapt to unexpected changes in the environment (Dent, 1987). Simons (1990, 1991, 1994, 1995, 2000) suggests that some management control devices can be used as interactive control systems (ICSs) to enable management to cope with strategic uncertainties. More specifically, budgeting could be used as an interactive management control system (MCS), turning goal-setting and monitoring into a platform for continuous discussion between different management layers—action plans and strategies being discussed on an ongoing basis, increasing the company's responsiveness to the external environment. Simons (1995) suggests that a different management control device should be used for diagnostic control and performance evaluation. He claims that in PEU situations, one MCSⁱ will be used interactively. However, when the budget—"profit planning systems"—is used interactively, formula-based incentives will not work and there will be a need for subjective assessment and rewards (Simons, 2000). Simons thus acknowledges the difficulty of using a budget both diagnostically and interactively at the same time; the issue is about reconciling the conflicting needs for flexibility and formal control that increase in PEU situations.

The use of budgeting in PEU situations deserves further examination. On the one hand, PEU may foster an interactive use of budgeting. On the other hand, budgetary objectives remain

imperative and budget emphasis may still be at work. This paper aims at gaining insights into the complexities of this dual use of budgeting in PEU situations.

To this end, we conducted semi-structured interviews with senior sales and marketing managers from a variety of industries, with the aim of capturing their actual experience. We imported projective techniques from psychology-based research and used carefully-designed evocative visuals to encourage the interviewees to talk and express their feelings.

Our findings confirm those of Simons (1995), but also suggest the existence of work-based arrangements for explaining the dual use of budgeting in practice. First, our study exemplifies Simons' ideas: the managers describe an interactive use of budgets. More specifically, two practical aspects of budgets used as ICS with more intense relationships up and down the line—with their superiors and teams, respectively—and the additional use of subjective evaluation criteria for rewarding performance.

Second, we observed that the budget can be used as an interactive MCS while remaining a crucial component of the performance evaluation system (PES). In addition, the field study provides insights into work-based arrangements which permit this dual use of budgeting. There is evidence of an organisational risk- and effort-sharing arrangement among divisions, which some managers called *mutualisation*. When uncertainty affects one division during the year, top management may ask another division to achieve a higher performance. As the top management's primary emphasis is on achieving the overall budget objectives, it develops strategies to balance out results in order to do so. *Mutualisation* entails information sharing and the use of budgeting as an ICS. Besides, *mutualisation* does not jeopardize perception of fairness in individual accounting-based performance evaluation. The managers consider it fair to reward individuals who have put in more effort to make up for the poor results of other markets. Further more, in the long term, advantageous and disadvantageous situations may affect individuals evenly. *Mutualisation* thus makes possible the dual use of budgeting.

Section 2 reviews the literature and presents our research objectives. Section 3 is devoted to the research method, notably data collection based on projective techniques, as well as data analysis. Section 4 reports our field results. The final section discusses our findings and considers the limitations of the study.

2. Literature background and research focus

Prior literature reveals conflicting findings regarding use of budgeting in PEU contexts. Since Argyris (1952, 1953) and Hopwood (1972), a stream of behavioural empirical literature has discussed the roles and use of budgeting in relation to performance evaluation and reliance on accounting performance measures (RAPM) under uncertainty conditions, but has failed to provide conclusive answers (Section 2.1). We use Simons' MCS framework for better understanding of the use of budgeting in uncertainty contexts (Section 2.2).

2.1. Budgeting in perceived environmental uncertainty (PEU) contexts

Uncertainty was one of the earliest and most prominent variables examined in early contingency research of the 1960s (Burns and Stalker, 1961; Woodward, 1965; Lawrence and Lorsch, 1967; Thompson, 1967; Perrow, 1967; Galbraith, 1973). More specifically, PEU has been defined as the uncertainty arising out of the external environment of a firm, referring to “*the unpredictability in the actions of the customers, suppliers, competitors and regulatory groups that comprise the external environment of the business unit*” (Govindarajan, 1984, p.127). Besides, PEU lies in the managers' *perceptions* of uncertainty in their environmentⁱⁱ rather than *actual* uncertainty. As suggested by Weick (1969), organisational members form an image of the environment—he terms a process of *enactment*—and “*respond to the enacted environment rather than to the objective environment*” (Gordon and Narayan, 1984, p.34).

Much tension appears in the conflicting findings of prior literature regarding the reliance on accounting controls and the pressure to meet targets under conditions of perceived uncertainty. A stream of literature suggests that uncertainty limits the use of budgeting as a control device, based on target-setting and individual accounting-based performance evaluation (Govindarajan, 1984; Brownell, 1985; Williams, Macintosh and Moore, 1990; Imoisili, 1989). First, uncertainty makes target-setting more difficult. As Galbraith stated (1977, p.36): “*the basic effect of uncertainty is to limit the ability of the organization to preplan or make decisions about activities in advance of their execution*”. Uncertainty causes difficulty in making predictions, which hinders budgetary target-setting (Govindarajan, 1984). Second, uncertainty is problematic at the performance evaluation stage as individual managers may be unable to achieve their pre-set objectives due to uncontrollable factors. Uncertainty makes it difficult to

assess whether good (poor) accounting results are the result of good (poor) managerial effort or (dis)advantageous circumstances (Hartmann, 2000). For this reason, uncertainty causes difficulties in the implementation of the controllability principle. This common textbook principle states that “*managers should only be assigned responsibility only for what they can control*” (Atkinson et al., 1997). Adherence to this principle is considered desirable as it indicates that performance evaluation should be “fair” (Merchant, 1987, p.77), while non-adherence generates dysfunctional behavioural effects, especially a lack of managerial motivation. This would suggest that PEU limits the use of budgeting as a control device.

Prior research on this issue has provided contrasting results. Some empirical studies have concluded that uncertainty induces lower budget emphasis and the use of subjective elements in performance evaluation. For instance, superiors would take managerial efforts into account in unfavourable uncertainty contexts (Govindarajan, 1984; Govindarajan and Gupta, 1985). Govindarajan (1984) found a negative relationship between environmental uncertainty and RAPM; Govindarajan and Gupta (1985) observed the use of subjective dimensions for performance evaluation in high PEU business units.

In contrast, other studies suggest that the use of budgeting as a strict control device is reinforced in high PEU contexts. They argue that budgeting is used as a structured framework to signal priorities, a reminder of the objectives and a reliable benchmark in a turbulent environment. Ezzamel (1990) found that accounting performance measures were used more frequently under conditions of high uncertainty, the rationale being that larger, decentralized firms would emphasize formal communication means when faced with uncertainty. Ezzamel’s results corroborate a number of other studies (Khandwalla, 1972; Merchant, 1981; Simons, 1987).

Moreover, empirical research regarding the principle of controllability has shown that it is rarely implemented in a strict manner (Bushman et al., 1995; Dent, 1987; Drury and El-Shishini, 2005; Merchant, 1987; Otley, 1990; Vancil, 1979). Theoretical arguments have been also provided to support the idea that “perfect” controllability is not desirable (MacNally, 1980; Choudury, 1986; Merchant, 1987). Implementing a perfect controllability principle might work against organisational effectiveness, and take away a manager’s motivation to exert as much

influence as possible on events. First, Choudhury (1986) suggests that the organisation should allow a manager in a situation of failure to rather blame external factors. Internal attribution of failureⁱⁱⁱ would cause helplessness and self-blame, which could be counter-productive in terms of self-efficacy: *“It is desirable for the organization to assist the manager in finding external attribution for failure caused by non-controllable factors, even if it reduces his perception of control, so as to retain his self-efficacy and to avoid dysfunctional consequences of its loss”* Choudhury (1986, p.192). Second, Merchant (1987) introduces the notion of “uncontrollable but relevant factors”: when confronted with PEU they can not control, managers may still be able to influence the outcomes, making performance evaluation based on non-controllable factors both feasible and desirable. It would provide managers an incentive to exert some influence upon the events. Besides, managers tend to regard themselves as “managerial entrepreneurs” whose job it is to bear a certain level of risk (Merchant, 1987).

Furthermore, there is significant evidence of budgets becoming more important to provide direction and control under conditions of uncertainty. Some authors (Marginson and Ogden, 2005(a), 2005(b)) have shown that managers appreciate budgeting in a PEU context as it offers some stability and structure—a fixed reference in a fast-changing environment. Reasons include that budgeting can play a role as routine and ritual, reducing anxiety at both the organisational and individual level.

In sum, as highlighted by Hartmann (2000), RAPM in PEU contexts is paradoxical: PEU limits the “feasibility” of controls due to the limited controllability but increases its “desirability”, i.e., need for controls. Therefore, the use of budgeting in high PEU situations deserves further attention. As suggested in previous management control literature, tensions are likely to be important, as a changing environment calls for fluidity and flexibility, as well as for structure and order, in management practice (Dent, 1987). Budgeting, as a formal control device thus faces contradictory imperatives and is likely to require adjustments and adaptation.

2.2 Dual use of budgets as diagnostic and interactive control systems

MCS used according to traditional models of cybernetic organisational control tends to focus on compliance to pre-planned objectives and standards (Anthony, 1965). In this case they represent a coercive device, which may work as a coercive type of formalisation^{iv} (Adler and Borys, 1996). However, some authors (Dent, 1987; Simons, 1990; Chapman, 1998) have

suggested that in uncertainty contexts, “[MCS] may be used differently and enable employees to deal more effectively with inevitable contingencies” (Ahrens and Chapman, 2004, p.279). Enabling, coercive formalisations are likely to drive very different attitudinal outcomes^v and different assessments of “fairness”, i.e. of good and bad MCS (Adler and Borys, 1996, p.62). Moreover, a number of these management control studies suggest that in PEU contexts management control practices combine coercive and enabling characteristics (Dent, 1987; Simons, 1990; Chapman 1998; Ahrens and Chapman, 2004). There is a need for better understanding of how^{vi} MCS might be used simultaneously to support and constrain operational management. We use Simons’ distinction between interactive and diagnostic MCS as a framework to examine this question^{vii}.

Simons (2000) suggests that organisations need to rely both on a diagnostic control system (DCS) and an interactive control system (ICS). DCS are defined as “*formal information systems that managers use to monitor organizational outcomes and correct deviations from preset standards of performance*” (Simons, 2000, p.209). In contrast, an MCS is labelled interactive when: (1) information generated by the MCS forms an important, recurring agenda addressed by top management levels; (2) data are interpreted and discussed in face-to-face meetings of superiors, subordinates and peers; and (3) the process relies on ongoing discussion of underlying data, assumptions and action plans (Simons, 1987; Simons, 1991).

Budgets can be used as DCS, with variance analysis regarded as a cybernetic feedback system: objectives are set and results are monitored; and variances are computed, analysed and used in identifying new action plans. When budgets are used as a diagnostic tool, they also serve the traditional purpose of evaluating performance and delegating responsibilities to individual organisational members. However, budgets may also be used interactively, in which case they will be a “*dynamic and proactive tool to gather information and stimulate discussions*” (Simons, 1991, p.61) that facilitates monitoring of the strategic uncertainties of the firm or business unit. Simons (1990) has emphasized that budgets are used in an interactive manner, describing situations where budgets are the “*focus of a good deal of debate among managers ... They are used as agendas to discuss tactics, new marketing ideas, etc.*” (Simons, 1990, p.134). In its more sophisticated management use, the budget could activate organisational learning and allow new strategies to emerge through inter-hierarchical dialogue (Kloot,

1997)^{viii}. Like most interactive MCS, interactive budgets enable the firm to cope better with perceived strategic uncertainties.

Simons has made the following claims: (1) in PEU contexts, one MCS only is used interactively, and (2) which MCS depends on the perceived uncertainties and on the industry: *“profit planning systems [budgets] are used interactively in firms with a desire to compete through product and market innovations”* (Simons, 1991, p.55); and (3) if the budget is used interactively, formula-based incentives may not work, thus there is a need for subjective assessment and rewards (Simons, 2000). As a consequence, Simons finds that budgeting may have a dual use, which he regards as problematic: *“Managers who wish to use a profit plan [budget] interactively face a special problem [...] How can a profit plan [budget] be used both diagnostically and interactively at the same time?”* (Simons, 2000, p.225). Contingency “buffers” may protect key diagnostic targets in cases when profit plans [budgets] must be used both diagnostically and interactively at the same time: *“In a highly competitive, innovative business, the senior manager might build in a contingency that would hold participants accountable for an initial target of \$11 million with \$1million contingency fund [for a 10 million “real” target] that could be drawn upon, after mutual agreement”*(Simons, 1995, p.120-121). Although Simons has contributed to highlighting issues related to the duality of budgeting, the question remains rather peripheral to his work. Our study aims at better understanding Simons’ claims about the “dual use” of budgeting in PEU contexts. We explore more specifically how interactive and diagnostic uses of budgets are simultaneously possible in organisations, thus gaining insights into how organisations reconcile the need for flexibility and adaptation while maintaining budgetary pressure for performance evaluation.

3. Research design

In this explorative study, we have sought to clarify how managers experience and cope with uncertainty in the budgetary process. We conducted 14 semi-structured interviews with senior sales and marketing managers from 13 companies^{ix} operating in a variety of industries. Our aim was to capture the actual budgeting experience of senior sales and marketing managers.

3.1. A multiple research site field study

There has been a long-standing case for qualitative, field-based research in management (Morgan and Smircich, 1980; Yin, 1984; Bruns and Kaplan, 1987; Scapens, 1990; Miller, 1996; Ahrens and Dent, 1998). Some budgeting studies (Lukka, 1988; Abernethy and Brownell, 1999; Frow et al., 2005) have adopted such an approach. In management accounting, most of the explorative field work has been case-based rather than cross-sectional. In marketing literature, on the other hand, explorative studies have made extensive use of semi-directive interviews with varied interviewees' profiles (e.g. Aaker, Kumar and Day, 2006). While case studies still have a lot to bring to explorative management accounting research, we decided to use the multiple sites approach, and conducted interviews with managers in various industries. First, multiple research site studies may help researchers to uncover the reasons for conflicting results and ambiguities in prior research (Lillis and Mundy, 2003, 2005)^x. Second, comparing different research sites, we were able to look for similarities and differences across organisations. Similarities helped us gain some external validity, as we could identify patterns. For instance, when the same uses of budgeting or the same practices—such as *mutualisation*—are found in various industries or companies, such practices gain significance in furthering understanding of budgeting complexities. Third, we aimed at building the highest possible level of trust with our interviewees (Moorman et al., 1993). No more than one manager from each company was interviewed, providing assurance that no organisational use would be made of statements made. During the interview, the manager was in a neutral, safe, enclosed space, allowing reflection in privacy.

We only conducted a limited number of interviews (14) compared to those of previous cross-sectional studies (Merchant and Manzoni, 1989; Bruns and MacKinnon, 1993). This reflects the explorative nature of the study, which aimed for an in-depth analysis of the material to capture the complexity of the use of budgeting in PEU situations.

3.2. Sales and marketing interviews

We conducted interviews with senior sales and marketing managers. Sales and marketing departments are exposed to the external environment and—although to varying degrees—to rapidly changing and not always easily predictable markets. For example, there is a high degree of uncertainty in the sales transformation process when economic uncertainty, regulatory

changes and competitors' responsiveness may affect the relationship between sales effort and sales output. Therefore, sales and marketing can be considered a field worth capturing perceived uncertainty on and its consequences^{xi}.

Sales and marketing departments have some specificity. First, historically, sales force managers have tended to emphasize reward systems based on the attainment of sales objectives (Churchill et al., 1985). Second, the sales budget is the starting point for corporate budgeting. Target-setting and the achievement of objectives are all the more important at the sales level as an (in)appropriate sales budget cascades down over the rest of the organisation's budgets—production, purchasing, investments and so forth. In sum, sales and marketing is a departmental area where the pressure to meet budgets is likely to be high. While this degree of specificity certainly limits the generalisability of our explorative findings, it also reveals some interesting features for better understanding of how managers experience budgeting in PEU contexts.

We conducted interviews with senior executive sales and marketing managers who were relatively homogeneous in terms of nature and level of responsibility. All managers reported to a divisional managing director in a business unit. They were in charge of clearly identified, measurable budgetary objectives: sales, cost of resources to achieve sales objectives and additional longer-term issues related to customer satisfaction, customer loyalty, brand awareness and brand perception.

With our focus on the sales and marketing functions, we sought to cover as much variety as possible in terms of industries and distribution channels, in order to capture possible differences across industries. The respondents' companies included firms in the sectors of environment utilities, beverages, food/tobacco, pharmaceuticals, equipment, telecommunications, computers services, transportation, computer equipment, food, packaging, and healthcare. All the companies were of significant size, as large firms are more likely to have implemented sophisticated, formal budgeting and performance evaluation processes.

Trust, between the interviewer and the interviewees, has been identified as a significant factor in enhancing the quality of interview data (Moorman, Zaltman and Deshpandé, 1993). Our research design therefore relied on interviewees whose level of trust in the interviewers was previously high in order to create a favourable relationship for collecting data. Besides, we promised entire confidentiality to the interviewees, making clear that no organisational or

institutional use would be made of the interview content. The interviews were intense and lasted on average 1½ to 2 hours.

3.3. Data collection

Our aim was to identify how the managers' perceptions of uncertainty affect their budgeting practices. The exploratory semi-structured interviews enabled us to discuss the managers' perceptions and personal experiences in relation to uncertainty, budgeting and performance evaluation. Visuals were employed simultaneously with a semi-directive interview protocol, the visuals being an additional stimulus for the interviewees. "*Creative interviewing allows research subjects to express themselves more freely, and thus to have a greater voice in the research process*" (Fontana and Frey, 1998, p.62). The use of visuals during interviews belongs to projective methods, which have long been in use in marketing research (Haire, 1950; Mason, 1996). A professional illustrator drew the carefully-designed visuals that accompanied our questions in a deliberately elusive style, suggesting a range of situations and attitudes. We defined the topics of the visuals for the illustrator based on concepts from the budgeting literature (for instance, job tension, budgetary participation etc.). While this underlying framework certainly shapes to some extent the interviewees' answers, the visuals encouraged the managers to allude to much broader issues, such as trust or *mutualisation*. Interestingly, interviewees interpreted the visuals differently.

The early stages of the interview concerned issues of the organisational design, the manager's position in the company, as well as the specificities of the industry and perceived uncertainties. Then, four series of visuals were introduced. Each series concerned specific aspects of the budgeting cycle, at three different times: target-setting time (two series of visuals, A and B); throughout the year, as unexpected events make it difficult to stay "on budget" (Series C); and at the end of the year, if the objectives have not been achieved (Series D). Regarding the target-setting time, Series A was used to better understand how target-setting in uncertainty situations was experienced from an individual, cognitive point of view, while Series B focused on the social or relational experience included in target-setting.

When shown the visuals, the managers expressed what they called to mind, relating these spontaneous associations to individual organisational experience, sometimes leading to short

narratives. During the interview, we sometimes introduced semi-directive questions from the protocol to allude to dimensions that were not spontaneously addressed by the interviewee.

Used as an indirect technique for measuring an individual's underlying motivations, "*there is sufficient empirical evidence that this [projective] approach to the measurement of attitude expression is fruitful and valid.*" (Weschler and Bernberg, 1950, p.225). In practice, our experience of using them in addition to a semi-structured interview protocol confirms that such methods encourage the managers to talk about their own motivations (Barth and Rive, 2005). Within a time-constrained interview, the visuals helped the managers to focus discourse on perceptions and feelings. For example, in order to capture whether openness and information sharing are common practices in their organisation, we left them the option through their choice of visuals to focus on pictures evoking such practices. In Series C, for instance, some interviewees alluded to openness and transparency, some to solidarity, and others to nothing. Overall, the managers produced very little "politically correct" discourse.

To summarize, the semi-structured interviews covered the following topics: the organisational and external environmental contexts of operations, the goal-setting and target-setting processes, the role of budgetary information in guiding action and decision-making during the year, and finally target achievement and performance evaluation.

3.4. Data analysis

Fully-transcript interviews (18 to 25 single-spaced pages each) provided a rich set of data on which we conducted two complementary kinds of analysis. The first type of analysis, horizontal analysis, compares the different managers' perceptions and discourse on categories, identifying similarities and specificities across companies. The second type, vertical analysis, aims to reconstitute the cause-and-effect relationships in a specific manager's thinking and discourse.

Horizontal analysis

Our horizontal analysis begins with the perception of environmental uncertainty (Category 1, Table 1), based on the first set of non-directive questions put to the managers. The four series of visuals used during the interviews underlie the rest of the horizontal analysis.

Insert Series A

Series A relates to the manager's feelings when required to define and negotiate objectives: the pictures helped interviewees to reflect on the extent to which they felt possible anxiety, boredom or emphasis on target-setting. Based on series A, the categories that we used to code the findings are:

- Is the target-setting perceived as difficult? Why? What are the effects of PEU on target-setting? (Category 2a, Table 2)
- How formal is the target-setting process? (Category 2b, Table 2)
- How much commitment is there to the target-setting process? Does budgeting matter to the manager? (Category 3, Table 2)

Insert Series B

Series B was designed to raise the issues of relations between the manager, top management and colleagues at target-setting time. We sought in particular to capture whether any collaborative work was involved, and to define the nature of exchanges between the various hierarchical levels at that stage. Based on the visuals, the manager would reflect on the perception of the nature of work at target-setting time: working alone, in a one-to-one relationship with a superior, or collaboratively in a team—with colleagues and/or the boss. Many managers then emphasized that the collaborative work for setting the coming year's targets was not limited to target-setting time, but was ongoing throughout the year. Two categories are thus based on Series B:

- Is target-setting an individual or a collaborative task? (Category 4, Table 2)
- Does target-setting result from a one-shot exercise, as limited in time as possible, or is it an ongoing activity? (Category 5, Table 2)

Insert Series C

Series C dealt with what happens during the year, especially when it becomes clear that expected results may not be achieved. Building on managers' reactions to the visuals, we were able to explore the approaches adopted when results are lower than expected—for instance, when a significant negative variance is observed. The managers saw and described a great variety of situations in the visuals, probably a reflection of their different experiences of what

happens at such times. We coded the results in our horizontal analysis according to the categories underlying the design of the visuals:

- Is information shared with superiors or the team? (Category 6, Table 3)
- Are the problems addressed individually or collaboratively? (Category 7, Table 3). This category can itself be split into two separate components which emerged during the interviews:
 - Does top management actively get involved to find a solution when the situation deteriorates, or does it remain aloof, raising the pressure without participating in the search for solutions?
 - Can the overall objectives assigned to the division be reallocated to other colleagues? In other words, is the manager ever asked to do more during the year because other divisions are not performing as well as expected? Does the manager ever ask more of certain subordinates because some markets managed by others will clearly fall below their objectives?

Insert Series D

Finally, Series D alluded to various possible year-end situations for a manager who has failed to meet the budget. Failure may be likened to entering a tunnel, or a blame game. Alternatively, failure may be experienced positively as a learning opportunity, or somebody—such as a superior or colleague—may assist. Looking at the visuals, many managers mentioned sanctions that apply for non-achievement of the budget, the factors taken into account in performance evaluation, the superior's attitude, the collective versus individual perception of failure. We let them elaborate and possibly asked further questions on the categories forming the basis for our horizontal analysis:

- Do formula-based incentives work? How? (Category 9, Table 4)
- Are there any short-term subjective rewards? How do they work? (Category 10, Table 4)
- Are there any long-term subjective rewards? What does a career depend on? (Category 11, Table 4)

In other words, one of our aims was to understand whether the short-term individual bonus is strictly dependent on achievement of the initial budget objectives. We wished to know whether a manager who does not achieve the targets set would receive no bonus at all or a partial bonus based on qualitative objectives, such as personal development, attitude and efforts.

Furthermore, we gained insights as to whether the short-term bonuses have a collective component or not, and whether rewards are partly individual or partly collective. Alternatively, reward systems can make individual objective-based bonuses conditional upon achieving overall objectives, awarding no individual bonus if the collective target is not met, even if individual performance is outstanding.

Finally, beyond the short-term bonus (the current year), we looked at the impact of the manager's financial results on career in the medium term. Especially, we assessed how much consideration is given to qualitative aspects versus the individual's accounting performance.

In sum, the horizontal analysis has given us insights into whether, and how, budgeting was used both interactively and for performance evaluation.

Vertical analysis

The vertical analysis of the interviews translates the categories used in the horizontal analysis into stories that make sense. It also identifies the relationship between PEU in a given industry and certain budgeting practices. For instance, a manager in charge of international telecommunications sales covers national markets with high political and economic risks, and, therefore, considers that unexpected problems may arise at any time in these markets. Consequently, budgeting is used in an interactive manner and action plans are adjusted on an ongoing basis. The vertical analysis furthers understanding of "new" categories that emerged in the open interviews, such as mutualisation.

Our vertical analysis was validated by sending out our synopsis of the interview to the manager, who was free to validate the associations and interpretations.

4. Results

We present our results in two sections. Section 4.1 describes the findings of the horizontal analysis along the main data analysis categories. Section 4.2 presents the vertical analysis of two short cases which we found particularly illustrative of the effects of both perceived uncertainty and emerging categories.

4.1. Horizontal analysis

This part describes what we found across organisations.

First, we identified varied sources of uncertainty across industries. For instance, in healthcare, the distributors' demands are largely unpredictable. Senior sales managers must turn in the following year's budgets before the beginning of top-level negotiations with very powerful distributors (food retail channel). If a negotiation with a major distributor fails, the company could lose up to 20% of its sales. Such a risk exists at target-setting and also during the year.

*“There's great uncertainty, because we've always got to go through this channel ... relations are tense, like they are whenever you're dealing with someone more powerful than yourself. If there's a problem during negotiations, they lose 0.1%, in other words nothing, whereas I lose 20% of my sales revenues, so there's no room for discussion at all. The balance of power is completely unequal.
... Realistically, you have to remember that our approach involves an intermediary channel: the distributor. If the product is unavailable (from the distributor), the final customer won't buy it.”
(Healthcare)*

In the tobacco industry, changes in the legal context - speed and level of anti-tobacco regulation and tax developments in the various countries - are a major source of PEU:

“When the government decides to raise taxes, [...], in our line of trade sales may collapse...” (Tobacco, Company A)

In geographically-diversified companies, currency fluctuations may be another source of PEU. Shifts in currency value can affect pricing decisions and threaten margins.

To summarize, we found a variety of specific sources of PEU across industries: threats from the powerful distribution channels; market volatility and sensitivity to the economic situation (for instance, cyclic markets); legal and tax developments affecting products; market deregulation and globalisation; competitors' attitude; and risks associated with new product launches. Combined with budgetary pressure, these different sources of uncertainty all make the senior sales and marketing managers perceive their environment as highly uncertain.

Insert Table 1 here

Second, the findings help us understand better how, as PEU strengthens, managers are affected at target-setting time, during the year and at the time of year-end performance assessment.

Target-setting

Insert Table 2 here

We found several similarities. First, in every single case, PEU, whatever its source, impinges upon target-setting. A telecom company provides one example. The manager is in charge of different international areas, which have grown in importance. However, some of these areas

are located in turbulent geopolitical contexts, for instance in certain African countries. Sales are particularly unpredictable in such countries: they may climb to never-reached levels and grow by double-digits, or just collapse if the political situation deteriorates during the year. The lack of predictability seriously hampers target-setting:

“There are unpredictable factors that are beyond our control; for instance, the geopolitical situation in Ivory Coast or Congo. It’s a real headache setting objectives for those places!” (Telecommunications)

In most cases, sales targets are also used later as a reference for the sales force’s variable compensation. This makes target-setting be perceived as an even more risky and difficult exercise:

“Don’t fool around with target-setting, because 40% of people’s salaries are performance-based, so they depend on how well you budgeted... If you set them a non-realistic target, there’s no motivation. And I don’t have two figures, one for them, one for my boss... Just one.” (Pharmaceuticals)

Second, the target-setting process is formalized in every case, and usually also very detailed. Third, all industry cases but three—*Equipment, Computer equipment, and Food*—involve considerable discussions, *commitment*, and some form of interaction in the budgeting process. The managers describe intense discussions between the different hierarchical levels—above and below sales and marketing managers. Instead of arm’s-length management, there is ongoing interaction all year with teams and/or superiors. The chief executive officer (CEO), the managing directors, sales directors, brand managers and product managers, all have daily contact with each other, develop information systems to monitor market trends closely and decide on strategies following an in-depth collective debate. At target-setting time, the managers question both the targets and the underlying economic assumptions, comparing views on possible developments in the business environment. The senior sales and marketing managers listen carefully to their teams and work closely with them.

“When I’m working on the budgets with my area managers, we have a proper discussion. I ask them to explain why they think one orientation is better than another... in the end we always manage to reach a consensus.” (Beverages)

Discussions can include attentive examination of operational strategies and in-field initiatives. Throughout the dialogue, the managers try and capture potential environment changes, their possible adverse effects and the appropriate responses. For instance, in the pharmaceutical industry, sales and marketing campaigns have a direct impact on the level of sales; over time, the managers develop an empirical knowledge of what return on investment (ROI) to expect

from different actions. Before validating any action plan, the senior sales and marketing manager seeks to understand the underlying assumptions, so that alternative scenarios can be explored and enacted if the assumptions change during the year.

“Bottom-up budget development is really detailed. Incredibly detailed. I have a sheet listing all the campaigns, and I discuss the points one by one. For example, I’ll say to one of my colleagues: I think the return on investment has been underestimated for this operation; looking at the last one we did, it brought in so many patients, so I think your forecasts are a bit lightweight...” (Pharmaceuticals)

Analysing differences across firms also provides insights. First, interaction is in some cases limited “up the line” (i.e., by top management), but remains important “down the line” (i.e., by teams), and all the more so when top-down financial pressure is intense^{xii}. Second, we found that the managers with the highest PEU are those experiencing the most top-down target-setting. When top-down pressure is intense, PEU, which corresponds to perceived risk, is higher. To reduce PEU, managers need to reinforce interaction with their teams. PEU is reduced where interaction is greatest, and remains high when there is little interaction with sales teams. This result confirms that PEU is linked to perceived target-related risk rather than environmental turbulence.

Third, the perceived difficulty in target-setting is experienced to varying extents, but there is no clear relationship between the level of PEU and the level of difficulty in target-setting. In a top-down process, the target-setting difficulty increases down the line, when it comes to dispatching the overall objective set by top management between the various managers.

Such findings suggest that senior sales and marketing managers understand that their job is to cope with these environmental uncertainties—they perceive them, but consider their existence as “normal”; however, the financial pressure increases their perception of the risk (of missing targets).

Lower than expected results during the year

Insert Table 3 here

Each case without exception involves openness and information sharing with both superiors and teams. However, this information sharing can vary in nature.

In some cases (*Beverages, Tobacco, Equipment, Transportation, Telecom, Healthcare*) the company has a culture of openness and a team spirit reflected in considerable interaction, discussions, and a collective search for solutions, as for example in Company A:

“It’s an ongoing discussion, we don’t wait for the planning exercise to discuss our strategy, what we could do, or take corrective action. [...] If there is a problem, obviously we won’t try and hide it... we try to see how we can solve it, we talk it over [...] The search for solutions is shared from the outset...” (Tobacco, Company A)

In other cases (*Environment, Pharmaceuticals, Computer services, Computer equipment, Food*), on the contrary, managers comment that it is impossible to hide anything. Once the information systems are in place, top management will find out sooner or later, sooner being better than later. Here again, two different situations were observed as follows.

(1) The information is passed on up the line, but top management shows no support. The manager’s superiors will be aware of the situation and may consider “mutualising” the risk, asking other divisions to step up their efforts in order to achieve the overall objective, but the problem remains individual. It is up to the manager, rather than top management, to handle the situation and find solutions.

“Immediately, you would go and see your boss. (...) It was very, very tough, it was kind of “it’s up to you to cope”. So you aren’t going to make your targets, OK we’ll lower your budget, the brand isn’t doing well. That was more or less the line they took. And then it was up to you to find a way to get things going again. He (your boss) was doing OK overall, but he was sending you a message that it was your job to find the solution for your brand and although there was plenty of two-way discussion on the target-setting process, in this case you were on your own. At first they said, well, it’s not working, well that’s it, if you won’t tell us what to do, we’ll get rid of the brand. Fortunately, you do find ideas, you come through. But it’s really hard going in such situations.” (Food)

(2) Alternatively, providing superiors with advance information makes it possible to involve them^{xiii}, and take joint responsibility for the choice of solution:

“Whatever autonomy I may have, I give the hierarchy a degree of visibility and that means they’re jointly responsible for what I do...” (Computer services)

The need for information sharing is related to the need to anticipate, but above all to the top management’s absolute requirement to achieve overall objectives. In various industries the managers mention that targets can be stretched during the year for certain business units if it becomes clear that others will not be able to achieve their targets. They talked about *mutualisation* at the corporate level: divisions can be called upon to compensate for other divisions’ unsatisfactory performance. The company’s overall budget is a strong commitment

to the shareholders. However, “inside the black box,” top management and senior managers can adjust, offset, and change objectives, as long as they achieve that overall budget.

“What’s important is that the group achieves its overall objectives, and there are readjustments. If one entity has had problems with sales, operational management or whatever, we might have to ask the others to make an effort to compensate for that... It has been known to happen” (Environment utilities)

Finally, the results show that the practice of forecasts exists almost everywhere, but at frequencies that vary (between once and four times a year) and are related to budgetary pressure. Four forecasts were found in companies where budget-related financial pressure is greatest. However, in all cases, the original budget remains the benchmark, and forecasts are not taken into account for performance assessment. Rather they are used to improve visibility, as an incentive for corrective action, so that results will come in as close to budget as possible at the end of the year, and to improve the quality of budget forecasts for the following year.

Performance evaluation at year end

Insert Table 4 here

Many companies (10 out of the 12 in our study) include a significant variable portion in sales managers’ compensation, ranging from 15% to 40% of their total package, a very large proportion of which is based on achievement of individual and collective budget targets. Two among them reported the existence of a system where individual bonuses are only awarded on the achievement of a collective result - if not, even the highest-performing individuals receive no bonus. Overall, budgetary objectives are used for performance evaluation.

Seven out of the ten companies working with accounting-based incentives balance achievement of quantitative targets with more qualitative targets for calculation of the bonus^{xiv}. This practice allows more freedom in performance assessment, depending on the nature of the qualitative objectives and the degree of precision in their definition. This means a manager may continue to show confidence in a colleague, and possibly provide some reward, even if quantitative objectives are not fully achieved. This was the case for one of our interviewees in the pharmaceuticals sector:

“At the end of the year my boss said to me: “97%, well you nearly made it”, and I answered: “Well, I did much more than was humanly feasible.” (...) I don't think anyone's fooled. Well, if people feel that you didn't achieve your targets because there was some under-optimization in the use of resources or knowledge, it's different... I think it's easier when they believe the manager is smart, (s)he did his/her best...”. (Pharmaceuticals)

In sum, in PEU situations, in the ten companies using accounting-based incentives, a high level of budget emphasis is indicated. However, in seven out of these, such formula-based incentives co-exist with short-term subjective rewards. Besides, career development in the long term depends not primarily on accounting performance and is also counterbalanced by other criteria; in ten (out of the initial twelve) companies, managers with average accounting results but positive behavioural assessment can make career progress.

Finally, some managers insisted that the budget game is played over several years, and that credibility and trust strongly intervene in the process:

“You know why credibility comes into the process. If you've done well in the past 2 or 3 years ... The first slide I show my boss says: “Look, last year I said I would make that much. I made it, sales and costs”. You do what you say and you say what you do. So after a while they really trust you and if they say: “We need 5 million more in sales”, you answer: “OK, but I need this many more resources to make it. Here are the steps we need to take”. Product managers can have enormous power here.” (Pharmaceuticals)

Budgeting is experienced as a multiple-year game, not a one-time experience: what has happened in previous years, the level of trust built up, and the achievement or non-achievement of targets all impact the process as it repeats itself.

In sum, sources of PEU vary. However, PEU across all companies leads to difficulties and affects the process of accountability associated with target-setting and year-end performance evaluation. Vertical analysis of two cases can help better understand the sales senior manager's experience when PEU is high and the budget is used both as an interactive MCS and diagnostically for performance evaluation.

4.2. Vertical analysis

This section discusses budgeting use in two company cases which highlight work-based arrangements that make complex use of budgeting possible. The two cases selected were those where the effects of PEU on the budgeting process seemed the strongest and most clearly articulated, furthering our understanding of what happens in such situations.

Company A

Company A operates in the tobacco sector and has a 12% share of the European market. The manager interviewed was senior manager for European sales, reporting directly to general

management, with a team of four managers: one duty-free sales manager, one sales manager for Eastern Europe, one for Western Europe and one for the German market.

The tobacco industry strongly depends on and is very negatively affected by anti-tobacco regulations. On average, taxes represent 76% of tobacco consumer's sale prices in Europe. Tax increases, when implemented according to the regulator's will, are important and significant enough to cause a drop in consumption, especially by young people whose budgets are not elastic. This causes tobacco sales volume to plummet. Tobacco manufacturers can not lower the selling price to compensate for the tax increase as while this would enable them to maintain their sales volume, their profit margin would drop.

“When the government decides to raise taxes, this can have a major impact on profitability and consumer prices. That's the major factor, it causes great disruption, and in our line of trade sales may collapse. Since we try to preserve our margins, we have to increase prices sharply if there's a big rise in taxes, and that can have a long-term impact on the profitability level in our market.”

Target-setting is part of a clearly-organised budget procedure based on a three-year rolling plan and development of scenarios. Thus, there are scheduled formal meetings for market managers to present their budgets for the coming year. However, the senior sales manager is in continuous contact with the sales team, often travelling to the various countries; the area managers tell the senior sales manager about their difficulties, and together they discuss action plans. This means the senior sales manager knows the figures well before budgeting time.

“There's been a lot of discussion and talking before we get to this point, I mean, much earlier than budgeting and setting the targets. When we talk about developing markets, it's an ongoing discussion, we don't wait for the planning exercise to discuss our strategy, what we could do, or take corrective action: what should we do about distribution, marketing, advertising, etc. It's a more or less continuous dialogue. We don't wait until the formal exercise to discuss the issues... I regularly go round all the markets, so while I'm there we can talk about the quantitative objectives, but also action plans to implement...”

The previous year, general management had not accepted the figures proposed by the Senior Sales Manager, and required him to raise the targets. In such circumstances, the objectives imposed on sales management—in terms of sales and contribution—are perceived as difficult to achieve. The company is a privatised former national business, which merged with another European firm in the tobacco industry not long after privatisation. The group has been under pressure from the financial markets ever since to keep its earnings promises. In our interviewee's opinion, this explained the increased pressure. Previously, the emphasis used to be on a more long-term approach.

“Since the privatisation, and even more so since the merger, there’s been a tendency to set slightly overambitious targets, but we still have to meet them, so the pressure is really full-on...”

Forecasts are issued three times a year: in February, May and September. The second forecast, in May (R2), is crucial. It provides a more realistic prediction of the year’s performance. Budgetary pressure results in slightly unrealistic target figures, and through this second forecast, the company has a more accurate view of the year’s forthcoming results.

When the senior sales manager is faced with unfavourable budget variances, talks are held with the sales team. There is extensive information-sharing and solutions are developed collectively.

“If there is a problem, obviously we won’t try and hide it... we try to see how we can solve it, we talk it over... For example, this year, we knew from the start that we’d have difficulty meeting our budget objectives. Well before R2, I told them all “see where we can cut back on sales and marketing investments, then we’ll decide on the basis of the new forecasts we develop in May.” So before R2, we’d already worked on possible change scenarios. We knew that to make our target contribution, we’d need to stop investment in such and such a country, or cutbacks on such and such development expenses. The search for solutions is shared from the outset...”

A *mutualisation* process of risk- and effort-sharing may come into play during the year. For company A, this takes the form of asking a manager to do more to make up for problems in a different zone:

“When we’re working on R2, they might say: “your colleague has done so well that the pressure’s off you a bit” or, on the other hand, “the pressure’s still on, or doubled, because your colleague’s doing even worse”. In that case, we need to review our action plans for example, make cuts in the marketing budget”.

Nevertheless, the managers’ performance evaluation and bonus is based on the budget figures. A large portion of their variable compensation depends on achievement of their individual objectives. The compensation system includes bonuses that can represent up to 25% of a manager’s total income—10% based on the company’s overall performance, 30% based on achievement of the division’s objectives and 60% based on the achievement of individual objectives (half qualitative and half budgetary objectives).

If a manager does not achieve the budget objectives, there is a financial sanction, however, if the superior considers that the manager did the best possible, this would qualify for a partial bonus. In fact, 40% of the bonus depends on achievement of collective objectives.

“There is a financial sanction, because a large portion of our variable income is based on objectives: some of the bonus relates to objectives that are overall objectives for the entire division. I share performance with my colleagues (the managers of other world regional areas). We stand together, that’s what I was saying earlier, if one hasn’t made his targets, there’ll be another one who’s done

better and gone over target. Another part of the bonus is connected to achievement of personal profitability objectives. That's very clear, and unfortunately, if you don't meet them, you don't get that bonus. But alongside that are subjective rewards, we don't only work on financial objectives."

The case of company A illustrates how the budget is used as a device for interactive control, at the heart of permanent exchanges and collaborative solutions. However, the budget also remains a central part of the performance evaluation system. It is vital for the company to achieve the results promised to the financial markets, and much, therefore, remains at stake on the budget. This dual use of the budget is made possible by the risk- and effort-sharing described by our interviewee: during the year, certain managers will be asked to make an extra effort to compensate for others' difficulties, particularly when certain markets are suffering the repercussions of unfavourable tax and regulatory measures.

Company B

Company B operates in the long-distance telecommunications sector. The manager interviewed is the senior sales manager for a zone covering most of Europe, Africa and the Middle East, reporting directly to the CEO and supervising ten sales managers in charge of various zones.

The two difficulties encountered by our interviewee relate to economic and political factors. Economically, the market is operating at overcapacity, and the price of one minute's telecommunication fluctuates daily. Like most large operators, company B has developed infrastructures to sell capacity. Due to excess capacity, a price war exists. In addition, certain failing United States (US) operators are offering rock bottom prices under Chapter 11 bankruptcy rules. Thus, competition is fierce.

Politically, African countries are markets at potential risk of sudden upheaval. Therefore, great uncertainty reigns in certain African markets.

"... There are unpredictable factors beyond our control, and Africa in particular is a good source of turnover for us, but what we can't control is the political and geopolitical situation in those regions, so there are people saying, yes, the objectives set for Ivory Coast before things started moving, well it's obvious the sales guy who got those is going to have trouble achieving them."

The sales department is under great budgetary pressure. Sales must be increased by capturing other operators' international traffic, while simultaneously reducing the cost of delivery. In particular, company B is expected to participate in its parent company's debt reduction drive.

The objectives are set by top management and are difficult to achieve. The executive committee sets the overall goals, which are then redistributed between the entities. Our interviewee sees them as very difficult to reach, and, more importantly, not at all open to negotiation—incurring greater pressure on objectives.

“[Given the very ambitious objective announced on the markets], we are affected. That explains the pressure we’re under. We have to report our figures practically on a daily basis now. To begin with, the executive committee defines the overall sales goals at international level, then that’s reallocated between the various entities ... I know from experience [...] that there’s no point trying to challenge the objectives. It won’t make any difference, no difference at all.”

Besides, at each level, there is always someone who will add a bit extra to the objectives. The system of inserting “downward safety margins” makes targets difficult for sales staff to achieve. Our interviewee has to take on the assigned objectives and allocate them to the country managers. If the target is lowered for one, the target for another must be raised. In company B, a *mutualisation* process thus takes place at target-setting time.

“There’s always someone who’ll add a bit extra [...] So, well, when you finally get down to the actual salespeople, the situation is the same whatever the company: it’s unachievable. [...] I’m assigned overall objectives [...] Then I have to allocate them between areas, so [...] I look at last year’s results and try to apply a three-step rule, saying right, we’ll take into consideration what we did last year, the objectives imposed from the top, and I’ll apply a growth rate to the sales.”

Our interviewee explained that allocation of the management’s objectives can be adjusted if it is known that a given country is in particular difficulty, such as Ivory Coast. Discussion of objectives by the sales division can last several weeks.

“Allocating the objectives is a real headache with all those figures. Sometimes, especially when there are compelling reasons, I take part [of the sales objectives] off Africa and pass it on to our man for the Middle East, when he’s told me ‘OK, I can make that’. [...] Distribution of objectives is always a hard time of year, it takes a month if not two. Even when the year has begun, we’re still talking about it.”

There are no mid-year forecasts, but performance monitoring is highly-developed. Our interviewee monitors quarterly and half-yearly trend indicators on a weekly basis, for each zone, taking into consideration developments for what he calls “the heavyweights” (20% of clients, accounting for 80% of sales). Every week, any variance from budget must be reported up line.

“Every week, the boss and I examine progress for all my zones, and this shows up either a general problem that might be associated with a given product, or a general opportunity that might be associated with an operation or a new product. I have to do a forecast for the year but it fluctuates, there are changes, there are unexpected developments, in fact coping with unexpected developments is what we do all the time...”

Similarly, there are regular meetings with country sales managers. Discussions thus take place regularly and at various levels, from general management to country managers, who seek to update their information based on reports from in-the-field contacts. These meetings provide our interviewee the latest information available on clients, competition and opportunities that may arise during the year.

“[Whenever a] country is important, I’ll spend an hour and a half going over it, saying ‘what are you going to do, what’s your strategy in respect of us? How are you working with other operators? What can we do? Are there any development opportunities? Are there any risks at this or that level?’”

Although these ongoing discussions make no formal difference to the budget, they provide various levels of the company’s top management a constant up-to-date view of the markets, enabling them to monitor and anticipate performance.

Company B’s sales teams’ compensation includes a large variable bonus of approximately 40%. When objectives turn out to be as difficult to achieve as the teams feared at the start of the year, the senior sales manager has some room for manoeuvre on the variable compensation.

“I do have some room for manoeuvre on pay: in our company, the variable portion of salary is 40% of the total. That’s a lot, but in fact that 40% is split 70/30. [...] 30% on qualitative factors. So as a last resort, I can adjust things through the qualitative side, for instance in September....”

The case of Company B again illustrates how budgeting is used for interactive control. There are frequent discussions up and down the line. At target-setting time, the senior sales manager works closely with the country managers to define their targets. Results are subsequently monitored in real time throughout the year. By using the budget in interactive mode, the company teams can face uncertain markets collaboratively. For in addition to intense competition, there is uncertainty over political developments in some countries. Interactive use of the budget facilitates circulation of information, and sharpens the company’s responsiveness. At performance evaluation time, the senior sales manager can take into consideration the effort put in by certain colleagues, and award them a partial bonus even if they have been unable to achieve their targets. These two observations—use of the budgeting as a support for permanent dialogue, and implementation of a certain degree of subjectivity at performance evaluation time—show that budgeting is used as an interactive MCS.

However, achievement of targets remains a central element of performance evaluation. It is vital for the company to achieve the results promised to the financial markets. Much, therefore,

remains at stake on the budget, with a significant variable portion of compensation related to target achievement. The budget comprises features of a diagnostic MCS.

We thus observe a dual use of the budget—interactive and diagnostic—made possible through a *mutualisation* process. At target-setting time, some managers asked to do more, to compensate for those in charge of problem zones. At the year-end, the variable compensation associated with qualitative criteria can be used to reward commitment and team effort.

5. Discussion and conclusion

Based on the findings of the above horizontal and vertical analyses, this study makes three major contributions on issues raised by budgeting in PEU situations.

First, we contribute to better understanding of the interrelationships between PEU, budgetary pressure and interactive MCS. We find that senior managers perceiving strong top-down financial pressure also perceive the highest uncertainty. PEU relates to a perceived risk: (1) external events which are likely to endanger achievement of their budgetary objectives; and (2) the company's overall results promised to shareholders^{xv}. However, we also find that a more interactive, collective and ongoing target-setting process reduces the perception of uncertainty by the managers: discussion of targets with top management and interaction with colleagues and teams as to how to achieve the targets influences their perception of risk.

Second, our study confirms certain findings in the prior literature, especially the interactive use of budgeting in PEU situations, including the use of subjective components in performance evaluation. The managers describe an ongoing exchange and discussion process at all organisational levels—senior sales and marketing managers, their CEO and sales teams—rather than a one-off contract: such discussions help managers cope better with strategic uncertainties. The budget process includes formal dates for target-setting, interim reviews and year-end evaluation of final results. Alongside these scheduled encounters, sales and marketing teams have on-going relationships, and information on environmental changes is shared on an on-going basis. Such openness and information fluidity are useful in the continuous process of collective risk-assessment, and the construction of alternative action plans to cope with unexpected events.

Moreover, as indicated in prior literature, budgeting in most cases is not the only basis for performance evaluation. Some managers mentioned that short-term variable compensation—i.e., bonuses—may be based on a more subjective, more qualitative system alongside the budgetary control system. This subjective performance evaluation is made possible by the close relationships described above. Managers' efforts can be taken into consideration, instead of tying rewards solely to budget results (Simons, 1995). In all cases, long-term career development is based on informal assessment rather than on pure achievement of yearly objectives. Our findings confirm those of previous studies which show how uncertainty leads to more subjectivity in performance evaluation. This subjectivity allows top management to take into account a manager's effort, particularly when results have been affected by unfavourable uncontrollable factors (Govindarajan, 1984; Govindarajan and Gupta, 1985).

However, our findings show that, while subjective elements are integrated in performance assessment, budgets are simultaneously used as motivational devices and also play a major role in assessment of individual performance. The managers' compensation systems are based partly on qualitative—i.e., subjective—criteria, and partly on accounting performance measures^{xvi}.

Consequently, we found situations in which the budget is used both as an interactive tool for reducing strategic uncertainties, and as a short-term performance evaluation device.

Our third and main contribution is to identify work-based arrangements that allow for this dual use of budgeting in practice. More specifically, in PEU situations, we found risk- and effort-sharing arrangements, which the managers named "*mutualisation*": ten out of twelve companies in our study used some type of collaborative management of risk and uncertainty—whether at target-setting time, during the year or at end-of-year performance evaluation and reward. Firstly, at target-setting time, collaborative work goes beyond allocating objectives in a traditional manner, based on the superior-subordinate relationship: the senior sales and marketing manager informs the teams about the top-down global objective, but then objectives are allocated interactively and collaboratively. Such a collective process, based on teamwork with much interaction between pairs, also outplays traditional budgetary participation, framed in the superior-subordinate relationship. Secondly, during the year, *mutualisation* may occur

when the results are endangered in one specific area, some managers being asked to raise their results to compensate for the failing markets. This involves some interactivity and common understanding of the business goals by pair managers reporting to the same level. Thirdly, at year-end performance evaluation, bonuses may be conditional upon collective objectives. Extra individual efforts to rescue the collective objective are acknowledged and rewarded.

Mutualisation lays on a shared understanding of group objectives and a sense of collective achievement that goes beyond the use of contingency funds as described by Simons (1995, p.120-121): (1) Simons suggests setting individual higher targets –which might then be drawn upon- in order to make sure that the overall desired numbers are made; and (2) a contingency is added in the “vertical”, traditional, target-setting. The collective effort-sharing between pairs to rescue the overall objective is not described.

Mutualisation allows managers to achieve the overall, group objectives and simultaneously preserves perception of fairness in performance evaluation.

Well before any target-setting process starts, the company’s overall objectives have already been “promised” to the financial markets, and, therefore, must be delivered. Most managers understand these objectives, and accept that their individual contribution will be measured in accounting terms and used for short-term performance evaluation, despite the increased PEU. This concurs with the literature, which finds emphasis on the responsibility of managers to understand their operating environment and to reduce uncertainty (Merchant, 1987). However, as perceived uncertainty increases, due to external turbulences or to increased top down pressure, there might be a point when the managers’ perceptions of fairness are endangered. During the year, as uncontrollable events threaten a specific manager’s results, effort-sharing can save the collective financial objectives. The divisions or managers who successfully stretched their budgets to make-up for other markets’ poor performance fairly deserve a reward in the short term. Such a mechanism both preserves the collective, global objectives and managerial motivation. *Mutualisation*, as a work-based arrangement, allows the use of budgeting because this formal device is not resented as a “bad” rule (Adler and Borys, 1996, p.66).

Mutualisation relieves the pressure of the risk of failing and preserves perceptions of fairness with two mechanisms. First, rewards may be partly collective, or conditional upon the

achievement of collective objectives. Besides, individual managers understand that they may benefit from the effort-sharing mechanisms in turn, as advantageous and disadvantageous situations on the markets do not repeat with the same managers over time. *Mutualisation* is based on expectation of multi-budgeting processes over the years.

Second, *mutualisation* relies on mechanisms of mutual trust and reputation. As such, it has some similarities with the concept of “*mutual trust and accountability...which basically meant that a manager could be trusted to “deliver on his part of the bargain”*” (Marginson, 1999, p.223). However, in contrast to Marginson’s study,^{xvii} mutualisation occurred in our cases among autonomous sales units and teams. They are not interdependent in achieving their individual results, but might face turbulence on their individual markets and need to achieve a collective objective set by top management^{xviii}. Our cases depict situations where relying on the formal organisation to set individual targets is possible and yet the achievement of overall objectives in conditions of uncertainty calls for collective, group-based systems and *mutualisation* of risk.

To summarize, our findings, in line with those of Simons (1990, 1991, 1994, 1995), show that in high PEU situations, a more flexible use of budgeting takes place, based on the collaborative search of solutions and the introduction of some subjectivity in performance evaluation. However, as we also found, the budget remains a major performance evaluation device in the short term. As the overall sales objectives are an imperative commitment to shareholders, to be respected under any circumstances, a *mutualisation* process allows the dual use of budgeting which reconciles the conflicting needs of flexibility and strict achievement of corporate objectives.

Of course, this study has its limitations. First, from the relatively small number of interviews, our findings can not be generalised. Some replication, defined as “*finding significant sameness from a series of related studies*” (Lindsay, 1995, p.36), will be needed in the future. Survey-based research could test some of the explorative results from our horizontal analysis.

Second, the study has been conducted in the specific setting of sales and marketing, which further limits the generalisability of our explorative findings. As we mentioned, sales and marketing are likely to be subject to high budgetary pressure. Moreover, in the light of our findings, PEU is related to top-down financial pressure. Across different industries and sales

organisations, *mutualisation* has emerged as a way of coping with PEU and making dual use of budgeting possible. More studies are needed to investigate whether such a process is common in other organisational areas.

A third limitation of this study, which opens up new avenues for future research, is the absence of any cultural analysis of the results. Previous research has indicated that performance evaluation and compensation packages may differ across countries (Coates, Davis and Stacey, 1995; Merchant, Chow and Wu, 1995). More generally, our findings belong to a particular ethnographic context, which could be re-interpreted as cultural phenomena: for instance, for *mutualisation*, “collective” budgeting may relate to a less individualistic culture than in the United Kingdom or US (d’Iribarne, 1989). Replication in different national settings could help validate our findings or, conversely, highlight cultural bias.

Fourth, findings from the PEU analysis identified varied sources of uncertainty across industries. However, we were not able at this stage to identify major differences in the budgeting process that could relate to these varied sources. More research could help us better understand how different sources of uncertainty may impinge on the use of budgeting.

Furthermore, the study calls for a new budgeting agenda. First, the results confirm that more research is needed on the many conflicting purposes of budgeting (Samuelson, 1986). Hansen and Van der Stede (2004) identify four “*reasons-to-budget*”: (1) operational planning, (2) performance evaluation, (3) communication of goals and (4) strategy formation. Behavioural budgeting research focuses on budgeting as a contract for individual performance evaluation that should reduce opportunistic behaviour in the firm due to budget-based rewards. This perspective tends to neglect certain other purposes of budgeting. The results of our study describe how budgets can be used simultaneously as a behavioural device and as a coordination instrument. In PEU contexts, management is concerned not only with preventing opportunistic behaviour, but also developing collective responses to the expectations of both financial markets and customers. Budgets are used for challenging assumptions and action plans, in an interactive mode. A parallel *mutualisation* process helps maintaining simultaneously the pressure for individual performance and the management of collective results. Our study has contributed to highlighting a work-based arrangement which makes the dual use of budgeting

possible in practice. More research should be conducted to examine how budgets can fulfil their different and potentially conflicting purposes.

Second, arrangements embedded in budgets, especially collective risk- and effort-sharing arrangements, also call for more research and theories. There is still much to understand about how budgeting develops in risky, uncertain settings, and about the nature of PEU. Some arguments have emerged that organisational participants socially construct risk (Collier and Berry, 2002). More research is needed into how managers perceive and manage risk in the budgeting process. In PEU situations, budgets are caught between individual-level accountability and collective, *shared accountabilities* (Frow et al., 2005). We need further insights into how budgetary emphasis can be maintained at the corporate level while simultaneously allowing some flexibility in individual targets. Research may be conducted on how individual performance-based rewards conflict in theory and practice with corporate-based or team-based incentives, as well as profit-sharing plans. Work-based arrangements such as *mutualisation* reopen a long-standing debate on management control over the individual and collective levels.

Third, this study calls for further research on intra-organisational trust embedded in budgeting, as well as for taking into account the long-term dimension of budgeting. Target-setting, implementation and adjustments during the year and year-end performance evaluation are inseparable. Failure to take into account the fact that budget games and goal-setting in a given year are largely influenced by what occurred in previous years is perhaps one serious limitation of many previous budgeting studies, with some exceptions (Webb, 2002; Fischer et al., 2006). A few empirical studies have examined the effects of intra-organisational trust and reputation on budgeting^{xix} (Ross, 1994; Lau and Tan, 2006) but do not provide a significant body of knowledge yet. Besides, additional theories of management accounting have emerged emphasizing the importance of trust and reputation as a means of management control, especially under conditions of uncertainty (Marginson, 1999; Speklé, 2001). Such theories could be fruitfully applied to budgeting processes for further research. Specifically, more qualitative longitudinal research could be undertaken to explore the mechanisms of intra-organisational trust and reputation building in budgeting.

Our study opens up ways to advance understanding of budget use in PEU situations. More research and theories are needed on these issues at a time when most companies are engaged in a quest for more balanced, non-accounting, evaluative styles and are reviewing their budget and compensation practices, looking for more flexible and reactive targets.

ⁱ Which MCS will be used interactively will depend on the perceived uncertainties and strategy.

ⁱⁱ As such, the PEU concept used in this paper also bears many similarities with Simons' "strategic uncertainties", contingencies or threats about the environment as perceived by top management.

ⁱⁱⁱ Defined as the manager's inability to influence outcome when other managers are doing so successfully.

^{iv} Defined as the extent of written rules, procedures and instructions (Adler and Borys, 1996)

^v Such ideas echo the recent criticisms of budgeting in the managerial world beyond budgeting literature (Hope and Fraser, 2000, 2003). Budgets, originally introduced to promote autonomy of decision rights in a decentralized context (Vancil, 1979) have turned into coercive bureaucratic instruments of a "compliance, command and control" culture.

^{vi} Some rationales can be found in Marginson and Ogden (2005). Our study focuses on the hows rather than the whys.

^{vii} We do not address the boundaries and beliefs systems suggested by Simons' (1995) framework. First, among his four levers of control, Simons explicitly defines the interactive control systems (ICS) as the systems used by top management for coping with strategic uncertainties. As the focus of the paper is on the use of a management control system in perceived uncertainty conditions, ICS seem to be the most relevant systems in relation to our study. Second, budgets and profit plans are presented by Simons as "typical" diagnostic MCS. We understand in Simons (1995) that belief and boundary systems, as opposed to ICS and DCS, do not relate directly to formal management control systems, but instead constitute value systems and bureaucratic rules and procedures in which the control tools such as budgets and performance measurement and management systems (PMMS) are embedded. Certainly the organizational values and constraints which define the belief and boundary systems permeate formal MCS such as a budget. However, they are not the main object of this study, which explores individual managers' responses and dual use of formal MCS.

^{viii} A role generally devolved to distinct and more recent MCS, including performance measurement systems (PMS) like the balanced scorecard (BSC).

^{ix} In one company, we interviewed two managers, one senior sales and one senior marketing manager.

However, we decided not to do that again for anonymity, as mentioned below. Besides, we also removed one company from our sample because the interview had not been properly taped, which left us with 13 interviews in 12 companies.

^x Although the cross-sectional studies approach is less well-documented and less common than case-study methods in explorative accounting and control research, it has been successfully used to explore important constructs (Merchant and Manzoni, 1989; Bruns and MacKinnon, 1993; Abernethy and Lillis, 1995).

^{xi} Brownell (1985) considered marketing departments as low uncertainty departments, as compared to research and development (R&D). Although goal ambiguity is certainly more limited for sales and marketing managers than R&D managers, in our view sales and marketing managers have to cope directly with environmental changes and the corresponding PEU.

^{xii} Perception bias on the part of managers is also possible: they tend to see themselves as taking a more interactive approach with their teams than their superiors with them. For the reasons stated in Section 3.3, we did not interview their teams.

^{xiii} As stated previously (Table 2); team effort and collaborative work is always perceived to be greater down the line (with the manager's own teams) than up the line with superiors: we interpret this fact both as a result of the position of senior sales and marketing managers, who are caught "between the hammer and the anvil" (as a link in the management chain), but also partially as perception bias.

^{xiv} Two exceptions (Computer services and Computer equipment) are companies with a very strong "results culture": these are the companies with the largest variable portion of compensation (up to 40%), and where long-term career development also depends on results. However, these two companies have distinct target-setting profiles: while one is quite collaborative and interactive in its target-setting with average PEU, the other has high PEU, high top-down financial pressure, and a very low-interaction target-setting process.

^{xv} Although our study is based on a very different epistemological framework, this finding is in line with recent critical literature examining the effects of executives speaking on behalf of the investor within the business (Roberts et al., 2006; Ezzamel et al., 2008).

^{xvi} Our findings are in line with economics theories emphasizing the emergence of hybrid forms of governance when “*in conditions of substantial uncertainty, the minimum level of contracting detail cannot always be provided*” (Speklé, 2001, p.422).

^{xvii} In addition, the managers in our study described situations with accounting-based bonus incentive schemes whereas, at Telco, managers either individually or collectively were not explicitly rewarded for achieving or exceeding budgetary targets (Marginson, 1999)

^{xviii} In Marginson’s study, at Telco, the managers described complex matrix organizations where interdependencies and transversal processes would hinder decentralization. Marginson identified the phenomena of mutual accountability with individuals often being accountable to people from different hierarchical levels and different business unit areas (and sometimes beyond). These mutual interdependencies cause managers to promote “*a collective, a system of social control to help ensure that each individual did his bit*” (Marginson, 1999, p.217)

^{xix} : For instance, Ross (1994) suggests that, given a high level of intra-organisational trust, the use of accounting-style performance evaluation results in lower dysfunctional effects, i.e. lower job-related tension, than the use of a non-accounting style.

Appendix 1: Visuals, A, B, C and D series:

Visual A



Visual A

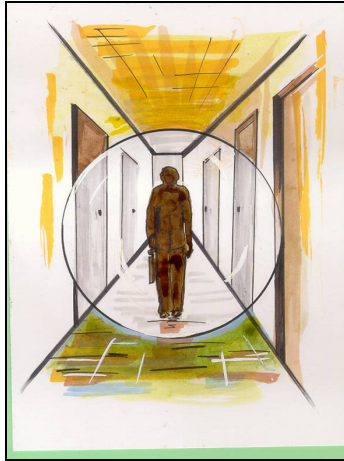


Visual A



Series A: Target-setting time (categories 2 & 3, table 2)

Visual B



Visual B



Visual B



Series B: Target-setting time (categories 4 & 5, table 2)

Visual C



Visual C



Visual C



Visual C



Series C: During the year (categories 6 & 7, table 3)

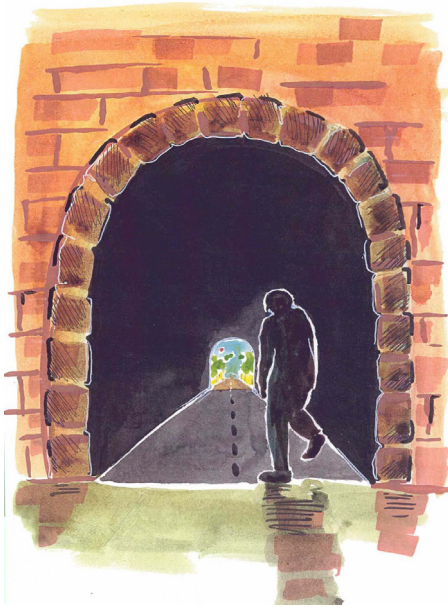
Visual D



Visual D



Visual D



Visual D



Series D: Year-end performance evaluation (categories 9, 10 & 11, table 4)

	Environment utilities	Beverages	Food/Tobacco	Pharmaceuticals	Equipment	Telecom
1. Is any EU perceived? Nature and source?	<p>YES, PEU. Perception of uncertainty on markets is average. However, there is strong financial pressure related to promises to financial markets, and difficult-to-attain top-down objectives.</p>	<p>LOW PEU in the short term due to strong brand positioning, BUT HIGH PEU in the long term as regards changes in <u>distribution</u>, <u>regulations</u> and taxes penalising alcohol consumption. Growth in exports helps to deal with this uncertainty, but creates another source of <u>uncertainty over currency values</u>.</p>	<p>YES, HIGH PEU. A stable, mature market, but uncertainties over <u>legislation</u> and <u>taxation</u>; very high competitive intensity. Moreover, <u>shareholders</u> are gaining in influence, resulting in greater pressure to achieve financial objectives.</p>	<p>YES, PEU. The markets are manageable with good knowledge of the process; uncertainty concerns the resources <u>competitors</u> will use (response options are limited, because campaigns have to be prepared well in advance), and <u>new product launches</u> (financial stakes are enormous).</p>	<p>HIGH PEU in the medium term, related to increasing <u>globalisation</u> in the domestic market; this is a <u>very high-growth</u> sector, with <u>fierce competition on price</u> (leading to profitability problems). Small number of customers and small number of contracts every year, and cyclic markets.</p>	<p>HIGH PEU The sector had hardly got over the "shock" of <u>deregulation</u> when a <u>fierce price war</u> ensued between several operators (which are simultaneously customers, suppliers, partners and competitors). Major investments, <u>excess capacity</u>, and <u>financial problems for all</u>.</p>
	Computer services	Transportation	Computer equipment	Food	Packaging	Healthcare
1. Is any EU perceived? Nature and source?	<p>YES, PEU. The company is a new arrival against highly structured competition, but very good knowledge of its banking customers. <u>Highly cyclic market</u> (but significant growth overall).</p>	<p>HIGH PEU. The <u>sector is very sensitive to events</u> and economic climate. The market is experiencing high growth with an enormous amount of opportunities, the difficulty is identifying them in a <u>volatile, highly competitive market</u>.</p>	<p>HIGH PEU. Uncertainty is perceived as high due to <u>fierce competition</u> on a BtoB market.</p>	<p>HIGH PEU. Fresh dairy products are a very competitive market; the food channel distribution is tough; the company has a market leader position but there is low brand loyalty, impulse buys by consumers, and <u>relations with distributors are very tense</u>.</p>	<p>YES, PEU. Uncertainties largely resulting from a complex <u>structure</u>: "internal" sales take place to other countries' sales subsidiaries, and these subsidiaries are in fact also shareholders! The European Marketing/Sales department has little power although profit is measured at its level. The situation varies greatly according to the country. The key factor in restoring profitability is the final sale price to the distributor, which is controlled by each country...</p>	<p>HIGH PEU. Major power conflicts with distribution, and serious power imbalance, which are perceived as high uncertainty "like the sword of Damocles". Moreover, <u>governance</u> is also a source of uncertainty (but also autonomy!): the position is that of a joint venture between two companies.</p>

Table 1: Perceptions of Environmental Uncertainty

	Environment utilities	Beverages	Food/Tobacco	Pharmaceuticals	Equipment	Telecom
2.a. Is target-setting perceived as difficult?	YES. Top-down process; difficulty increases as you go down the line	NO. Mature market; target-setting is perceived as quite easy	NO. Good control over the process. The 3-year plan (not the budget) takes into account the breakthroughs and major changes.	YES. Difficulty in the allocation of marketing resources between products	MEDIUM. New target-setting process. The accountability principle is new, people are still learning.	YES, perceived as VERY DIFFICULT. A “nightmare” due to political instability in some foreign countries. High pressure on budgets, very “painful”, targets often unattainable.
2.b. Degree of formalization of the target-setting process	VERY STRONG formalization	STRONG. Very detailed process	STRONG. Scientific process based on large amounts of data on the competition	STRONG. A “marketing power house” process requiring much financial input.	STRONG Top-down process. An “engineering culture” with a very rational and “scientific” approach to budgeting	STRONG Objective contracts are signed at each level of the hierarchy.
	Computer services	Transportation	Computer equipment	Food	Packaging	Healthcare
2.a. Is target-setting perceived as difficult?	NO. Rationalisation of customer offerings improves forecasting.		MEDIUM. Difficulty in dispatching the overall objective set by top management between the various managers.	VARIABLE. Target-setting is a long process. It is perceived as a random exercise at the beginning of the process, but not at the end. Marketing and sales have a strong voice.	YES. Sales objectives are set at an international level. The difficulty is in coordinating the process with countries showing varying degrees of cooperation. Some countries play “against the clock”...	NO. The top management does not question the sales targets too much, because the sales department has considerable influence.
2.b. Degree of formalization of the target-setting process	STRONG. Budget is perceived as the result of a mathematical equation.		STRONG. Structured process. Targets are established based on thorough analyses of prices and competitors	STRONG. Very long, very detailed process. Two very formal presentations (like “oral exams”!!)	Formalized process. Degree of formalization variable across countries.	STRONG. Very detailed process and calculations.

- Table 2 - Target setting Process: difficulty and formalization

	Environment utilities	Beverages	Food/Tobacco	Pharmaceuticals	Equipment	Telecom
3. How much commitment to the target-setting process? Does budgeting matter to the manager?	Quite strong commitment. Everyone feels responsible for his own action plans. The organisation is very decentralised but entities need to convince the hierarchy that they are in line with strategy. Formal presentations to the Management Committee.	Quite strong commitment, although the budget is seen more as a forecast instrument, allocation of resources is key: area managers come to “defend” their budget.		Very strong commitment, very interactive “Marketing Power House”: the budget is born of a collective effort, going into the details of all action plans, with “lots of late nights and lots of pizzas” in March, very intense process	Growing managerial commitment to objectives, but the budget follows a “cartesian, hierarchical” reasoning that remains fairly top down... little discussion of objectives...	Strong commitment is sought, through transparency and teamwork to foster collective motivation: “the objectives come from the top, that’s what we have to achieve as a team, now think it over and tell me, you examine them and we’ll talk about it”
4&5. Is target-setting an individual or collaborative job? Is target-setting ongoing or one-shot?	Average, 2 discussions with teams and superiors both up and down the line, between October and December	Tends to be collaborative, with teams and with exclusive distributors for each market; distributors are often overoptimistic so there is some critical interaction to bring them to take a realistic view. This happens between October and January.	Collaborative, with both superiors and teams, and continuous. Strategic and budget factors are discussed in advance and all year: change scenarios are examined, without haste. However, the final budget decision comes from the top after consideration of all arguments.	Very collaborative, and more importantly very bottom-up. The manager’s function is in-between top-down financial pressure and the latest in-field knowledge of the sales teams. The salespersons’ opinions are seriously taken into consideration.	Very little collaborative target-setting, little discussion, although target figures are collective. Decisions come down from the top. The budgeting exercise takes only a short time (6 to 8 weeks) and is “conscientiously and scientifically applied”. Interaction exists, but not during budgeting.	Both: very top-down above, very strong budget pressure. “There’s no point trying to challenge the objectives. It won’t make any difference, no difference at all.” Our interviewee feels caught between the hammer and the anvil. Extensive collective team involvement to respond to and compensate for this top-down pressure.
	Computer services	Transportation	Computer equipment	Food	Packaging	Healthcare
3. How much commitment to the target-setting process? Does budgeting matter to the manager?	Quite strong commitment. Teams are involved in target-setting; a well-balanced model, neither too top-down nor too bottom-up; the hierarchy are prepared to listen, but arguments must be convincing.	Strong commitment in general from salespersons but not necessarily to the target-setting process.	Strong commitment on targets, given their importance for the variable portion of salary. Many discussions on implementation of action plans, but the target is non-negotiable.	Mixed: strong investment in terms of time, high individual accountability regarding the sales objectives; but performance assessment and career developments depend on qualitative factors, not budget targets.	Strong commitment at the European office and the budget is the principal “time/opportunity” for discussion and action on countries: but the response is very variable, depending on the country	Low commitment on individual targets: individual performance assessment does not depend on achievement of targets, experienced as a collective performance.
4&5. Is target-setting an individual or collaborative job? Is target-setting ongoing or one-shot?	Fairly collaborative process, from November to January inclusive: target-setting is the result of a discussion with teams and the superior. It encompasses overall growth objectives, feedback from the field, and market growth assumptions.	Highly collaborative, bottom-up process. The sales team has a large influence, as the rest of the organisation has a completely different way of working: they bring in a lot of money, so they are listened to and trusted.	Very low-collaborative process despite appearances (3 discussions from July to October). Top down objectives are imposed and “delivering the results” is an absolute requirement.	Low-collaborative process, but objectives are “mutualised”: the process starts bottom-up, but achieving the Group’s objective is crucial, so the Marketing manager “fixes” things internally among brand managers, and may decide to cut on certain brands... 10 discussions between May and December.	Target-setting is supposed to be based on collaboration between functions and countries (August to late November). But some countries are hostile to any interference They cultivate their independence, and despise the budget as something “for the accountants”.	Very collaborative, between mid-June and October, in-depth detailed analysis on both the figures and action plans, with dozens (50) of informal discussions between hierarchical levels and between Sales and Marketing. Performance is seen as collective.

- Table 2 - Target setting Process (follows): commitment and collaborative work

	Environment utilities	Beverages	Food/Tobacco	Pharmaceuticals	Equipment	Telecom
6. During the year, if "off track": is information shared with superior and team?	YES. In any case, it is difficult to hide things with three forecasts a year... Informal reporting discussions with the superior and the team.	VARIABLE. It can sometimes be difficult to get transparency from distributors and sales staff in direct contacts with the market.	YES. Continuous discussions, a shared process with nothing hidden	YES. With both the teams and the direct superior. Very close management team, maintaining a high level of communication and trust; successes and failures are borne together. However results are not reported to the international head office (no waste of time on paperwork and endless explanations)	YES. Transparency is a corporate value. It is not a matter of urgency because the markets have long cycles, but it is vital for the business to spot problems early on so a solution can be quickly found.	YES. Despite great unpredictability, there is a great concern for transparency. Forecasts and regular progress reports are needed, because rapid responses are essential.
7. During the year, if "off track": are problems addressed collaboratively?	YES. High degree of "mutualisation": objectives can be redistributed between divisions.	YES. Collective identification of solutions involving more than just the salesperson in the field is needed.	YES. Possible solutions are considered together, and shared.	AMBIGUOUS: YES, since there is high transparency, but a strong sense of individual accountability remains; our interviewee "mutualises" targets between his different product lines.	YES. Highly collective and close management; no indifference; there is a joint search for solutions, which are almost always collective in this sector.	YES. Collective approach to solving problems. Rapid reactions are essential given the large number of unanticipated events. Quarterly forecasts, with new action plans.
	Computer services	Transportation	Computer equipment	Food	Packaging	Healthcare
6. During the year, if "off track": is information shared with superior and team?	YES. Transparency is non negotiable, the manager always reports information and has decisions validated by the hierarchy.	YES. Culture of transparency, no use ignoring the signs; what counts is the year-end result, so reporting and sharing setbacks is not a problem.	YES. Either voluntarily or under orders: permanent benchmarking with the two other major countries in the Europe zone. Close management and monitoring of sales objectives.	YES. Transparency is mandatory: to enable the hierarchy to reorganise things and ask more of others if there is a problem with a particular product; the overall objectives must absolutely be met.	YES/NO. Information-sharing works well at European office, but the situation with the countries is more difficult and uneven. Reporting structures are being progressively introduced.	YES. It is technically impossible to hide anything. The top management is always informed "in real time" of any problem, through the <i>last estimates</i> (monthly adjusted forecasts).
7. During the year, if "off track": are problems addressed collaboratively?	YES. There is solidarity in success and failure (even if one individual is responsible). Through transparency, search for support from the hierarchy: a joint decision	YES. Unconditional support for the sales teams, as well as a need for rapid reactions. But this dialogue does not take place as part of the budget reporting, which is seen as a management control tool ("just statistics").	NO. Problem-solving is individual and target renegotiation is not possible. "Mutualisation" was experienced only one-way: he had been called on to compensate for the failings of another sector, but there was never any let-up in the pressure put on him!	AMBIGUOUS. Great degree of transparency, but superiors tend to leave individual responsibility for the problem with their staff, who have to find a solution on their own. No help with the problem itself.	YES. In the small centralised Europe division, problems are managed very collectively, teamwork involving the salesperson and marketing, with superiors. However, it is more difficult to help and achieve teamwork with the other countries.	YES. There is considerable team spirit: all sales and market personnel are jointly responsible for achievement of budget objectives. Nevertheless, in practice responses are fairly slow as action plans are "locked-in" with customers at least 6 months in advance.

Table 3: Sharing of information during the year

PERFORMANCE EVALUATION	Environment utilities	Beverages	Food/Tobacco	Pharmaceuticals	Equipment	Telecom
	<p>9. At year-end: do formula-based incentives work? How?</p> <p>10. Are there any short-term subjective rewards? How do they work?</p> <p>11. Are there any long-term subjective rewards? What does a career depend on?</p>	<p>YES. Variable portion of 15 to 20% largely based on the entity's objectives, but also on division or "area" objectives.</p> <p>YES. Past performance and the unpredictability of new markets are taken into consideration.</p> <p>YES. A career is built on a mix of long-term performance and personal factors.</p>	<p>NO. Aim to avoid gaming at year-end and overstocking by distributors. One exception is the USA subsidiary which has a bonus.</p> <p>NO. No short-term bonus, but a subjective understanding and "fair" evaluation.</p> <p>YES. This is a family business where fair evaluation matters a lot.</p>	<p>YES. Variable portion of 25%, based on individual quantitative objectives (profitability), on group objectives (net profit), and on personal quantitative objectives.</p> <p>YES. Short-term variable portion partly based on specified individual qualitative objectives (e.g. projects, behaviour).</p> <p>YES. Achievement of objectives is one thing, but "there are other criteria" in the long term.</p>	<p>YES. Large variable portion, including 40% to 70% related to achievement of budget targets. The aim is "<i>spot landing</i>" (to come in right on target).</p> <p>YES. 30% of the bonus is based on behavioural objectives, team spirit and qualitative objectives. Subjectively assessed by the superior, who takes into consideration the effort put in and the difficulty of targets.</p> <p>YES. Strong emphasis on trust, reputation, and credibility building developed over the years.</p>	<p>YES. Variable portion of 20%, including 10% on measurable, quantifiable collective objectives. The superior decides to allocate individually or not the team's objective.</p> <p>YES. 50% of the bonus is based on more qualitative individual objectives. Collective performance and team spirit always take precedence. Dismissal may result from behaviour, not from failure to achieve budget targets.</p> <p>YES. It is possible to miss the short-term bonus and nevertheless have a good career in the company.</p>
	Computer services	Transportation	Computer equipment	Food	Packaging	Healthcare
<p>9. At year-end: do formula-based incentives work? How?</p> <p>10. Are there any short-term subjective rewards? How do they work?</p> <p>11. Are there any long-term subjective rewards? What does a career depend on?</p>	<p>YES. Sales force's variable portion of 30% to 40%. Bonus applies for quantitative objectives only, in proportion to achievement of results.</p> <p>NO. Apparently no great success...</p> <p>NO. Only the results count...</p>	<p>YES. Sales force's variable portion of 10% to 15%.</p> <p>N.A.</p> <p>YES. Only the superior can take people forward in their career (or not), depending on their "performance".</p>	<p>YES. Sales force's variable portion of 60%, based solely on top-down sales targets.</p> <p>NO.</p> <p>NO. Only results matter for career development: no more than one mistake or failure.</p>	<p>VARIABLE, depending on the hierarchical level YES for the marketing manager and above, based on sales revenue targets; NO below.</p> <p>YES. For levels below the marketing manager, pay rises are distributed at his/her discretion, mainly taking personal qualities into consideration.</p> <p>YES. The career depends on both formal and informal qualitative assessment factors.</p>	<p>YES. Large variable portion. Trigger: individual bonuses are only negotiable if the overall objective is met.</p> <p>NOT REALLY. The bonus partly depends on qualitative, but generally measurable objectives. However, due to the "trigger system", "everybody is in the same boat".</p> <p>YES. The career is determined by the successive annual evaluation interviews</p>	<p>NO. Achievement of sales targets is not taken into consideration in salespersons' pay. The individual evaluation is totally disconnected from (collective) budget performance.</p> <p>YES. Individual performance objectives concern skill developments. The highly developed team spirit is also reflected in collective rewards.</p> <p>YES. No "fast-track" career path.</p>

Table 4: Performance evaluation at year end

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