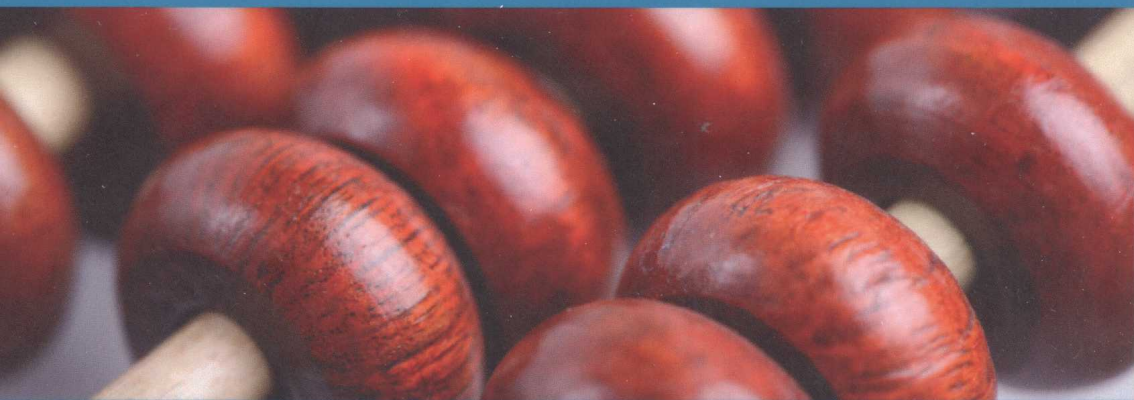# Budgeting Practice and Organisational Structure

David Dugdale and Stephen Lyne

4. *motivating* managers to strive to achieve the organizational goals

5. *controlling* activities

6. *evaluating* the performance of managers

Budgeting for the key activities of *planning* and *control* seems simple enough though pinning down these concepts is not so easy. Mintzberg argued that many definitions of 'planning' are so broad as to be useless and concluded that strategic planning is characterised by its formalised and structured nature. This definition makes clear why budgeting, with its institutionalised procedures, is associated with organisational planning.

Control is often associated with 'dominance' but, in management accounting, usually means comparison to plan and acting to correct deviations. Again the link to budgeting is clear as an articulated budget acts as a standard against which actual results can be compared so as to stimulate corrective action. We also note that budgeting can be implicated in assisting managers to direct subordinates, in facilitating control of the agenda and in budgeting's underpinning ideology that insists on the importance of profit and cost control.

Budgeting helped senior managers to construct organisations with clearly defined areas of responsibility with managers monitored through the tool of budgetary control. The link between budgetary control and the delegation of responsibility may have facilitated the growth of large businesses because, as businesses grew, it became necessary for central managers to delegate their authority and they therefore needed some means of ensuring that control was still retained.

Although the theory of budgeting was quickly developed and stabilised this does not imply that companies rapidly adopted the new technique. In fact, take-up was relatively slow and companies taking up budgeting often did so only partially without producing full budgeted profit and loss accounts and balance sheets. However, despite the uneven implementation of the technique, after the Second World War, surveys increasingly found that budgeting was widespread and the most recent surveys indicate that virtually all companies use budgeting systems.

The Literature: Problems with Budgets

Budgetary control could be perceived as managerial, impersonal, controlling, task oriented and designed to hold managers and supervisors to account. Argyris (1952) commented that '...making the tool is a far easier task than learning how to use it...' and, based on his research, concluded that budgets could be used to pressure factory supervisors: leading to endemic conflict because staff 'success' was achieved by reporting supervisors 'failure'. Additionally, responsibility centre budgeting emphasised

individual accountability and militated against teamwork with supervisors blaming others and indulging in budget games.

Hopwood (1972) and Otley (1978) investigated management control in a Chicago-based steel manufacturer and the UK National Coal Board respectively. Hopwood's findings were similar to those of Argyris. He concluded that a budget-constrained style, based upon the cost-centre head's ability to continually meet short-term budgets, was more likely to result in job-related tension and manipulation and was, therefore, likely to lead to inferior performance. Otley, however, failed to confirm Hopwood's findings. He concluded that, in the NCB, that style of performance evaluation had little impact on subordinates feelings and motivations.

Attempts to reconcile the Hopwood and Otley studies concentrated on differing organisation structures and contrasted interdependent cost centres (more uncertainty) in Hopwood's study with relatively autonomous profit centres (less uncertainty) in Otley's study. We suspect the contrast between cost centres and profit centres is more important than the more abstract concept of 'uncertainty' and the interaction between organisational structures and control systems is a key theme in this study.

Commonsense suggests that budgets need to be set at an attainable (though possibly difficult) level and, in the 1960s, Stedry and Hofstede undertook experiments and field studies that suggested that individuals did, indeed, respond best to a challenging target. If the target was either too easy or clearly unachievable performance was not as good as when the target was 'tight but achievable'. Hofstede noted that translating this finding into action was complicated because of the number of intervening variables such as personality, company structure and plant culture. Additionally, a tight budget that encouraged maximum effort might still not be achieved and was not, therefore, realistic for planning. Unexpectedly, despite earlier findings, Merchant and Manzoni (1989) discovered, in a study of profit-centre managers, that budgets were actually *attainable* most of the time. They reported many advantages: bonuses paid, credibility maintained, commitment to 'winning' strengthened, overspending (driven by a too optimistic budget) avoided, earnings predictable, fewer interventions needed and earnings manipulation reduced.

Again, organisation structure comes into play, Otley's and Merchant & Manzoni's findings relate to profit centres whereas Argyris and Hopwood's relate to cost centres. Also, wider context is important. As Merchant and Manzoni point out, there are many ways to motivate managers such as extra bonuses, recognition, credibility and increased career prospects. Senior managers have many levers at their disposal beside the use of tight budgets.

It is well known that managers sometimes play 'budget games'. Research has revealed that the inclusion of budget 'slack' or 'padding' is commonplace with, for example, Onsi (1973) finding that 80% of managers interviewed were prepared to admit that they bargained for slack. Budget gaming may be a consequence of encouraging participation in the budgeting process as managers use the opportunity

to bias the budget either optimistically (if they feel insecure) or pessimistically (to improve the chance of achieving the budget).

Early literature tended to view budget slack as unfortunate and dysfunctional. However, attainable budgets have advantages and contemporary literature indicates that some slack can be desirable, providing some flexibility to operating managers. Managers may take actions that are actually beneficial to the company, for example, by continuing a good project that would otherwise be lost.

Budgetary slack and padding are attempts by managers to game the budgeting system *in advance*. Managers may also game the budget *after* it has been implemented, both by making accounting entries that show their operations in a better light and by operational changes that are driven by desire to report better results. For example, managers may incorrectly book expenses to other cost centres or in the wrong accounting period and, more worryingly, managers may defer important but discretionary expenditures so as to improve short-term results.

The Literature: 'Beyond Budgeting'

The 'Beyond Budgeting' movement stemmed from a feeling that traditional, hierarchical budgeting was at odds with the new 'realities' of global competition and rapid change. Originally CAM-I's[1] interest was in the development of 'advanced budgeting' but Bunce et al. (1995) concluded that a better budgeting system was unlikely. Instead, Bunce and Fraser formed the 'Beyond Budgeting Round Table' (BBRT) and, inspired by the example of a Swedish bank, Svenska Handelsbanken, advocated, not better budgeting, but the abandonment of budgeting.

Hope and Fraser argued that budgeting systems are inflexible, fail to support managers in competitive environments, encourage managerial gaming and are bureaucratic and expensive. They are particularly critical of the use of budgets as a rigid 'performance contract'. Hope and Fraser linked the abandonment of budgeting with the adoption of what they called the 'N-form' organisation that should replace the divisional 'M-form'. In this type of networked organisation with emphasis on open non-hierarchical communication, there would be multiple linkages between managers at all levels, group executives would be 'challengers', middle managers, 'integrators' and SBU managers, 'entrepreneurs'. Rewards to managers would be based on relative performance measures versus competition not on performance related to a preset budget. A thorough-going culture change was needed based on responsibility, enterprise, trust and loyalty.

---

[1] CAM-I is an international, non-profit making consortium of companies that works with academics in pursuing industry-based research into management systems. Originally CAM-I focused on computer-aided manufacturing but the consortium played a key role in the spread of activity-based techniques in the late 1980s.

The 'Beyond Budgeting' critique echoes earlier gaming themes: setting low targets, procuring more resources than are needed, spending what is in the budget, making the budget 'whatever it takes', meeting the budget but not beating it. Additionally, Hope and Fraser draw attention to the possibly bureaucratic, rigid and expensive nature of budgets and to the use of budgets in performance contracts. However, Hope and Fraser's analysis is rather one-sided and the budgeting literature provides examples of the *beneficial* use of budgetary slack and *appropriate* emphasis on the budget.

Aims of the Survey

The main aim of the survey was to discover whether the 'Beyond Budgeting' critique had affected attitudes to budgeting and whether budgeting practices had changed in recent years as a result. The attitudes of both financial and non-financial managers were investigated and use of the 'BRICMAR'[2] database of companies generated an acceptable response rate of 40.1% to a survey questionnaire. Forty companies from the industrial and service sectors were represented. A financial manager responded from all these companies (response rate 53.3%) and a non-financial manager responded from 21 companies (response rate 28%). Respondents were asked about the importance of budgeting for planning, control, coordination, communication, authorisation, motivation and performance evaluation and the extent to which they agreed with 20 statements that were critical of budgeting. These questions were based on both the traditional and the 'Beyond Budgeting' literatures.

Findings: Financial Versus Non-financial Managers

We were surprised that there were almost no significant differences between the responses of financial and non-financial managers to statements about the importance of budgeting and to statements criticising budgeting. The only significant result related to the time-consuming nature of budgets, their realism and the need for more budgeting resources. Financial managers were more likely to agree that budgets are too time consuming while non-financial managers were more likely to see budgets as unrealistic and to agree that more budgeting resources were needed.

Findings: The Budgeting Process

All 40 respondents confirmed that their companies set budgets. Budgeting processes do tend to be bureaucratic, typically starting 4–6 months before the start of the financial year and involving a number of iterations. Budgets are usually set for each

---

[2]Bristol Centre for Management Accounting Research.

month in the financial year and the vast majority confirmed that variances between budget and actual results are reported monthly. Most companies also provided previous year data for comparison. Few companies claimed to flex the budget before calculating variances and almost 80% of respondents indicated that the budget was not revised during the financial year. Most respondents felt that the budgeting process was driven by senior managers although a significant number (more than half) also felt that junior managers had a major input. Most (85%) of respondents confirmed that financial forecasts are prepared, usually for the remainder of the financial year.

▌ Findings: Attitudes to Budgets

Almost 95% of financial managers thought that budgets are fairly, very or extremely important, performance evaluation, control and planning being the most important uses. Budgets are also important for coordination, communication and authorisation, but respondents tended not to agree that budgets are important for motivation.

Most financial managers *disagreed* with the statements criticising budgeting. A majority of financial managers agreed or strongly agreed with *only two* (from twenty) of the critical statements. Overall, these results do *not* indicate widespread dissatisfaction with budgets and budgeting processes in the survey companies.

While most respondents were not critical of budgeting some were and an open-ended question asked for reasons for dissatisfaction. There were three causes:

1. The 'top-down' nature of the process that could lead to lack of local ownership.
2. Lack of accountability or involvement of operating managers.
3. Need for a better budgeting process.

When asked directly a significant minority of managers expressed some dissatisfaction. However, the issues raised did not relate to over-emphasis on accounting measures, the budget-constrained style of management, target setting or budget gaming. Instead they were concerned with the budgeting process and the roles of both top managers and operating managers.

Changes in the Budgeting Process

More than half (55%) of the respondents reported some form of change in the past 5 years and three general themes emerged:

1. Greater involvement of junior management in budgeting processes.
2. More detailed analysis.
3. Intensification in the use of budgets.

Traditional budgeting methods are not decreasing in importance and another question indicated that their use in setting bonuses was *increasing* in importance. Change in the past 5 years had not been driven by the 'Beyond Budgeting' movement, instead, respondents reported more sophisticated (traditional) budgeting, and, in some companies, tighter financial controls.

There was also evidence that non-financial performance indicators and the balanced scorecard had become more important in recent years together with increasing emphasis on standard costing and variance analysis.

Exploration of the Data

Generally, this study shows that there is more satisfaction with budgeting when conditions are relatively stable. When there is more certainty budgets become more important for implementation and control and managers are unlikely to agree that budgets cause problems. This is consistent with traditional literature that Otley (2001) summarised '...budgetary control appeared to work reasonably satisfactorily in a relatively stable environment with well-codified business plans.'

If conditions are relatively uncertain then budgeting is generally not so well regarded although we report that it becomes more important for *planning*. Consistent with this, there is more participation in budgeting with more involvement of junior managers and more iterations in the development of the budget. We also note that, in uncertain conditions, managers feel that budgets can be both challenging *and* realistic and, consequent on the involvement of more managers, budget gaming tends to increase.

In 'top-down' companies where *senior management drive the budget* there is a very significant likelihood that the budgeting process will be perceived as more bureaucratic, time consuming and inhibiting.

Analysis of survey data showed that attitudes to budgeting are likely to be most favourable in stable conditions where top management adopts a relatively light touch to the budgeting process.

Conclusion

We conclude that neither the traditional literature nor the 'Beyond Budgeting' diagnosis captures the reality of budgeting practice in contemporary organisations:

- Traditional literature has concentrated on the behavioural consequences of budgeting but, in this survey, there was only limited evidence of budgets leading to a blame culture, excessive gaming or over-stringent targets.

- The 'Beyond Budgeting' critique identifies the bureaucratic and time-consuming nature of budgets; performance contracts and gaming as problems and similar dimensions emerged from our factor analysis. *However*, there is little to suggest that budgeting is perceived as a major problem by most financial or non-financial managers.

Our observations are consistent with those of Ross (1995) and Frow et al. (2005). Ross failed to replicate the Hopwood and Otley studies and concluded that one possible explanation was that '...a more flexible use of variances for performance evaluation had developed' (p. 8). Frow et al. investigated whether traditional budgeting based on responsibility centres inhibited innovation in a high-tech company and concluded that it did not. These positive findings are consistent with our survey. Budgets are often used flexibly and there is very limited evidence of the various misfortunes that might follow in the wake of budgeting. Budgets can be time consuming, bureaucratic and rigid, managerial ownership might be lost and some managers complained of sometimes unfortunate interventions by senior managers. However, most managers are satisfied with their budgeting systems. Where companies do go 'Beyond Budgeting' they do so by adding additional techniques or analytical detail rather than reducing traditional budgeting.

Part 2

Introduction

A number of interviews were undertaken in order to confirm the findings of the survey and to provide more insight into the changing uses of budgeting. This revealed the importance of understanding the uses of budgeting in organisational context and helped provide a provisional reconciliation of our findings with those that advocate 'Beyond Budgeting'.

The Literature: Business Structures and Control

As small businesses grow, they develop specialised, *differentiated* functions and budgetary control provides a means of *integrating* these, allowing functional directors to set out objectives and plans and delegate authority to responsible managers.

Business structure depends on circumstances and Burns and Stalker (1961) showed that administrative, hierarchical control may lead to loss of flexibility and

innovation. In uncertain conditions, they recommended *organic* structures based on individual initiative, lateral communication and shared values. Chenhall (2003) summarised subsequent research noting that organic structures were associated with broad scope and timely information, more subjective evaluation style, participative budgeting and more interpersonal interaction.

Woodward (1965) found that technology (individual, batch, mass) had an important influence on structure and Thompson (1967) provided a categorisation of technologies: pooled, sequential or reciprocally interdependent. Pooled interdependence (e.g. bank branches) refers to relatively self-contained operating units carrying out similar activities. Sequential interdependence (as in many manufacturing operations) arises when the output from one department is passed to the next in serial fashion. Reciprocal interdependence (e.g. in the interaction between marketing, design and development departments) is characterised by work passing back and forth between departments and complex dependencies. Macintosh and Daft (1987) confirmed that pooled organisations tend to use standardised rules and procedures, sequential organisations use more sophisticated accounting and reciprocal organisations need more face-to-face interaction and mutual adjustment.

Decentralisation in Very Large Organisations

Following study of the growth of American businesses, Chandler (1962) showed that very large companies needed to adopt something other than functional (whether mechanistic or organic) structures. Large firms tended to diversify both products and markets but this placed an 'intolerable strain' on existing administrative structures and Chandler concluded that, as companies grew and diversified, they moved towards decentralised, divisional, product–market-related structures.

Divisional organisation structures are now ubiquitous, often with many decentralised divisions, each with its own functional organisation, reporting to a corporate centre that might include a variety of staff functions that support the divisions. There can be many layers with divisions, themselves, internally decentralised into product/market business units while corporate 'centres' themselves report to yet higher corporate levels.

Contemporary and Future Organisations

The application of the principles of decentralisation and mechanistic/organic structures has been adapted to developments such as flexible manufacturing, just-in-time production, total quality management, lean methods and workforce empowerment

and an increasingly globalised, deregulated and competitive environment. Researchers expected more team structures and more diversified skills in empowered employees and this is what they found. Generally, recent developments in manufacturing and a more uncertain, competitive environment have tended to promote more organic than mechanistic structures.

Beinhocker (2007) and Hamel (2007) supported the move towards organic structures with a radical attack on traditional economic theory and examples of companies that emphasised encouragement, peer pressure and results-based incentives. Hamel's examples have similarities with the key 'Beyond Budgeting' example, Svenska Handelsbanken and the future of organisations might be ever more organic structures with flat hierarchies and democratically managed and remunerated teams. However, we also note that the companies chosen as examples emphasise innovation and can be organised into relatively small, sometimes pooled units. Flat organisational structures are easier to arrange in these companies than in those companies that focus on efficient execution of complex processes.

Hierarchies and Markets

Arrow (1969) and Williamson (1981a,b) drew attention to transaction costs with markets being efficient when transaction costs are low but, if complex contracts are needed, transaction costs increase and hierarchical organisation becomes more efficient. Paradoxically, as companies grew, the hierarchies became unworkable and, as Chandler explained, this has been met by the introduction of internal market-based structures.

Hierarchies, Markets and Clans

Organisations may be structured as mechanistic hierarchies or they may prefer organic structures where the glue is not the invisible reporting lines that define duties and responsibilities but common beliefs and values. Ouchi (1980) later referred to this sort of organisational control as *clan* control with employees socialised to regard their personal interests as congruent with those of the organisation.

This analysis based on markets (output controls), hierarchies (process controls) and clans (input controls of beliefs and values) provides insights into the transition of growing organisations from markets to hierarchies and then back to the use of markets as very large companies decentralised. Clan controls, appropriate to organic organisations, provide a counterpoint to mechanistic, hierarchical controls with beliefs and values replacing reliance on rules and instructions.

Our summary:

1   A taxonomy of control systems

		Focus of control		
		Input control	Process control	Output control
Method of control	**Formal systems**	**Budgetary control** for authorisation of financial resources. Qualifications, training, induction schemes for control over personnel	**Mechanistic** structures with administrative systems for control over action. Standards, procedures, **budgets**, bureaucracies, hierarchies and role definitions.	Specification of required outputs: product and service quality and volume; financial metrics for performance evaluation. **Markets** for product; incentive schemes for results.
	Informal systems	Company values and culture leading to peer pressure and **clan** control over personnel	**Organic** structures with lateral communications and reliance on interpersonal relationships	If outputs are ambiguous or difficult to evaluate subjective social controls may be needed.

Budgetary control is most likely to be associated with *formal* organisational control especially when that control is over *inputs and processes* and is especially useful when outputs are unambiguously specified and the relationship between outputs and inputs is well understood.

Strategy and Control

Chandler's analysis showed how large, diversified companies opted for decentralised organisation structures and Goold and Campbell's (1987) research found that strategy might be set at the corporate centre (core businesses), at divisional level (diverse businesses) or at business unit level (manageable businesses).

From the late 1970s a number of models were suggested that could help in analysing strategy and in guiding its formulation: the defender–prospector–analyser typology of Miles and Snow (1978); Porter's (1980, 1985) identification of cost leadership and differentiation as generic strategies and the build–hold–harvest–divest strategic missions of Gupta and Govindarajan (1984). Common sense matching between chosen strategy and control systems suggested that defenders and cost leaders would use hierarchical, centralised, mechanistic structures. On the other hand, prospectors following differentiation strategies would use more organic structures with control through interpersonal coordination rather than formal systems. Surprisingly, research did not confirm these expectations.

This caused a re-evaluation of budgeting and Simons (1995) set out his 'levers of control' based on belief systems, boundary systems, interactive systems and diagnostic systems. This echoes several of the themes developed in our literature review: belief systems relate to clan control and organic structures; boundary systems link to input controls; interactive systems imply participation; diagnostic systems link to traditional feedback (or feed-forward) standard costing and budgeting systems.

Simons' analysis leads to the conclusion that the manner in which control systems are *used* is important. While output targets and standards are intrinsic to diagnostic control systems, according to Simons they should not be used in interactive control systems where participants are expected to share problems and opportunities and propose solutions, thus fostering organisational learning. 'For these reasons, control systems *cannot* be used interactively if incentives are linked by formula to fixed, *ex ante* goals' (p. 118).

The Field Study

Visits were made to eight of the companies that had participated in the survey and interviews undertaken either with a finance manager or with both finance and non-finance managers. A semi-structured interview style was adopted.

The companies represented a range of manufacturing industries[3] and varied from a very large cost centre, Aircraft, part of an aerospace multinational, to two small, privately owned companies, Systems and WRL. We visited five companies that could be characterised as 'profit centres': Systems, WRL, Foundations, Frozen Food and Jam. Of the remaining three companies, Aircraft and Laboratory Instruments were cost centres and, at the last company, Food Ingredients, our interviewee

---

[3] Three from the food industry, Frozen Food, Jam and Food Ingredients; one in construction, Foundations; one wholesaling/retailing, WRL; one manufacturer of laboratory instruments, Laboratory Instruments; one engineering consultant, Systems; and one in the aircraft industry, Aircraft.

represented the corporate centre of a major European division. Two companies, Systems and the Jam Group, had plans to float on the stock exchange.

Field Study Findings: Budget Preparation

The field study confirmed the findings of the survey. Typically budget preparation begins 3–6 months before the financial year and follows a carefully structured process. We were impressed by the attention to detail and, where appropriate, the use of probabilities to estimate the likelihood of winning contracts. There were references to the longwinded nature of budgeting (at Aircraft and Systems) and at two companies, Laboratory Instruments and Frozen Food, this had been addressed by reducing the timescale for preparation of the budget by 1 month.

'Ownership' of the budget by responsible managers was an important issue in most of the companies. If profit-accountable managers accept their budget, one would expect them to be motivated towards its achievement and this did seem to be the case. In one company we heard about a failure of budget ownership: agreement to an over-ambitious budget, subsequent failure, demoralisation and the general manager responsible left the company.

The pressure for an aggressive budget varied from company to company. At the two companies that desired stock exchange listing senior managers generated pressure and inserted budget 'tasks'. In other companies realistic (though not easily achieved) budgets were set and, at Foundations, there was a clear mandate from the corporate centre to ensure that the budget was *achievable*. There could be some conflict, for example, at Systems, the Finance Director wanted realism while the general manager wanted more ambition.

The field study supports the results of the survey. In these companies preparation of the budget begins some months in advance of the financial year and preparation can be longwinded with several iterations. Two companies had taken steps to reduce the time taken to prepare the budget and, in some companies, there was recognition that it was a time-consuming and expensive process. This did not lead automatically to dissatisfaction but, in two companies, the interventions of senior managers were criticised.

Field Study Findings: Budgets for Influencing and Controlling Behaviour

Budgets are used for control in all the companies and, at Systems and Laboratory Instruments, the Managing Director set what might be considered a budget-constrained culture. At Systems this led to some job-related tension while, at the cost centre, Laboratory Instruments, managers seemed to accept the need for tight targets and cost control (aggressive targets in Laboratory Instruments' more stable,

cost-centre environment may be more acceptable). Whereas Systems and Laboratory Instruments faced personal constraint, enforced by individuals, the large cost centre, Aircraft, seemed to face bureaucratic constraint with complex systems and senior managers involved in detailed reporting.

The profit-centre managers tended to emphasise managerial responsibility rather than control with the need to educate managers to take action even if this involved unbudgeted spend at Foundations and WRL. Managers at Jam seemed to be sand-wiched[4] between corporate managers insisting on aggressive targets and their local culture that emphasised teamwork and supportive budgeting. The budget sets the financial profit but '…not the method of getting there'.

Field Study Findings: Resetting the Budget

All these companies set a budget for the financial year and did not amend it. Aircraft and Systems had previously reset the budget but, at Aircraft, it was felt that this involved a disproportionate finance workload for the benefit obtained and, at Systems, the board felt that, if the budget could be changed, managers did not take it sufficiently seriously.

Field Study Findings: Attitudes to Budgeting

In the survey most respondents continue to see budgets as important and the field study confirmed these perceptions. Budgeting is 'essential', 'pretty important' and the 'primary financial tool'. It 'provided a framework', 'crystallised targets' and allowed 'management by exception'. Although there were some adverse comments, as in the survey, these were outweighed by generally positive comments.

In the survey respondents generally *did not* agree with a list of statements criti-cising budgeting and, similarly, our interviews were generally positive. Where dis-satisfaction was expressed in the survey it was usually because of the process and/or failure to encourage local ownership of budgets and senior management pressure. Again, the interviews reflected these findings. At Aircraft and Systems, budgets were considered longwinded and local budget ownership was an issue. At both these com-panies and Jam the intervention of senior managers was not always seen as helpful.

Implications for 'Beyond Budgeting' and Traditional Literatures

We confirm that *budget processes tend to be longwinded and bureaucratic* although this did not automatically lead to dissatisfaction. Two companies had reduced the length of time given to budget preparation.

---

[4]No pun intended.

We had little evidence that budgeting *fails to meet the needs of managers in competitive environments*. In general, budgeting was seen as helpful for planning and control and, as in Frow et al. (2005), managers seemed to find budgets useful in setting a realistic financial framework rather than inhibiting necessary action.

There was little evidence that *performance contracts are pernicious* although incentive schemes had real and sometimes undesirable effects. At Food Ingredients and Frozen Food budgets might be 'managed' with an eye on potential bonuses and the combination of budget targets and an incentive scheme was criticised at Systems.

There were limited examples of *budgets leading to gaming:* budget contingencies to manage the expectations of Group managers and a danger that, once authorised, operational managers might regard budgets as 'theirs to spend'. Overall, managers were aware of the dangers of budget gaming and did not see this as a major issue.

We saw only one example, at Systems, of *a budget-constrained style having adverse consequences*. In most of the companies we would have characterised the style as more 'profit conscious' than 'budget constrained'.

There was little evidence of *conflicting objectives in setting budget targets*: survey managers did not agree that this was a problem. There was some evidence of budget optimism, especially at Systems and, recently, at Jam. However, even at these companies, there were voices arguing for realism and, generally, companies seemed to set realistic but nevertheless challenging budgets.

The use of budgeting does seem to have moved on since the 1970s with managers generally positive about the benefits of budgeting, aware of the possible risks and prepared to use the budget constructively so long as the culture set by senior managers permits this.

Lessons from the Field Study: Culture, Context and Structure

Local management culture was influenced by the structures adopted. Managers in decentralised, autonomous profit centres adopted flexible approaches to meeting targets while management attitudes at Laboratory Instruments and Aircraft were influenced by their cost-centre status.

Context was important at all the companies. Possible stock exchange listing affected senior management attitudes at Jam and Systems. Serious difficulties at WRL meant budgeting was necessary to reassure creditors. At Laboratory Instruments recent cost pressures had led to a freeze on capital expenditure. At Aircraft the joint venture, trans-European nature of the operation, set the context for budgeting and other systems. At Frozen Food the outperformance of the company allowed the use of contingencies in budgets submitted to Group and increased local flexibility. At Foundations corporate insistence on realism in budgets impacted directly on local practices.

Budgets and Structures

Profit centres were relatively autonomous and, where possible, pushed the profit-centre approach down their organisations: to geographical areas at Foundations; to products at Frozen Foods; to customer segments at Systems and to functions (wholesaling, retailing, leisure) at WRL. Jam could not so easily adopt this approach because its different product lines (and those of the wider group) are often sold to the same powerful customers. The Jam Group therefore has a marketing division that takes a large proportion of Jam's product and there is more centralisation than at other companies.

Where appropriate, standard costing and operating systems were used. Factories at Foundations and Frozen Foods were treated as cost centres, controlled, like Laboratory Instruments, through standard costing and budgeting systems. WRL also has important operational controls with an incentive scheme that rewards warehouse personnel for speedy and accurate stock-picking.

We conclude that control in the organisations we visited was exercised through a number of related systems emphasising control of *outputs* (sales, gross margin, contribution margin) in the sales areas, *processes* in the factories (standards and budgets) and *inputs* (budgeted resources) in the support areas.

Particularly important for our later conclusion was the observation that, even *within* a unit of a much larger group there were complex issues of coordination and control. Budgets at Foundations and Frozen Food help to coordinate activities across the factories, marketing areas and service centres. Budgets are also important in setting the fully absorbed cost used in transferring output from factories to marketing areas and in providing a resource envelope for service areas such as IT and Finance.

Transfer pricing policy was important in several companies. Managers at Jam and Foundations wanted 'arms-length' inter-divisional transfer pricing. There was a similar view at WRL where transfers from the wholesale division to the retail division were at the same price as that used to supply other customers. However, within Frozen Food, a Support Services centre provides its services to the other profit centres and our interviewee emphasised the importance of a relatively high transfer price so as to prevent the delivery profit centres from 'giving the service away'. At Frozen Food a specialised Support Services centre, supplying its services at managed transfer prices, is an integral part of company strategy.

Coordination, Planning and Control

Budgets were useful for different reasons. Foundations, Frozen Food and Jam need systems to *plan* and *coordinate* their production, service and delivery operations and budgets help in *setting transfer prices*. Frozen Food also uses the budget as a *control* mechanism, whereas Foundations and Jam emphasised *interaction*, trusting the managers and encouraging them to think outside the budget when needed.

At Systems and WRL there are fewer coordination issues with relatively autonomous sub-units. In these companies budgets are used for both planning and control. At Systems senior managers reverted to an unchanged budget in order to enforce agreed targets and at WRL a budgeting system was necessary to persuade creditors that the company merited continued support.

Are Budgets Needed?

A key element in the 'Beyond Budgeting' thesis is that, if companies implement radical decentralisation, they will have much less need for budgeting systems. However, *despite extensive decentralisation*, the companies we visited continue to use budgets. We argue that, even after reaching the limits of decentralisation, there was enough complexity and interdependence *within* companies we visited for budgets or other coordinating systems to be necessary.

We conclude that interdependence between business units and the corporate centre and within business units is the key to understanding whether budgets (or other coordination/planning/control systems) are *necessary*. Interdependence can be analysed into vertical, lateral and external dimensions. Vertically the business unit may share corporate services, may be constrained by corporate strategy and may suffer a degree of control both in formulating and in executing plans. Horizontally the business unit may buy from or sell to other business units. Externally, the business unit may share finished good or factor markets with other business units. Within business units the analysis in relation to sub-units proceeds in similar fashion. Sub-units may share services, follow common strategies and be closely controlled. They may take/supply products and services from/to other sub-units and, externally, they may share factor and/or finished goods markets.

This analysis indicates that interdependence varies depending on organisational level. Foundations and Frozen Food are relatively autonomous business units with few vertical, horizontal or external interactions. However, both exhibit considerable *internal* complexity. This leads us to the conclusion that, structurally, these business units could be managed by setting *output* targets but they need budgets or other planning/control systems to manage their *internal* operations.

Implications for the 'Beyond Budgeting' Debate

Partly driven by the Svenska Handelsbanken example a key element of the 'Beyond Budgeting' thesis is that modern organisations need to go beyond hierarchical, divisionalised structures and adopt flat decentralised structures. Our analysis suggests a more complex relationship between organisational structure and budgets in non-pooled organisations. At Foundations, Frozen Food, Jam, Laboratory Instruments and Aircraft we observed complex, differentiated organisations that contrasted with