

# Part Three

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## Accounting for Non-Programmed Activities

Our emphasis on the distinction between programmed and non-programmed activities allows our analysis to recognize uncertainty explicitly. In *Accounting for Management Control*, the precise sources of uncertainty are not identified and this is intentional. The significance of dynamic market forces, changes in personnel, corporate strategy and internal systems of control may, individually or in combination with other sources at any point in time, render the divisional management's decision-making task more or less programmed. The important aspect to acknowledge in our view is that all decision-making under these real-life assumptions will require a degree of intuition, judgement and discretion. Whether uncertainty influences the business enterprise to adopt a different organizational structure to the unitary or functional organization, whether this consequently causes complex interrelationships to emerge in the internal operations of the organization and whether the design of the accounting information system (AIS) promotes behaviour congruence or provides an incentive for managers to emphasize short-term, quantified performance measures play a central role in the control process. The readings selected here follow this sequence.

### ORGANIZATION STRUCTURE

The relationship between corporate strategy, organization structure and market performance is the focus of Caves's (1980) article which surveys the non-economic literature on this series of issues. The emergence of the multidivisional structure as a response to diversification, technological change and environmental uncertainty is traced over time. With growth in size, the need to develop and rely upon an all-embracing system to monitor diverse activities and complex interrelationships is apparent. The AIS is one such system but its imposition may itself cause managerial decision-making behaviour to change, not always in the firm's best interest. The success of corporate enterprises is therefore insufficiently explained by reference to market performance alone. The author calls for a greater interest by economists in corporate strategy and internal systems in order to explain why firms displaying different organizational designs appear to perform effectively in the same industrial markets.

Measurement of divisional performance is the focus of the Emmanuel and Otley (1976) and Scapens (1978) papers. The debate surrounding residual income may be viewed as significant when segments or divisions of the firm are treated as investment centres. Emmanuel and Otley take a managerial behaviour view which examines reactions to alternative profit performance measures. For planning and monitoring purposes, residual income can be argued to give less ambiguous signals than rate of return on investment or absolute profit measures. Despite the practical difficulty of determining which cost of capital to employ in the calculation of residual income, its successful application may be most appropriate when divisional management exercise significant influence over the capital investment decision, an issue which may reflect or influence corporate strategy itself. The effectiveness of the performance measure to obtain the correct response from managers is therefore conditioned by the strategic and organizational setting. The consistency between residual income as a short-term measure of managerial performance and the maximization of net present value (NPV) is ably demonstrated by Scapens. Economic profit, and hence residual income, can be improved by the use of an enterprise-wide decision model. This is an interesting conclusion given the differing growth, risk and profitability profiles most multidivisional firms exhibit and contradicts the view that each division should have a separate cost of capital. As in other parts of the performance measurement literature, a trade-off between the practically feasible and theoretically desirable must be made.

## MANAGING COMPLEXITY

This preference for company-wide decision models has a parallel in the transfer pricing literature. With increasing size and adoption of the multidivisional structure, the interrelationships between parts of the enterprise become more complex. Transfer pricing can be viewed as a mechanism of integrating or differentiating divisional operations. The neoclassical economic approach views this problem as finding a company-wide solution, the transfer price being the means to secure the optimal amount of inter-divisional trade. However, this approach inevitably impairs and limits the decision-making autonomy of divisional management. Watson and Baumler (1975), in their seminal paper, attempt to evaluate when transfer pricing as an integrating or differentiating mechanism could be best used. They are inevitably driven to identify not just the pricing base but also the process and objectives transfer pricing systems may serve. They recognize that whilst sub-optimization can be demonstrated by means of neoclassical economic and mathematical models, the value of decentralized decision-making can rarely, if ever, be quantified. However, this is not to say that the largely intangible benefits of decentralization are any the less important.

A transfer pricing procedure designed to balance the worst excesses of abuse of divisional autonomy and centralization is suggested by Emmanuel

and Gee (1982). Uncertainty in intermediate markets is explicitly recognized and a 'fair and neutral' procedure is recommended whereby the means of calculating the transfer price is known before inter-divisional trade is undertaken, with the actual value only becoming known subsequently. Hence divisional autonomy is maintained but the choice between trading internally and externally is based on comparisons of relevant cost data for decision-making and forecasts of market prices. The possibility of sub-optimization persists but the resulting divisional profit figures are argued to reflect the decision-making responsibilities of the managers concerned.

The consideration of market imperfections is taken further by Spicer (1988) whose analysis is firmly embedded in the organizational failures and transaction costs literature. Six hypotheses are developed which for the first time offer an organizational framework in which transfer pricing can be examined. The theory of the transfer pricing process acknowledges the influence of strategy, centralization, arbitration procedures, performance related incentives and the characteristics of the item being traded. In many respects, the six hypotheses provide a structure for future research and demonstrate the ample scope that remains. If there is an apparent limitation in Spicer's framework, it is the relatively low significance associated with divisional autonomy and the behavioural issues highlighted by Watson and Baumler. Nevertheless, Spicer has indicated a potentially fruitful way forward whilst Grabski (1985) provides an overview of current research. As his paper deftly shows there are almost as many transfer pricing techniques as there are researchers. There are also almost as many roles, especially in the international movements of goods and services, which transfer pricing may play. A comprehensive survey of empirical research reveals the variety of practice and the author concludes that a behavioural approach is likely to be the most rewarding for future research. From the plethora of options, Grabski supports negotiated transfer pricing which may reduce conflict within multidivisional firms, especially if performance of the entire firm is highlighted. Again, there is the recognition that transfer pricing must be viewed within its organizational context.

## BEHAVIOUR CONGRUENCE

In our desire to establish behaviour congruent performance measures to ensure divisional management take non-programmed decisions compatible with the overall interests of the firm, we identified inaccuracy, incompleteness and non-neutrality as major obstacles. Of these, perhaps the short-term property of virtually all financial performance measures is the most pervasive in practice. Divisional management is delegated decision-making autonomy and, in return, is held strictly accountable for financial performance. When this accountability concentrates on quarterly, half-yearly or even annual evaluation, there is the distinct possibility that divisional management will perceive attainment of the financial measures

as the goals themselves rather than as means to a desired end. Pressure to achieve these short-term measures may be reinforced when an incentive scheme is linked to them and this may lead divisional management to take decisions which safeguard self-interest but which result in second-best solutions for the firm as a whole. This lack of behaviour congruence is clearly seen when, for example, different accounting models are used to evaluate managerial performance as distinct from capital investment proposals. The potentially harmful effects of short-term financial performance measures being associated with incentive schemes and with capital investment proposals are addressed by the articles of Merchant and Manzoni (1989) and Haka, Gordon and Pinches (1988) respectively in this part. However, the contributions of Scapens and Emmanuel and Otley which appeared earlier are also relevant to these issues.

Although there are several surveys which indicate the use of incentive schemes in practice, there is surprisingly little evidence relating to their effectiveness, either from the viewpoint of the firm's top management or divisional management. One of the few exceptions is the article by Merchant and Manzoni. With data gathered from 54 profit centres in 12 corporations in the USA, they find that on average, eight or nine times out of ten, the annual budget target is achieved. This contrasts with the conventional claim that motivational budgets should be achieved less than 50 per cent of the time. However, the managers interviewed in this study argue that corporate reporting and resource planning, control and even motivation is improved under the incentive schemes they experience. Short-term financial performance measures may not therefore lead to incongruent behaviour if the targets set are easily achievable. Hence, the degree of difficulty of attainment may be an ameliorating variable. Defensive routines created by divisional management to provide alibis for under-performance are avoided (see Argyris (1990) in Part Four for a theoretical justification). However, the Merchant and Manzoni study does prompt the question: 'Was the incentive scheme really essential in these situations and what was it trying to achieve?' If the profit centre managers were programmed decision-makers, the findings may not be so surprising.

Another potential contradiction to the conventional wisdom is exposed by Haka, Gordon and Pinches. Firms using sophisticated capital budgeting techniques such as NPV and which account for risk should theoretically perform better than firms using naive models such as the payback period or accounting rate of return. However, for a matched pair survey of 30 sophisticated and 30 naive user firms, no evidence to support the claim can be made. One explanation which could not be controlled for concerned the individual company's incentive and reward structure. In the decentralized multidivisional firm this might result in managers submitting more or less projects for approval and these would vary in the extent to which self-interest and company interest are aligned. Both of these empirical studies indicate that our present level of understanding as to the actual use made of short-term performance measures is limited. There is a whole host of interesting issues to be researched and we are only beginning to pose the questions in a meaningful manner.

## CONCLUSIONS

In total, this selection of readings provide a rich body of evidence testifying to the complexity of operating a multidivisional structure successfully. The majority of these papers explicitly recognize uncertainty, and hence the non-programmed nature of divisional management decision-making. The underlying message is that we, as accountants, advocate the use of certain techniques at our peril if we do not take into account the strategic, behavioural and organizational dimensions which are a central part of exercising effective control in today's large business enterprise.