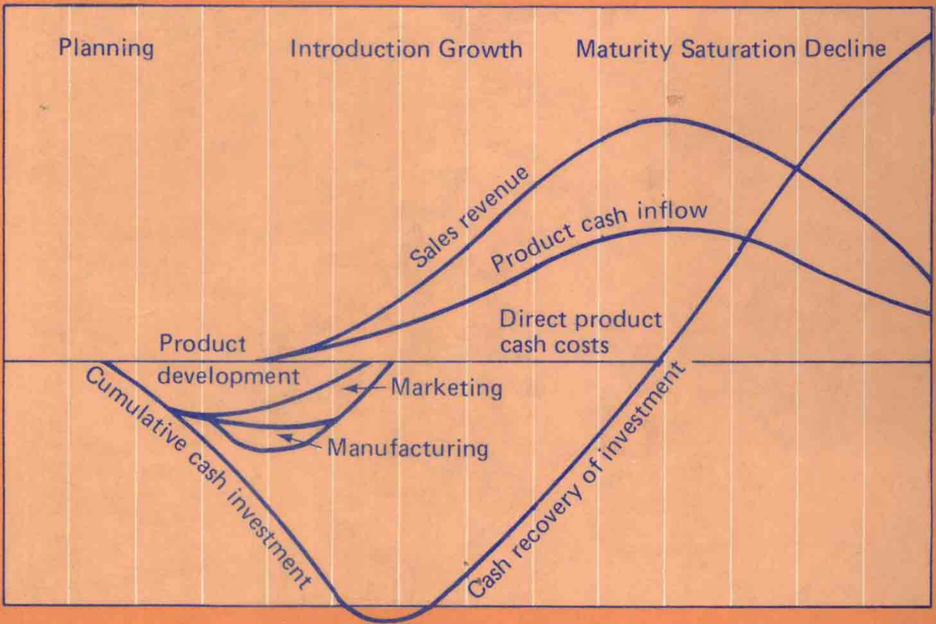
TOPICS IN MANAGEMENT ACCOUNTING



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Topics in Management Accounting

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Preface

British writers have contributed substantially to the development of the literature on management accounting. In this book we have attempted to bring together contributions from a number of leading British academics, many of whom have been involved in the advancement of the literature. The book is intended to complement introductory and intermediate level text books in management accounting. It is aimed primarily at students taking undergraduate university courses, or other courses of a similar level. The book should give such students some insights into the scope and methods of the subject and an appreciation of its more exciting and challenging aspects. It is also suitable for managers who are interested in a relatively non-mathematical account of the state of management accounting in British universities.

The particular contribution of the book is that it brings together original writings by authors who are experts in the topics covered. All of the authors are, or have been, based at UK universities and, in consequence, the book illustrates current UK academic thinking in management accounting. Each chapter contains an explanation of the topic covered at a fairly basic level and a discussion of possible applications. Where appropriate, simple numerical examples are used to illustrate the main points. Inevitably, in a book of this size, it has not been possible to deal with all topics which are currently thought to be within the management accounting area. To those readers who rue the omission of, for example, contributions in the area of capital budgeting, we apologise.

The chapters that are included fall into six main categories. The first four chapters examine topics which are prerequisites for a study of almost any aspect of accounting, and which provide a framework for the remainder of the book. Chapter

5 deals particularly with problems involved in, and methods available for, forecasting. This is an activity which is central to much of management accounting. In Chapters 6 to 9 various aspects of (short-term) decision making are discussed; in particular the measurement and application of relevant costs for decisions. Chapters 10 to 12 are concerned with the control of the implementation of plans arising from the decision making process, and with the ways in which control information might be used to develop future plans. Chapter 13 provides an historical perspective of management accounting and explains the current state of the subject. We believe that an understanding of the historical development of management accounting methods is of great importance in evaluating their usefulness. Chapter 14 summarises and provides a synthesis of previous chapters, and suggests certain areas in which future research could be conducted.

We extend our thanks to all those who have contributed chapters. No-one refused our invitation and everyone accepted our often unreasonable deadlines with good grace. Our thanks go also to the anonymous (to us) secretaries who typed the first drafts of the chapters by authors not from our department. We owe a particular debt to Imelda Welsby and Colette White who typed the chapters emanating from our department and re-typed several of the others, frequently working to deadlines even more unreasonable than those we imposed on the authors!

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Introduction

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The purpose of this book is to provide a review of some of the most important topics in management accounting. It is hoped that the book will serve to stimulate the reader's interest in further study by illustrating the methods of thought that are contributing to the development of the subject and by offering glimpses into some of the problems that are being investigated in current research. In this introductory chapter, we shall discuss the nature of management accounting. We shall discuss its purposes and some of the procedures that it involves. A convenient focus for the discussion is a comparison of management accounting with financial accounting.

Management Accounting versus Financial Accounting

All branches of accounting are concerned with systems for providing information that will be useful to people who take decisions. The primary focus of accounting is on financial information, but the system may also deal with related statistics. Accounting systems are potentially useful in any situation in which financial decisions have to be taken and the relevant considerations are too complex to be dealt with informally. However, an accounting system will actually be established only if the benefits from its use, in terms of improved decisions, are expected to exceed the costs of establishing and operating it. Most businesses and government organisations have accounting systems, because the complexity of their affairs makes it impossible to carry out their legal obligations without one. An individual might also benefit from an accounting system – for example, one that records expenditures on different commodities and prices at different shops. Some individuals do keep such records, but most do not because of the effort (cost) involved.

Many types of decision, taken by people in various roles, are based on accounting information. In some cases, the people who arrange for the information to be collected are also its main users. For example, the managers of a business require a system to provide information which they can use for decisions about which products should be manufactured by the business. Such systems are classified as management accounting systems.

In other cases, the people who arrange for the information to be collected are not the people who use it. In those cases, the systems are usually regarded as part of financial accounting. Examples of the decisions that are based on financial accounting information include:

(a) Decisions by people who have invested in a business about whether they should invest more or try to sell their investment to someone else.
(b) Decisions about extending credit to a business.
(c) Decisions by prospective employees about job offers.
(d) Decisions by government officials about the amount of tax to be demanded from a business.

The dividing line between financial accounting and management accounting is not clear cut. Financial accounting reports normally deal with a business at an aggregate level – for example, the statement of assets and liabilities and the income statement that are prepared for the owners of a business are regarded as financial accounting statements. That type of report is also important to managers, even if they have no interest as owners. The managers as a group know that owners will assess their performance on the basis of income and net assets; consequently, the managers will use the financial accounting statements when they establish plans and assess whether progress has been satisfactory. Managers in overall charge of an organisation may also use an income statement and statement of net assets to monitor the performance of their colleagues who are responsible for part of the organisation, for example a separate division.

However, in spite of those managerial uses of the financial accounting statements, the focus of management accounting systems is usually on information at a more detailed level, on results for individual products or groups of products and on costs for particular productive operations. Even at that level, management accounting normally is not separate from financial accounting. Part of the information required for management accounting often represents a detailed analysis of the financial accounting information. It is usually economical, in terms of cost, to use an integrated system for both kinds of information, even though that procedure may sometimes involve compromises in the acceptance of information that is not the best for the purposes at hand.

Standard-Setting in Accounting

Financial accounting is now subject to a great deal of regulation. Various bodies, some of them government agencies, others organised by the accounting profession, have drawn up rules that specify standard accounting practices. Those rules are normally followed in the preparation of financial accounting statements because of direct or indirect legal sanctions. The standards have been developed because of a widespread belief that businesses would not produce satisfactory statements without the guidance of standards. Before the advent of standards, it was common for different businesses to treat a given type of transaction in different ways. For example, some businesses would treat research and development expenditures as a deduction from income when they were incurred; others would treat the expenditures as assets on the ground that they were expected to bring future benefits. Accounting standards have reduced the frequency of occurrence of that kind of difference.

The level of importance that should be attached to the avoidance of variations in accounting practice is largely a matter of subjective judgment. Some people argue that such variations are relatively unimportant and that market mechanisms would lead to the disappearance of undesirable practices. They believe that a business that provided too little information or that used unacceptable methods of measurement would find itself unable to obtain capital at a normal cost and would therefore be forced to change its ways. However, most people take a different view. They believe that market competition cannot be relied upon to provide sufficient incentives to avoid the use of inferior accounting practices: the identification of inferior practices might take too long; incentives might be too remote; and, even if superior practices prevailed in the long term, many people might suffer damage in the meantime. The majority view, though it is unsupported by firm evidence, has been encouraged by the observation that minority accounting practices have often been used by firms which have failed or which have received unfavourable publicity for other reasons.

Management accounting has few standard-setting bodies and few standard practices. In the following pages we shall discuss the need for standards of management accounting and then consider what standards we might promulgate if we were in a position to do so. The Financial Accounting Standards Board (FASB), the body mainly responsible for the development of financial accounting standards in the United States, has been working on a project to develop a conceptual framework for financial accounting and reporting. The conceptual framework comprises a body of concepts that can be used to guide decisions on individual standards. It deals with general issues and is intended to promote consistency in standard-setting. We shall focus our attention on the selection of topics that might be included in a conceptual framework for management accounting.

The Need for Management Accounting Standards

At first sight, it may seem strange to suggest that there is a need for standards of management accounting. As noted above, management accounting systems are normally operated by managers for their own use in decision taking. If managers think that some particular information would be useful, they can arrange for its collection and there is no need for outside interference. Moreover, it would be difficult to make management accounting standards effective. It might be possible to compel businesses to collect specified kinds of information in specified ways, but it would not be possible to compel the managers to use the information for decision-taking purposes.

However, a case can be developed for the formulation of management accounting standards. The case is linked to the needs of financial accounting. In essence, it is that investors and creditors need information about the management accounting system of a firm as a means of assessing the performance of managers in making effective use of shareholders' resources. Management accounting standards could help to meet that need by providing a basis for reports by independent assessors (the auditors) about deviations between actual practice and standard practice. A good system does not guarantee a good performance, but it is a contributory factor.

Let us consider these arguments for management accounting standards in greater detail. Much of the literature on the design of management accounting systems rests on the implicit or explicit assumption that the main objective of managers is to maximise the wealth of people who have invested in the business. That assumption is unrealistic. It is much more likely that the primary goal of managers is to maximise their own wealth and other aspects of the satisfaction they get from their employment. To some extent, the behaviour required to achieve managers' own goals may be the same as the behaviour required to maximise the wealth of shareholders: high levels of business profit may enable managers to obtain correspondingly high rewards. However, the interests of managers and investors are not identical. Managers may, for example, be more interested than investors in increasing the size of the business and in avoiding ventures that are potentially profitable but risky. A report to investors on the management accounting system of a business may give them some minimal assurance of the extent to which their interests are the focus of managerial behaviour, because such a report would provide information about whether the system deals with financial indicators that reflect investors' objectives.

A second advantage of reporting on deviations between actual management accounting practices and standard practices may be stronger. Efficient managers are likely to have better management accounting systems than inefficient managers. Reporting on those systems would provide investors with information that would contribute to their assessments of managerial efficiency.

We shall not attempt to reach a firm conclusion regarding the need for standards of management accounting. The arguments are too numerous to be considered in detail in this chapter. Instead, we turn our attention to the issues that would have to be resolved if we were to prepare an authoritative statement of management accounting concepts. The following are some of the main steps that would be involved:

(a) Specify the main purpose(s) of a management accounting system.
(b) Identify the decisions that depend on management accounting information.
(c) Describe the principles that determine the selection of information for inclusion in the system.
(d) Describe the main types of information that should be provided.

Financial Accounting Concepts

The fundamental objectives of financial accounting were described in the FASB Statement, *Objectives of Financial Reporting by Business Enterprises.* That Statement emphasises that financial reports should be useful to users in making business and economic decisions. It identifies investors and creditors as the main users, but refers also to the needs of other users. The main decisions discussed by the Statement are decisions on investment (for example, the purchase and sale of shares) and on granting credit. The most important conclusion is, perhaps, that users require a basis for assessing the amounts, timing and uncertainty of future cash flows. That conclusion is based on the models of individual behaviour, developed in the literatures of economics and finance, in which individuals are assumed to wish to maximise the satisfaction that they obtain from the contemplation of future consumption. In those models, personal satisfaction depends on the amounts, timing and uncertainty of cash flows; consequently, individuals will wish to invest in businesses that seem to be likely to generate favourable cash flows – and assessment of future cash flows is an important part of the investment decision.

It is beyond the scope of the FASB Statement on Objectives to reach detailed conclusions about the means for satisfying the objectives; that goal will be pursued in other statements. The Objectives Statement simply observes that there is a need for certain types of information, for example, information on economic resources and obligations; it asserts also that the primary focus of financial reporting is information on earnings.

The Purpose of Management Accounting

There is not likely to be much controversy about the first steps in our exercise to develop a statement on the concepts of management accounting. It should be readily agreed that management accounting, like financial accounting, must be useful for taking decisions. More specifically, it may be stated that management accounting must provide information that is useful to the managers of an organisation in taking decisions within the scope of their managerial responsibility.

The next step in the development of our concepts statement is to identify the types of decision with which the management accounting system is expected to help. It would be impracticable to develop a complete list, reflecting all the peculiarities of different types of business. It is sufficient for our purposes to note the main types:

> *Output Decisions.* These are decisions on what types of goods and services should be supplied, at what prices and in what quantities.

Input Decisions. These are decisions on how the outputs should be produced, i.e. what quantities should be used of different materials, labour and other resources.

Input and output decisions are related: the cost of resources required to produce goods and services is relevant to decisions on the best quantities to produce and the best prices to charge. Moreover, each broad decision category leads into many subsidiary types of decision. For example, decisions on outputs involve consideration of sales promotion strategies. Decisions on inputs often involve trade-offs between different mixes of materials, labour and machinery; those decisions involve investment decisions that lead in turn to decisions on how investments are to be financed. Decisions on the allocation of people to particular jobs, resting on judgments of their efficiency, may also be regarded as decisions on inputs.

The Identification of Useful Information

Now that we have described some of the main decisions that have to be taken by managers, we come to more difficult questions about the types of information that should be provided by the management accounting system. In order to make progress in dealing with such questions, we need to have a good understanding of what the business managers are trying to achieve. As noted above, the traditional view is that managers are trying to obtain the best possible results for people who have invested in the business. Moreover, investors are assumed to wish to maximise the satisfaction they obtain from contemplating the uses of cash provided by the business. This line of thought suggests that managers will wish to maximise the net present value of cash flows available to investors. Now, cash flows available to investors are derived from cash flows to the business: consequently, the managers should attempt to maximise the net present value of cash flows to the business.

The above argument has been greatly simplified and it rests on the questionable assumption that managers do actually try to act in the best interests of shareholders. However, it can probably be accepted as a reasonable basis for the development of management accounting concepts. No alternative statement of business objectives commands general acceptance; and any alternative would be likely to attach considerable weight to the maximisation of the present value of future cash flows to the business.

If we do accept the above statement of business objectives, we must infer that managers will attempt to choose, from among the available alternatives, the course of action that is expected to result in future cash flows having the highest possible net present value. Management accounting, if it is to be useful for managers' decisions, must help with the estimation of the future cash flows that will be earned under each alternative. We are now ready to formulate a key concept for our statement on management accounting: *The management accounting system should provide the best information for assessments of the amounts, timing and uncertainty of cash flows to the business from each alternative course of action available to the business.*

The Characteristics of Useful Information

The next question that must be addressed in our concepts statement on management accounting concerns the meaning of the word 'best' in the above conclusion: what guidance can be given for the identification of the best information for the assessment of future cash flows?

Identification of the best information for predictive purposes depends mainly on empirical research. The best indication of the usefulness of information is in statistical evidence about some consistent relationship between the information and the future cash flows that are the object of prediction.

However, it is possible to give some additional guidelines for the identification of useful information. A first guideline is that the information should be relevant: it must be possible to demonstrate some relationship between the information and future cash flows. Secondly, the information should be reliable. Any prediction of the future will be subject to some uncertainty, because the relationship between past events and future events is never completely fixed. It will depend on some chance factors. However, the uncertainty of a prediction may be larger than necessary, because of unreliability in the measurement of the past event that forms the basis for the prediction. Unreliability does not necessarily preclude use of the information. Sometimes, all relevant information is unreliable; but reliable information will be preferred over unreliable information, other things being equal.

It would be possible to develop a long list of desirable qualities for information. However, we limit ourselves to discussion of one further consideration: the evaluation of costs and benefits. The collection of information will be worthwhile, only if it is expected to have benefits that exceed its costs. The benefits of useful information arise because it increases the chances of taking good decisions and, consequently, the value of future cash flows available to the business. However, those benefits must be weighed against the costs of collecting and analysing the information. Some information may be relevant to the assessment of future cash flows and yet be so costly that its collection is not worthwhile.

The Components of a Management Accounting System

Our description of some of the characteristics of useful information has been in general terms. The reader of our concepts statement will be impatient for more specific guidance. There is a limit to the amount of help we can provide. The detailed specification of the information that should be collected and provided to managers must be determined by each business for itself, partly from a process of experimentation. However, we can give some additional guidelines.

Important clues to the design of a management accounting system may be obtained from a study of the factors that are relevant for decisions in the business concerned. For example, decisions on the optimal output of various products depend partly on estimates of the change in total costs for each extra unit produced. If it is believed that the past relationship