

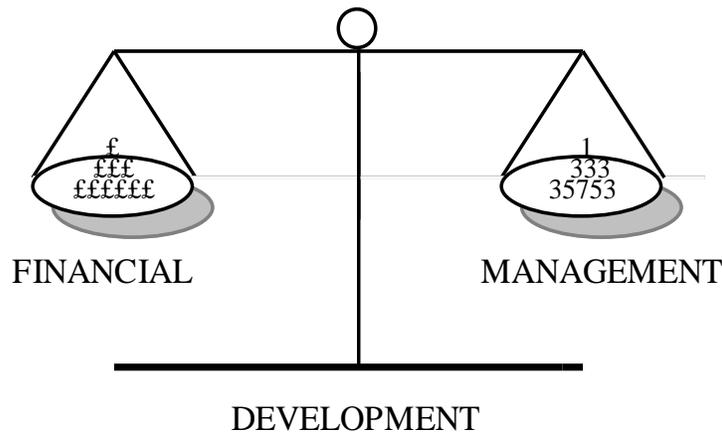
FINANCIAL MANAGEMENT DEVELOPMENT

Financial Accounting

Common Problem Areas

NO 143

REVENUE AND PROFIT RECOGNITION FOR FIXED PRICE CONTRACTS



ONE OF A SERIES OF GUIDES FOR
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This is one of a series of documents produced by David A Palmer as a guide for managers on specific financial topics to assist informed discussion. Readers should take appropriate advice before acting upon any of the issues raised.

REVENUE AND PROFIT RECOGNITION FOR FIXED PRICE CONTRACTS

Organisations are in business to make a profit. Profit is defined as sales (income earned from goods and/or services supplied to customers) less attributable costs (goods or services consumed to achieve the sales). There are often areas of doubt regarding the sales and costs when organisations seek to assess the profit earned in a time period which does not correspond to the time period over which goods and services are delivered.

For Time and Materials Contracts it is "relatively" easy to assess the value of the work done, the relevant costs and therefore the profit. For all other contracts - time spent to a maximum, fixed price etc. it is necessary to have a Consistent and Prudent approach to revenue recognition and therefore profit recognition. This includes a consistent and prudent approach to the treatment of "contingency" funds.

This note sets out some of the implications of the normal method of profit recognition on fixed price contracts.

Where work is undertaken on a fixed price contract which lasts beyond the end of an accounting period it is important that consideration is given to the extent to which the organisation has made a profit or a loss for that period. This is an application of the Accruals (or Matching) principle which is fundamental to accounting. The objective is clear: to match income and costs for a particular period of time, to determine whether a profit or loss has been made. The fact that this involves estimates of future costs (and in some cases past costs) does not absolve the manager from seeking to achieve the objective. It is better to be approximately right than precisely wrong.

To estimate the profit on such a contract the manager will need to know the following:

1. Costs incurred to date
2. Costs to complete the project
3. Amount billed to the customer to date
4. Amount to be billed to the customer in future

Of necessity the amounts in 2 and 4 have to be estimated. The closer the estimates are to reality, the more likely that the figures will provide useful management information. In particular, progress against budget can be monitored and used to assist management if, and only if, the estimates used are realistic. To continue to predict costs in line with budget when to date they have not been, is to run the serious risk of "unfortunate surprises" eg. Taurus and the Stock Exchange, NHS IT System etc, etc. To overdo the "contingency" will result in an embarrassment of riches at the end of the contract and may lead to incorrect management decisions eg. "If it will cost that much to finish we won't do it". The objective of a forecast is to predict the most likely outcome, not to provide "the answer that political or managerial overlords want to hear".

A series of examples will assist the understanding of the accounting needs. The Profit and Loss Account and Balance sheet detail for each example are shown in the summary at the end:

Original Project Budget agreed with customer (including profit)	£1,000,000
Original Project Costs - as estimated	£ 900,000

Expected Profit	£ 100,000
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Case 1 (Normal Contract)

Costs to date	£ 270,000
Costs to complete	£ 630,000
Invoiced to date	£ 250,000
Invoices to complete	£ 750,000

Percentage completed (i.e. costs to date divided by total costs) 30%.

Since 30% is complete the fee earned is £300,000 (30% of total Revenue).

The sales value of work done to date less the amount billed to date is £50,000 (£300,000 - £250,000). This is commonly called Work in Progress but since 1988 has been called "amounts recoverable on contracts" in published accounts and is included as a debtor in the Balance Sheet. The method of establishing the percentage complete is up to the organisation. There are many highly sophisticated methods of arriving at "Earned Value". Here we are only dealing with how to account for it.

Case 2 (Invoiced in advance)

As above but invoiced to date is £400,000. The only change is that work in progress is a negative figure. This is called a "payment on account" and included as a creditor in the Balance Sheet at the amount of (£300,000 - £400,000) £100,000. Revenue and Profit are unaffected.

Case 3 (Cost overrunning)

Cost to date	£ 270,000
Cost to complete	£ 690,000
Invoiced to date	£ 250,000
Invoices to complete	£ 750,000

The project is now only (£270,000 divided by £960,000) 28.125% complete and although costs are overrunning the fee is fixed. The earned value is only £281,250. Thus the amount of "profit" earned to date is only (£281,250 - £270,000) £11,250 and the "amount recoverable on the contract" only £31,250.

Case 4 (Customer accepts Overrun)

Cost to date	£ 270,000
Cost to complete	£ 690,000
Invoiced to date	£ 250,000
Invoices to complete	£ 800,000

The customer has agreed to bear part of the overrun. The total fee has increased to £1,050,000. Change control should record a sale of an extra £50,000 and should have a reference to written acceptance by the customer. Progress to date is still 28.125% but the fee earned is now (28.125% of £1,050,00) £295,313 and profit will be £25,313 (28.125% of £90,000). The amount recoverable on the contract is £45,313.

Case 5 (Loss making project)

Cost to date	£ 270,000
Cost to complete	£ 810,000
Invoiced to date	£ 250,000
Invoices to complete	£ 750,000

Here the organisation has a choice of reporting. The project is 25% (£270,000 divided by £1,080,000) complete but will make a loss when completed. The dilemma is "should the loss be spread over the life of the contract, or should it be provided for now?"

Case 5 (a) assumes that the loss will be spread over the life of the contract. The fee earned is (25% of £1,000,000) £250,000 and the loss to date is £20,000. The Work in Progress is nil (£250,000 - £250,000). This would not be acceptable in published accounts where the concept of prudence states that losses must be provided in full once they are foreseen.

Case 5 (b) makes full provision for the whole of the anticipated loss. (Thus the loss will be £80,000 at the end of the contract. Costs to date are £270,000 as spent but it is important that there is full provision now for the loss of £80,000. Since invoices raised are £250,000 the cost figure that has to be recorded is £330,000; giving £250,000 less costs of £330,000; a loss of £80,000. Work in Progress contains nothing for uninvoiced costs since the fee earned is now pure reimbursement of costs. It includes the unused provision which would appear in the balance sheet of £60,000. This is made up of:

Costs incurred	£ 270,000
Less invoiced	£ 250,000

Provision utilised	£ 20,000
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of the original provision of £80,000 this leaves £60,000 to carry forward.

Neither 5 (a) or 5 (b) is completely satisfactory. Whilst 5 (a) fits with other projects it can be misleading. In practice most organisations report separately on projects which are likely to be loss making.

SUMMARY OF ACCOUNTING RESULTS

The summary items below set out the Profit and Loss data and the Balance Sheet entry for each of the examples in the text:

	Fee Earned £'000	Costs £'000	Profit £'000	Debtor/ Creditor £'000
CASE 1 Normal Contract	300	270	30	50
CASE 2 Invoiced in Advance	300	270	30	(100)
CASE 3 Cost Overrunning	281	270	11	31
CASE 4 Customer accepts Overrun	295	270	25	45
CASE 5 (a) Loss making Project	250	270	(20)	nil*
CASE 5 (b) Loss making Project PROVISION -	250 -	270 60	- (80)	- (60)

* NOT NORMALLY CORRECT

FINAL WORD

Note that the recognition of profit on fixed price contracts is one of the few areas where the results shown in Historic Cost based Accounts depend heavily on estimates for the future. Hence the Accounts of companies in industries where these are common are more likely to be heavily scrutinised by analysts than say retailers. The other major area is the provision for pension liabilities - but then due to the failure of accountants and actuaries to talk to each other, almost all companies got that wrong.

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David is an experienced financial professional who has devoted his skills to management training in practical understanding and utilisation of financial information. A Graduate, Chartered Accountant, and Associate of the Institute of Taxation, he is also a Member of the Chartered Institute of Personnel and Development and has been an Ordained as a Deacon in the Catholic Church.

He has worked as a Financial Controller and Company Secretary in the Finance industry and as a Director of Finance and Administration in the Computer Services industry. Since 1990 he has conducted management development programmes for over forty major organisations including Arla Foods, Blue Circle, BP, CSC Computer Sciences, Conoco, Ernst & Young, Lloyds Bowmaker, Royal Mail, Unilever and Zeneca. He also runs programmes for the Leadership Foundation and the management teams at a number of Universities. International training experience includes work in Belgium and Holland for CSC, in Denmark, Kenya and the Czech Republic for Unilever, in Holland and the US for Zeneca, in Dubai for Al Atheer, in Bahrain and Saudi Arabia for Cable & Wireless.

He specialises in programmes in financial management for both tactical and strategic decision making. In addition he has run courses in acquisition evaluation (The Economist, Eversheds, Blue Circle and Hays Chemicals) and in post-acquisition management (Unilever). All training is specifically tailored to the needs of the organisation with the emphasis on practical applications to enhance profitability and cashflow. He has developed material for delivery by in-house personnel (Royal Mail, Lloyds Bowmaker and Conoco), computer based training packages (The Post Office, Unilever and BP), and post course reinforcement self-study workbooks (CSC and Zeneca). He has also produced a training video on Cashflow Management.

He is a prolific writer of case studies, role plays and course material. He has also published articles on the financial justification of training, financial evaluation of IT investment proposals, the use of Activity Based Costing and Customer Profitability statements, commercial considerations for consultants, the need for taxation awareness training for general managers, evangelisation and Christian business ethics.

Many of his generic documents are freely available on his website:

FinancialManagementDevelopment.com including papers on Charity Management.

In addition to his Diaconal work in the Church, he has held a number of voluntary positions including University, College and School Governor, Hospice Treasurer and Trustee of various charitable institutions. He continues to provide ad hoc commercial advice to several other charitable organisations. He has been married for over 35 years and has one daughter and three granddaughters.

This series of papers is designed to help managers by providing a basic understanding of key financial concepts to assist them in their work. It is provided at no cost since this knowledge is a Gift from God and thus to be shared (Matthew 10:8).