

ANNUAL CASH FLOW

R L Peterson
Superintendent Local Sales
Timberlands, Bay of Plenty

LIRA in inviting me to speak at this "Business of Logging" seminar have asked for the coverage of four specific areas:

1. Vulnerable periods within a contract.
 2. The period Timberlands stipulate a cash flow should cover.
 3. Level of detail required ie itemizations.
 4. Refinements Timberlands would like to see in cashflow - budget preparation.
4. Both parties at least know what the other has offered:
 - (a) Contractor, his services with the machinery offered at the cashflow stated.
 - (b) Employer, to utilize the services offered at the price quoted.
 5. Logging today is a business and must be treated as such, the days of tenders being written on a scrap of paper and accepted are gone, for which most of us would be very happy.

Before starting on any of these items it should be made clear that when asking for a cashflow from any prospective contractor the employer is satisfying himself of various factors:

1. The contractor or accountant has considered relevant costs and provided for the so-called outside normal operating costs, ie engine overhaul outside guarantee, increased ACC levies, wage increases etc.
2. The employer ends up with a signed document pertaining to the expected cashflow which provides an operating level for his budgetary requirements.
3. Cashflows by being stated at least provide a basis for updating be it by negotiation, indice application or whatever.

Tenders that stipulate unit rates without any supporting cashflow data can provide a constant source of disharmony as a contractor is moved from the original block to another.

As you are all well aware cash is the medium of exchange necessary for the smooth operation of a business and, without cash a business does not function or if it does, for only a very short period. Cashflow involves numerous sources and uses, most of which are essential to the business. The proper planning of future cash needs so that the business can continue with its normal operations, meet its known committals, have a surplus to meet future emergencies and at the same time ensure that surplus cash can be identified is of obviously prime importance.

At this stage definition of some components in logging cashing should be undertaken.

Fixed Costs

These are costs which do not vary as production varies. Obviously they are costs associated with the fixed factors of production, and include such items as interest on monies borrowed, insurance payments and depreciation. A major element in fixed costs, especially in capital intensive operations, is the item known as depreciation. It may seem rather illogical to classify depreciation as a fixed cost for many will think that the rate of depreciation of a capital asset is directly related to the extent to which it is used, i.e. to output. In fact the life of capital assets tends to be measured in economic rather than technical terms. Machinery depreciates even when not in use and, even more important, it becomes obsolete. Normal practice therefore is to fix an annual charge which will write off the cost over an estimated working life. The simplest way is to make an annual charge equal to a fixed proportion of the total value. If a machine costs \$100,000, an expected life of 5 years, then \$20,000 per annum would be added to costs and provision made to retain this to cover the expense of renewal.

As stated fixed costs are not influenced by changes in output. Whether a contractor is working at half or full capacity costs mentioned will be unaffected. The simile being if your new car sits in the garage costs are still being incurred.

Variable Costs

These are the costs which are directly related to output. Obvious items of variable costs are the wages of labour, costs of fuel and oil, tyres, R and M etc. Such costs can be affected by annual hours worked and the effect of over/under production.

Now that these factors are understood lets now move onto the areas I was asked to cover. To indicate this a relatively standard contract operation has been analysed and broken down into varying components and committal for

varying dates over a 5 year period. Contract term is selected as a means of achieving financial repayment, some equity in the business and is really the point at which contractors have to ask themselves: do I replace with new gear now or shall I rebuild? Some contractors are fortunate enough to have sufficient equity to have already replaced equipment at say the end of year 3 and by reducing R and M's can make this decision easier than others. I would venture to say however that in today's economic climate there are not too many fortunate enough to be in this position.

Vulnerable Period

To attempt to predict vulnerable periods within a contract is extremely difficult and would have little foundation. What in effect happens is that at known dates within any contract various costs occur that are inescapable:

1. ACC Levies - due 31st May in each year, based on previous years wages expenditure.
2. Insurance - payable on equipment, public liability etc due at anniversary of start date.
3. Taxation - provisional, due in February and September of any year, creative accountancy can assist in this area. Terminal tax has also to be considered.
4. Financial Repayments - monthly.

Of course one of the major problem areas is that of repairs and maintenance, the old standby has always been to purchase new equipment and trade-in before breakdown occurs. But we all know of new equipment during the so called minimum maintenance period having some need for major surgery. Warranty certainly covers some aspects but does not pick up the effect of loss of productive opportunity. As already mentioned the economics of new versus rebuilt equipment is one that requires careful consideration.

If it can be accepted that a model operation has a 100% income and a 100% expenditure on average over a 5 year period, then it is possible to indicate points at which major fluctuations occur.

Income - Expenditure 100%

\$ Per Month

	<u>Income</u>	<u>Expenditure</u>	<u>Variance</u>	
Year 1-5			\$	Additional Costs
April	31484	36903	- 5419	Ins
May	31484	42533	-11049	ACC
June-Nov	31484	28484	+ 3000	
Dec	20992	26740	- 5748	Xmas
Jan	16490	18379	- 1889	Jan start up
Feb	31484	28484	+ 3000	
Year 2				
Oct	31484	39350	- 7866	Skidder tyres
Year 3				
April	31484	44299	-12815	Loader tyres

From this it is possible to play various permutations - the examples shown cover two income ranges based on 80 and 120% income. Repairs and maintenance adjusted on the basis of:

- Year 1 + 2 normal R & M
- 3 + 50% above normal
- 4 +100% above normal
- 5 +120% above normal

Over/under production assumes no increase/decrease in operating costs.

	<u>\$ Per Month</u>				
	<u>Income</u>		<u>Expenditure</u>	<u>Variance</u>	
	80%	120%		80%	\$ 120%
Year 1-2					
April	25189	37788	36903	-10904	+ 885
May	25189	37788	42533	-17344	-4745
June-Nov	25180	37788	28484	- 3295	+9304
Dec	16795	25189	26740	- 9945	-1551
Jan	13194	19794	18379	- 5185	+1415
Feb	25189	37788	28484	- 3295	+9304
Year 3					
April	25189	37788	38438	-13249	- 650
May	25189	37788	44068	-18879	-6280
June	25189	37788	30019	- 4830	+7769
Oct	25189	37788	40885	-15696	-3097
Nov	25189	37788	30019	- 4830	+7769
Dec	16795	25189	27764	-10969	-2575
Jan	13194	19794	19183	- 5989	+ 611
Feb-Mar	25189	37788	30019	- 4830	+7769
Year 4					
April	25189	37788	47369	-22180	-9581
May	25189	37788	45603	-20414	-7815
June-Sept	25189	37788	31554	- 6365	+6234
Dec	16795	25189	28787	-11992	-3598
Jan	13194	19794	19987	- 6793	- 193
Feb-Mar	25189	37788	31554	- 6365	+6234
Year 5					
April	25189	37788	40587	-15398	-2799
May	25189	37788	46217	-21028	-8429
June-Nov	25189	37788	32168	- 6979	+5620
Dec	16795	25189	29196	-12401	-4007
Jan	13194	19794	20309	- 7115	- 515
Feb-Mar	25189	37788	32168	- 6979	+5620

As can be expected the contractor at 80% production with increased R and M costs will not survive for any great period. This situation can also be described as symptomatic of a contractor with old poorly maintained equipment. I certainly do not advocate every contractor should have brand new equipment every year but the tables certainly highlight the problems poor machinery, optimistic production levels and even straight bad luck, etc. can have on a contractor's livelihood.

To sum it up, vulnerability for a contractor is obviously continuous, i.e. strikes, windthrow, breakdowns, management decisions, etc. and also specific in time, i.e. ACC, taxation, holidays, etc.

Cashflow Itemization and Refinements

In general the annual cashflows supplied to Timberlands have been prepared by Accountants/Consultants and are satisfactory. As mentioned earlier, at least it is known that provisions have been made for the known points where expenditure exceeds income and some consideration made to handle this. Any major refinement to currently prepared cashflow of say, a cash projection over a 3-5 year term would not materially assist either party due to the aforementioned strikes, breakdowns, etc.

Competition between contractors for available work is intense and it certainly behoves both incumbent and prospective contractors to carefully consider their options when submitting cashflows.

Record keeping is the subject of a separate paper at this seminar and it is assumed great importance would be placed on this aspect of contracting. I do not think that this can be stressed enough because from such information comes the contractors main understanding of both his current and possible future operations.

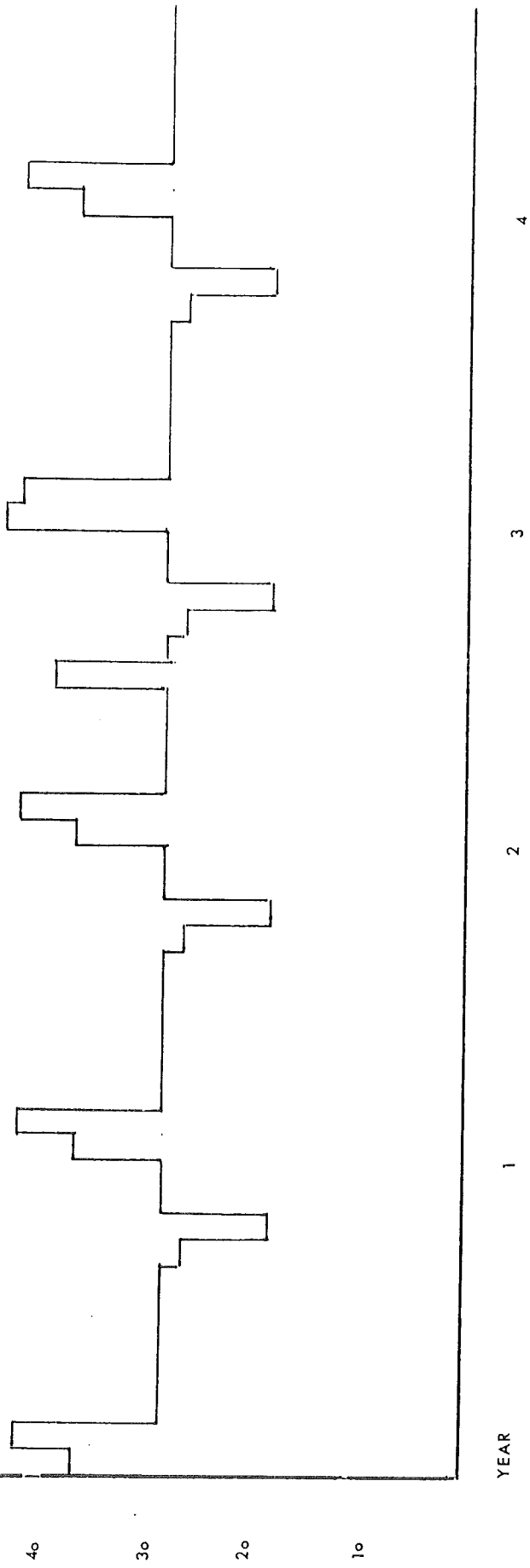
To sum up, the whole aspect of cashflows is a variable one whereby the contractor to some extent has to gamble on his ability to both produce and maintain his equipment within operable

levels. As my examples have shown this can be difficult with all the possible permutations available of production, downtime, strikes etc.

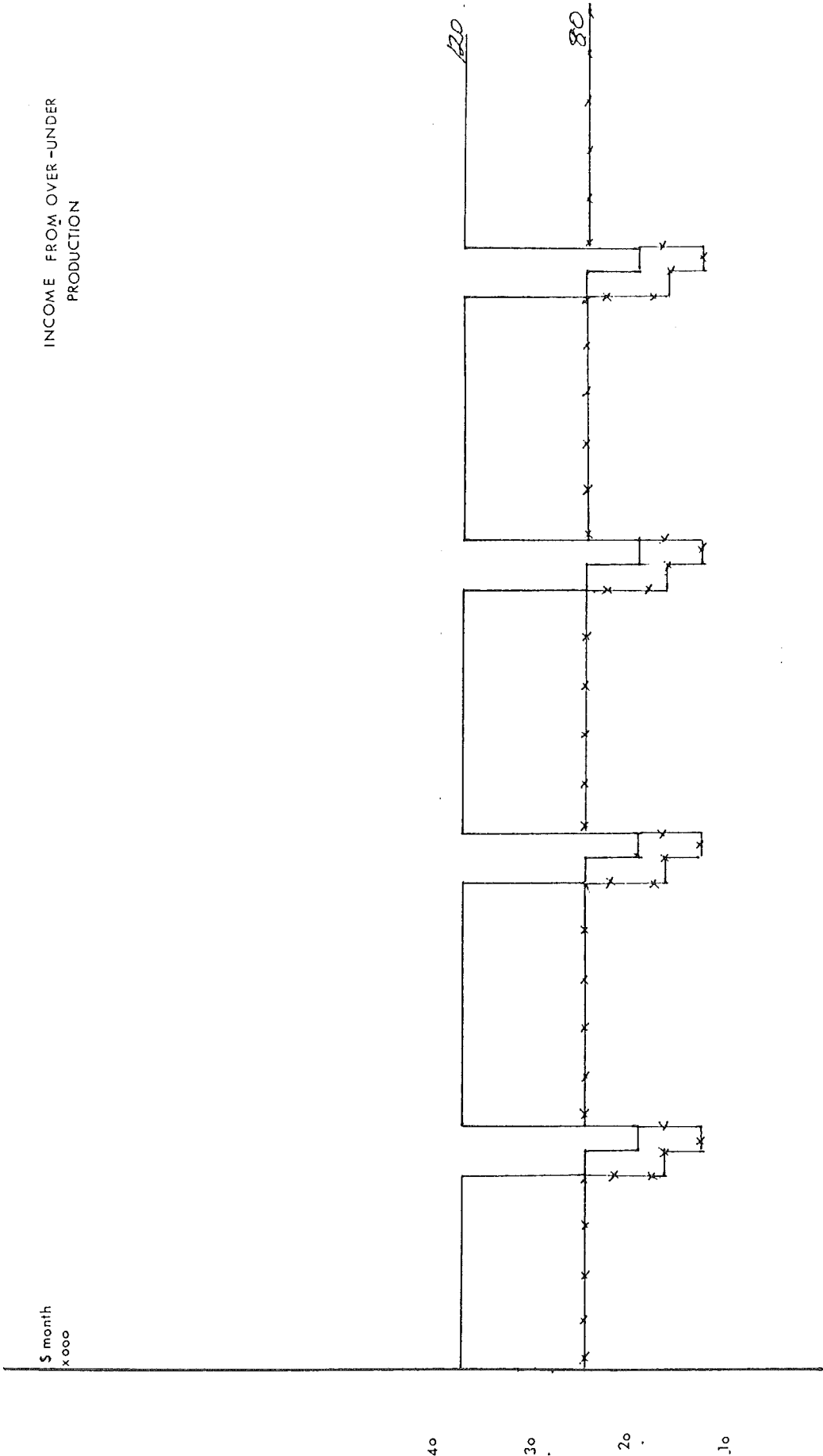
All in all the contractor has a difficult task and, in the main, handles the task well.

\$ month
x000

EXPENDITURE TOTAL 100 %

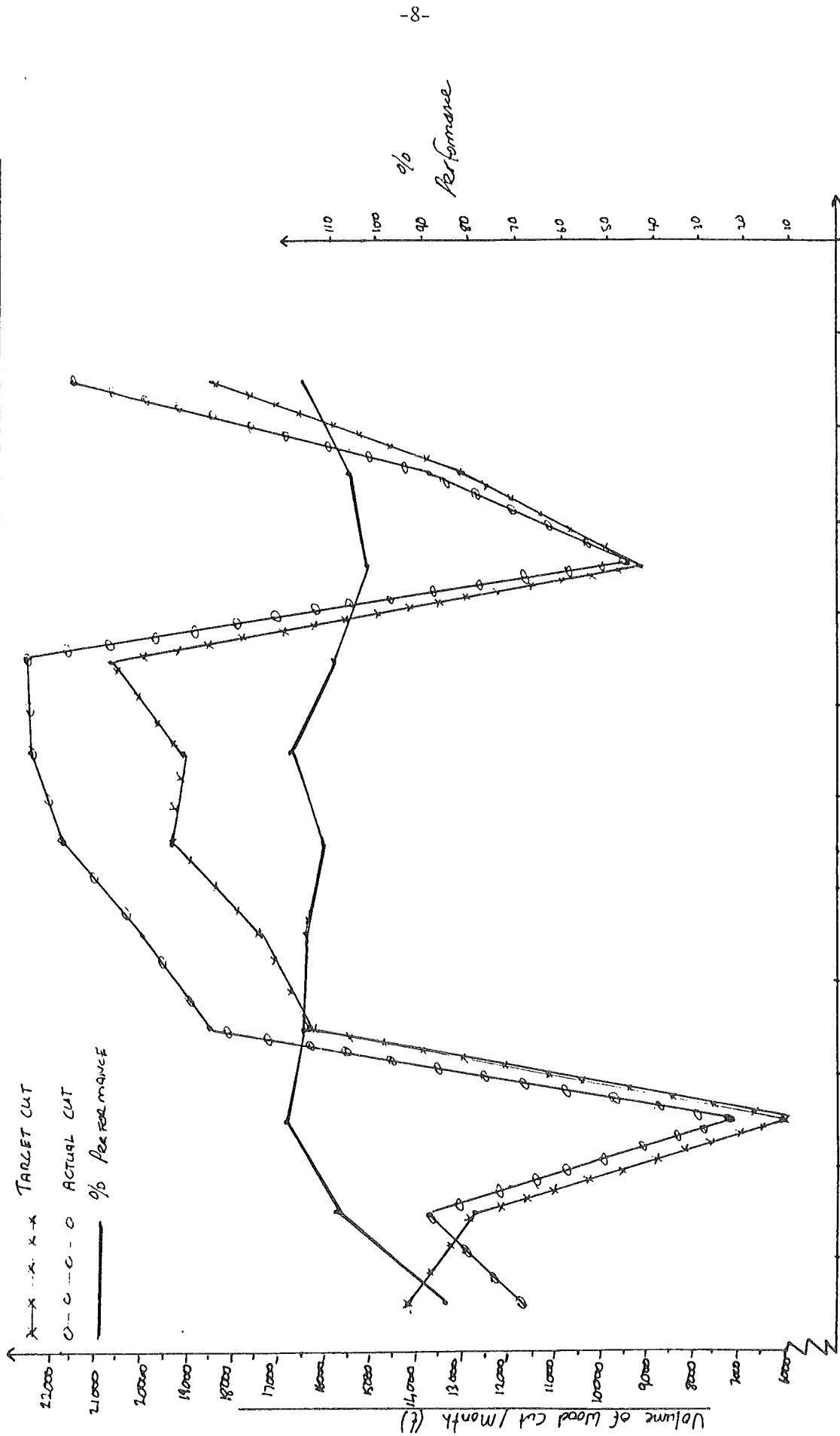


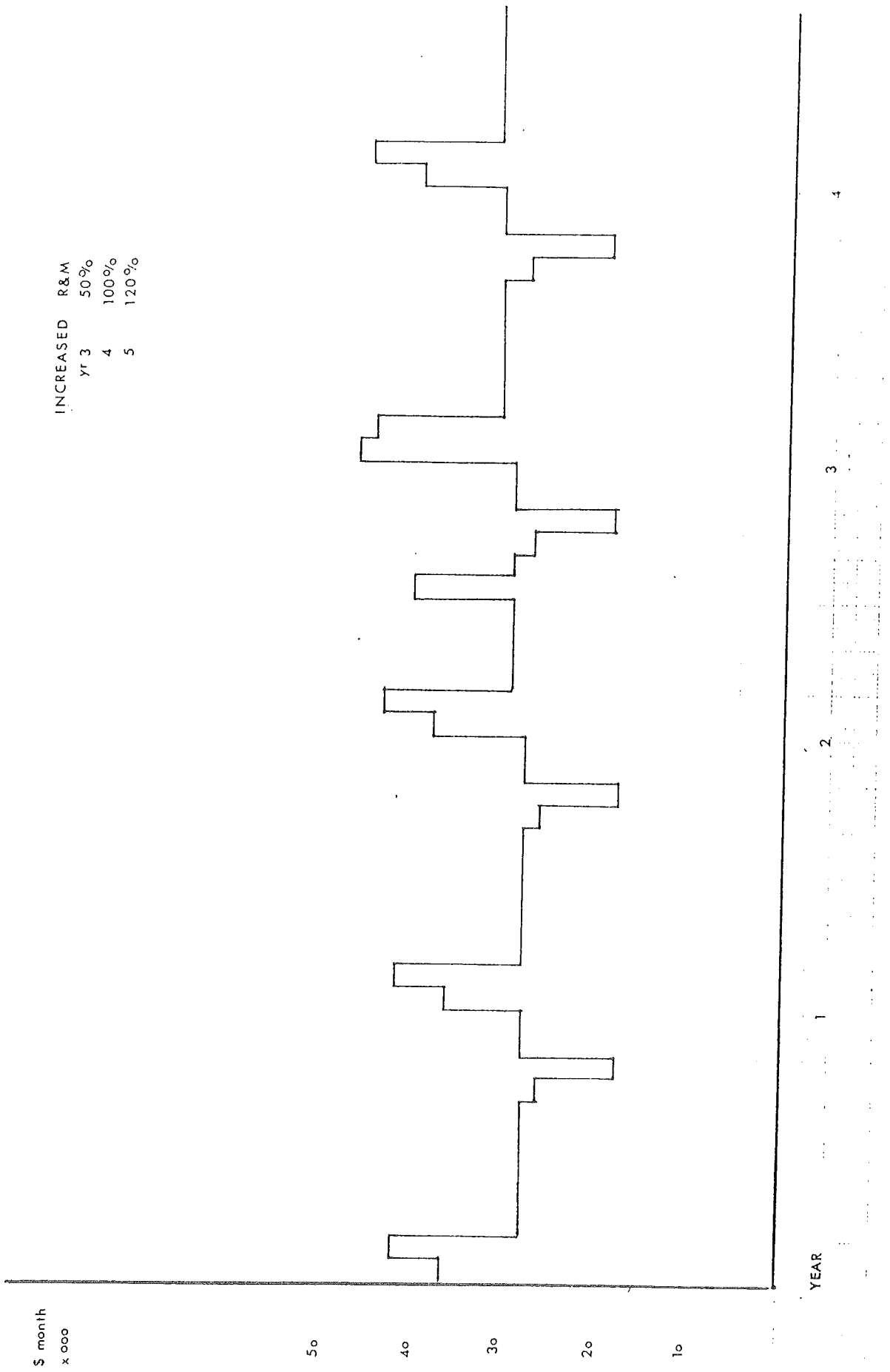
INCOME FROM OVER-UNDER
PRODUCTION



YEAR 1 2 3 4

GRAPH OF MONTH OF YEAR VERSUS VOLUME OF TRANSITION CROP CUT TARGETED AND ACTUAL CUT





INCREASED R&M
Yr 3 50%
4 100%
5 120%

\$ million
x 1000

50
40
30
20
10

YEAR

1 2 3 4

CASH FLOW MANAGEMENT

Pat Brown
Public Accountant
STRETTON & CO

INTRODUCTION

Cash Flow Management is the art of managing a business's finances with a view to ensuring that there are adequate cash funds available at all times to meet the business's commitments.

It is our view that Cash Flow Management is the single most important financial matter to control in any business. It is the oil in the engine. Without cash the business seizes up.

In this paper we discuss:

- The relationship of the Cash Flow Budget and the costing estimates.
- Budget Preparation
- Monitoring methods
- Problem areas and suggested solutions.

CASH FLOW BUDGET AND CONTRACT COSTING

The price payable to the contractor for harvesting and preliminary processing of trees is generally based on costs as set out on a daily or annual cost schedule.

To arrive at the unit price, (tonne or cube) the expected production is simply divided into the total costs.

It is important to realise that costs do not necessarily equate with payments.

- Some costs are incurred more or less at the same time that payment is required - here we refer to fuel and oil and wages other than holiday pay.

- Other costs may be paid only once per year and we could include here insurance premiums, ACC Levy, employees holiday pay.
- Some costs may not even be paid out in cash - if say there is free hold machinery the theoretical cost of providing this would be included in the costings, that is depreciation allowance and a return on investment for the funds involved, but there may not be a requirement to write out a cheque for these costs in the contract period.
- Some costs are not specifically included in the cost schedule - if we look upon income tax as a cost we will not see this as a separate item in the cost schedule, but it is likely that there will at some time be a requirement to write out a cheque for income tax.

The point that we are making here is that costs do not necessarily equal payments from a bank account, certainly not in the short term anyway.

Part of the process of submitting a competitive tender price is to compare the theoretical costs with the expected cash outgoings over the term of the contract. This exercise may then result in the tendered cost schedule being increased or decreased to cope with the cash requirement. This analysis required expected cash payments to be analysed over the term of the contract - or it no fixed term perhaps over the life of the equipment. This analysis will generally be for a three to five year period.

PREPARING THE CASH FLOW BUDGET

The Budget should be prepared at the time of preparing the cost estimates for the purposes of tendering a price. It is necessary to prepare the Cash Flow Budgets at this time to ensure that the costs allowed are adequate.

Payments that would generally be the same from year to year (disregarding the effects of inflation) would include :

- Fuel and Oil
- Maintenance - excluding major overhauls
- Insurance
- Administration
- Wages

Payments varying from year to year would include :

- Machine overhaul and major breakdown
- Tyre/track replacement
- Equipment replacement
- Taxation payments

Payments that may run constant for a period and then alter would include debt servicing costs eg. deals paid off and new agreements entered into.

For the purposes of the three to five year plan, contract receipts are generally assumed to be equal.

If a contract has been priced on new equipment, the annual Cash Flow Budgets should show surpluses in the early years as the machine operating costs should be less. Tax payments are also generally less in the early years as the allowable cost for tax purposes in respect of depreciation and interest charges is greater at the start then reducing as loans are paid off and the machine value decreases.

There can be significant timing delays in regard to payment of taxation and it is perhaps this payment that requires the closest attention. Recent changes to the tax laws will however have the effect of smoothing out the tax payments.

ANNUAL BUDGET

Having completed the five year plan the forthcoming years budget can then be broken down into monthly segments. The general process to achieve this is as follows :

Cash Receipts -
for budget purposes this should be based on the daily cost allowance by the productive week days available in each month. It is then necessary to adjust for the timing difference between the carrying out of the work and the receipt of the fund eg. work completed in March, but funds received say in April.

Fuel and Oil -
payment should be allowed on the basis of productive days each month.

Maintenance -
generally requires a static monthly allowance for odds and ends and an increased amount following annual close down plus major overhaul if one should be programmed for that year.

Tyres-
should have allowance if there is to be replacement in that year otherwise minor allowance for maintenance only.

Wages -
should be based on expected gross weekly payotes taking care to note that there are sometimes five pay weeks in a month or three fortnightly pays.

Annual and Statutory Holiday Pays -
should be programmed for the expected closedowns.

Debt Servicing costs -
should be allowed as per the financing agreements.

ACC Levies - payable 31 May with Supplementary Shareholder Employee Levy by 30 November.

Insurance on Equipment etc - payable on policy due date or there may be arrangement to pay off over a period of time.

Taxation - remembering that provisional taxation is now payable in three installments, and that there is generally a separate payment date for the balance of tax relating to the previous year.

MONITORING THE BUDGET

The budget is no more than an informed guess at the timing and amount of receipts and payment. It is highly unlikely that it will run precisely according to plan. In particular from month to month there will be significant variations and that is why it is important to have access to bank overdraft accommodation to cope with these 'blips'.

By monitoring the budget it is generally possible to determine whether or not there are likely to be problems requiring your attention in the future. Without the aid of a budget, one would not know whether or not the funds in the bank were available to be withdrawn from the business or used perhaps for the purchase of a replacement machine.

We suggest a monitoring process as follows :

- Daily - ave production volume targets been met? Is fuel usage as expected?
- Weekly - Is the wage cost as planned?
- Monthly - Compare other business payments with the budget and understand reason for variances. Likewise compare receipts with budget.

Check funds in the bank or the bank overdraft with the expected position as set out in the Budget and understand the reason for the variance - what effect will this have on the future.

Annually - Check annual receipts and payments total with budgets, also check the expected cash surplus or overdraft and understand the reason for variances. Check effect of variances on the three to five year plan.

Daily and weekly checks would be carried out either consciously or subconsciously by the contractor, along with the monthly figures, although these may also be checked out by the Accountant, who should also be responsible for preparing on a timely basis, the annual data.

The accounting system should be integrated as far as possible so that the actual receipts and payments may be checked against budget as part of the compliance work required to prepare GST returns and income tax calculations.

PROBLEMS AREAS AND SUGGESTED SOLUTIONS

Cash receipts and payments can fluctuate significantly month by month and year by year.

At times it will appear that there are surplus cash funds in the bank account and that can result in a false feeling of well being as those surplus funds may well be shortly required to meet some of the lumpy payments eg. ACC Levy.

Conversely there may at times be a shortage of funds providing the false illusion that the contractor is going broke. It may however simply be as result of the payment of some costs in advance eg. insurance or perhaps the purchase of equipment, the cost of which may be recovered over the term of the contract.

This is why it is important to go through the planning process with a view to identifying the highs and lows in the Cash Flows.

Some suggestions to even out Cash Flows include :

- ACC Levy, annual holidays and statutory holidays - set aside in a reserve account 20% of the gross wage every pay day and draw these funds down to meet holiday pay - 6%, statutory holidays - 4%, ACC Levy - 11.4%.
- Taxation - estimate next years tax liability in advance and transfer an equal amount of funds each month into a reserve account.
- In those years when there are surplus funds in the bank as expected by the budget these funds should be locked away in a separate investment account at year end.

CONCLUSION

Budgeting for Cash Flows is not a precise art. It is essential that the budgeting exercise be carried out-preferably over a three to five year period. This then provides the yardstick upon which actual receipts and payments can be compared and the necessary adjustments made.

The important thing is to have an understanding of the Cash Flows and to thus be aware as to when to expect the highs and the lows. This can then take away some of the worry and anxiety of managing a business, but more importantly it should ensure its ongoing survival. Without cash a business dies. Cash is king.