

# **CASH FLOW MANAGEMENT**

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### **Introduction**

After I finished my studies (1995) I started working in the firm MGI Gregoriou & co Ltd as an auditor. I have been practicing this profession up to now. My role in the organisation is to audit various types of firms and finally prepare the financial statements as well as the tax computations for each firm. My interest in such a project has developed because of the fact that:

- Cash flow is the lifeblood of a business.
- Companies have to manage their cash effectively.
- Almost all of the companies in Cyprus face cash flow problems.
- Personal interest, organisation's interest and clients' interest.

### **Aims and objectives**

- To gather information and analyse the factors that induce cash flow problems.
- To identify ways of managing these factors.
- To examine the impact that cash flow has on the financial statements of the firm and their debt capital.
- To prepare a guideline for proper cash flow management.

The main research questions that need to be answered are:

- What are the factors that influence cash flow?
- How do these factors affect cash flow?
- What is the impact of these factors on the financial statements?
- How can we manage cash flow effectively?

### **Methodology**

The best approach for the specific study is a positivistic approach. Positivistic approach is a method of investigation, which presupposes complete control over variables. My research will consist mostly of quantitative data so the strategy that I am going to use is quantitative research through the sensitivity analysis and simulation techniques. However I am going to employ some qualitative research, which will be based on literature review. My research will be conducted mostly through deskwork, since I am going to build my research through the annual reports of the selected firms and the literature review.

### **Data Analysis**

The specific research starts with the calculation of a set of six cash flow ratios derived from the literature review. I considered this as the best for the identification of any cash flow problems. So the tactic I will incorporate lies in the case study approach, since I am going to study the literature review to find out some ratios that I am going to use and I will focus on the annual reports of four companies to analyse any cash flow problems and make recommendations.

Ratios will be used to identify any problems that influence or are going to influence the cash flow of the firm. The ratios will be drawn upon the financial statements of the years 2001-2004. Tables will be constructed with the results of the chosen ratios for the three years for each firm for trend analysis. Finally another table will be drawn for 2001 showing the results of each firm for comparison purposes.

Within the annual financial statements, the reader is shown how the company has arrived at its present position, and is thereby enabled to view the year's results in the context of the disclosed trend.

Afterwards I will use hypothetical numbers for sensitivity analysis. That Sensitivity analysis will be made for the year 2004. I will change some numbers that influence the cash flow of the firm to show what effects this simulation will have on the debt structure of the firms as well as the cash flow. Finally, after extensive sensitivity analysis I will present some simulation factors that may help the company to reach at an optimum cash flow structure and an optimum debt structure. In the sensitivity analysis I will change the numbers of creditors, stocks and debtors, which believe they are the main factors that induce negative cash flow. Other numbers will remain constant and any change in stocks, debtors or creditors will not influence the cost of sales, since this research is drawn to help the readers understand how these numbers influenced the cash flow of the firm and its debt capital. By changing these numbers the positive cash flow is used to reduce the bank overdraft of the firms. However, the results would be the same if I use this positive cash flow for loan repayments. For simplicity 8% is used to calculate the interest that the firms have to pay for the bank overdrafts facilities over the year. Finally, for the purpose of sensitivity analysis the interest that is saved from the reduction of the overdraft is added to the profit before taxes or it reduces the losses.

For the purposes of my research secondary data were gleaned from:

- Contacts with the accounting departments of the selected firms were made in order to collect all the necessary data, which were the annual reports of the selected firms for the years 2002-2004. Annual reports provided the corresponding amounts for items shown in the balance sheet, profit and loss, cash flow and notes.
- European and U.S. management (operation) Textbooks.
- Academic and professional journals.
- The World Wide Web.

### **Specification of the sample**

The population from which I chose the sample for my research was the category of the listed companies with sales more than one million pounds per year. From those I chose randomly four.

### **Findings ratio analysis (CAP Ltd)**

- Interest coverage increases from 4.4 to 6.5. Thus PBIT covers the interest paid by 6.5 times.
- Creditors' payments are approximately 50 days for the three years.
- Creditors' payments decrease because of the good financial position of the firm.
- Debt capital decreases for about 300,000 CYP from the year 2003.

### **Findings ratio analysis (PAL Ltd)**

- Overstocking (stock turnover above 400 days 2003 633).
- The stock doubled from 2002 to 2004.
- Interest coverage becomes negative -4.07.
- Good debt collection system (falls from 74 days to 40 days).
- Increased creditors payments to 224 days.

### **Findings ratio analysis (CTC Ltd)**

- Decrease of interest coverage ratio from 3.2 to 2.3
- The reason is that the company increases its debt capital by 10 million pounds
- The creditors' days tend to increase from 38 days to 55 days
- Low current and quick ratio.

### **Findings ratio analysis (CJ Ltd)**

- Improvement of current ratio from 1.2 to 2.3 and quick ratio from 0.88 to 1.6.
- Interest coverage improved from 3.3 to 4.3.
- Creditors' days decrease from 83 days to 63 days.
- Debtors' collection days increased from 120 days to 142 days.

### **Findings from comparison table**

- Quick ratio the same to all except of that of PAL Ltd since stock levels doubled.

As a result PAL Ltd borrows more money so interest coverage becomes -4.07.

- PAL Ltd has the higher stock turnover days (466).
- CAP Ltd has low debtors collection days (7).
- CJ has high debtors' collection days (142).
- PAL Ltd reduces debtors' collection days to 40 and increases its creditors collection days to 142 (indicator that the company tries to improve its cash flow management).

### **Sensitivity analysis CAP Ltd**

Simulation factors (reduce both stocks and debtors by CYP 200.000 and increase creditors by CYP 100.000).

As a result:

- Interest is reduced by CYP40.000.
- PBIT increases from CYP930.000 to CYP 970.000.
- Reserves increase from CYP 1.24 millions to CYP 1.28millions.
- Bank overdraft is decreased from CYP548.000 to CYP 8.250.

### **Sensitivity analysis for PAL Ltd**

Simulation factors (stocks are decreased by CYP500.000, debtors decreased by CYP 100.000).

As a result:

- Bank overdraft is decreased from CYP1.7millions to CYP1million.
- Bank interest is reduced for about CYP48.000 so the loss decreased from CYP616.000 to CYP568.000.
- Reserves are increased to CYP658.000.

### **Sensitivity analysis for CTC Ltd**

Simulation factors (stocks decreased by CYP1 million, debtors decreased by CYP 1.5 millions and creditors increased for CYP 1 million).

As a result:

- Interest is reduced by CYP280.000 whereas profit before taxation will be increased from CYP4.8 millions to CYP 5.1 millions.
- Reserves will be increased from CYP3.6 millions to CYP 3.9 millions.

### **Sensitivity analysis for CJ Ltd**

Simulation factors (stocks reduced by CYP200.000 whereas debtors reduced by CYP300.000).

As a result:

- The company will save CYP40.000 since the overdrafts will be decreased from CYP 729.000 to CYP189.000.
- Profit before taxation will be increased from CYP396.000 to CYP436.000.

### **Conclusions observed from ratios**

- PAL Ltd faces the most serious cash flow problems so the company needs to borrow more money (interest coverage becomes -4.07, while acceptable limits must exceed 3 times).
- CTC Ltd faces a similar problem, since its interest coverage is 2.33.

### **First factor (Debtors)**

- CAP Ltd is in a better position if compared to the other three companies.
- PAL Ltd tries to improve its cash flow problems by trying to reduce debtors' collection days from 43 days (2002) to 40 days (2004).
- CJ Ltd must try to improve its system of debtor collection days since the collection of cash from debtors is made more or less within four months.

### **Second factor (inventories)**

- PAL Ltd seems to have the greatest problem since its stock turnover days are very high (466 days).
- CJ Ltd has a stock turnover of 113 days, which is again too high.
- The fewest stock turnover days are found in the firm CAP Ltd (36 Days)

### **Third factor (creditors)**

- PAL Ltd tries to solve its cash flow problems by delaying paying creditors. Creditors' payment days increased from 154 days (2002) to 224 days (2004).
- Here creditors act as an extra source of finance for the company to solve its cash flow problems

### **Conclusions from sensitivity analysis**

- It can be claimed that by reducing the two main factors (debtors & inventories) and by increasing the third factor (creditors) cash flow management is improved.
- Profits increased because the interest payable was reduced, since the bank overdrafts or the loans are decreased.
- The most important change in the sensitivity analysis is the increase of cash and cash equivalents
- CJ Ltd increased its cash by CYP540.000 whereas CTC Ltd by CYP1.5 millions.
- CAP Ltd had a negative cash of CYP170.000, but this amount was converted to a positive CYP370.000.
- The same occurs with PAL Ltd that had a negative amount of CYP621.000 and this was converted to a positive amount of CYP27.000

### **Recommendations**

Rare is the business that has not suffered a cash flow problem. In street terms this means running out of money. The key to increasing income, reducing debt and creating emergency funds is proper cash flow management. Below, are some recommendations related to the factors that may induce cash flow problems, which are derived from this research project. Any company can use these

recommendations as a set of guidelines for the improvement of its cash flow management.

### **Inventory**

First of all, the company must keep the proper inventory in its warehouse. The goal, therefore, should be to find ways to produce the same goods for sale with fewer inventories. The company must work with its suppliers and customers on large orders and long lead times: create a smooth flow of deliveries with shorter lead times. The solution is:

- Move towards a built order system.
- Implement lean manufacturing techniques.
- Collaborate with your business partners.

### **Creditors**

It is important that the management show command of the situation. Sure, the company has a problem, but it must be confident it can handle it. The company must take the responsibility for the problem and confidently show what is doing about it.

To maintain its goodwill with creditors, the expert should approach them as early as possible. If an expert represents the company, its creditors will know that they are serious about solving its problem. Keeping them informed is a two-way outlet, for as the company informs them of its progress, it can get important feedback about their attitudes and patience with the company. Ideally, the company wants to treat all creditors with equal consideration. In practice, it may give and take according to the attitude of each. Each has its own cash flow issues. Some can tolerate the company's late or reduced payments. Some cannot. This might be an area that the management can work and seek better payment terms from suppliers or banks.

### **Debtors**

Cash flow problems often result from the lack of time dedicated to the collection process. If calling on overdue accounts takes valuable time, the company can hire someone else to make the calls. Other researchers show that 50% or more of aging receivables can be collected after an interdisciplinary cash-flow specialist has been appointed. Such a position carries three responsibilities: invoice and identifying in-house errors; to talk to customers and bring cash quickly. However, if a company cannot afford to hire a specialist, an expert management must be involved in the receivables collection. Even though the task of calling on overdue accounts is often delegated to a clerical level, it is crucial that the management remains involved in the process.

The company can set up a regular appointment on a weekly or bi-weekly basis to review the individual accounts with its receivable clerk. The company must intercede with a phone call to those accounts where little or no progress is being made. A customer will usually react differently when the phone call comes from upper management or the owner of the business. The management must stay involved in the collection process - it may be a single determining factor as to the success of their collection efforts.

Also the company must make sure that its invoice terms are net 30 days, but these vary by industry. It may consider giving discounts for early payments. This may be cheaper than borrowing money against receivables. If it offers a discount, then it must be careful not to offer too generous a discount, unless it needs money because of cash flow squeeze. It can charge penalty interest to customers who pay late, and charge back customers who take discounts after discounts period. Above all, it must not procrastinate about following up on late payers. Lastly, the company must create

an aggressive policy for handling bounced checks and obtaining a fee from customers who issue them.

### **Reflection on Learning**

Accomplishing my project gave me the opportunity to attain great knowledge and an in-depth understanding of cash flow, a matter that is of great interest to me. Such a qualification will be very valuable for me, since I will have the opportunity to advise our clients in such an important matter of their companies. By researching on cash flow I believe that my abilities in consulting have been developed further. This qualification will give me the opportunity not only to make auditing but also take up a consultant's role in my career.

Another great thing that I have gained from examining this subject is the production of my own software for sensitivity analysis. I have produced software, which changes automatically the results on the financial statement using different simulation factors. So my employer will be very grateful if I train all my colleagues to give advice to our clients.

The structure of my project allows me to develop further my academic knowledge as well as to broaden and expand my range of knowledge to consider other similar roles within or outside the organisation. It also contributes to the development of new knowledge that can be used in my profession and what is more important the outcomes of my project will contribute towards the professional practice in auditing.