Chapter 14
CONCLUSION OF FINANCIAL ANALYSIS

As one journey ends, another probably starts

By the time you complete a financial analysis, you must be able to answer the two following questions that served as the starting point for your investigations:

- Will the company be solvent? That is, will it be able to repay any loans it raised?
- Will it generate a higher rate of return than that required by those that have provided it with funds? That is, will it be able to create value?

Section 14.1
SOLVENCY

Here we return to the concept that we first introduced in Chapter 4.

A company is solvent when it is able to honour all its commitments by liquidating all of its assets, i.e. if it ceases its operations and puts all its assets up for sale.

Since, by definition, a company does not undertake to repay its shareholders, its equity represents a kind of life raft that will help keep it above water in the event of liquidation by absorbing any capital losses on assets and extraordinary losses.

Solvency thus depends on:

- the break-up value of a company's assets;
- the size of its debts.

Do assets have a value that is independent of a company's operations? The answer is probably "yes" for the showroom of a carmaker on the *Unter den Linden* avenue in Berlin and probably "no" as far as the tools and equipment at a heavy engineering plant are concerned.

Is there a secondary market for such assets? Here, the answer is affirmative for the fleet of cars owned by a car rental company, but probably negative for the technical installations of a foundry. To put things another way, will a company's assets fetch their book value or less? The second of these situations is the most common. It implies capital losses on top of liquidation costs (redundancy costs, etc.) that will eat into shareholders' equity and frequently push it into negative territory. In this case, lenders will be able to lay their hands on only a portion of what they are owed. As a result, they suffer a capital loss.

The solvency of a company thus depends on the level of shareholders' equity restated from a liquidation standpoint relative to the company's commitments and the nature of its business risks.

If a company posts a loss, its solvency deteriorates significantly owing to the resulting reduction in shareholders' equity and cumulative effects.

A loss-making company no longer benefits from the tax shield provided by debt.[1] As a result, it has to bear the full brunt of financial expense, which thus makes losses even deeper. Very frequently, companies raise additional debt to offset the decrease in their equity. Additional debt then increases financial expense and exacerbates losses, giving rise to the cumulative effects we referred to above.

If we measure solvency using the debt/equity ratio, we note that a company's solvency deteriorates very rapidly in the event of a crisis.

Let's consider a company with debt equal to its shareholders' equity. The market value of its debt and shareholders' equity is equal to their book value because its return on capital employed is the same as its cost of capital of 10%.

As a result of a crisis, the return on capital employed declines, leading to the following situation:

Year	0	1	2	3	4	5
Book value of capital employed	100	100	100	100	100	100
= Book value of equity	=50	=50	=47	=34	=25	=25
+ Net debt (costing 6%)	+50	+50	+53	+66	+75	+75
Return on capital employed	10%	0%	−10%	−5%	5%	10%
Operating profit after tax	10	0	−10	−5	5	10
− After-tax interest expense (tax rate of 35%)	−2	−3	−3	−4	−5	−5
= Net income	=8[2]	=−3	=−13	=−9	=0	=5
Market value of capital employed[3]	100	85	55	68	85	100
= Market value of equity	=50	=38	=15	=18	=25	=30
+ Market value of net debt	+50	+47	+40	+50	+60	+70

The company's evolution does not come as a surprise. The market value of capital employed falls by 45% at its lowest point because the previously normal return on capital employed turns negative. The market value of debt declines (from 100% to 75% of its nominal value) since the risk of nonrepayment increases with the decline in return on capital employed and the growing size of its debt. Lastly, the market value of shareholders' equity collapses (by 70%).

Each year, the company has to increase its debt to cover the loss recorded in the previous year to keep its capital employed at the same level. From 1 at the start of our model, gearing soars to 3 by the end of year 5. In this scenario, its equity gets smaller and smaller, and its lenders will be very lucky to get their hands on the original amounts that they invested. This scenario shows how debt can spiral in the event of a crisis! Some restructuring of equity and liabilities or, worse still, bankruptcy is bound to ensue with the additional losses caused by the disruption.

1 *We disregard the impact of carrybacks here.*

2 *In year 0, since the company is profitable, financial expense is only 2 given the income tax rate of 35% (rounded figures). In addition, to keep things simple, it is assumed that the entire amount of net income is paid out as a dividend.*

3 *Market value is observed rather than calculated.*

Had the same company been debt-free when the crisis began, its financial performance would have been entirely different, as shown by the following table:

Year	0	1	2	3	4	5
Book value of capital employed	100	100	100	100	100	100
= Book value of equity	=100	=100	=100	=90	=84	=88
+ Net debt	+0	+0	+0	+10	+16	+12
Return on capital employed	10%	0%	−10%	−5%	5%	10%
Operating profit after tax	10	0	−10	−5	5	10
− After tax interest expense (tax rate of 35%)	−0	−0	−0	−1	−1	−1
= Net income	=10[4]	=0	=−10	=−6	=4	=9
Market value of capital employed[5]	100	85	55	68	85	100
= Market value of equity	=100	=85	=55	=58	=68	=87
+ Market value of net debt	+0	+0	+0	+10	+17	+13

4 *To keep things simple, it is assumed that the entire amount of net income is paid out as a dividend.*

5 *Market value is observed rather than calculated.*

At the end of year 4, the company returns to profit and its shareholders' equity has hardly been dented by the crisis.

Consequently, the first company, which is comparable to the second in all respects from an economic perspective, will not be able to secure financing and is thus probably doomed to failure as an independent economic entity.

For a long time, **net assets**, i.e. the difference between assets and total liabilities or assets net of debt, was the focal point for financial analysis. Net assets are thus an indicator that corresponds to shareholders' equity and is analysed by comparison with the company's total commitments.

Some financial analysts calculate net assets by subtracting goodwill (or even all intangible fixed assets), adding back unrealised capital gains (which may not be accounted for owing to the conservatism principle), with inventories possibly being valued at their replacement cost.

Broadly speaking, calculating net assets is an even trickier task with consolidated accounts owing to minority interests (which group assets do they own?) and goodwill (what assets does it relate to and what value, if any, does it have?). Consequently, we recommend that readers should work using the individual accounts of the various entities forming the group and then consolidate the net asset figures using the proportional method.

Section 14.2
Value creation

A company will be able to create value during a given period if the return on capital employed (after tax) that it generates exceeds the cost of the capital (i.e. equity and net debt) that it has raised to finance capital employed.

Readers will have to remain patient for a little while yet because we still have to explain how the rate of return required by shareholders and lenders can be measured. This

subject is dealt with in Section II of this book. Chapter 32 covers the concept of value creation in greater depth, while Chapter 19 illustrates how it can be measured.

Section 14.3
FINANCIAL ANALYSIS WITHOUT THE RELEVANT ACCOUNTING DOCUMENTS

When a company's accounting documents are not available in due time (less than three months after year end), it is a sign that the business is in trouble. In many cases, the role of an analyst will then be to assess the scale of a company's losses to see whether it can be turned around or whether their size will doom it to failure.

In this case, the analysts will attempt to establish what proportion of the company's loans the lenders can hope to recover. We saw in Chapter 5 that cash flow statements establish a vital link between net income and the net decrease in debt.

It may perhaps surprise some readers to see that we have often used cash flow statements in reverse, i.e. to gauge the level of earnings by working back from the net decrease in debt.

It is essential to bear in mind the long period of time that may elapse before accounting information becomes available for companies in difficulty. In addition to the usual time lag, the information systems of struggling companies may be deficient and take even longer to produce accounting statements, which are obsolete by the time they are published because the company's difficulties have aggravated in the meantime.

Consequently, the cash flow statement is a particularly useful tool for making rapid and timely assessments about the scale of a company's losses, which is the crux of the matter.

It is very easy to calculate the company's net debt. The components of working capital are easily determined (receivables and payables can be estimated from the balances of customer and supplier accounts, and inventories can be estimated based on a stock count). Capital expenditure, capital increases in cash and asset disposals can also be established very rapidly, even in a sub-par accounting system. We can thus prepare the cash flow statement in reverse to give an estimate of earnings.

A reverse cash flow statement can be used to provide a very rough estimate of a company's earnings, even before they have been reported.

In certain sectors, cash is probably a better profitability indicator than earnings.

When cash starts declining and the fall is not attributable to either heavy capital expenditure that is not financed by debt capital or a capital increase, to the repayment of borrowings, to an exceptional dividend distribution or to a change in the business environment, the company is operating at a loss, whether or not this is concealed by overstating inventories, reducing customer payment periods, etc.

If the decrease in cash cannot be accounted for by investing or financing activities, it can only come from deterioration in the company's profitability.

Section 14.4
CASE STUDY: INDESIT

Is Indesit solvent end of 2007? Yes, as it has equity of €580m and intangible assets and goodwill of €406m. In addition, although the value of intangibles is always questionable, in the case of Indesit, the image of the group's brands leads us to think that there is clearly value in the intangibles.

Does Indesit create value? It should, given the high level of returns generated in 2006 and 2007! We can observe that over this period, share price rose from €8.8 to €10.6 (end of 2007), outperforming the Milan stock index. In 2008, the share price suffered from the very bad stock exchange and economic environment. Even so, its market capitalisation remained above shareholders' equity.

SUMMARY

@ *download*

By the end of a financial analysis, readers must be able to answer the two following questions that served as the starting point for their investigations:

- Is the company solvent? Will it be able to repay all its creditors in full?
- Is the company creating any value for its shareholders?

A company is solvent when it is able to honour all its commitments by liquidating all of its assets, i.e. if it ceases its operations and puts all its assets up for sale. Net assets, i.e. the difference between assets and total liabilities, are the traditional measure of a company's solvency.

A company creates value if the return on capital employed (after tax) that it generates exceeds the cost of the capital (i.e. equity and net debt) that served to finance capital employed.

Lastly, we recommend that readers who need to carry out a rapid assessment of an ailing company where the accounts are not yet available build a cash flow statement in reverse. This reverse approach starts with reduction in net debt and works back towards net income, thus gauging the scale of losses that put the company's solvency and very survival in jeopardy.

QUESTIONS

@ *quiz*

1/ What risks do lenders run? How can lenders protect themselves against these risks?

2/ What is the ultimate guarantee that the lenders will be repaid?

3/ What is solvency?

4/ Is an insolvent company necessarily required to declare itself bankrupt?

5/ A company goes into debt with a one day maturity in order to buy fixed rate bonds. Is it running a liquidity risk? And a solvency risk? In what way does the risk manifest itself? What move in interest rates does this company expect?

6/ Is a company with negative net assets illiquid? Insolvent?

7/ It has been said that a solid financial structure is a guarantee of freedom and independence for a company. Is this true?

8/ Why is it difficult to determine the exact value of net assets in consolidated financial statements?

9/ Why is the concept of net book value useful?

EXERCISE

1/ What is your view of the solvency of the following companies?

Groups	S	N	T
Intangibles	2,239	40,640	2,583
Tangibles	10,635	22,065	693
Working capital	−809	7,489	−402
Shareholders' equity	726	41,800	2,055
Net bank and other borrowings	11,041	21,174	1,286
Sales	8,136	107,552	5,630
Operating profit	94	15,024	349

ANSWERS

Questions

1/ *The risk of default on payment. Request guarantees or ensure a high level of solvency.*
2/ *The value of shareholders' equity.*
3/ *The ability to repay its debts in full, even in the event of bankruptcy.*
4/ *Sooner or later it will probably have to do so.*
5/ *Yes; yes; inability to obtain further loans, capital losses; decline in interest rates.*
6/ *Possibly; yes.*
7/ *Yes, except when the share price is undervalued, in which case there is a risk of takeover (see Chapter 42).*
8/ *Because of minority interests.*
9/ *Because it shows the book value of all assets and liabilities.*

Exercise

1/ ***S**: disastrous. Lenders will only get back part of what they' re owed and shareholders lose everything. These are the figures for Swissair in mid-2001, before it filed for bankruptcy in 2002.*

***N**: good situation. Operating profit covers net debt, shareholder' s equity even after deducting 100% of intangible assets is still positive. These are the figures for Nestlé in 2007, one of the few AA/Aa1 corporate borrowers.*

***A**: weak situation. Equity seems very limited compared to debt and intangibles. Margins are low. These are the figures for Thomson in 2007. Thomson was downgraded to below investment grade status in 2008 following the announcement of its 2007 results.*