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# Answers

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**Examiner's Note:**

This suggested solution is written in order that it can be used in a classroom setting for tutorial purposes, and also as a study aid in private study. It is intended to illustrate the style and content of an answer which would be awarded a clear pass mark.

In this context it should be noted that the ratios considered in the suggested solution are not the only relevant ratios. Candidates received credit for applying other ratios, which were justified in the context of Thorntons strategy. For example, debt reduction is a stated objective, and could be assessed by considering the gearing ratio, while p/e ratio, eps, dividend cover and interest cover would also be relevant measures – provided they were discussed in the context of the company's strategy.

The answer to question 2 is in the form of the text of the presentation. To save on space, the visual aids have not been included in the suggested solution.

As the suggested solution is intended to be comprehensive, it is slightly longer than the permitted 5,000 words.

**Question 1**

**Just how informative are published financial statements?**

This is the latest article in our series examining issues of interest to investors. This quarter we are considering how published financial statements can be used to assess the performance of a company. To make this practical, rather than a theoretical exercise, we will focus on the 2002 financial statements of Thorntons plc (Thorntons).

**Introduction**

The first point to bear in mind is that any assessment of performance needs to be set in context. Of course, this will require a consideration of the general business environment, and the specific industry segment in which the company operates. These issues have been considered in previous articles. This article is concerned with the information included in the published financial statements.

Using this as our starting point, we need to consider the company's objectives. For example, there will be little point in using measures of growth to assess the performance of a company which is seeking to limit its loss of market share because it is operating in a declining market.

Therefore our starting point should be the stated objectives of the company. In the case of Thorntons, clear objectives are set out in the reports from the Chairman and the Chief Executive.

These objectives provide the starting point and framework for our analysis, and the company's performance should be assessed against them. As we are considering the Financial Statements – which are a historic record of the past year, we will be most concerned with the five initiatives which were set out previously. The six new initiatives also have some relevance, but can only be assessed when they have been implemented. It would be reasonable to expect that these will form the basis for an analysis of the 2003 financial statements.

**What should we look at?**

Having identified the company's objectives, we need to consider what information is most relevant. The financial statements run to 45 pages, much of which is required due to the rules of accounting (Financial Reporting Standards) and legislation (Companies Acts). The task therefore is to select relevant facts which will aid our analysis.

The overriding objective of the company is, in the words of the Chairman, to deliver improved shareholder value. It is reasonable to consider everything else as subordinate to this aim.

The Chairman and Chief Executive both report that the company has been stabilised. It would therefore be reasonable to consider some measures which test this assertion.

Based on the achieved stability, the chairman sets two key objectives – improved profit and cash generation.

The Chief Executive's report indicates that these objectives will be achieved through organic growth 'from existing assets'.

These statements provide the basis for selecting measures which can be used to assess performance.

Therefore some relevant measures are:

**1 Return on capital employed (ROCE)**

It is reasonable to say that ROCE is the overriding measure of performance. Investors provide capital to the company which will seek to make a return on the funds. The strength of this measure is that it includes profitability (return) with the amount of the investment (capital employed). An improvement in ROCE could be taken as *prima facie* evidence of improved shareholder value.

**2 and 3 Gross profit margin and Net profit margin**

If a company is seeking to stabilise, sales growth will not normally be a primary target. In order to maintain overall profitability, an improvement in gross profit margin will often be sought. Another factor in achieving stability is cost control.

Also, it is often the case that growth will be stimulated by keener pricing, which will lead to a reduction in gross profit margin. In his report, the chairman refers to 'close attention to margin and costs'.

If the company had been stabilised last year, and is now seeking to achieve growth, it is reasonable to expect that the 'close attention to margin and costs' would lead to a comparable gross profit margin to the previous year, combined with a reduction in the expenses/sales ratio, leading to an improved net profit margin. The fact that the company is seeking to reduce the product range and achieve additional sales of products on which higher margins can be obtained would also be expected to lead to improved gross and net profit margins.

#### 4 Net asset turnover

In referring to the requirement to achieve growth, the Chief Executive made it clear that this should be achieved from the existing assets. The success in this respect can be measured by considering net asset turnover. It could be argued that fixed asset turnover is a more appropriate measure, but as we have decided to focus on only six measures, net assets had been chosen. We can combine this measure with net profit margin to obtain an indication of the main driver of any change in ROCE.

#### 5 Stock turnover

A key feature of the Thorntons strategy is that it has been developed from the past and projected into the future. One of the issues identified by the Chief Executive is the 'management of stocks to avoid overhangs . . . whilst assuring we do not run the risk of missing sales through stock shortages'. If sales are missed due to stock shortages, there will be an adverse effect on the net asset turnover. So to some extent one aspect of stock management has already been assessed. It is therefore necessary to investigate whether the action taken to ensure sales are not missed has not led to stock overhangs. It is also worth commenting that considering the stock turnover allows some assessment of the continuity of the company's strategy.

#### 6 Cash generated

It goes without saying that cash management is important for all companies. The fact that the chairman has stated that a key objective was 'to deliver improving profit and to turn this into cash' means that it is appropriate to use this as a measure of success for Thorntons.

#### Analysis

The key measures we have identified are summarised in the following table:

Measure	2002	2001
ROCE	12.7%	11.5%
Gross profit margin	53.4%	52.0%
Net profit margin	6.36%	6.35%
Net asset turnover	2.0 times	1.8 times
Stock turnover	5.4 times	5.8 times
Cash generated/(consumed)	£(2,105,000)	£1,333,000

The most obvious comment from these measures is that there has been very little change. At first sight this would seem to indicate that the company has under-performed. However, the results must be assessed in light of the strategic objectives discussed earlier. The reasons for selecting each measure have been fully discussed above, so now we can consider the results in some detail.

It is the contention of the Chairman and the Chief Executive that the company's stabilisation had been completed in the previous year, with growth being the target for the 2002 year. The lack of significant change in the selected measures would suggest that the stabilisation period continued well into the current year. The company's claim to have made progress on the growth objective in the year needs to be investigated further. In his report, the Chief Executive refers to a number of initiatives.

Factual information is provided about only three of these initiatives, so the evidence is persuasive, rather than definitive. Nevertheless, a consideration of the available facts helps to build a picture.

##### *Signature Stores*

This initiative operated in nine stores in total and in eight stores over the 'key Christmas season' (Chief Executive's Report – page 10 of financial statements). The five year summary on page 45 of the financial statements reveals that the company operated around 400 stores. A fairly obvious conclusion is that this initiative has had little effect on the results for the year given the minimal number of stores involved, and the short time that it operated.

##### *Licensed products*

The Chief Executive reports that this added £189,000 to turnover in a period of five months. The total turnover was £163.8m. Once again the impact of this initiative has been minimal in the 2002 year. It remains to be seen whether the impact will be any greater in the future.

##### *Impulse product distribution*

The company has a 12 month contract with Tesco, but this only commenced in March. As no sales figures are revealed, it isn't possible to draw any firm conclusions, but two points are worth noting. First, the initiative operated for, at most, four months of the year. Second, the Chief Executive states that the initiative will be developed. This suggests that it has been successful, but the suggestion cannot be confirmed from the financial statements.

##### *Overall*

From the above, the initial observation that the stabilisation of the company continued into the 2002 year would appear to be justified. A further observation is that the growth target cannot be considered to have been achieved. The Profit and Loss Account (and the table of 2002 highlights) shows that turnover increased by 2.4%. Given the corresponding rise in the retail prices index, we can see that there has been no increase in the volume of sales.

However, when selecting the measures, we did note that a growth strategy normally resulted in a reduction in gross profit margin.

The company has achieved a slight improvement in gross profit margin, and a static net profit margin. We have also noted that the company was paying 'close attention to margin and costs'.

The fact that gross margin has been increased (albeit slightly) is positive. However this has not been carried through to overall profit. An examination of the expenses/sales ratios shows that selling and distribution costs have risen by 0.5% to 39.1% of turnover, while administrative expenses have risen by 1% to 8.2% of turnover. While not excessive, these increases are unwelcome and mean that the operating profit/sales% has remained static. Given the objectives, it would have been reasonable to expect an increase.

At the same time, the utilisation of assets (as measured by net asset turnover) has improved from 1.8 times to 2 times. The combination of improved asset utilisation and profitability has led to an improvement of just over 1% in ROCE.

The fact that stock turnover has declined from 5.8 times to 5.4 times suggests that the desire to ensure that sales were not missed prevailed over the desire to avoid stock overhangs. The dip in stock management has impacted adversely on the asset turnover rate discussed above, and consequently the ROCE.

Perhaps the most surprising result is the fact that despite the stated objective of generating cash, the cash flow statement reports an outflow of cash of £2.1m. Again at first sight this seems to indicate a failure to achieve a stated target. However this must be looked at more closely. There are two important aspects of this figure which should not be overlooked. The first relates to the definition of cash which is set out in the relevant standard for cash flow statements (FRS 1). The standard states that 'cash' relates to amounts 'repayable on demand'. This means that any cash on short term deposit is not actually classified as cash.

Therefore the sum of £2.3m which has been placed on deposit is reported as a cash outflow, but has not actually left the company. Secondly the level of external borrowing has been reduced by almost £11m. This will improve the gearing ratio and enhances the company's potential to achieve growth. Finally in this context, the dividend paid to shareholders has remained stable in cash terms.

#### *Conclusion*

The conclusion therefore must be that the stabilisation phase has continued into the 2002 year, and the results of the growth initiatives remain to be seen. Any analysis of the 2003 financial statements would be based on the growth targets. Based on the stated targets of generating improved shareholder value, improving profit which is turned into cash and setting in place the foundations for good long term growth we can conclude that the company has been reasonably successful. The stabilisation has continued, and some initiatives have been tested, providing a basis for growth. At the same time, profitability has not been sacrificed and the cash which has been generated has been used to maintain the dividends paid and reduce debt. A final observation in this context is that the increase in the year end share price (as reported on page 45 of the financial statements) to £1.125 (from 91p in 2001), combined with the maintenance of the earnings per share at 9.8p indicates that shareholders and the market believe that the company is in a strong position and is delivering value to shareholders.

#### **Limitations of financial statements**

The foregoing might imply that financial statements provide the information which is needed to assess a company's performance. Unfortunately, this is not the case. While the financial statements certainly provide a sound starting point, they must be considered as part of the total picture. It is fair to say that the financial statements of Thorntons are more useful in this context than is the case for many companies. For example, the company provides a fair amount of information regarding strategy. Without this information, any assessment is limited (remember our starting point that performance must be measured against objectives?).

So, a few warnings about using financial statements to assess performance are:

#### *Business is continuous, but accounts are periodic*

This may seem like a truism, but it is nevertheless important. The effects of strategic decisions in any period will carry forward into future periods. Although managing change is a primary responsibility for senior management, to a large extent strategy will be continuous. It will be based on the recent past and will influence the immediate future. As has been seen from our analysis of Thorntons, the rather simplistic assertion that stabilisation has been achieved and growth is now in place is not totally borne out by the results.

#### *Financial statements are not absolutely accurate*

For some people, this may seem to be a shocking statement. It would seem reasonable to point to the (ever increasing) number of standards and the fact that financial statements must be audited as evidence that they can be relied on. And it is in the detail of the language used in the previous sentence that the important message can be discerned. The overriding requirement is that financial statements give a true and fair view. This means that they can be relied on – but they are not absolutely accurate. There are too many areas in which judgement must be exercised to be able to claim absolute accuracy.

Perhaps the main point from the financial statements of Thorntons is that our analysis indicates that the claim that the company had become established in the growth phase in the 2002 year is a little premature. However, a perusal of the narrative statements of the Chairman and the Chief Executive would lead to acceptance of this view. For many people, narrative disclosures are easier to understand than the figures. This may lead to more attention being paid to these, with the consequence that the more detailed conclusions are not reached.

#### *Financial statements do not provide detailed business analysis*

Despite the fact that the paragraph above suggests that the Chairman and the Chief Executive are a little premature in their conclusion, it must be noted that they have access to data which is not included in the published financial statements. This means that any analysis, including the analysis we have carried out will be incomplete. In the case of Thorntons, we have already noted that some of the initiatives (signature stores, licensed products, impulse product distribution) have operated during only part of the year, but no detailed information about trends is available. For the other initiatives, there is no data provided, and we cannot come to any conclusion.

Furthermore, there is not enough data to allow the various segments of the business to be assessed.

#### *Financial statements are historic*

While the past will influence the present, and is therefore of some relevance, most users of the financial statements will be interested in the future. Any assessment of future prospects is therefore limited. In the case of Thorntons, we have noted that there is insufficient information to assess the initiatives which were implemented in the past year. However, our primary concern must be with the initiatives which will affect the future.

*Financial statements are often out of date*

By the time the financial statements are issued they have lost some relevance. This loss of relevance will be greater for some companies than for others. In the case of Thorntons, this is not a major problem as the financial statements were issued fairly quickly (the directors' report and the auditors' report are dated 9 September 2002). However as time passes, the financial statements become less relevant. Our analysis is being conducted in June 2003, so the data is between 12 and 24 months out of date.

*Financial statements may not be representative*

This is particularly the case with balance sheet figures. The balance sheet is drawn up at a specific date. This means that the values reported may be quite different to the value at other times in the year. For example, the Chief Executive of Thorntons refers to the importance of the Christmas period. It would be reasonable to assume that in the period leading up to Christmas, stock would increase. This means that the stock turnover figures we have calculated may not be representative of the average stock period, as the year end stock figure may be quite different to the average stock figure.

**APPENDIX Basis of calculation of ratios**

		<b>2002</b>	<b>2001</b>
		<b>£000</b>	<b>£000</b>
Operating profit	(P & L account)	10,410	10,148
<i>(NB The figure for operating profit before interest and tax, may include interest paid on short term borrowings and interest earned. As the sums are not material, no adjustment has been made here.)</i>			
Shareholders' funds	(Balance sheet)	43,015	40,097
Creditors over 1 year	(Balance sheet)	30,208	38,047
Provisions for liabilities and charges	(Balance sheet)	8,600	9,880
		<hr/>	<hr/>
Capital employed		81,823	88,024
		<hr/>	<hr/>
Turnover	(P & L account)	163,800	159,921
Gross profit	(P & L account)	87,473	83,199
Stock	(Balance sheet)	14,073	13,220
Cost of sales	(P & L account)	76,327	76,722
Cash generated	(Cash flow statement)	(2,015)	1,333

**Question 2**

**Presentation to the management team of Thorntons**

Good afternoon, ladies and gentlemen. Thank you for this opportunity to consider with you how the concept of the balanced scorecard could be utilised within Thorntons. You may have read my recent article in the InvestAdv magazine. I will be picking up on some of the points from that article in this presentation.

As you will be aware, the Balanced Scorecard is a methodology through which strategy can be translated into action, and the extent to which the stated strategy has been achieved can be measured. I do not intend to deal with the methodology in an academic fashion, but rather to consider the practical implications for Thorntons.

Given that the point of the Balanced Scorecard is to translate strategy into action, the starting point is the vision and objectives of the company.

The vision is to become 'the UK's leading retailer and distributor of sweet special food'. This has been developed by your Chairman's statement in the 2002 Financial Statements that 'Last year . . . the Company had been stabilised and we are confident of delivering improved shareholder value'.

This is entirely appropriate. Your company exists to deliver value to your shareholders. This means that we need to consider the concept of shareholder value before we can attempt to implement a Balanced Scorecard.

**Shareholder value**

There is no absolute agreement as to what constitutes shareholder value. It is often noted that shareholders will seek a combination of income (via dividends) and wealth (via increases in share price). Equally it is acknowledged that there is an interrelatedness between income and wealth.

Therefore one approach to measuring shareholder value is to adopt a financial approach, and consider key financial measures such as profit, earnings per share, return on assets. This might be considered to be the 'traditional' model.

A development of the traditional model is Economic Value Added (EVAR<sup>R</sup>). Here we assess the return which has been earned for shareholders, based on the economic, rather than the book, value of the assets invested and expenses incurred.

A further development is the model of Shareholder value analysis (SVA). This is based on two key foundations. First the observation that the primary function of a business is to add value. Considering how this is achieved at each stage of the business process leads to the concept of value chain analysis. The second is the observation that the share price is driven by an assessment of the ability of the company to generate cash in the long term. In doing so the business is considered as a whole unit (as shareholders invest in the entity – not in specific segments or projects). This means that strategic decisions need to be considered in terms of their impact on the whole business unit. While utilising the concept of key success factors, the focus remains on the whole business unit. This contrasts with the discounted cash flow techniques used in 'traditional' business appraisal models in which the strategic options are assessed in isolation.

So the key point about SVA is that it emphasises the fact that the goals of shareholders are met through a range of measures. Based on the concept of adding value, these are referred to as value drivers. By considering the whole business unit, as opposed to individual projects or sectors, we can see that the value drivers are interrelated.

It is worth remembering that the observation regarding the interrelatedness of the drivers of shareholder value applies to the 'traditional' model, to EVA and to SVA.

This of course leads to the question: what are the value drivers for Thorntons? I would suggest that appropriate value drivers for Thorntons might be:

- Product quality
- Store layout
- Product presentation
- Share price
- Earnings per share
- Return on capital employed

### Applying the Balanced Scorecard to Thorntons

In essence, the Balanced Scorecard can overcome many of the limitations of purely financial information as discussed in my magazine article.

To illustrate this, let's move from your strategy, to a possible scorecard.

The references to strategic objectives in your annual report indicate that you have what might be described as an 'objectives led' culture. In other words it is possible to assess the outcome of any decision or action by asking 'If this is done, how will it contribute to achieving our strategic objectives?'

This is a good starting point. However it hides the danger that there may be a number of different ways of understanding how the strategy actually works out in practice.

So the first benefit of using the balanced scorecard is that it can help in achieving goal congruence. By translating strategic objectives into specific (and measurable) outcomes the balanced scorecard helps to ensure that actions contribute to achieving strategy.

Before considering this in detail, let me note that I perceive no lack of clarity within the senior management team about what needs to be achieved. So when I refer to clarity, what I mean is the clarity which can become lost when individuals come to their own conclusion about what the company's strategy actually means.

So, the balanced scorecard helps to overcome one of the problems of implementing strategy – the human problem of each individual allowing the strategy to mean whatever they want it to mean.

The overall rationale of the balanced scorecard is to link strategy, action and feedback. This is done by measuring performance in four perspectives. We don't need to consider why these four perspectives have been selected. Suffice to say that in developing the methodology, a considerable amount of empirical work was carried out to arrive at a 'balance' across relevant areas.

The four perspectives are:

- Customer focus
- Internal processes
- Learning and growth
- Financial

I have already referred to another problem which the scorecard helps to overcome – the reliance on purely financial measures. Let me develop that point a little further. A moment ago in considering shareholder value, I suggested that one of the drivers might be product presentation. By this I mean the overall impression that a customer experiences in the store. Does the customer feel drawn into the store? Having been drawn in, does the customer feel that they *must* make a purchase? I'm sure we would all agree that these are critical questions. But only the *outcomes* are reflected in the financial statements. For example, the financial statements will reflect the outcome of increased sales, but we are not measuring the driver – we are measuring the outcome. Secondly, the outcome is reported after the event – and by then it's too late. We may already have lost the customer – and they won't come back.

So the balanced scorecard helps us to measure the right things at the right time, and therefore links strategy to action.

One way of making this link is to follow through a series of questions to provide the clarity we have been talking about. These are:

- |   |             |
|---|-------------|
| What are our overall objectives?        | Objectives  |
| How can we achieve these?               | Target      |
| What can we measure to assess progress? | Measure     |
| What action can we take?                | Initiatives |

As I suggested a moment ago – if we don't ensure this clarity, there is a danger that the initiatives could be seen as either the objectives or the target.

Therefore the balanced scorecard will contribute by enhancing clarity and ensuring that efforts are focussed on initiatives and actions which will lead to achieving objectives.

A further benefit is that in achieving this clarity, we will broaden the range of measures so that the performance measurement system is not merely concerned with financial measures.

The annual report also refers to the fact that the management team consider the first objective – stabilise – to have been achieved, and refers to the fact that this was aimed at ‘restoring internal effectiveness’. Reference is made to a number of measures which indicate the achievement of this objective. I would contend that it is essential that this is not considered to be complete, but is seen as ongoing, with continued measurement. I referred to this in my article, where I suggested that it was a little simplistic to consider stabilisation to be complete. I also referred to the tension between the ongoing dynamic of business and the periodic nature of the financial statements.

This idea can now be developed. The central tenet of the discussion of your strategy in the financial statements is that as stabilisation has been completed, there is a need to move forward. This is signposted by a new set of initiatives. Given that the financial statements are historic and shareholder value is about the future, it follows that the balanced scorecard should be set in the context of the intended strategy, while not totally ignoring the recent past.

So what might your balanced scorecard look like?

### A balanced scorecard for Thorntons

Remember the stated objective:

– to become the UK’s leading retailer and distributor of sweet special food

I would therefore suggest the following:

#### Customer Focus

Strategic Objective	Growth	Growth	Stabilise
Objective	New customers	Expand customer base	Customer retention
Target	Impulse sales	Listings with major multiples	Improved customer satisfaction
Measure	Increase no of custs. Sales growth	Increase no. of outlets Sales growth	Stock turnover Sales growth Promotional sales
Initiative	Product & packaging innovation	3rd Party distribution Café Thorntons	Brand development and communication

#### Internal processes

Strategic objective	Stabilise	Growth	Growth
Objective	Refocus range	New products	Ideas to market
Target	Less diverse products	Introduce licensed products, but retain product focus	Shorter decision cycle
Measure	Fewer product groups Area manager’s responsibility span	Stock turnover Gross margin	Period to implement decisions
Initiative	Retail support process	3rd party distribution	New sources of growth

#### Learning and Growth

Strategic objective	Growth	Growth	Growth
Objective	Employee satisfaction	Increase productivity	Improve quality
Target	Reduce staff t/over	Increase output	Reduce wastage
Measure	Staff retention%	Production per hour Unit cost of production	Material usage variance Delivery lead time
Initiative	Brand development and communication	Product and packaging innovation	Product and packaging innovation

#### Financial

Strategic objective	Stabilise	Growth	Growth
Objective	Improve profitability	Increase ROCE	Increase earnings
Target	Reduce costs	Increase sales	Increase EPS
Measure	Net profit % Customer/Product line profit	Sales growth by outlet/product Assets utilisation	EPS Cash generation
Initiative	Product and packaging innovation	Café Thorntons 3rd party distribution New sources of growth	Café Thorntons 3rd party distribution New sources of growth

### **So – will it work?**

That might seem like a strange question. But it is important to recognise that despite the benefits which the balanced scorecard can deliver, there may be problems to be encountered.

A comment in the Chief Executive's report, in the consideration of Brand development and communication is particularly relevant:

'This work is already underway and is starting to impact the other initiatives. In time, it will touch every element of the company's work and culture, allowing us to more efficiently and effectively work towards our vision.'

From this we can see that this is a 'cornerstone' initiative. If this isn't right, all the others will be affected. This emphasises the point that the drivers of shareholder value are interrelated.

It also emphasises the importance of culture. If the culture is not ready to embrace the changes that implementing the balanced scorecard will bring, there is little chance of success.

This means that an appraisal of the company's culture is required to assess whether you are ready for the balanced scorecard.

Of course, even if the culture is appropriate, I cannot claim that the balanced scorecard will be a panacea. There will be other problems. I don't want to become negative, but unless potential problems are foreseen they cannot be overcome.

So let's briefly consider the problems you may face.

#### *Culture*

As I have already noted, there may be a need to bring about a change in culture.

#### *Goal congruence*

Although the balanced scorecard can assist in this context, there needs to be commitment to the overriding objective of delivering shareholder value on the part of all staff. It goes without saying that this is directly related to culture.

#### *Commitment*

It is well documented that for the balanced scorecard to deliver its potential benefits, there needs to be a clear commitment from senior management. This commitment (or lack of it) will quickly translate into staff attitudes.

#### *Time and costs*

Of course it will take time, resources and will cost money to introduce and use the balanced scorecard. You will not be surprised to hear me say, that if this is done properly, the benefits will greatly outweigh the costs.

#### *Staff buy in*

If staff are not convinced that their efforts will make a positive contribution to achieving the company's objectives, there is little chance of success. However, if staff can see that their efforts have a direct effect on organisational success, they will feel motivated and involved. This can only be beneficial.

#### *Interpretation*

Although the balanced scorecard will bring clarity, there is still a danger that the outcomes can be interpreted differently by different individuals. This can be overcome by ensuring that the reasons for, and benefits of, introducing the balanced scorecard are clearly communicated to staff.

### **Conclusion**

I hope that you now feel that you understand how you can use the balanced scorecard. Equally I'm sure that there are many aspects you'll want to discuss, so can we now move to an open discussion?