

Industry characteristics

Mr. Watson, our team has reviewed your concerns regarding the financial projections created by Mr. Finson, the company's CFO. As you already know, STC operates in a highly competitive and fast-changing industry. Its success is based on introducing innovative products and new technologies. Heavy investment in R&D is required because of the need to introduce new products and technologies. The company's goal from an innovative standpoint is to make its own products obsolete, before one of its competitors does.

Industry financial profile

Just based on the profile of the industry mentioned above, it is not advisable for STC to carry high amounts of inventory, as it quickly may become obsolete because of the short life cycles of products. Inventory probably has a shelf life of less than 2 years. Because of the high operational risk of the business, it is not recommended for STC to take on a high amount of financial risk (incur debt).

Mr. Finson's projections

We believe Mr. Finson's profitability projections are too aggressive. STC's historical sales growth has been about 12% since 1980, only 10% last year while the industry has grown at 28% per year. STC currently has the highest amount of assets (including fixed assets, A/R and inventory) in its history, probably because past sales projections were overly optimistic. With so much inventory, STC will incur higher carrying costs, and may end up selling products at steep discounts, or may not be able to sell product at all because they become obsolete.

Although STC has won a new contract with the government, we would decrease sales growth to 15% for 1985, which is more in line with STC's historical performance of 12%, and is more realistic based

on increased competition. We'd increase growth to 20% from 1987 to 1988 and 20% growth during the remaining years due to the introduction of the new product line in mid 1986.

Cost of sales in the projections appears to be high at 41% of sales. Cost of sales was 46% of sales last year, and 44% the year before. We'd increase cost of sales to 46%. R&D is only 14% of revenue, while it was 16% during 1984, and two of STC's competitors have 16%. We'd recommend an increase to 16%. We believe the SG&A at 31% of revenue is okay, since last year it was 33%. We believe STC has learned from its mistake of hiring people in anticipation of increased revenue. It is better off hiring more employees when new sales actually take place. Our revised EBITDA figures are in Figure 1 attached.

Concerns over uneven growth

We have some concern about the uneven growth in sales, inventories and receivables in the past, but we are not overly concerned that Mr. Finson's estimates are positively linear while past performance has not been positively linear. The part that we are concerned about were the overly optimistic projections for 1984. We are not too concerned about the uneven historic financial data, since most of the inconsistencies can be explained, due to increased personnel, competitive pressures, increasing R&D, manufacturing problems and a product recall. Some of these events have been corrected, and for the most part, events such as manufacturing problems and recalls, is an innate risk of the business that cannot be predicted. Some fluctuating in revenue can be expected as older products end their life cycles.

Financial pressures

A worst-case scenario for STC would be an economic downturn, coupled with another product recall or production problem and a competitor introducing a better product than STC. The

government, as well as other customers, may reduce orders to STC during economic downturn, and probably would delay payment for sales that have already been booked (especially the government). Simultaneously, if there is a product recall/production problem, STC will have to spend a lot of money and human resources to correct the problem. STC would see declining revenue from a poor economy and a better product from a competitor, increased expenses, and a damaged reputation/stock decline from the recall. This could weaken STC to the point where it is vulnerable to a takeover from a larger competitor, like Teradyne, or would have no choice but to merger with another company because it becomes too weak to survive on its own.

Recommendations

Based on the worst-case scenario above, STC needs to bolster its cash position. It ended 1984 with only \$3 million in cash, which is not a high enough cushion if the economy goes south and not enough to win the R&D war against its competitors. Cash declined from \$25 million to \$3 million, but we're not sure where that drop came from. STC has a fairly large working capital balance of \$128 million at the end of 1984, mostly due to very high A/R relative to A/P. It can increase cash levels by managing its working capital better. It could improve its cash position by reducing payment terms on its least creditworthy customers, and offer discounts to pay early for all of its customers. It can also investigate factoring its A/R. Since STC's stock has been increasing and the company is profitable, it can look to negotiate better payment terms with its vendors.

Teradyne's SG&A as a % of sales was only 20%, compared to 46% for STC during 1984. It is a large competitive disadvantage if its largest competitor has a better cost structure. STC should seriously evaluate its operations and determine the minimum amount of employees it requires to efficiently run its operations. Employee layoffs may be necessary. STC can also offer an early retirement package to reduce its staff.

STC should become conservative as far as capital expenditures. STC can also look to outsource productions of its low end products and some future products, in order to save money on capital expenditures and reduce the amount of employees. This would also reduce its assets, and improve asset turnover. It may even look to issue additional stock. We would still try to avoid issuing additional debt, since STC has high operational risk.

Furthermore, keep investing heavily in R&D. There will always be a need for better technology and you can't let STC's competitors beat you as far as innovation. If STC develops a superior product or project, someone will finance it, if STC cannot finance it on its own.

Figure 1
Revised EBITDA projections

	1985	1986	1987	1988	1989	
Revenue	\$ 261.1	\$ 300.2	\$ 360.2	\$ 432.3	\$ 518.8	15% growth first 2 years, 20% after 1987
COGS	\$ 120.1	\$ 138.1	\$ 165.7	\$ 198.9	\$ 238.6	46% of sales
Gross profit	\$ 141.0	\$ 162.1	\$ 194.5	\$ 233.4	\$ 280.1	
R&D	\$ 41.8	\$ 48.0	\$ 57.6	\$ 69.2	\$ 83.0	16% of sales
SG&A	\$ 80.9	\$ 93.1	\$ 111.7	\$ 134.0	\$ 160.8	31% of sales.
EBITDA	\$ 18.3	\$ 21.0	\$ 25.2	\$ 30.3	\$ 36.3	
EBITDA %	7.0%	7.0%	7.0%	7.0%	7.0%	
Finson's EBITDA	42	54	70	90	119	
Finson's EBITDA %	14.1%	14.1%	14.0%	13.9%	14.1%	
EBITDA Difference	\$ (23.7)	\$ (33.0)	\$ (44.8)	\$ (59.7)	\$ (82.7)	

