EXHIBIT 3 | Free Cash Flows and Analysis of Proposed Projects[1] (all values in euro millions)

Project	1	2	3	4	5	6	7	8	9	10
	Expand Truck Fleet[3]	New Plant (Dijon, France)	Expanded Plant (Nuremberg, Germany)	Snack Foods	Automation and Conveyer Systems	Southward Expansion[5]	Eastward Expansion[5]	Artificial Sweetener	Inventory-Control System	Strategic Acquisition[6]
Investment										
Property	30.00	37.50	15.00	22.50	21.00	0.00	0.00	22.50	22.50	45.00
Working Capital	3.00	7.50	0.00	4.50	0.00	30.00	30.00	4.50	0.00	15.00
Year	**EXPECTED FREE CASH FLOWS[4]**									
0	−17.10	−45.00	−15.00	−9.00	−21.00	−30.00	−30.00	−27.00	−18.00	−25.00
1	−11.85	3.00	1.88	−9.00	4.13	5.25	4.50	4.50	8.25	−30.00
2	4.50	7.50	2.25	−9.00	4.13	6.00	5.25	6.00	8.25	7.50
3	5.25	8.25	2.63	4.50	4.13	6.75	6.00	6.75	7.50	13.50
4	6.00	9.00	3.00	4.50	4.13	7.50	6.75	7.50		16.50
5	6.75	9.38	3.38	6.00	4.13	8.25	7.50	7.50		19.50
6	7.50	9.75	3.75	6.75	4.13	9.00	8.25	7.50		22.50
7	10.50	10.13	2.25	7.50	4.13	9.75	9.00	7.50		25.50
8		7.50	2.25	8.25		10.50	9.75	7.50		28.50
9		7.88	2.25	9.00		11.25	10.50	7.50		31.50
10		8.25	2.25	9.75		12.00	11.25	7.50		88.50
Undiscounted Sum	11.55	35.63	10.88	29.25	7.88	56.25	48.75	42.75	6.00	198.50
Payback (years)	6	6	6	7	6	5	5	5	3	5
Maximum Payback Accepted	4	5	5	6	4	6	6	6	4	6
IRR	7.8%	11.3%	11.2%	13.4%	8.7%	21.4%	18.8%	20.5%	16.2%	27.5%
Minimum Accepted ROR	8.0%	10.0%	10.0%	12.0%	8.0%	12.0%	12.0%	12.0%	8.0%	12.0%
Spread	−0.2%	1.3%	1.2%	1.4%	0.7%	9.4%	6.8%	8.5%	8.2%	15.5%
NPV at Corp. WACC (10.6%)	−2.88	1.49	0.41	3.74	−1.31	17.99	13.49	13.43	1.75	69.45
NPV at Minimum ROR	−0.19	2.81	0.82	1.79	0.48	14.85	10.62	10.97	2.67	59.65
Equivalent Annuity[2]	−0.04	0.46	0.13	0.32	0.09	2.63	1.88	1.94	1.03	10.56

[1]The effluent treatment program is not included in this exhibit.
[2]The equivalent annuity of a project is that level annual payment that yields a net present value equal to the NPV at the minimum required rate of return for that project. Annuity corrects for differences in duration among various projects. In ranking projects on the basis of equivalent annuity, bigger annuities create more investor wealth than smaller annuities.
[3]This reflects EUR16.5 million spent both initially and at the end of year one.
[4]Free cash flow = Incremental profit or cost savings after taxes + Depreciation − Investment in fixed assets and working capital.
[5]Franchisees would gradually take over the burden of carrying receivables and inventory.
[6]EUR25 million would be spent in the first year, EUR30 million in the second, and EUR5 million in the third.

Star River 星河 Electronics Ltd.

On July 5, 2001, her first day as CEO of Star River Electronics Ltd., Adeline Koh confronted a host of management problems. One week earlier, Star River's president and CEO had suddenly resigned to accept a CEO position with another firm. Koh had been appointed to fill the position—starting immediately. Several items in her in-box that first day were financial in nature, either requiring a financial decision or with outcomes that would have major financial implications for the firm. That evening, Koh asked to meet with her assistant, Andy Chin, to begin addressing the most prominent issues.

Star River Electronics and the Optical-Disc-Manufacturing Industry

Star River Electronics had been founded as a joint venture between Starlight Electronics Ltd., United Kingdom, and an Asian venture-capital firm, New Era Partners. Based in Singapore, Star River had a single business mission: to manufacture CD-ROMs as a supplier to major software companies. In no time, Star River gained fame in the industry for producing high-quality discs.

The popularity of optical and multimedia products created rapid growth for CD-ROM manufacturers in the mid-1990s. Accordingly, small manufacturers proliferated, creating an oversupply that pushed prices down by as much as 40%. Consolidation followed as less efficient producers began to feel the pinch.

Star River Electronics survived the shakeout, thanks to its sterling reputation. While other CD-ROM manufacturers floundered, volume sales at the company had grown at a robust rate in the past two years. Unit prices, however, had declined because of price competition and the growing popularity of substitute storage devices, particularly digital video discs (DVDs). The latter had 14 times more storage capacity and threatened to displace CD-ROMs. Although CD-ROM *disc drives* composed 93% of

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all optical-disc-drive shipments in 1999, a study predicted that this number would fall to 41% by 2005, while the share of DVD drives would rise to 59%.[1] Star River had begun to experiment with DVD manufacturing, but DVDs still accounted for less than 5% of its sales at fiscal year-end 2001. With newly installed capacity, however, the company hoped to increase the proportion of revenue from DVDs.

Financial Questions Facing Adeline Koh

That evening, Koh met with Andy Chin, a promising new associate whom she had brought along from New Era Partners. Koh's brief discussion with Chin went as follows:

KOH: Back at New Era, we looked at Star River as one of our most promising venture-capital investments. Now it seems that such optimism may not be warranted—at least until we get a solid understanding of the firm's past performance and its forecast performance. Did you have any success on this?

CHIN: Yes, the bookkeeper gave me these: the historical income statements [**Exhibit 1**] and balance sheets [**Exhibit 2**] for the last four years. The accounting system here is still pretty primitive. However, I checked a number of the accounts, and they look orderly. So I suspect that we can work with these figures. From these statements, I calculated a set of diagnostic ratios [**Exhibit 3**].

KOH: I see you have been busy. Unfortunately, I can't study these right now. I need you to review the historical performance of Star River for me, and to give me any positive or negative insights that you think are significant.

CHIN: When do you need this?

KOH: At 7:00 a.m. tomorrow. I want to call on our banker tomorrow morning and get an extension on Star River's loan.

CHIN: The banker, Mr. Tan, said that Star River was "growing beyond its financial capabilities." What does that mean?

KOH: It probably means that he doesn't think we can repay the loan within a reasonable period. I would like you to build a simple financial forecast of our performance for the next two years (ignore seasonal effects), and show me what our debt requirements will be at the fiscal years ending 2002 and 2003. I think it is reasonable to expect that Star River's sales will grow at 15% each year. Also, you should assume capital expenditures of SGD54.6 million[2] for DVD manufacturing equipment, spread out over the next two years and depreciated over seven years. Use whatever other assumptions seem appropriate to you, based on your historical analysis of results. For this forecast, you should assume that any external funding is in the form of debt.

CHIN: But what if the forecasts show that Star River cannot repay the loan?

[1]Global Industry Analysts, Inc., "TEAC—Facts, Figures and Forecasts," 5.

[2]SGD = Singaporean dollars.

KOH: Then we'll have to go back to Star River's owners, New Era Partners and Star River Electronics United Kingdom, for an injection of equity. Of course, New Era Partners would rather not invest more funds unless we can show that the returns on such an investment would be very attractive and/or that the survival of the company depends on it. Thus, my third request is for you to examine what returns on book assets and book equity Star River will offer in the next two years and to identify the "key-driver" assumptions of those returns. Finally, let me have your recommendations about operating and financial changes I should make based on the historical analysis and the forecasts.

CHIN: The plant manager revised his request for a new packaging machine and thinks these are the right numbers [see the plant manager's memorandum in **Exhibit 4**]. Essentially, the issue is whether to invest now or wait three years to buy the new packaging equipment. The new equipment can save significantly on labor costs but carries a price tag of SGD1.82 million. My hunch is that our preference between investing now versus waiting three years will hinge on the discount rate.

KOH: [laughing] The joke in business school was that the discount rate was always 10%

CHIN: That's not what my business school taught me! New Era always uses a 40% discount rate to value equity investments in risky start-up companies. But Star River is reasonably well established now and shouldn't require such a high-risk premium. I managed to pull together some data on other Singaporean electronics companies with which to estimate the required rate of return on equity [see **Exhibit 5**].

KOH: Fine. Please estimate Star River's weighted average cost of capital and assess the packaging-machine investment. I would like the results of your analysis tomorrow morning at 7:00.

EXHIBIT 1 | Historical Income Statements for Fiscal Year Ended June 30 (SGD 000)

	1998	1999	2000	2001
Sales	71,924	80,115	92,613	106,042
Operating expenses:				
Production costs and expenses	33,703	38,393	46,492	53,445
Admin. and selling expenses	16,733	17,787	21,301	24,177
Depreciation	8,076	9,028	10,392	11,360
Total operating expenses	58,512	65,208	78,185	88,983
Operating profit	13,412	14,908	14,429	17,059
Interest expense	5,464	6,010	7,938	7,818
Earnings before taxes	7,949	8,897	6,491	9,241
Income taxes*	2,221	2,322	1,601	2,093
Net earnings	5,728	6,576	4,889	7,148
Dividends to all common shares	2,000	2,000	2,000	2,000
Retentions of earnings	3,728	4,576	2,889	5,148

*The expected corporate tax rate was 24.5%.

EXHIBIT 2 | Historical Balance Sheets for Fiscal Year Ended June 30 (SGD 000)

	1998	1999	2000	2001
Assets:				
Cash	4,816	5,670	6,090	5,795
Accounts receivable	22,148	25,364	28,078	35,486
Inventories	23,301	27,662	53,828	63,778
Total current assets	50,265	58,697	87,996	105,059
Gross property, plant & equipment	64,611	80,153	97,899	115,153
Accumulated depreciation	(4,559)	(13,587)	(23,979)	(35,339)
Net property, plant & equipment	60,052	66,566	73,920	79,814
Total assets	110,317	125,262	161,916	184,873
Liabilities and Stockholders' Equity:				
Short-term borrowings (bank)[1]	29,002	37,160	73,089	84,981
Accounts payable	12,315	12,806	11,890	13,370
Other accrued liabilities	24,608	26,330	25,081	21,318
Total current liabilities	65,926	76,296	110,060	119,669
Long-term debt[2]	10,000	10,000	10,000	18,200
Shareholders' equity	34,391	38,967	41,856	47,004
Total liabilities and stockholders' equity	110,317	125,263	161,916	184,873

[1]Short-term debt was borrowed from City Bank at an interest rate equal to Singaporean prime lending rates + 1.5%. Current prime lending rates were 5.2%. The benchmark 10-year Singapore treasury bond currently yielded 3.6%.

[2]Two components made up the company's long term debt. One was a SGD10 million loan that had been issued privately in 1996 to New Era Partners and to Star River Electronics Ltd., U.K. This debt was subordinate to any bank debt outstanding. The second component was a SGD8.2 million from a 5-year bond issued on a private placement basis last July 1, 2000, at a price of SGD97 and a coupon of 5.75% paid semiannually.

EXHIBIT 3 | Ratio Analyses of Historical Financial Statements

	1998	1999	2000	2001
Profitability				
Operating margin (%)	18.6%	18.6%	15.6%	16.1%
Tax rate (%)	27.9%	26.1%	24.7%	22.6%
Return on sales (%)	8.0%	8.2%	5.3%	6.7%
Return on equity (%)	16.7%	16.9%	11.7%	15.2%
Return on assets (%)	5.2%	5.2%	3.0%	3.9%
Leverage				
Debt/equity ratio	1.13	1.21	1.99	2.20
Debt/total capital (%)	0.53	0.55	0.67	0.69
EBIT/interest (x)	2.45	2.48	1.82	2.18
Asset Utilization				
Sales/assets	65.2%	64.0%	57.2%	57.4%
Sales growth rate (%)	15.0%	11.4%	15.6%	14.5%
Assets growth rate (%)	8.0%	13.5%	29.3%	14.2%
Days in receivables	112.4	115.6	110.7	122.1
Payables to COGS	36.5%	33.4%	25.6%	25.0%
Inventories to COGS	69.1%	72.1%	115.8%	119.3%
Liquidity				
Current ratio	0.76	0.77	0.80	0.88
Quick ratio	0.41	0.41	0.31	0.34

EXHIBIT 4 | Lim's Memo Regarding New Packaging Equipment

MEMORANDUM

TO: Adeline Koh, President and CEO, Star River Electronics
FROM: Esmond Lim, Plant Manager
DATE: June 30, 2001
SUBJECT: New Packaging Equipment

Although our CD packaging equipment is adequate at current production levels, it is terribly inefficient. The new machinery on the market can give us significant labor savings as well as increased flexibility with respect to the type of packaging used. I recommend that we go with the new technology. Should we decide to do so, the new machine can be acquired immediately. The considerations relevant to the decision are included in this memo.

Our current packaging equipment was purchased five years ago as used equipment in a liquidation sale of a small company. Although the equipment was inexpensive, it is slow, requires constant monitoring and is frequently shut down for repairs. Since the packaging equipment is significantly slower than the production equipment, we routinely have to use overtime labor to allow packaging to catch up with production. When the packager is down for repairs, the problem is exacerbated and we may spend several two-shift days catching up with production. I cannot say that we have missed any deadlines because of packaging problems, but it is a constant concern around here and things would run a lot smoother with more reliable equipment. In 2002, we will pay about SGD15,470 per year for maintenance costs. The operator is paid SGD63,700 per year for his regular time, but he has been averaging SGD81,900 per year because of the overtime he has been working. The equipment is on the tax and reporting books at SGD218,400 and will be fully depreciated in three years time (we are currently using the straight-line depreciation method for both tax and reporting purposes and will continue to do so). Because of changes in packaging technology, the equipment has no market value other than its worth as scrap metal. But its scrap value is about equal to the cost of having it removed. In short, we believe the equipment has no salvage value at all.

The new packager offers many advantages over the current equipment. It is faster, more reliable, more flexible with respect to the types of packaging it can perform, and will provide enough capacity to cover all our packaging needs in the foreseeable future. With suitable maintenance, we believe the packager will operate indefinitely. Thus, for the purposes of our analysis, we can assume that this will be the last packaging equipment we will ever have to purchase. Because of the anticipated growth at Star River, the current equipment will not be able to handle our packaging needs by the end of 2004. Thus, if we do not buy new packaging equipment by this year's end, we will have to buy it after three years time anyway. Since the speed, capacity, and reliability of the new equipment will eliminate the need for overtime labor, we feel strongly that we should buy now rather than wait another three years.

The new equipment currently costs SGD1.82 million, which we would depreciate over 10 years at SGD182,000 per year. It comes with a lifetime factory maintenance contract that covers all routine maintenance and repairs at a price of SGD3,640 for the initial year. The contract stipulates that the price after the first year will be increased by the same percentage as the rate of increase of the price of new equipment. Thus if the manufacturer continues to increase the price of new packaging equipment at 5% per annum as it has in the past, our maintenance costs will rise by 5% also. We believe that this sort of regular maintenance should insure that the new equipment will keep operating in the foreseeable future without the need for a major overhaul.

Star River's labor and maintenance costs will continue to rise due to inflation at approximately 1.5% per year over the long term. Because the manufacturer of the packaging equipment has been increasing its prices at about 5% per year, we can expect to save SGD286,878 in the purchase price by buying now rather than waiting three years. The marginal tax rate for this investment would be 24.5%.

EXHIBIT 5 | Data on Comparable Companies and Capital-Market Conditions

Name	% of Sales from CD-ROM and/or DVD Production	Price/ Earnings Ratio	Beta	Book D/E	Book Value per Share	Market Price per Share	Number of Shares Outstanding (millions)	Last Annual Dividend	5-Year Earnings Growth Forecast
Sing Studios, Inc.	20%	9.0	1.07	0.23	1.24	1.37	9.3	1.82	4.0%
Wintronics, Inc.	95%	NMF	1.56	1.70	1.46	6.39	177.2	0.15	15.7%
STOR-Max Corp.	90%	18.2	1.67	1.30	7.06	27.48	89.3	none	21.3%
Digital Media Corp.	30%	34.6	1.18	0.00	17.75	75.22	48.3	none	38.2%
Wymax, Inc.	60%	NMF	1.52	0.40	6.95	22.19	371.2	1.57	11.3%

Note: NMF means not a meaningful figure. This arises when a company's earnings or projected earnings are negative.

Singapore's equity market risk premium could be assumed to be close to the global equity market premium of 6%, given Singapore's high rate of integration into global markets.

Descriptions of Companies

Sing Studios, Inc.
This company was founded 50 years ago. Its major business activities historically had been production of original-artist recordings, management and production of rock-and-roll road tours, and personal management of artists. It entered the CD-production market in the 1980s, and only recently branched out into the manufacture of CD-ROMs. Most of its business, however, related to the manufacture and sale of MIDI (Music Instrument Digital Interface) CDs.

Wintronics, Inc.
This company was a spin-off from a large technology-holding corporation in 1981. Although the company was a leader in the production of CD-ROMs and DVDs, it has recently suffered a decline in sales. Infighting among the principal owners has fed concerns about the firm's prospects.

STOR-Max Corp.
This company, founded only two years ago, had emerged as a very aggressive competitor in the area of CD-ROM and DVD production. It was Star River's major competitor and its sales level was about the same.

Digital Media Corp.
This company had recently been an innovator in the production of DVDs. Although DVD manufacturing was not a majority of its business (film production and digital animation were its main focus), the company was projected to be a major competitor within the next three years.

Wymax, Inc.
This company was an early pioneer in the CD-ROM and DVD industries. Recently, however, it had begun to invest in software programming and had been moving away from disc production as its main focus of business.

PART 5

Management of the Firm's Equity: Dividends, Repurchases, Initial Offerings