

G&P GREETINGS, INC.

After a two-hour meeting, Bob Randell returned to his office. Two subjects had been discussed at length: the high interest on G&P Greetings' existing debt and a proposed new debt issue. Due to a consolidation and an investment in the first phase of a new production facility in June 1993, the company had issued a non-callable five-year 7-3/8 percent fixed rate note in the amount of \$75 million. Since this time, sales levels had languished and the interest costs of this financing had been a significant drain on earnings. In fact, earnings had been flat for the last few years, and prospects for growth in the next two years were not promising. Beverly Knight, G&P's chief executive officer, was demanding that expenses be cut. In response, the company had already reduced its staff and imposed restrictions on purchases. And at today's meeting (September 1, 1995), Knight had handed Randell a mandate to reduce the firm's relatively high financing costs.

Randell knew that his first task would be to review the alternatives he had received from John Lawler, who worked with Mendelsohn and Hall, the regional investment bank with which G&P had traditionally worked. In addition, Randell needed to review a new non-callable \$20 million debt issue which would be privately placed. Although this note had a very attractive rate, Knight had voiced concerns about the company taking on additional non-callable debt. At the close of the meeting, Knight had requested that Randell explore other options.

G&P Greetings, Inc.

G&P, a medium-sized firm which specialized in the production of designer greeting cards and stationary, was founded at the turn of the century by William Hughes. Over many years, the firm had carved out a niche in the midwest market of the United States. In 1992, the firm decided to expand beyond the midwest and as part of this effort constructed a new production

complex. A second phase was planned for late in 1994. Overall, sales had increased; however, the results had not been as successful as the original plans had foretold. The net result was that expenses had risen and earnings per share had fallen for the last three years. (See Exhibits 1 and 2.) Randell knew that additional debt in the amount of \$20 million would have to be issued to complete the financing of the second phase.

Randell was convinced, moreover, that short-term interest rates would fall; as a result, he wanted to change from the fixed rate debt (see Exhibit 3 for the scheduled debt payments) that the company currently had to a floating rate. He believed that this would reduce current and future interest costs, but felt that he needed to review all of the alternatives that Lawler had put together.

Alternatives

Existing debt

Lawler had suggested the following alternatives:

1. Swap fixed for floating on a notional principle of \$75 million. The proposal would involve G&P receiving a fixed payment on the same dates as the scheduled payments and paying 3 month LIBOR. However, the LIBOR payments would be paid quarterly. The quoted swap rate was 6.10 percent for receiving fixed and paying LIBOR.
2. Mendelssohn and Hall could arrange for the sale of an interest rate cap to a third party. Under the terms, G&P would agree to pay the interest differential¹ on \$75 million between the 3 month LIBOR rate and a fixed rate of 6.5 percent on each of the scheduled payments shown in Exhibit 3. If the 3 month LIBOR were greater than 6.5 percent then G&P would pay the difference between six months of interest² at LIBOR and six months of interest at 6.5 percent and if LIBOR was less than 6.5 percent, G&P would pay nothing. Mendelssohn and Hall was willing to arrange the sale of the interest cap for any or all of the scheduled payment dates. The cash inflow in 1994 would significantly reduce the interest costs for the year.³ Lawler indicated that he would get back to Randell with price information if he were interested.
3. Sell (write) a swaption. A swaption would involve the sale to a third party of the right to force G&P to enter into a fixed for floating 24-month swap any time during the next

¹The terms of the option contract specify that the interest differential would be calculated as the difference between 6.5% and the 3 month LIBOR rate as quoted on the first trading day of the month in which the coupon payment is due as shown in exhibit 3.

² If the 3 month LIBOR rate was 7.0%, the payment would be $(.07-.065)/2 \times \$75 \text{ million}$ or \$375,000.

³Randell had decided to ignore the accounting and tax implications of each of the alternatives.

twelve months. Mendelssohn and Hall had suggested terms for G&P promising to receive a fixed rate equal to 6 percent and paying LIBOR. The purchaser of the swaption would get the right to receive LIBOR and pay 6 percent fixed. Both the fixed and LIBOR payments would be made quarterly. In this case, the proceeds from the sale would offset some of the interest costs in the current year and price quotes would be provided if there were any interest in this alternative.

There were a number of issues that Randell needed to resolve before he could decide what to do. First, he wanted to check how competitive the swap quote provided by Mendelssohn and Hall was compared to the market. (Exhibit 4 shows the current Eurodollar futures prices.) Since this was just to check, he decided for simplicity to assume that it was exactly three months to each of the maturity dates on the Eurodollar futures contracts. The basic swap looked attractive, since Randell thought interest rates would drop, but he did wonder if he could not do even better if he swapped on the basis of \$150 million instead of \$75 million.

He had not received the price quote for the interest rate cap, but assumed that these were just call options on LIBOR. Consequently, he collected information on current interest rates (Exhibit 5), five years of data on 3 month LIBOR spot rates (Exhibit 6), and some historic information on Eurodollar futures rates (Exhibit 7). He decided that he could use the Black-Scholes model to estimate the price of the interest rate caps on a basis of \$75 million, but was uncertain as to what the value of the underlying asset was and what was the volatility.

The swaption was clearly a viable alternative, but Randell needed to know what kind of volatility he would be facing and what the underlying asset value would be. He did call a friend and was told that the volatility for this type of swaption was 8 percent and that most investment banking firms used a Black-Scholes model to price swaptions. If he used the Black-Scholes model, he knew the risk-free rate (Exhibit 5), the time to maturity (one year), and he could use the volatility of 8 percent but he still needed to determine the underlying asset value and the strike price.

New debt

G&P had a great opportunity to finance the \$20 million they needed through a private placement. The lender was willing to finance the debt at 8 percent fixed for five years, which was 25 basis points less than the firm would pay if it went directly to the market with non-callable debt. The lender had indicated that it was not interested in callable debt, so Randell was interested in how he might be able to use the swap market to create a callable bond. Lawler had suggested purchasing a swaption for a swap from fixed to floating. Randell was not sure how this could help him with his problem, but he was intrigued.

Exhibit 1

G&P GREETINGS, INC.

Income Statement

	<u>1994</u>	<u>1993</u>	<u>1992</u>	<u>1991</u>
Sales	230	220	204	201
Cost of goods	<u>166</u>	<u>156</u>	<u>143</u>	<u>141</u>
Gross profit	64	64	61	60
Selling and administration	35	33	31	30
Depreciation	<u>9</u>	<u>7</u>	<u>2</u>	<u>2</u>
Operating profit	21	24	29	28
Interest	<u>7</u>	<u>5</u>	<u>3</u>	<u>1</u>
Profit before tax	14	19	26	27
Tax	<u>5</u>	<u>7</u>	<u>9</u>	<u>9</u>
Profit after tax	9	12	17	18
Dividends	--	4	5	5
Add to retained earnings	9	9	12	12
EPS	\$ 1.84	\$ 2.44	\$ 3.39	\$ 3.50

Exhibit 2

G&P GREETINGS, INC.

Balance Sheet

	<u>1994</u>	<u>1993</u>	<u>1992</u>	<u>1991</u>
Assets				
Cash	2	5	7	8
Accounts receivable	67	55	51	49
Inventory	<u>38</u>	<u>33</u>	<u>25</u>	<u>23</u>
Current assets	107	93	83	80
Net PP&E	<u>222</u>	<u>223</u>	<u>156</u>	<u>145</u>
Total assets	329	316	239	225
Liabilities and net worth				
Accounts payable	70	67	59	58
Accrued liabilities	<u>23</u>	<u>22</u>	<u>13</u>	<u>12</u>
Current liabilities	93	89	72	70
L-T debt	75	75	24	24
Common stock	3	3	3	3
Retained earnings	<u>158</u>	<u>149</u>	<u>140</u>	<u>128</u>
Total liabilities and Net Worth	329	316	239	225

Exhibit 3

G&P GREETINGS, INC.

Existing Debt Schedule of Payments

	Payments (millions)	
<u>Date</u>	<u>Coupon</u>	<u>Principal</u> .
Dec-95	\$ 2.7656	\$ --
Jun-96	2.7656	--
Dec-96	2.7656	--
Jun-97	2.7656	--
Dec-97	2.7656	--
Jun-98	2.7656	75.000

Exhibit 4

G&P GREETINGS, INC.

Eurodollar Futures Prices
September 1, 1995

<u>Maturity*</u> <u>Date</u>	<u>Settle</u> <u>Price</u>	<u>Yield</u>
Sep-95	94.24	5.76
Dec-95	94.20	5.80
Mar-96	94.19	5.81
Jun-96	94.15	5.85
Sep-96	94.00	6.00
Dec-96	93.79	6.21
Mar-97	93.74	6.26
Jun-97	93.65	6.35
Sep-97	93.57	6.43
Dec-97	93.44	6.56
Mar-98	93.42	6.58
Jun-98	93.35	6.65
Sep-98	93.29	6.71
Dec-98	93.18	6.82
Mar-99	93.17	6.83
Jun-99	93.11	6.89
Sep-99	93.05	6.95
Dec-99	92.96	7.04

Maturity date is the date that The Futures Contract matures, which is usually the middle of the month. The yield is applicable to the next 3 months.

Exhibit 5

G&P GREETINGS, INC.

Current Market Information
September 1, 1995

U.S. Treasury Securities

3-month bill	5.45%
6-month bill	5.51%
1-year bill	5.59%
2-year note	5.79%
3-year note	5.89%
5-year note	6.01%
10-year note	6.23%
30-year bond	6.61%

London Inter-bank Rate

LIBOR (3 months)	5.78%
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Exhibit 6

G&P GREETINGS, INC.

LIBOR rates 1990-1995

Euro-Currency (LDN) US\$ 3 Months-Middle Rate

<u>Date</u>	<u>LIBOR</u>	<u>Date</u>	<u>LIBOR</u>
8/1/90	7.88	3/1/93	3.13
9/1/90	8.00	4/1/93	3.19
10/1/90	8.06	5/1/93	3.13
11/1/90	8.00	6/1/93	3.31
12/1/90	8.25	7/1/93	3.25
1/1/91	7.50	8/1/93	3.25
2/1/91	6.69	9/1/93	3.19
3/1/91	6.69	10/1/93	3.31
4/1/91	6.31	11/1/93	3.38
5/1/91	5.98	12/1/93	3.44
6/1/91	6.06	1/1/94	3.31
7/1/91	6.13	2/1/94	3.19
8/1/91	6.00	3/1/94	3.63
9/1/91	5.69	4/1/94	3.88
10/1/91	5.56	5/1/94	4.25
11/1/91	5.19	6/1/94	4.56
12/1/91	4.94	7/1/94	4.88
1/1/92	4.19	8/1/94	4.75
2/1/92	4.13	9/1/94	4.94
3/1/92	4.19	10/1/94	5.44
4/1/92	4.25	11/1/94	5.56
5/1/92	3.94	12/1/94	6.19
6/1/92	4.00	1/1/95	6.44
7/1/92	3.84	2/1/95	6.25
8/1/92	3.38	3/1/95	6.19
9/1/92	3.44	4/1/95	6.25
10/1/92	3.13	5/1/95	6.13
11/1/92	3.56	6/1/95	6.00
12/1/92	3.94	7/1/95	5.94
1/1/93	3.38	8/1/95	5.75
2/1/93	3.19	9/1/95	5.78

Exhibit 7

G&P GREETINGS, INC.

3 month Eurodollar Futures Rates

months forward	3	6	9	12	15	18	21	24	27	30	33	36
1-Jan-89	9.38	9.44	9.47	9.65	9.59	9.65	9.69	9.76	9.69	9.72	9.74	9.76
1-Apr-89	10.48	10.60	10.70	10.36	10.07	9.87	9.84	9.70	9.62	9.59	9.58	9.55
1-Jul-89	8.50	8.30	8.18	8.28	8.36	8.55	8.56	8.61	8.64	8.70	8.67	8.69
1-Oct-89	8.97	8.71	8.60	8.64	8.90	8.90	8.92	8.93	9.01	8.98	9.00	9.00
1-Jan-90	8.02	7.84	7.85	8.08	8.20	8.38	8.46	8.58	8.53	8.58	8.64	8.72
1-Apr-90	8.67	8.78	8.95	9.03	9.13	9.15	9.24	9.20	9.24	9.27	9.35	9.31
1-Jul-90	8.17	8.18	8.21	8.36	8.48	8.64	8.70	8.80	8.88	9.01	9.05	9.15
1-Oct-90	7.94	7.86	8.00	8.24	8.55	8.64	8.75	8.84	8.99	9.02	9.13	9.18
1-Jan-91	7.20	7.11	7.22	7.53	7.68	7.93	8.14	8.37	8.47	8.61	8.68	8.81
1-Apr-91	6.51	6.79	7.27	7.47	7.78	8.04	8.32	8.39	8.50	8.60	8.78	8.81
1-Jul-91	6.48	7.05	7.17	7.58	7.97	8.31	8.30	8.49	8.67	8.90	8.90	8.99
1-Oct-91	5.67	5.55	5.70	6.02	6.57	6.73	7.02	7.28	7.63	7.64	7.78	7.94
1-Jan-92	4.04	4.15	4.36	4.84	5.09	5.54	5.98	6.50	6.59	6.83	7.04	7.40
1-Apr-92	4.49	4.85	5.59	5.87	6.39	6.88	7.44	7.51	7.71	7.88	8.16	8.11
1-Jul-92	3.90	4.37	4.47	4.87	5.36	5.94	6.10	6.43	6.73	7.14	7.19	7.43
1-Oct-92	3.01	3.05	3.35	3.73	4.32	4.64	5.06	5.40	5.82	5.94	6.22	6.42
1-Jan-93	3.64	4.07	4.48	5.11	5.33	5.68	5.98	6.41	6.52	6.78	6.98	7.28
1-Apr-93	3.32	3.52	3.92	4.09	4.46	4.78	5.20	5.32	5.59	5.80	6.11	6.16
1-Jul-93	3.40	3.76	3.85	4.14	4.42	4.83	4.93	5.15	5.36	5.66	5.69	5.83
1-Oct-93	3.47	3.48	3.68	3.91	4.27	4.35	4.55	4.72	5.01	5.05	5.22	5.36
1-Jan-94	3.54	3.90	4.22	4.64	4.79	5.03	5.23	5.54	5.59	5.76	5.90	6.16
1-Apr-94	4.53	5.08	5.62	5.90	6.22	6.51	6.83	6.92	7.08	7.22	7.42	7.45
1-Jul-94	5.36	6.05	6.34	6.64	6.87	7.11	7.15	7.25	7.34	7.50	7.51	7.61
1-Oct-94	6.04	6.40	6.82	7.13	7.41	7.47	7.58	7.68	7.81	7.81	7.88	7.95
1-Jan-95	7.23	8.00	8.35	8.53	8.45	8.38	8.33	8.33	8.23	8.18	8.13	8.16
1-Apr-95	6.48	6.72	6.97	6.96	7.05	7.12	7.21	7.19	7.21	7.24	7.30	7.29
1-Jul-95	5.67	5.66	5.62	5.71	5.80	5.98	6.02	6.10	6.16	6.27	6.29	6.35