



VALUATION ADVISORY
SERVICES

 **ERNST & YOUNG ORENDA**
CORPORATE FINANCE INC.

British Columbia Expropriation Association

Considerations in Business Loss Analysis

October 29, 2005



Assessing the Damage: Considerations in Business Loss Analysis

Paul McEwen

 **ERNST & YOUNG ORENDA**
CORPORATE FINANCE INC.

Road Map

- Contribution margin and other considerations
- Qualitative considerations
- “Goodwill” compensation



Contribution Margin



- Loss equals marginal change in profit due to the disturbance
- Marginal profit is the decline in revenues due to the disturbance, less the direct costs that would have been incurred, but for the disturbance
- Or ... revenues lost, minus costs saved
- The contribution margin of any company is made up of numerous input factors
 - Selling price per unit
 - Direct costs per unit
 - Volume
 - Product mix
 - Combination of the above

Contribution Margin – Simplified Example



Sample Income Statement		Contribution Margin	
		Marginal Elements	
Sales	\$2,000,000	\$2,000,000	
Cost of goods	1,311,000	1,311,000	
Gross profit	689,000	689,000	
Expenses			
Advertising & promotion	2,200		
Bank charges & interest	4,500	2,250	1/2 fixed
Commissions	30,000	30,000	
Management salaries	235,000		
Rent	120,000		
Selling expenses	50,000	50,000	
Utilities	8,300		
Wages & benefits	225,000	112,500	1/2 fixed
	675,000	194,750	
Net income before taxes	\$14,000	Contribution margin	\$494,250 24.7%

Contribution Margin – Simplified Loss Calculation



	<u>Year 1</u>	<u>Year 2</u>	<u>Total</u>
Sales			
But for the disturbance	\$2,350,000	\$2,600,000	
Actual	(1,925,000)	(2,100,000)	
Loss	425,000	500,000	
Contribution margin %	24.7%	24.7%	
Loss of contribution margin \$	104,975	123,500	\$228,475

Questions to Consider – Key Factors



- Changed due to the Disturbance or not?
- Subject to internal constraints (e.g. production capacity, costs)?
- Subject to external constraints (e.g. competition/pricing, market capacity, foreign exchange)?
- Can be assessed via analytical means, or should be taken should be taken as an instruction, or should be evidence from another type of expert?
- Assumptions to be proven by counsel to support the calculations?

Considering Constraints – Some Additional Facts



Some Additional Facts

- Volume of production in sample year: 85,000 units
- Capacity of plant: 100,000 units
- Prices and costs per unit were unaffected by Disturbance

From the above, can derive that:

- Price per unit was \$23.53 ($\$2,000,000 \div 85,000$ units), and
- Maximum annual sales are \$2,353,000, without increase in capacity

Contribution Margin – Revised Loss Calculation



	<u>Year 1</u>	<u>Year 2</u>
Capacity	100,000	100,000
Price per unit	\$23.53	\$23.53
Maximum sales	\$2,352,941	\$2,352,941
"But for" - as presented	2,350,000	2,600,000
"But for" - considering capacity	2,350,000	2,352,941

Contribution Margin – Revised Loss Calculation Recognizing Capacity Constraint



	<u>Year 1</u>	<u>Year 2</u>	<u>Total</u>
Sales			
But for the disturbance	\$2,350,000	\$2,352,941	
Actual	(1,925,000)	(2,100,000)	
Loss	425,000	252,941	
Contribution margin %	24.7%	24.7%	
<u>Loss of contribution margin \$</u>	<u>104,975</u>	<u>62,476</u>	<u>\$167,451</u>

Common Unstated/Unanalyzed Assumptions



- Pricing is unaffected by Disturbance
- Direct costs unaffected by Disturbance
- All volume declines were a result of the Disturbance
- Production/sales mix was unaffected by the Disturbance
- No scarcity of supplies, including labour
- “All you need is the General Ledger”

Qualitative Considerations



- Destination or walk-up?
- Market share approach?
- Market position within its niche?
- Inter-company transactions?
- Who are the business' key customers?
- Main marketing and distribution channels?

Qualitative Considerations (cont.)



- Main competitors?
- Barriers to entry into the relevant industry or sector?
- Past or prospective general economic conditions for the relevant industry or sector?

Loss of Goodwill



- “Goodwill” generally represents intangible value of a business interest:

Going Concern Value of Business

Less: (Going Concern Value of Tangible Assets)

Equals: Goodwill

Elements of Goodwill - Examples



- Market share of business
- Location of business
- Quality of products and service
- Customer recognition of brands
- Business conditions
- Customer relationships
- Stability of revenues
- And many more ...

Loss of Goodwill – Statute References



■ Section 34(4):

“If ... not feasible for an owner to relocate his or her business ... there may be included in the compensation an amount not exceeding the value of the goodwill of the business.” (underline for emphasis)

■ Section 34(1):

“reasonable costs, expenses and financial losses ... attributable to the disturbance ...” (underline for emphasis)

■ Section 40(1)(b)(ii):

“if part of the land of an owner is expropriated, he or she is entitled to compensation for ... to the extent they are directly attributable to the taking or result from the construction reasonable personal and business losses” (underline for emphasis)

Ongoing Loss Scenarios



- Full take, no relocate
- Full take, relocate
- Partial take

Some Triggering Factors For Ongoing Losses



- Loss of production capacity
- Loss of retail floor space
- Loss of parking spaces
- Decline in customer traffic volumes
- Reduced access to premises
- Loss of specific location



Thank you!