MQE INSIGHT

APPENDIX C:

ASSET VS. SHARE SALE – ILLUSTRATIVE EXAMPLE

Question 2 (20 Marks, 48 minutes)

Mr. Apple is the owner/operator of Plastics Co. Limited ("Plastics" or the "Company"), a private company engaged in the manufacture of plastic baby toys. He is the sole shareholder and has no children. Mr. Apple is 64 years old and would like to retire from his current role at Plastics. Alan, a long-term employee of Plastics, is anxious to take over the business. Mr. Apple trusts Alan, and would be happy to have him carry on the business.

While Mr. Apple is willing to consider any appropriate approach to transfer his ownership in the Company, he also wants to be assured that he will maximize his proceeds. In this regard, a friend and business associate of Mr. Apple has recently cautioned him that income tax implications in the sale of a business can dramatically affect proceeds, and that selling assets versus the shares of Plastics may have a major impact on the money that Mr. Apple will retain upon transferring of his business. Mr. Apple doesn't mind paying his fair share of taxes but wants to understand what his net proceeds may be on the disposition of either the assets or shares of Plastics if he sells to Alan.

Mr. Apple has approached Ms. Pear a partner at your firm, ABC Valuators Inc., to provide advice in this regard. Ms. Pear has asked that you prepare a memo outlining your thoughts and calculations which she can use in an upcoming meeting with Mr. Apple.

The attached Appendices have been provided by Mr. Apple.

Required:

Prepare the memo for Ms. Pear.

SCHEDULE 1

PLASTICS CO. LIMITED
SUMMARIZED BALANCE SHEET
AS AT DECEMBER 31, 2017

Assets		
Cash	$	50,000
Accounts receivable (Note 1)		110,000
Inventory (Note 1)		125,000
Equipment (Note 2)		550,000
Building (Note 2)		625,000
Land (Note 2)		700,000
Investment - 10% of Liquid Creations (Note 3)		150,000
	$	2,310,000
Liabilities		
Current liabilities	$	130,000
Bank loan		2,000,000
		2,130,000
Shareholder's equity		
100 Common shares		100
Retained earnings		179,900
	$	2,310,000

Notes:

1. Mr. Apple knows that historically 5% of the Accounts Receivable are uncollectible and inventory has a 25% gross margin when sold.

2. These assets are utilized in Plastics' operations and are not considered to be redundant assets. Although formal appraisal opinions have not been received, Mr. Apple has Investigated the sale of land and buildings and believes the fair market value of the assets along with their respective undepreciated capital cost balances as at December 21, 2017 are as follows:

	FMV	UCC	Original Cost
Land	$ 1,500,000	N/A	$ 700,000
Building	$ 750,000	$ 250,000	$ 900,000
Equipment	$ 250,000	$ 300,000	$ 800,000

3. The investment relates to Plastics' ownership of common shares in a private company, Liquid Creations, Inc. ("Liquid"). Information related to Liquid is included in Appendix 4.

SCHEDULE 2

PLASTICS CO. LIMITED
INCOME STATEMENTS
FOR THE YEARS ENDED DECEMBER 31,

	2017	2016	2015
Revenue	$ 6,250,000	$ 6,400,000	$ 6,200,000
Cost of goods sold	4,732,000	4,769,000	4,700,000
Gross margin	1,518,000	1,631,000	1,500,000
Expenses			
Selling expenses	336,000	331,000	320,000
Office expenses	220,000	205,000	210,000
Administrative salaries	205,000	199,000	190,000
Interest and bank charges (Note 1)	115,000	147,000	158,000
Management salaries (Note 2)	200,000	175,000	200,000
	1,076,000	1,057,000	1,078,000
Income before tax (Note 3)	$ 442,000	$ 574,000	$ 422,000

Notes:

1. Includes bank charges of $10,000 per annum.
2. Management salaries include salary of $75,000 for each of Alan and Mr. Apple, plus bonuses.
3. The higher revenue and gross margin in 2015 was attributable to a contract with a competitor who could not fulfill its orders. Management estimates that the pre-tax direct profit from this contract was $150,000.

SCHEDULE 3

ADDITIONAL INFORMATION REGARDING PLASTICS

1. A competitor recently put forth an offer of $2 million for the shares of Plastics. As part of this offer, Mr. Apple would be required to provide management consulting services on a full-time basis to Plastics for three years, earning $100,000 per annum.

2. Mr. Apple has deep personal contacts with most of Plastics' major customers.

3. Plastic's combined federal and provincial income tax rate on active business income is 15.5% on the first $500,000 and 26.5% on the remainder, and the company is subject to a rate of 46.17% on investment income.

4. You have done some research in to comparable WACC rates and a reasonable range for the industry seems to be 14.29% to 16.67% .

SCHEDULE 4

INFORMATION REGARDING LIQUID CREATIONS

1. Liquid is a research-based company that has spent the last four years developing a proprietary methodology of forming plastic using a combination of water and chemical compounds.

2. Liquid's year end is June 30.

3. Up to the end of its fiscal year ended June 30, 2017, Liquid has had no customers and no revenue.

4. During the fiscal year ended June 30, 2017, Liquid signed a contract to provide plastic manufacturing services to a telecommunications company located in the United States. The contract provided for fees of $8,000,000 over each of the next three years. Other contracts are currently being negotiated, and could provide revenue of $0 to $10,000,000 per annum.

5. A recent round of financing was just completed for Liquid. A third party paid $1,000,000 for 20,000 common shares.

6. Liquid has recently been approached by an investment bank who suggested that Liquid go public. The investment bank pegged the value of Liquid at 2.5X forward revenue. Liquid management has indicated that an IPO is possible in early 2018.

7. 200,000 common shares are currently outstanding.

8. Plastics holds 10,000 common shares in Liquid. These shares were purchased for $15 each on January 31, 2015.

APPENDIX 1
CALCULATION OF THE FAIR MARKET VALUE OF PCL

				Year Ended December 31,	
			2017	2016	2015
Income before tax			$ 442,000	$ 574,000	$ 422,000
Less: Direct profit on one-time contract				(150,000)	
Add: Interest expense (excl. bank charges)			105,000	137,000	148,000
Add: Management salaries			150,000	150,000	150,000
Less: Reasonable management salary			(100,000)	(100,000)	(100,000)
Adjusted pre-tax income			$ 597,000	$ 611,000	$ 620,000
Maintainable pre-tax income				$ 548,000	$ 670,000
Less: Income taxes					
On the first	$ 500,000 @	15.5%		(77,500)	(77,500)
On the remainder	@	26.5%		(12,720)	(45,050)
				457,780	547,450
WACC multiple	14.3% to	16.7%		7.0	6.0
				3,204,460	3,284,700
Add: FMV of investment in Liquid Creations (redundant asset)				720,000	1,260,000
Enterprise value				3,924,460	4,544,700
Less: Value of bank debt				(2,000,000)	(2,000,000)
Fair Market Value of 100% of equity				**$ 1,924,460**	**$ 2,544,700**
Midpoint					**$ 2,235,000**
Compare to offer					*$ 2,000,000*

APPENDIX 2
VALUE OF LIQUID CREATIONS BASED ON IPO

		Low	High
Range of revenue		$ 8,000,000	$ 18,000,000
Assumed multiple		2.5	2.5
En bloc equity value (200,000 common shares)		$ 20,000,000	$ 45,000,000
En bloc value of 10,000 common shares	5%	$ 1,000,000	$ 2,250,000
Less: Marketability discount at	10%	(100,000)	
	20%		(450,000)
		900,000	1,800,000
Less: Minority discount at	20%	(180,000)	
	30%		(540,000)
Value of 10,000 shares		**$ 720,000**	**$ 1,260,000**
Midpoint			**$ 990,000**
Original amounts paid by Plastic on January 31, 2013			*$ 150,000*
Price recently paid for 10% (20,000 shares) by third party			*$ 1,000,000*

APPENDIX 3
PLASTICS CO. LIMITED
NET PROCEEDS ON SALE OF ASSETS

	Deemed/Net proceeds	ACB/Tax Basis	UCC	Business income (loss)	Investment income	CDA	RDTOH
Beg. Balance - c/fs				$ -	$ -	$ -	$ -
Cash	$ 50,000	$ 50,000	$ -				
A/R	104,500	110,000	-	-$ 5,500 N1			
Inventory	156,250	125,000	-	31,250			
Land	1,500,000	700,000	-		$ 400,000	$ 400,000	
Building	750,000	900,000	250,000	500,000	-	-	
Equipment	250,000	800,000	300,000	(50,000)	-	-	
Investment - Liquid	990,000	150,000	-		420,000	420,000	
Current liabilities	(130,000)	(130,000)	-				
Bank loan	(2,000,000)	(2,000,000)	-				
Goodwill	564,250	-	-	-	282,125	282,125	
	2,235,000	$ 705,000	$ 550,000	475,750	1,102,125	$ 1,102,125	$ 1,102,125
Less: Income taxes	(634,925)			26.50% N2	46.17%		26.67%
Add: RDTOH	293,937			$ 126,074	$ 508,851		$ 293,937
Funds Available	$ 1,894,012						

Deemed dividend on Windup:

Funds available for distribution	$ 1,894,012	
Less: Paid up capital	(100)	N3
Deemed dividend	1,893,912	
Less: CDA	(1,102,125)	
Deemed taxable dividend	$ 791,787	

Calculation of net proceeds:

Funds available for distribution (above)			$ 1,894,012
Deemed taxable dividend	$ 791,787		
Personal income tax rate on dividends	34.00%	N4	
Personal income taxes			(269,208)
Net Proceeds			$ 1,624,804

Notes:
(1) Assuming S. 22 election filed.
(2) Assuming this income would be considered to qualify as active business income and the company's small business limit is fully utilized in the fiscal year prior to the sale.
(3) Assumed to be equal to the book value of the shares.

(4) Using the highest marginal income tax rate and assuming 100% of the dividends would be eligible (i.e., paid from GRIP). **[NOTE THAT RATES WILL GENERALLY BE GIVEN ON THE EXAM, EITHER IN THE QUESTION OR ON THE INSTRUCTION PAGE - USE THOSE FOR SIMPLICITY]**

APPENDIX 4
PLASTICS CO. LIMITED
NET PROCEEDS ON SALE OF SHARES

En bloc value of PCL		$ 2,235,000		$ 2,235,000
Less: Adjusted cost base		(100)	N1	
Capital gain		$ 2,234,900		
Less: Lifetime capital gains deduction		(835,714)	N2	
		$ 1,399,186		
Taxable capital gain	50%	$ 699,593		
Multiply by: Personal income tax rate		49.50%	N3	
				(346,299)
Net proceeds				$ 1,888,701

Notes:
(1) Assumed to be equal to the book value of the shares.
(2) Assuming no utilization of the lifetime capital gains deduction by Mr. Apple to date and the company qualifies.
(3) Using the highest marginal income tax rate. **[NOTE THAT RATES WILL GENERALLY BE GIVEN ON THE EXAM, EITHER IN THE QUESTION OR ON THE INSTRUCTION PAGE - USE THOSE FOR SIMPLICITY]**