MSCI 261 Assignment 1

Question 1

Negative Growth

Note: All results are in the thousands

Givens	Value
Interest Rate	15%
Initial Investment	40,000
Period	5 years
Variable Expense	$12.00
Fixed Costs	$3,500
Growth	-0.09

Without Additional Investment		Period	Selling Price	Units Sold	Total
Present Value Fixed Expenses	$11,732.70	1	$29.00	1,000	$29,000.00
Present Value Variable Expenses	$40,226.40	2	$26.39	1,000	$26,390.00
Present Value Total Expenses	$51,959.10	3	$24.01	1,000	$24,014.90
Present Worth Income	$83,344.28	4	$21.85	1,000	$21,853.56
Net Profit	-$8,614.82	5	$19.89	1,000	$19,886.74

With Additional Investment		Period	Selling Price	Units Sold	Total
Present Value Fixed Expenses	$11,732.70	1	$29.00	1,000	$29,000.00
Present Value Variable Expenses	$75,975.69	2	$26.39	2,200	$58,058.00
Present Value Total Expenses	$87,708.39	3	$24.01	2,200	$52,832.78
Present Worth Income	$153,096.54	4	$21.85	2,200	$48,077.83
Present Worth Additional Investment	$13,043.48	5	$19.89	2,200	$43,750.83
Net Profit	$12,344.67				

The proposed investment is acceptable because the present worth is greater with the additional investment. Without the additional investment, there is a present worth of $83,344.28, whereas with the additional investment, there is a present worth of $153,096.54.

MSCI 261 Assignment 1

Steady Price

Note: All results are in the thousands						
Givens	**Value**					
Interest Rate	15%					
Initial Investment	40,000					
Period	5 years					
Variable Expense	$12.00					
Fixed Costs	$3,500					
Growth	0					
Without Additional Investment			**Period**	**Selling Price**	**Units Sold**	**Total**
Present Value Fixed Expenses	$11,732.70		1	$29.00	1,000	$29,000.00
Present Value Variable Expenses	$40,226.40		2	$29.00	1,000	$29,000.00
Present Value Total Expenses	$51,959.10		3	$29.00	1,000	$29,000.00
Present Worth Income	$97,212.50		4	$29.00	1,000	$29,000.00
Net Profit	$5,253.40		5	$29.00	1,000	$29,000.00
With Additional Investment			**Period**	**Selling Price**	**Units Sold**	**Total**
Present Value Fixed Expenses	$11,732.70		1	$29.00	1,000	$29,000.00
Present Value Variable Expenses	$75,975.69		2	$29.00	2,200	$63,800.00
Present Value Total Expenses	$87,708.39		3	$29.00	2,200	$63,800.00
Present Worth Income	$183,606.63		4	$29.00	2,200	$63,800.00
Present Worth Additional Investment	$13,043.48		5	$29.00	2,200	$63,800.00
Net Profit	$42,854.75					

The proposed investment is acceptable because the present worth is greater with the additional investment. Without the additional investment, there is a present worth of $97,212.50, whereas with the additional investment, there is a present worth of $183,606.63.

MSCI 261 Assignment 1

Positive Growth

Note: All results are in the thousands						
Givens	**Value**					
Interest Rate	15%					
Initial Investment	40,000					
Period	5 years					
Variable Expense	$12.00					
Fixed Costs	$3,500					
Growth	0.09					
Without Additional Investment			**Period**	**Selling Price**	**Units Sold**	**Total**
Present Value Fixed Expenses	$11,732.70		1	$29.00	1,000	$29,000.00
Present Value Variable Expenses	$40,226.40		2	$31.61	1,000	$31,610.00
Present Value Total Expenses	$51,959.10		3	$34.45	1,000	$34,454.90
Present Worth Income	$113,598.78		4	$37.56	1,000	$37,555.84
Net Profit	$21,639.68		5	$40.94	1,000	$40,935.87
With Additional Investment			**Period**	**Selling Price**	**Units Sold**	**Total**
Present Value Fixed Expenses	$11,732.70		1	$29.00	1,000	$29,000.00
Present Value Variable Expenses	$75,975.69		2	$31.61	2,200	$69,542.00
Present Value Total Expenses	$87,708.39		3	$34.45	2,200	$75,800.78
Present Worth Income	$219,656.45		4	$37.56	2,200	$82,622.85
Present Worth Additional Investment	$13,043.48		5	$40.94	2,200	$90,058.91
Net Profit	$78,904.58					

The proposed investment is acceptable because the present worth is greater with the additional investment. Without the additional investment, there is a present worth of $113,598.78, whereas with the additional investment, there is a present worth of $219,656.45.

Paolo Torres