Session 17D: Post class test

solutions

1.	Reinvestment Rate = g/ ROIC	Value of operating assets & equity	Probability
Status Quo	30.0%	$ 2,333.33	60%
Activist in charge	20.0%	$ 3,200.00	40%
Expected Value		$ 2,680.00	
Value per share		$ 26.80	

2.

Expected operating income next year =	$ 50.00
Expected growth rate =	-2.00%
Cost of capital	8.00%
Return on capital	10.00%
Reinvestment Rate	-20.00%
Expected FCFF next year	$ 60.00
Value of firm =	$ 600.00
Debt outstanding =	$ 250.00
Value of equity =	$ 350.00

3.

Face value of bond	$400.00	
Market value of debt	$250.00	
Matures in year	10	
Riskfree rate	3%	
Value of bond with riskfree rate =	$297.64	! PV of face value at 3% for 10 years
Probability of failure =	16.01%	= 1 - 250/297.64
Adjusted value of equity =	$293.98	350 (.84)+ 0 (.16)

4.

Expected after-tax operating income	$20.00	
Reinvestment rate	50%	(g/ ROiC)
Value of operating assets	$142.86	(20 1-.5)/(.10-.03)

5. No. You are assuming that the company will continue with its dysfunctional growth investments forever, and have lowered its value significantly to reflect that. That is the cost of poor corporate governance.