Module 12 – Financial & Managerial Accounting for MBAs, 2nd edition by Easton, Halsey, McAnally, Hartgraves & Morse

Solutions to Practice Quiz

LO: 3
1.
Answer: b
$3,305 million – (6.66% x $12,972 million) = $2,441 million.

LO: 2
2.
Answer: c
FCFF = NOPAT - increase in NOA
= $3,305 million – ($12,209 million – $12,972 million)
= $4,068 million

Note: 3M's NOA decreased during 2005. The free cash flows to the firm are, therefore, the sum of NOPAT and the decrease in NOA.

LO: 3
3.
Answer: d
PepsiCo will earn a positive ROPI up to a WACC of 21.9%. At this level of WACC, ROPI = ($18,908 million) x 21.9% = $4,140, the level of NOPAT.

LO: 1, 2
4.
Answer: c

TGT	Current	Forecast Horizon				Terminal
($millions)	2006	2007	2008	2009	2010	Year
Sales	$51,271	$57,526	$64,544	$72,418	$81,253	$82,878
NOPAT	2,694	2,876	3,227	3,621	4,063	4,144
NOA	24,077	27,008	30,302	33,999	38,147	38,910
DCF Model						
Increase in NOA		$ 2,931	$ 3,294	$ 3,697	$ 4,148	$ 763
FCFF (NOPAT - Increase in NOA)		(55)	(67)	(76)	(85)	3,381
Discount factor [1 / (1 × r_w)^t]		0.93458	0.87344	0.81630	0.76290	
Present value of horizon FCFF		(51)	(59)	(62)	(65)	
Cum present value of horizon FCFF	$ (237)					
Present value of terminal FCFF	51,587					
Total firm value	51,350					
Less NNO	9,872					
Firm equity value	$41,478					
Shares outstanding (millions)	874.1					
Stock price per share	$ 47.45					

LO: 3
5.
Answer: a

ANF ($millions)	Current 2006	Forecast Horizon 2007	2008	2009	2010	Terminal Year
Sales	$2,785	$3,838	$5,289	$7,288	$10,043	$10,244
NOPAT	325	448	617	851	1,172	1,195
NOA	616	849	1,170	1,612	2,222	2,266
ROPI Model						
ROPI (NOPAT - [$NOA_{Beg} \times r_w$])		$ 368	$ 507	$ 699	$ 962	$ 906
Discount factor [$1 / (1 \times r_w)^t$]		0.88496	0.78315	0.69305	0.61332	
Present value of horizon ROPI		326	397	484	590	
Cum present value of horizon ROPI	$1,797					
Present value of terminal ROPI	5,052					
NOA	616					
Total firm value	$7,465					
Less NNO (Plus negative NNO)	(379)					
Firm equity value	7,844					
Shares outstanding (millions)	103.3					
Stock value per share	$ 75.93					

LO: 1, 2
6.
Answer: d

CVS ($ millions)	Current 2005	Forecast Horizon 2006	2007	2008	2009	Terminal Year
Sales	$37,006	$44,777	$54,180	$65,558	$79,325	$80,912
NOPAT	1,292	1,563	1,891	2,288	2,768	2,824
NOA	10,520	12,721	15,392	18,624	22,536	22,986
DCF Model						
Increase in NOA		$ 2,201	$ 2,671	$ 3,232	$ 3,912	$ 450
FCFF (NOPAT - Increase in NOA)		(638)	(780)	(944)	(1,144)	2,374
Discount factor [1 / (1 × r_w)^t]		0.92593	0.85734	0.79383	0.73503	
Present value of horizon FCFF		(591)	(669)	(749)	(841)	
Cum present value of horizon FCFF	$(2,850)					
Present value of terminal FCFF	29,083					
Total firm value	26,233					
Less NNO	2,189					
Firm equity value	$24,044					
Shares outstanding (millions)	814.3					
Stock price per share	$ 29.53					

LO: 1, 2
7.
Answer: c
($millions)
NOA = $20,513 – $272 – $1,256 – $469 – $989 – $1,452 – $3,866
= $12,209

LO: 1, 2
8.
Answer: b
($millions)
NOPAT = $5,009 – ($1,694 + [$26 x 36.3%])
= $3,306

LO: 3
9.
Answer: c

3M ($millions)	Current 2005	Forecast Horizon 2006	2007	2008	2009	Terminal Year
Sales	$21,167	$22,395	$23,694	$25,068	$26,522	$26,787
NOPAT	3,306	3,498	3,701	3,916	4,143	4,184
NOA	12,209	12,945	13,696	14,490	15,331	15,484
ROPI Model						
ROPI (NOPAT = [$NOA_{Beg} \times r_w$])		$ 2,643	$ 2,795	$ 2,957	$ 3,129	$ 3,111
Discount factor [$1 / (1 \times r_w)^t$]		0.93458	0.87344	0.81630	0.76290	
Present value of horizon ROPI		2,470	2,441	2,414	2,387	
Cum present value of horizon ROPI	$ 9,712					
Present value of terminal ROPI	39,556					
NOA	12,209					
Total firm value	61,477					
Less NNO	2,109					
Firm equity value	$59,368					
Shares outstanding (millions)	754.5					
Stock value per share	$ 78.69					

LO: 1,2
10.
Answer: d
2005 NOA = $48,314 – $3,990 – $1,458 – $4,135 – $2,249 – 2,110 – $1,160 – $632 – $810 – $1,960 – $703 – $89 = $29,018 million.