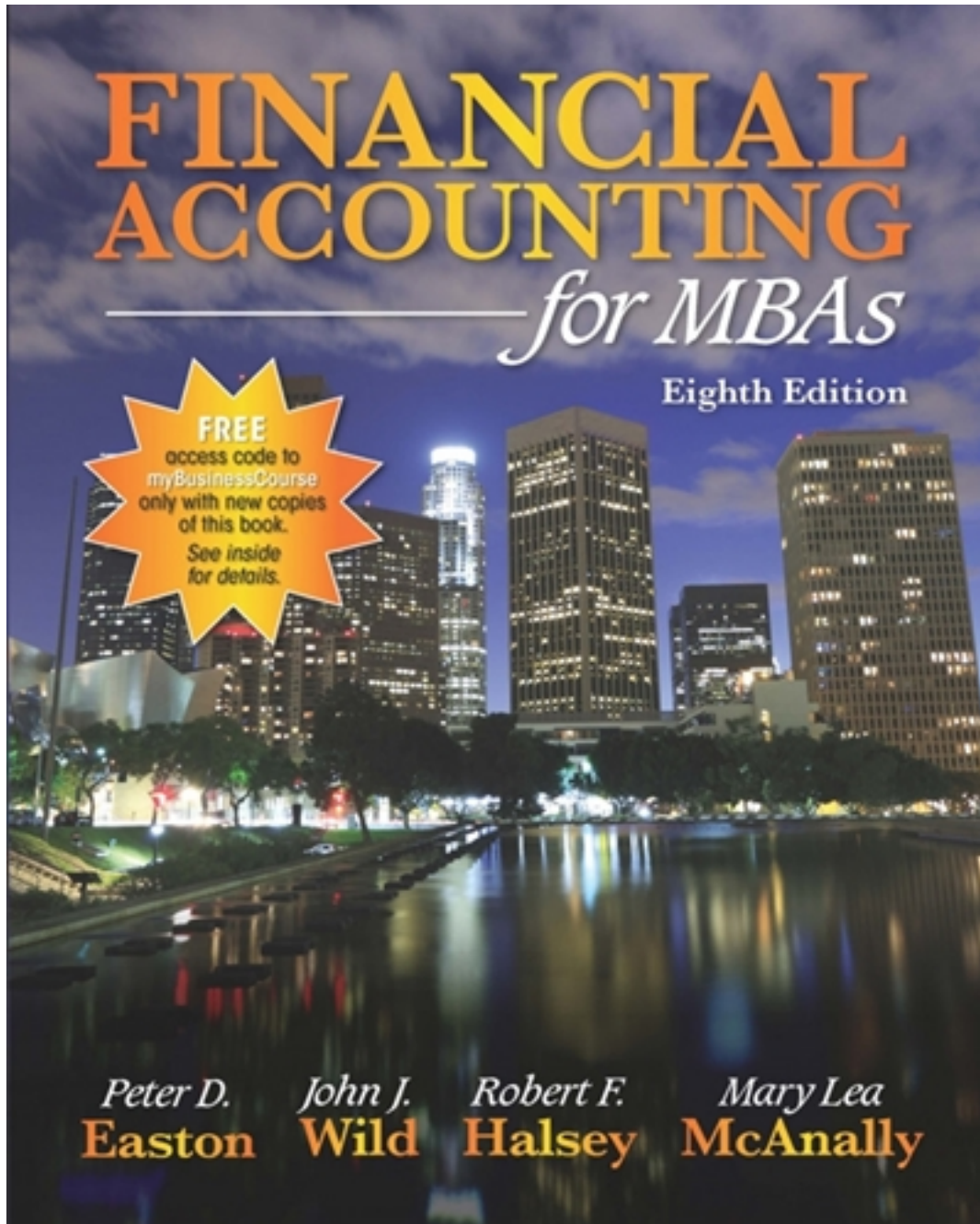


# Solutions for Financial Accounting for MBAs 8th Edition by Easton

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# Solutions

# Module 2

## Introducing Financial Statements

### QUESTIONS

**Q2-1.** An asset represents resources a company owns or controls. Assets should provide future economic benefits. Assets arise from past events or transactions. A liability is an obligation that will require a future economic sacrifice. Equity is the difference between assets and liabilities. It represents the claims of the company's owners to its income and assets. The following are some examples of each:

- |             |   |
|-------------|---|
| Assets      | <ul style="list-style-type: none"><li>• Cash</li><li>• Receivables</li><li>• Inventories</li><li>• Plant, property and equipment (PPE)</li></ul>  |
| Liabilities | <ul style="list-style-type: none"><li>• Accounts payable</li><li>• Accrued liabilities</li><li>• Deferred revenue</li><li>• Notes payable</li><li>• Long-term debt</li></ul>  |
| Equity      | <ul style="list-style-type: none"><li>• Contributed capital (common and preferred stock)</li><li>• Additional paid-in capital</li><li>• Retained earnings</li><li>• Accumulated other comprehensive income</li><li>• Treasury stock</li></ul> |

**Q2-2.** A cost that creates an immediate benefit is reported on the income statement as an expense. A cost that creates a future benefit is added to the balance sheet as an asset (capitalized) and will be transferred to the income statement as the benefit is realized. For example, PPE creates a future benefit and the cost of the PPE is transferred to the income statement (as depreciation expense) over the life of the PPE.

- Q2-3.** Accrual accounting means that we record revenues when *earned* (when the performance obligation is satisfied) and record expenses when they are *incurred*. Accrual accounting does not rely on cash flows in determining when items are revenues or expenses. This is why net income (a GAAP measure) differs from cash from operations.
- Q2-4.** Transitory items are revenues and expenses that are not expected to recur. One objective of financial analysis is to predict *future* performance. Given that perspective, transitory (nonrecurring) items are not relevant except to the extent that they convey information about future financial performance.
- Q2-5.** The statement of stockholders' equity provides information about the events that impact stockholders' equity during the period. It contains information relating to net income, stock sales and repurchases, option exercises, dividends and other accumulated comprehensive income.
- Q2-6.** The statement of cash flows reports the company's cash inflows and outflows during the period, and categorizes them according to operating, investing and financing activities. The income statement reports profit earned under accrual accounting, but does not provide sufficient information concerning cash flows. The statement of cash flows fills that void.
- Q2-7.** Articulation refers to the fact that the four financial statements are linked to each other and that changes in one statement affect the other three. For example, net income reported on the income statement is linked to the statement of retained earnings, which in turn is linked to the balance sheet. Understanding how the financial statements articulate helps us to analyze transactions and events and to understand how events affect each financial statement separately and all four together.
- Q2-8.** When a company purchases a machine it records the cost as an asset because it will provide future benefits. As the machine is used up, a portion of this cost is transferred from the balance sheet to the income statement as depreciation expense. The machine asset is, thus, reduced by the depreciation, and equity is reduced as the expense reduces net income and retained earnings. If the entire cost of the machine was immediately expensed, profit would be reduced considerably in the year the machine was purchased. Then, in subsequent years, net income would be far too high as none of the machine's cost would be reported in those years even though the machine produced revenues during that period.

- Q2-9.** An asset must be “owned” or “controlled,” it must provide “future economic benefits,” and it must arise from a past transaction or event. Owning means having title to the asset (some leased assets are also recorded on the balance sheet because they are controlled, as we will discuss in our Module 10 entitled, “Reporting and Analyzing Off-Balance-Sheet Financing”). Future benefits may mean the future inflows of cash, or an increase in another asset, or reduction of a liability. Past event means the company has purchased the asset or acquired it in some other cash or noncash transaction or event.
- Q2-10.** Liquidity refers to the ready availability of cash. That is, how much cash the company has on hand, how much cash is being generated, and how much cash can be raised quickly. Liquidity is essential to the survival of the business. After all, firms must pay loans and employee wages with cash.
- Q2-11.** Current means that the asset will be liquidated (converted to cash) or used in operations within the next year (or the operating cycle if longer than one year).
- Q2-12.** GAAP uses historical costs because they are less subjective than market values. Market values can be biased for two reasons: first, we may not be able to measure them accurately (consider our inability to accurately measure the market value of a manufacturing facility, for example), and second, managers may intervene in the reporting process to intentionally bias the results to achieve a particular objective (like enhancing the stock price).
- Q2-13.** Generally, excluded intangible (unrecorded) assets are those that contribute to a company’s sustainable competitive advantage, but that cannot be measured accurately. Some examples include the value of a brand, the management of a company, employee morale, a strong supply chain, superior store locations, credibility with the financial markets, reputation, and so forth.
- Q2-14.** An intangible asset is an asset that is not physical in nature. To be included on the balance sheet, it has to meet two tests: the company must own or control the asset, it must provide future economic benefits, and the asset must arise from a past event or transaction. Some examples are goodwill, patents and trademarks, contractual agreements like royalties, leases, and franchise agreements. An intangible asset is only recorded on the balance sheet when it is purchased from an outside party. For example, goodwill arises when the company acquires (either with cash or stock) another company’s brand name or any of the other intangibles listed above.
- Q2-15.** An accrued liability is an obligation for expenses that have been incurred but not yet paid for with cash. Examples include wages that have been earned by employees and not yet paid, interest owing on a bank loan, and potential future warranty claims for products sold to customers. When the liability is recognized on the balance sheet, a corresponding expense is recognized in the income statement.

- Q2-16.** Net working capital = Current assets – Current liabilities. Increasing the amount of trade credit (e.g., accounts payable to suppliers) increases current liabilities and reduces net working capital. Trade credit is like borrowing from a supplier to make purchases. As trade credit increases, the supplier is lending more money than before. This frees up cash, which the company can use for other purposes such as paying down interest-bearing debt or purchasing additional productive assets. Thus, net working capital decreases. This can be a good thing. As a business grows, its net working capital grows because inventories and receivables generally grow faster than accounts payable and accrued liabilities do. Net working capital must be financed just like long-term assets.
- Q2-17.** Book value is the amount at which an asset (or liability) is carried on the balance sheet. The book value of the company is the book value of all the assets less the book value of all the liabilities, that is, the book value of stockholders' equity. Book values are determined in accordance with GAAP. Market value is the sale price of an asset or liability. Markets are not constrained by GAAP standards and, therefore, can consider a number of factors that accountants cannot. Market values, therefore, generally differ significantly from book values.
- Q2-18** The income statement and the equity section on the balance sheet are linked via retained earnings. When a company reports net income, the amount increases retained earnings. Similarly, losses on the income statement decrease retained earnings on the balance sheet. When a company pays a dividend, retained earnings decrease. The amount of the dividend paid is reported on the statement of cash flows as a use of funds (outflow) in the financing section.

## MINI EXERCISES

### M2-19. (15 minutes)

- |                     |                     |
|---------------------|---------------------|
| a. Income statement | f. Balance sheet    |
| b. Balance sheet    | g. Income statement |
| c. Income statement | h. Balance sheet    |
| d. Balance sheet    | i. Income statement |
| e. Income statement |                     |

### M2-20. (15 minutes)

- |                     |                     |
|---------------------|---------------------|
| a. Balance sheet    | g. Balance sheet    |
| b. Income statement | h. Balance sheet    |
| c. Balance sheet    | i. Income statement |
| d. Income statement | j. Income statement |
| e. Balance sheet    | k. Balance sheet    |
| f. Balance sheet    | l. Balance sheet    |

### M2-21. (15 minutes)

On February 28, 2019 Kraft Heinz announced that they would record a goodwill impairment of \$7.1 billion in the next quarterly earnings report. The company's stock price had recently fallen and had not rebounded. Goodwill impairment tests revealed that current fair value was less than the carrying value of seven of the company's 20 reporting units (similar to subsidiaries) and six of its major brands.

### M2-22. (15 minutes)

- |      |      |
|------|------|
| a. A | e. L |
| b. L | f. E |
| c. E | g. E |
| d. A | h. L |

**M2-23. (10 minutes)**

	<b>2020</b>	<b>2019</b>
Beginning retained earnings .....	\$189,089	\$ 155,957
Add: Net income (loss) .....	(19,455)	48,192
Less: Dividends.....	<u>0</u>	<u>(15,060)</u>
Ending retained earnings.....	<u>\$169,634</u>	<u>\$189,089</u>

**M2-24. (10 minutes)**

(\$ millions)

Retained earnings, December 31, 2017.....	\$101,793
Add: Net earnings .....	15,297
Less: Other retained earnings changes.....	(1,380)
Less: Dividends.....	<u>(9,494)</u>
Retained earnings, December 30, 2018.....	<u>\$106,216</u>

## EXERCISES

### E2-25. (15 minutes)

- a. One plausible reason that Credit Suisse prepared its financial statements in accordance with US GAAP, is to make it easier for financial statement users including securities analysts, investors, and regulators to compare to Credit Suisse's close competitors, many of which are U.S. companies.
- b. Credit Suisse wants its investors, customer, regulators and other stakeholders to know that it is a good corporate citizen. A proactive statement claiming to take seriously the international anti-terrorist laws and to have implemented strong policies and procedures to combat crime, seeks to decrease the perceived riskiness of the company's operations, and thereby decrease the company's equity cost of capital.

### E2-26. (15 minutes)

Analysts would want to know about other income statement and balance sheet accounts that relate to the allowance. For example to assess the variability of the allowance account, the balance could be common-sized to total assets or as a percentage of total accounts receivable. The changes in the allowance account, when expressed in percentage terms, might be immaterial (a positive signal) or might vary even more drastically (a negative signal). Analysts would also want to use industry-wide information – what have H&R Block's competitors experienced with bad debt and doubtful accounts? Answering that question will help determine if additional research and analysis are required.

### E2-27. (20 minutes)

BARTH COMPANY Income Statement For Year Ended December 31, 2019		
Sales revenue .....		\$500,000
Expenses		
Cost of goods sold.....	\$180,000	
Wages expense.....	40,000	
Supplies expense .....	<u>6,000</u>	
Total expenses .....		<u>226,000</u>
Net income .....		<u>\$274,000</u>

*continued*



<b>BARTH COMPANY</b> <b>Balance Sheet</b> <b>December 31, 2019</b>			
Assets		Liabilities and equity	
Cash.....	\$148,000	Accounts payable .....	\$ 16,000
Accounts receivable .....	30,000	Bonds payable .....	<u>200,000</u>
Supplies inventory .....	3,000	Total liabilities.....	216,000
Inventory .....	<u>36,000</u>		
Total current assets	217,000		
Land .....	80,000	Common stock .....	150,000
Equipment .....	70,000	Retained earnings .....	<u>160,000</u>
Buildings.....	151,000	Total equity.....	<u>310,000</u>
Goodwill .....	<u>8,000</u>		
Total assets.....	<u>\$526,000</u>	Total liabilities and equity ....	<u>\$526,000</u>

**E2-28. (15 minutes)**

<b>BAIMAN CORPORATION</b> <b>Income Statement</b> <b>For Month Ended January 31</b>	
Sales .....	\$40,000
Wage expense .....	<u>12,000</u>
Net income (loss).....	<u>\$28,000</u>

<b>BAIMAN CORPORATION</b> <b>Balance Sheet</b> <b>January 31</b>	
Cash .....	\$ 0
Accounts receivable .....	<u>40,000</u>
Total assets.....	<u>\$40,000</u>
Wages payable .....	\$12,000
Retained earnings .....	<u>28,000</u>
Total liabilities and equity .....	<u>\$40,000</u>

**E2-29. (30 minutes)**

a.	b.	c.	d.	e.	f.	g.
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**Balance sheet**

Cash	+	–	+		–	+	–
Noncash assets	+			+		–	
Total liabilities							
Contributed capital	+						
Retained earnings		–	+	+	–		–
Other equity							

**Statement of cash flows**

Operating cash flow		–	+		–	+	
Investing cash flow							
Financing cash flow	+						–

**Income statement**

Revenues			+	+			
Expenses		+			+		
Net income		–	+	+	–		

**Statement of stockholders' equity**

Contributed capital	+						
Retained earnings		–	+	+	–		–

**E2-30. (30 minutes)**

a.	b.	c.	d.	e.	f.	g.
----	----	----	----	----	----	----

**Balance sheet**

Cash	+	+	-	-	-	-	+
Noncash assets			+	+			-
Total liabilities		+					
Contributed capital	+						
Retained earnings				+	-	-	
Other equity							

**Statement of cash flows**

Operating cash flow				-	-		+
Investing cash flow			-				
Financing cash flow	+	+				-	

**Income statement**

Revenues				+			
Expenses				+	+		
Net income				+	-		

**Statement of stockholders' equity**

Contributed capital	+						
Retained earnings				+	-	-	

**E2-31. (15 minutes)**

**a. Best Buy Inc.**

(\$ millions)	Amount	Classification
Sales.....	\$42,879	I
Accumulated depreciation .....	6,690	B
Depreciation expense.....	770	I
Retained earnings .....	2,985	B
Net income.....	1,464	I
Property, plant and equipment, net.....	2,510	B
Selling, general and admin expense.....	8,015	I
Accounts receivable .....	1,015	B
Total liabilities .....	9,595	B
Total stockholders' equity .....	3,306	B

**b. Total assets = Total liabilities + Total stockholders' equity**

Total assets = \$9,595 million + \$3,306 million = \$12,901 million

Sales – Total expenses = Net income

\$42,879 million – Total expenses = \$1,464 million

Thus, Total expenses = \$41,415 million

**E2-32. (15 minutes)**

**a. Terex Corp**

(\$ millions)	Amount	Classification
Total revenues.....	\$5,125.0	I
Accrued compensation and benefits.....	152.2	B
Depreciation and amortization expense.....	59.7	I
Retained earnings .....	749.0	B
Net income .....	113.7	I
Property, plant & equipment .....	345.6	B
Selling, general & admin expense .....	673.5	I
Inventory .....	1,212.0	B
Total liabilities.....	2,624.9	B
Total stockholders' equity .....	861.0	B

**b. Total assets = Total liabilities + Total stockholders' equity**

Total Assets = \$2,624.9 million+ \$861.0 million = \$3,485.9 million

Total revenue – Total expenses = Net income

\$5,125.0 million – Total expenses = \$113.7 million

Thus, Total expenses = \$5,011.3 million

**E2-33. (15 minutes)**

a.

(\$ thousands)	ANF		TJX	
Sales .....	\$3,590,109	100.0%	\$38,972,934	100.0%
Cost of goods sold .....	1,430,193	39.8%	27,831,177	71.4%
Gross profit .....	2,159,916	60.2%	11,141,757	28.6%
Total expenses .....	2,081,108	58.0%	8,081,959	20.7%
Net income .....	\$ 78,808	2.2%	\$ 3,059,798	7.9%

ANF is a high-end retailer and TJX operates in the value-priced segment of the market. Clearly, their respective business models are evident in the gross profit margin. ANF's gross profit margin is more than twice that of TJX (60.2% compared to 28.6%). This implies that ANF adds a healthy markup to determine their merchandise sales price. The high-end segment also requires additional personnel, advertising, and other operating costs. ANF's expense margin is nearly three times higher (58% compared to 20.7%). On balance, TJX is more profitable than ANF with each sales dollar (7.9% vs. 2.2%).

b.

(\$ thousands)	ANF		TJX	
Current assets .....	\$1,335,950	56.0%	\$ 8,469,222	59.1%
Long-term assets .....	1,049,643	44.0%	5,856,807	40.9%
Total assets .....	\$2,385,593	100.0%	\$14,326,029	100.0%
Current liabilities .....	\$ 558,917	23.4%	\$ 5,531,374	38.6%
Long-term liabilities .....	608,055	25.5%	3,746,049	26.1%
Total liabilities .....	1,166,972	48.9%	9,277,423	64.8%
Stockholders' equity .....	1,218,621	51.1%	5,048,606	35.2%
Total liab. and equity .....	\$2,385,593	100.0%	\$14,326,029	100.0%

ANF has slightly lower levels of current assets relative to total assets than does TJX. For clothing retailers, current assets are primarily cash and inventories. If the two companies have about the same levels of cash, we would conclude that ANF holds less inventory. This makes sense given that TJX has discount-type stores chock-full of merchandise.

- c. ANF has a much smaller proportion of total liabilities in its capital structure (48.9% compared to 64.8% at TJX) which might seem to imply that TJX relies more on debt to fund its assets and is therefore riskier. However, TJX has significantly more current liabilities that are low risk because they are typically non-interest bearing and are paid off with sales of inventory and available cash (current assets are greater than current liabilities for both companies). The proportion of long-term liabilities is about the same across the two companies. Because long-term debt bears interest and requires periodic payments of interest and principal, it is riskier than current liabilities. On par, TJX is a slightly riskier company.

**E2-34. (15 minutes)**

a.

(\$ millions)	Pfizer		Dr. Reddy's	
Sales .....	\$53,647	100.0%	\$2,181	100.0%
COGS.....	11,248	21.0%	1,009	46.3%
Gross profit.....	42,399	79.0%	1,172	53.7%
Total expenses .....	31,211	58.2%	1,021	46.8%
Net income .....	\$11,188	20.9%	\$ 151	6.9%

Dr. Reddy's COGS is more than twice that of Pfizer (46.3% compared to 21.0%). This is likely due to two factors: first, Pfizer manufactures and sells branded, patented drugs and therapeutics whereas Dr. Reddy's is a generics and compounding firm. Dr. Reddy's competition is more intense and Pfizer can premium price its products. Second, Dr. Reddy's has a larger global footprint, selling in markets where price competition is fierce.

b.

(\$ millions)	Pfizer		Dr. Reddy's	
Current assets .....	49,926	31.3%	1,684	48.6%
Long-term assets .....	109,496	68.7%	1,781	51.4%
Total assets .....	159,422	100.0%	3,465	100.0%
Current liabilities .....	31,858	20.0%	1,070	30.9%
Long-term liabilities .....	63,806	40.0%	453	13.1%
Total liabilities .....	95,664	60.0%	1,523	44.0%
Stockholders' equity.....	63,758	40.0%	1,942	56.0%
Total liabilities and equity.....	159,422	100.0%	3,465	100.0%

Pfizer holds fewer current assets and liabilities than Dr. Reddy's and has more liabilities (60% for Pfizer and only 44% for Dr. Reddy's.)

Pfizer has a smaller proportion of stockholders' equity in its capital structure. A greater proportion of equity is generally viewed as a less risky capital structure. However, Pfizer's relatively low level of equity arises from the fact that the company has repurchased its stock and retired shares. This decreases retained earnings, a component of equity.

**E2-35. (15 minutes)**

a.

(\$ millions)	CMCSA		VZ	
Sales .....	\$94,507	100.0%	\$130,863	100.0%
Operating costs .....	75,498	79.9%	108,585	83.0%
Operating profit.....	19,009	20.1%	22,278	17.0%
Nonoperating expenses .....	7,147	7.6%	6,239	4.8%
Net income .....	<u>\$11,862</u>	12.6%	<u>\$ 16,039</u>	12.3%

Verizon's product lines yield slightly lower operating profit margin than do Comcast's. Its nonoperating expense, however, is lower than Comcast's. The operating and nonoperating relative effects offset leaving the two companies with profit margins that are roughly equal.

b.

(\$ millions)	CMCSA		VZ	
Current assets .....	\$ 21,848	8.7%	\$ 34,636	13.1%
Long-term assets .....	229,836	91.3%	230,193	86.9%
Total assets .....	<u>\$251,684</u>	100.0%	<u>\$264,829</u>	100.0%
Current liabilities .....	\$ 27,603	11.0%	\$ 37,930	14.3%
Long-term liabilities .....	151,579	60.2%	172,189	65.0%
Total liabilities .....	179,182	71.2%	210,119	79.3%
Stockholders' equity.....	72,502	28.8%	54,710	20.7%
Total liabilities and equity .....	<u>\$251,684</u>	100.0%	<u>\$264,829</u>	100.0%

Verizon is larger in both sales and total assets. Both companies are highly capital intensive, with long-term assets accounting for about 90% of total assets. Both companies' business models necessitate continued investment in long-term assets as they seek to continue to develop their telecom infrastructure.

- c. The two companies have relatively high debt loads. This is typical for capital-intensive industries like telecom. Given the large level of capital expenditures (CAPEX) that the companies will make over the next decade, and the amount of additional debt that they will have to incur to fund CAPEX, the debt levels will be a continuing financial issue for both companies.

**E2-36. (30 minutes)**

a.

	<b>TJX (\$ thousands)</b>		<b>Pfizer (\$ millions)</b>	
Sales .....	\$38,972,934	100.0%	\$53,647	100.0%
COGS.....	27,831,177	71.4%	11,248	21.0%
Gross profit.....	11,141,757	28.6%	42,399	79.0%
Total expenses .....	8,081,959	20.7%	31,211	58.2%
Net income .....	\$ 3,059,798	7.9%	\$11,188	20.9%

TJX is a value-priced clothing retailer whose main expense is cost of sales. Pfizer brand-name products are well differentiated and patent-protected. The difference in their respective business models is clearly evident in the level of gross profit. Pfizer's gross profit margin percentage is more than 2.5 times greater than TJX's. This does not imply that Pfizer is a better-managed company. Much of the difference in operating percentages between companies in different industries is related to differences in their respective business models. Pfizer incurs significant expenses for R&D, selling, marketing, and advertising, which contribute to the 58.2% expense margin compared to 20.7% at TJX.

b.

	<b>TJX (\$ thousands)</b>	<b>Pfizer (\$ millions)</b>
Sales .....	\$38,972,934	\$53,647
Total assets .....	14,326,029	159,422
Sales / Total assets .....	2.72	0.34

TJX's sales are almost three times its total assets. Pfizer's sales are only one third its total assets. It might be tempting, therefore, to conclude that Pfizer is more capital intensive than TJX. However, significant levels of total assets consist of cash and marketable securities as well as intangible assets acquired when Pfizer bought other pharmaceutical companies. This points to the need to study the financial statements and footnotes more thoroughly before coming to broad conclusions.

c.

<b>(\$ millions)</b>	<b>TJX (\$ thousands)</b>	<b>Pfizer (\$ millions)</b>
Total liabilities .....	\$9,277,423	\$95,664
Stockholders' equity.....	5,048,606	63,758
Total liabilities / Stockholders' equity.....	1.84	1.50

TJX operates with slightly more debt relative to equity than does Pfizer. Companies with higher proportions of debt are generally viewed as riskier because failure to make required debt payments can have significant negative consequences. Pfizer has high equity because of retained earnings – many years of large profits – but in recent years has repurchased large amounts of its own stock, which depresses equity and inflates the ratios above.



**E2-37. (35 minutes)**

a.	b.	c.	d.	e.	f.	g.	h.
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**Balance sheet**

Cash				+	-	-	-	-
Noncash assets		+	+	-	+			
Total liabilities	+	+				-	-	
Contributed capital								
Retained earnings	-		+					-
Other equity								

**Statement of cash flows**

Operating cash flow				+		-		-
Investing cash flow					-			
Financing cash flow							-	

**Income statement**

Revenues			+					
Expenses	+		+					+
Net income	-		+					-

**Statement of stockholders' equity**

Contributed capital								
Retained earnings	-		+					-

## PROBLEMS

### P2-38. (30 minutes)

a. (\$ millions)

	Current Assets	Long-term Assets	Total Assets	Current Liabilities	Long-term Liabilities	Total Liabilities	Stockholders' Equity
2018	13,709	22,791	36,500	7,244	19,408	26,652	9,848
2017	14,277	23,710	37,987	7,687	18,678	26,365	11,622
2016	11,726	21,180	32,906	6,219	16,344	22,563	10,343

b. The following would not be included among 3M's current assets:

2. Property plant & equipment
4. Accounts payable
6. Goodwill
7. Accrued expenses

c. The following would be included among 3M's long-term assets:

2. Property, plant & equipment
3. Intangible assets
5. Goodwill

### P2-39. (30 minutes)

a. Common-sized balance sheet items, such as the allowance for doubtful accounts, express the item as a percentage of total assets. For Community Health Systems this is as follows:

	2017	2016	2015
Allowance	\$ 3,870	\$ 3,773	\$ 4,110
Total assets	17,450	21,994	26,861
Common size allowance	22.2%	17.2%	15.3%

The allowance is higher percentage terms in 2017 as compared to both 2016 and 2015. This could indicate that the company is having more difficulty collecting money from its patients.

b. Community Health Systems operates hospitals, which typically provide services for indigent and uninsured patients as well as for patients who can pay personally or who have insurance coverage. This means that many services are "charged" to patients but the company has no reasonable expectation of collecting the amount or the entire amount. To verify this idea, analysts would gather information from other hospitals and compute similar ratios and use those as a benchmark to assess Community Health Systems.

- c. Common-sized income statement items, such as the bad debt expense, express the item as a percentage of Revenue. For Community Health Systems this is as follows:

	2017	2016	2015
Bad debt expense	3,054	2,849	3,168
Revenue	18,398	21,275	22,564
Common size expense	16.6%	13.4%	14.0%

In 2015, the common-size bad debt expense was 16.6%, which means that for every dollar of revenue, the company recorded nearly 17 cents of bad debt expense. This seems high and the ratio is higher than the prior two years.

- d. *Answer: 3*

If Community Health Systems had recorded \$500 less of bad debt expense, total expenses would have been lower and thus, the operating loss before tax would have been \$500 smaller, or \$1,378 loss instead of \$1,878 loss. This would have had no effect on cash from operations because bad debt expense is a non-cash item.

**P2-40. (50 minutes)**

- a. Facebook's form 10-K was filed on January 31, 2019 and the company's fiscal year end was December 31, 2018. The SEC filing is a month after year end because the auditors took a month to complete the audit.
- b. The company's mission is "to give people the power to share and make the world more open and connected."
- c. The company claims to compete with the following:
  - Companies that offer products that replicate the full range of capabilities that Facebook provides. For example, Google has integrated social functionality into a number of its products, including search and Android, as well as other, largely regional, social networks that have strong positions in particular countries.
  - Companies that develop applications, particularly mobile applications, that provide social or other communications functionality, such as messaging, photo- and video-sharing, and micro-blogging.
  - Companies that provide web- and mobile-based information and entertainment products and services that are designed to engage people and capture time spent on mobile devices and online.
  - Traditional, online, and mobile businesses that provide media for marketers to reach their audiences and/or develop tools and systems for managing and optimizing advertising campaigns.

- d. As of December 31, 2018, Facebook employed approximately 33,587 people.
- e. Facebook had 1.52 billion daily active users (DAUs) on average in December 2018, an increase of 9% compared to December 2017.
- f. Facebook does not include Schedule II. The Form 10-K says, "All schedules have been omitted because they are not required, not applicable, not present in amounts sufficient to require submission of the schedule, or the required information is otherwise included." This implies that the uncollectible accounts receivable are relatively immaterial, or insubstantial. The balance sheet reports allowance of \$229 million, which is immaterial compared to accounts receivable of \$7,587 million and total assets of \$97,334 million.
- g. The company is audited by Ernst & Young out of the San Francisco office.

**P2-41. (30 minutes)**

a.

Company	Gross Profit / Sales	Net Income/ Sales	Net Income/ Equity	Liabilities/ Equity
Target.....	29%	4%	26%	2.65
Nike.....	44%	5%	20%	1.30
Harley-Davidson.....	41%	9%	30%	5.01
Pfizer.....	79%	21%	18%	1.50

- b. Companies generally realize higher gross profit margins if there is some limit on competition, such as a barrier to entry. This barrier to entry can be legal in nature such as that afforded by a patent; or operational, such as that created by strong brand identity. Pfizer, Nike and Harley all enjoy above-average gross profit margins. Pfizer is a pharmaceutical company that benefits from patents on desirable drugs and therapeutics. Nike and Harley have strong and valuable brands. Nike relies on its advertising campaigns while Harley enjoys its cult following. Target, while a strong brand, sells goods that are difficult to differentiate and the company cannot command the pricing power that the other three companies enjoy.

Profit margin (Net income / Sales) is a function of both gross profit margin and expense control. Pfizer's ratios is the highest of the companies in this sample, resulting from its high gross profit margin and excellent expense control. The other three companies have mid-range profit margin with Target's being the lowest. Again, Target lacks the ability to differentiate itself and has significant advertising expense.

- c. Harley enjoys the highest return on equity (measured as net income to equity), followed by Target whose equity is relatively low due to recent stock buybacks (which decreases equity). Harley and Nike are premium brands that have effectively differentiated their products and can, therefore, enjoy above-average returns on stockholder investment.
- d. Harley has the highest proportion of debt in its capital structure because of the Harley-Davidson Financial Services (its loan and lease financing subsidiary). The balance sheets and income statements of Harley's financial operations are similar to that of a bank – high debt levels and relatively low margins. Harley must consolidate its financial operations with its operating company. This inflates its consolidated debt level above what we typically observe for pure-play manufacturing operations. Finally, Nike and Pfizer have lower levels of fixed assets, which typically require debt financing. Thus their liabilities / equity ratios are relatively low.

**P2-42. (30 minutes)**

a.

Company	Net Income / Sales	Rank
Macy's	4.3%	2
Home Depot	10.3%	1
Best Buy	3.4%	4
Target	3.9%	3
Walmart	1.3%	5

Home Depot, Macy's and Target report the highest profit margins. These companies have succeeded at effectively differentiating their brands and/or controlling their costs. Walmart operates in highly competitive markets with undifferentiated product lines and Best Buy products are easily purchased online because product characteristics are known and competition is fierce.

b.

Company	Operating Cash Flow / Sales	Rank
Macy's	6.7%	3
Home Depot Inc.	12.0%	1
Best Buy	5.6%	4
Target Corp.	7.9%	2
Walmart Stores	5.4%	5

Home Depot, Target, and Macy's report the highest level of operating cash flow as a percentage of sales. These are very efficient operations. Walmart and Best Buy are not as effective on this dimension. The rankings for this ratio are nearly exactly the same as for the net profit margins.

c.

Company	Investing Cash Flow / Sales	Rank
Macy's	-1.8%	4
Home Depot Inc.	-2.2%	3
Best Buy	1.2%	5
Target Corp.	-4.5%	2
Walmart Stores	-4.7%	1

Investing cash flows are typically negative (cash outflow), representing the purchase of PPE and other long-lived assets including intangible assets and goodwill purchased in a merger or acquisition. The companies' rankings here, do not correspond with their rankings in parts a and b. Best Buy is not expanding, its cash flow is positive. Walmart and Target are expanding most among the five companies.

**P2-43. (45 minutes)**

- The largest asset is marketable securities \$275.3 billion or 66% of total assets. The smallest asset is inventory, only \$4.9 billion or 1.29% of total assets.
- We can see that the company is slightly smaller in 2018 compared to 2017 (total assets of \$275.3 billion compared to \$265.7 billion). However, the composition of the balance sheet has changed noticeably. The most significant change on the asset side is the decrease in marketable securities both in dollar terms (from \$249 billion to \$211 billion) and in proportionate terms (from 66% of total assets down to 58%).
- On the liabilities and equity side, changes from 2017 to 2018 were less dramatic. Accounts payable and other liabilities grew proportionately. Earned capital decreased significantly, from 26% to 18% of total assets. The company was profitable but paid out dividends and bought back stock in excess of net income.
- Apple started paying dividends in 2012. Dividends have increased steadily over time but not by the same rate as net income.
- Apple has bought back significant amounts of stock beginning in 2013. In both 2014 and 2018, Apple bought back more stock than it earned in net income. We see that the red part is higher up on the graphic than the black part, in those year. In other years, the proportions were roughly the same.
- In 2018, retained earnings decreased. The sum of dividends (green) and stock buybacks (red) is greater than net income (black).

## IFRS ASSIGNMENTS

### I2-44. (15 minutes)

a. Income Statement

	Tesco		Carrefour	
	February 24, 2019		December 31, 2019	
	£millions	%	€millions	%
Sales	£ 63,911	100.0%	€ 77,917	100.0%
Cost of goods sold	59,767	93.5%	60,850	78.1%
Gross profit	4,144	6.5%	17,067	21.9%
Total expenses	2,824	4.4%	17,411	22.3%
Net income	£ 1,320	2.1%	€ (344)	-0.4%

Carrefour's gross profit margin (21.9%) is about three times that of Tesco (6.5%) due to their relatively low cost of goods sold. The difference might be in the type of product each company sells or the product mix. For example Carrefour might sell more specialty, high-end groceries or wines that command a higher margin. But the opposite pattern holds for the total expenses. This could indicate that the companies classify certain expenses differently—Tesco classifies more expenses as COGS.

b. Balance Sheet

	Tesco		Carrefour	
	February 24, 2019		December 31, 2018	
	(£ millions)	%	(€millions)	%
Current assets	£12,668	25.8%	€18,670	39.4%
Long-term assets	36,379	74.2%	28,708	60.6%
Total assets	49,047	100.0%	47,378	100.0%
Current liabilities	20,680	42.2%	23,162	48.9%
Long-term liabilities	13,533	27.6%	12,930	27.3%
Total liabilities	34,213	69.8%	36,092	76.2%
Equity	14,834	30.2%	11,286	23.8%
Total liabilities and equity	£49,047	100.0%	€47,378	100.0%

Tesco holds far less current assets than Carrefour, 25.8% compared to 39.4%. We observe a similar difference for current liabilities, with 42.2% for Tesco and 48.9% for Carrefour. The two companies have about the same level of long-term liabilities.

- c. Tesco has a greater proportion of stockholders' equity in its capital structure: 30.2% compared to Carrefour's 23.8%. A greater proportion of debt is generally viewed as a riskier capital structure. So, on that basis, we would conclude that Carrefour is the riskier company. That said, neither of these companies carries a large percentage of long-term debt. We would conclude that they are both very solvent.

## MANAGEMENT APPLICATIONS

### MA2-45. (25 minutes)

- a. The cash conversion cycle is the number of days that pass from the time the company pays cash to purchase or manufacture inventory, sells the inventory and ultimately collects the accounts receivable. This period of time is reduced to the extent that suppliers finance a portion of the inventory purchase.

Receivables and inventories are costly to maintain. They must be financed (either with borrowed funds or by forgoing investment in other earning assets), collected (with some prospect of loss), stored, insured, and moved. By reducing the amount of investment in these assets, companies can reduce their expenses and their need for external capital.

- b. A company might reduce its cash conversion cycle by reducing receivables and inventories and by increasing accounts payable.
1. Receivables—managers can reduce receivables by invoking more stringent credit-granting policies. Companies need appropriate policies to decide to whom to extend credit and in what dollar amount. As credit policies become more restrictive, the dollar amount of receivables declines. Managers can also implement more aggressive and or efficient collection practices
  2. Inventories—for retailers, inventories are the cost of the goods purchased for resale. For manufacturers, inventory costs include raw materials, and additional labor and overhead costs to convert the goods into salable form. Reducing inventory levels will reduce the cash conversion cycle time. This can happen with more efficient buying (purchasing for actual orders rather than for estimated demand) and with leaner manufacturing processes.
  3. Payables—lengthening the time to pay accounts payable (“leaning on the trade”) reduces the cash conversion cycle time because less of the company’s own capital is invested in receivables and inventories.
- c. Each action described above has implications for the company’s relations with customers and suppliers.
1. Receivables—receivables are a marketing tool, like advertising, product promotions and selling expenses. Tightening a company’s credit policies can adversely affect sales. On the other hand, more restrictive credit policies can reduce collection costs, bad debt expense, and financing costs. Establishing a credit policy and collection procedures involves balancing the competing effects of lost sales with cost savings.

*continued*



- c. 2. Inventories—reducing finished goods inventory levels increases the risk of stock-outs and could result in lost sales. The decision about what depth and breadth of finished goods inventories to carry is as much a marketing decision as it is a financial one. Further, the amount of raw materials and work-in-process inventories on hand affects production efficiency and has financial implications. Inventory management is a delicate process that must be handled with care to balance competing needs.
3. Payables—lengthening the time to pay accounts payable, while reducing the cash conversion cycle, may also damage relations with suppliers. One company's account payable is another's account receivable. There is a natural tension between two companies seeking to balance the period of time that the credit is outstanding. Although extending payables is favorable from a financial viewpoint, should supplier relations become strained, the company's ability to obtain additional products or services may be jeopardized. Policies relating to the payment of suppliers must be handled with care.

Working capital management is as much art as it is science. Companies must consider many constituencies in framing the appropriate policies.

#### **MA2-46. (30 minutes)**

The FASB has traditionally taken the position that accounting standards should reflect the diversity of business models by allowing discretion in their application. Revenue recognition and expense recording is a case in point.

- a. Following are some pros and cons of drafting more restrictive accounting standards:

Pros:

1. "One size fits all" accounting standards simplify the accounting process and make the resulting financial statements easier to interpret.
2. Reducing the discretion available to accountants also reduces the temptation to manage the financial statements to achieve managers' self-serving objectives.
3. Simplifying accounting standards will reduce complexity of the audit process as well as potential litigation costs because the rules are clear.

Cons:

1. Businesses are too complex to use a "one size fits all" standard-setting philosophy. Unique transactions and corporate relations may not lend themselves to classification in a standardized accounting system.
2. Creating "bright line" accounting standards (e.g., standards with numerical guidelines that direct the appropriate accounting treatment, such as the rules regarding recognition of off-balance sheet entities) invites creative managers to structure their deals so as to meet the technical requirements of the standard while violating its intent.
3. Standardizing accounting rules reduces the value added by professional accountants.

- b. The “end justifies the means” argument, frequently used in support of earnings management, is flawed on at least two fronts:
1. Earnings management is generally performed to “smooth” earnings fluctuations or to meet earnings targets. Typically the parties benefiting from this action are managers (because their compensation is contingent on meeting targets and because there will be less shareholder dissent when earnings targets are met) and investors long in the stock. Future investors, investors short in the stock, suppliers, lenders, and future employees may all be damaged as a result of the failure to provide timely and accurate financial information.
  2. The argument implicitly assumes that managers are more capable of understanding financial reports than other market participants. To be sure, managers have access to information that is not available to the market, but managing financial results to filter what is seen, or not seen, by the market is not the answer. Rather, management should divulge more of its information in an unfiltered form and let the market make its own assessment.