

INTRODUCTION TO ACCOUNTING AND FINANCIAL STATEMENTS

John C. Heater
Associate Professor of Accounting

Objectives

- Operate 4th quarter of Fuqua Lemonade
- Review full year of financial information
- Understand concept of accrual accounting vs cash accounting
- Observe similarities and differences between Fuqua Lemonade and National Beverage

Fuqua Lemonade – Where we left off

Balance Sheet				
	Pre-Firm	Q1	Q2	Q3
	12/31/2013	3/31/2014	6/30/2014	9/30/2014
Cash	0	1000	1125	525
Inventory	0	0	0	500
Accounts Receivable, net	0	0	0	625
PP&E (juicer), net	0	0	450	300
TOTAL ASSETS	0	1000	1575	1950
Short term note payable	0	0	0	0
Accounts Payable	0	0	300	375
TOTAL LIABILITIES	0	0	300	375
Common Stock	0	600	600	600
Retained Earnings	0	400	675	975
TOTAL OWNERS' EQUITY	0	1000	1275	1575

Income Statement	Q1	Q2	Q3
Sales	1000	1125	1250
Less: Cost of Goods Sold	600	600	700
Equal: Gross Margin	400	525	550
Less: Compensation	0	0	0
Less: Rent	0	0	0
Less: Advertising	0	100	100
Less: Depreciation	0	150	150
Less: Interest Expense	0	0	0
Less: Bad Debt Expense	0	0	0
Equals: Pretax Income	400	275	300
Less: Taxes	0	0	0
Equals: Net Income	400	275	300

Final Quarter of the Year

- No changes relative to expected TOTAL sales in Q3, but product mix shifts toward less fresh-squeezed (premium) and more regular. Forecasted sales (both regular and premium) are half cash and half credit:

Q4 Forecast:

3500 regular units

250 premium units

Q3 Forecast:

3000 regular units

750 premium units

- Lemons from Q3 are now moldy and unusable.
- \$120 of existing credit customers from Q3 confirm they will not.

Lemonade Stand – Quarter 4, 2014

- Pay supplier
- Write down moldy lemons (500 units x \$.40 = \$200)
- Collect \$300 in receivables

Lemonade Stand – Quarter 4, 2014

- Buy inventory
 - Need $3500 - 1000 = 2500$ more regular units (cost $2500 \times \$0.30 = \750)
 - Need 250 new premium units (cost = $250 \times \$0.40 = \100)
 - Do we have the money? Supplier can give credit for only \$300. Any deficit can be supported by a local bank @8% interest.

Lemonade Stand – Quarter 4, 2014

- Sell all inventory, half on credit
- Pay for advertising
- Pay interest to bank

Lemonade Stand – Quarter 4, 2014

- Juicer will wear out $\frac{1}{4}$ during quarter
- Acknowledge expected uncollectibles

Lemonade Stand – Quarter 4, 2014

Balance Sheet		
	Q3	Q4
	9/30/2014	12/31/2014
Cash	525	898
Inventory	500	0
Accounts Receivable, net	625	1205
PP&E (juicer), net	300	150
TOTAL ASSETS	1950	2253
Short term note payable	0	100
Accounts Payable	375	300
TOTAL LIABILITIES	375	400
Common Stock	600	600
Retained Earnings	975	1253
TOTAL OWNERS' EQUITY	1575	1853

Income Statement	Q4
Sales	2000
Less: Cost of Goods Sold	1350
Equal: Gross Margin	650
Less: Compensation	0
Less: Rent	0
Less: Advertising	100
Less: Depreciation	150
Less: Interest Expense	2
Less: Bad Debt Expense	120
Equals: Pretax Income	278
Less: Taxes	0
Equals: Net Income	278

Statement of Cash Flows	Q4
Cash Flow from Operations	273
Cash Flow from Investing	0
Cash Flow from Financing	100
Total Cash Flow	373
Beginning Cash Balance	525
Ending Cash Balance	898

Lemonade Stand – Fiscal Year, 2014

Balance Sheet		
	Pre-Firm	Q4
	12/31/2013	12/31/2014
Cash	0	898
Inventory	0	0
Accounts Receivable, net	0	1205
PP&E (juicer), net	0	150
TOTAL ASSETS	0	2253
Short term note payable	0	100
Accounts Payable	0	300
TOTAL LIABILITIES	0	400
Common Stock	0	600
Retained Earnings	0	1253
TOTAL OWNERS' EQUITY	0	1853

Income Statement	FY 2014
Sales	5375
Less: Cost of Goods Sold	3250
Equal: Gross Margin	2125
Less: Compensation	0
Less: Rent	0
Less: Advertising	300
Less: Depreciation	450
Less: Interest Expense	2
Less: Bad Debt Expense	120
Equals: Pretax Income	1253
Less: Taxes	0
Equals: Net Income	1253

Statement of Cash Flows	FY 2014
Cash Flow from Operations	798
Cash Flow from Investing	-600
Cash Flow from Financing	700
Total Cash Flow	898
Beginning Cash Balance	0
Ending Cash Balance	898

What Did We Learn?

- Balance Sheets Give Snap Shot of Firm on a Given Day
 - Does B/S Equation Hold at Fiscal Year End 2014?
- Income Statements & Cash Flow Statements:
 - Mechanically explains why the balance sheet changed between two balance sheet dates (quarterly or annually)
 - Net Income and Operating Cash Flows are **NOT** the same
 - $NI = CFO$ in Q1; $NI < CFO$ in Q2; $NI > CFO$ in Q3
- A firm's own generated cash is the cheapest way to finance transactions (avoid interest if have cash)

Annual and Quarterly Numbers

Income Statement		Q1	Q2	Q3	Q4	FY 2014
Sales		1000	1125	1250	2000	5375
Less: Cost of Goods Sold		600	600	700	1350	3250
Equal: Gross Margin		400	525	550	650	2125
Gross Margin %		40.0%	46.7%	44.0%	32.5%	39.5%

What made Gross Margin % go up in Q2, down in Q3 and down in Q4?

Q2:

Q3:

Q4:

Accrual Accounting & Role of Estimation

Accrual Accounting Intuition: record economic transactions when they occur.
Do not wait until cash changes hands.

Example – sell lemonade in Q3 on credit for \$1,250. Suppose full payment occurs in Q4. Focus on revenue only at this point.

Accrual accounting:		<u>Income Statement Q3</u>	<u>Income Statement Q4</u>
	Revenue:		

Cash accounting:		<u>Income Statement Q3</u>	<u>Income Statement Q4</u>
	Revenue:		

Accrual accounting vs. Cash accounting:

	<u>Cost</u>	<u>Benefit</u>
Accrual basis:		
Cash basis:		

Accrual Accounting & Role of Estimation

When using accrual accounting, estimates are required about the likely transaction amount. When making estimates, mistakes can be made.

Example: sell lemonade in Q3 on credit for \$1,250 and \$120 is ultimately not repaid (so true cash receipt = $1,250 - 120 = 1,130$). Amount of non-repayment is learned in Q4. At the time of sale (Q3) must make an estimate (i.e. an educated guess) about how much will not be repaid.

Accrual accounting with perfect estimation (estimate = \$120):

	<u>Income Statement Q3</u>	<u>Income Statement Q4</u>
Revenue:		
Bad Debt Expense:		

Accrual accounting with initial OVER estimation (estimate = \$140):

	<u>Income Statement Q3</u>	<u>Income Statement Q4</u>
Revenue:		
Bad Debt Expense:		

Accrual accounting with initial UNDER estimation (estimate = \$115):

	<u>Income Statement Q3</u>	<u>Income Statement Q4</u>
Revenue:		
Bad Debt Expense:		

Accrual Accounting & Role of Estimation

Comparison of scenarios – Income Statement Effects:

AS CURRENTLY DONE - NO ACCRUAL MADE

Income Statement	Q1	Q2	Q3	Q4	FY 2014
Sales	1000	1125	1250	2000	5375
Less: Cost of Goods Sold	600	600	700	1350	3250
Less: Non bad debt expenses	0	250	250	252	752
Less: Bad Debt Expense	0	0	0	120	120
Equals: Pretax Income	400	275	300	278	1253
Less: Taxes	0	0	0	0	0
Equals: Net Income	400	275	300	278	1253

ACCRUAL ACCOUNTING - OVERESTIMATION

Income Statement	Q1	Q2	Q3	Q4	FY 2014
Sales	1000	1125	1250	2000	5375
Less: Cost of Goods Sold	600	600	700	1350	3250
Less: Non bad debt expenses	0	250	250	252	752
Less: Bad Debt Expense	0	0	140	-20	120
Equals: Pretax Income	400	275	160	418	1253
Less: Taxes	0	0	0	0	0
Equals: Net Income	400	275	160	418	1253

ACCRUAL ACCOUNTING - PERFECT ESTIMATION

Income Statement	Q1	Q2	Q3	Q4	FY 2014
Sales	1000	1125	1250	2000	5375
Less: Cost of Goods Sold	600	600	700	1350	3250
Less: Non bad debt expenses	0	250	250	252	752
Less: Bad Debt Expense	0	0	120	0	120
Equals: Pretax Income	400	275	180	398	1253
Less: Taxes	0	0	0	0	0
Equals: Net Income	400	275	180	398	1253

ACCRUAL ACCOUNTING - UNDERESTIMATION

Income Statement	Q1	Q2	Q3	Q4	FY 2014
Sales	1000	1125	1250	2000	5375
Less: Cost of Goods Sold	600	600	700	1350	3250
Less: Non bad debt expenses	0	250	250	252	752
Less: Bad Debt Expense	0	0	115	5	120
Equals: Pretax Income	400	275	185	393	1253
Less: Taxes	0	0	0	0	0
Equals: Net Income	400	275	185	393	1253

Accrual Accounting & Role of Estimation

Comparison of scenarios – Balance Sheet Effects:

Balance Sheet	NO ACCRUAL		PERFECT ACCRUAL ESTIMATION		ACCRUAL OVERESTIMATION		ACCRUAL UNDERESTIMATION	
	Q3	Q4	Q3	Q4	Q3	Q4	Q3	Q4
	9/30/2014	12/31/2014	9/30/2014	12/31/2014	9/30/2014	12/31/2014	9/30/2014	12/31/2014
Cash	525	898	525	898	525	898	525	898
Inventory	500	0	500	0	500	0	500	0
Accounts Receivable	625	1205	625	1205	625	1205	625	1205
Less: Allowance for Doubtful Accounts	0	0	-120	0	-140	0	-115	0
Equals: Accounts Receivable, net	625	1205	505	1205	485	1205	510	1205
PP&E (juicer), net	300	150	300	150	300	150	300	150
TOTAL ASSETS	1950	2253	1830	2253	1810	2253	1835	2253
Short term note payable	0	100	0	100	0	100	0	100
Accounts Payable	375	300	375	300	375	300	375	300
TOTAL LIABILITIES	375	400	375	400	375	400	375	400
Common Stock	600	600	600	600	600	600	600	600
Retained Earnings	975	1253	855	1253	835	1253	860	1253
TOTAL OWNERS' EQUITY	1575	1853	1455	1853	1435	1853	1460	1853

Accrual Accounting & Role of Estimation

There are many estimates you will see in financial statements of real firms.

Examples can include:

- Estimation of future non-payment (allowance for doubtful accounts)**
- Estimation of future inventory obsolescence (inventory obsolescence reserve)**
- Estimation of future product failure (warranty reserve)**

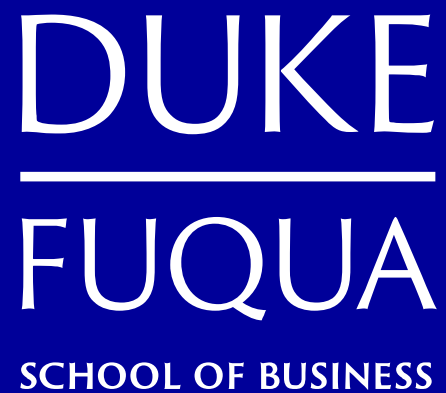
Accounting rules generally require firms to make a “guess” when they reasonably can, and fix the guess over time as they get more information.

Misestimating can distort inferences

Firms will tell you the critical estimates in the footnotes to the financial statements. This tells you where to look to see these “guesses”.

Module Takeaways

- Understand three key financial statements: Balance Sheet, Income Statement and Statement of Cash Flows.
- Understand how economic transactions are reflected in the financial statements
- Understand how annual numbers and quarterly numbers relate
- Appreciate the role of accrual accounting in the generation of financial statements
- A lemonade stand is easy to understand, but has the same fundamental operating underpinnings as a large public beverage company like National Beverage.
- Next: First Steps in reading a real annual report



PREVIEW FOR
NEXT TIME IN
ACCOUNTING!

- Public companies, i.e., companies whose shares are traded in the stock market, are required to publish their financial statements each quarter and at the end of each year.
- It is usually easy to access a firm's financial statements from the firm's website.
- You can now read and understand the financials of our lemonade stand. But what about for a public company?
 - Let's get literate: <https://www.nationalbeverage.com/>

Real Life Reading – National Beverage

National Beverage Corporation (stock ticker: FLZZ) develops, produces, markets and sells a diverse portfolio of flavored beverage products primarily in North America.



Lemonade & Tea



Juices



Water



Sports Drinks



Balance Sheet – Asset Side



Biggest Non-Cash Assets?

Make sense?

(In thousands, except share data)

	April 29, 2017	April 30, 2016
ASSETS		
Current assets:		
Cash and equivalents	\$136,372	\$105,577
Trade receivables - net	71,319	61,046
Inventories	53,355	47,922
Deferred income taxes - net	3,906	4,454
Prepaid and other assets	7,275	4,672
Total current assets	272,227	223,671
Property, plant and equipment - net	65,150	61,932
Goodwill	13,145	13,145
Intangible assets	1,615	1,615
Other assets	5,752	5,135
Total assets	\$357,889	\$305,498

Balance Sheet – Asset Side



What is “– net” after Trade Receivables?

(In thousands, except share data)

ASSETS

Current assets:

Cash and equivalents

April 29,
2017

April 30,
2016

\$136,372

\$105,577

Trade receivables - net

71,319

61,046

CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Although these estimates are based on management's knowledge of current events and actions it may undertake in the future, they may ultimately differ from actual results. We believe that the critical accounting policies described in the following paragraphs comprise the most significant estimates and assumptions used in the preparation of our consolidated financial statements.

Credit Risk We sell products to a variety of customers and extend credit based on an evaluation of each customer's financial condition, generally without requiring collateral. Exposure to credit losses varies by customer principally due to the financial condition of each customer. We monitor our exposure to credit losses and maintain allowances for anticipated losses based on specific customer circumstances, credit conditions and historical write-offs.

Balance Sheet – Liability + OE



Biggest Liabilities?

Why so little debt?

LIABILITIES AND SHAREHOLDERS' EQUITY

Current liabilities:

Accounts payable	\$ 58,100	\$ 49,391
Accrued liabilities	29,017	26,195
Income taxes payable	89	28

Total current liabilities	87,206	75,614
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Deferred income taxes - net	15,993	14,474
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Other liabilities	9,072	9,258
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Shareholders' equity:

Preferred stock, \$1 par value - 1,000,000 shares authorized

Series C - 150,000 shares issued	150	150
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Common stock, \$.01 par value - 75,000,000 shares authorized;

50,616,134 shares (2017) and 50,588,734 shares (2016) issued	506	506
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Additional paid-in capital	35,638	34,570
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Retained earnings	227,928	190,733
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Accumulated other comprehensive loss	(604)	(1,807)
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Treasury stock - at cost:

Series C preferred stock - 150,000 shares	(5,100)	(5,100)
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Common stock - 4,032,784 shares	(12,900)	(12,900)
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Total shareholders' equity	245,618	206,152
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Total liabilities and shareholders' equity	\$357,889	\$305,498
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Income Statement



Trend in Sales, Gross Profit, Net Income?

Inference?

CONSOLIDATED STATEMENTS OF INCOME

	Fiscal Year Ended		
	April 29, 2017	April 30, 2016	May 2, 2015
(In thousands, except per share amounts)			
Net sales	\$826,918	\$704,785	\$645,825
Cost of sales	500,841	463,348	426,685
Gross profit	326,077	241,437	219,140
Selling, general and administrative expenses	163,600	148,384	145,157
Interest expense	189	203	371
Other (income) expense - net	(537)	145	(1,101)
Income before income taxes	162,825	92,705	74,713
Provision for income taxes	55,780	31,507	25,402
Net income	107,045	61,198	49,311

Income Statement – 2017 Decomposition



What is cost of goods sold each quarter?

Is the overall gross margin % for the year influenced by one particular quarter?

11. QUARTERLY FINANCIAL DATA (UNAUDITED)

(In thousands, except per share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
FISCAL 2017				
Net sales	\$217,108	\$203,180	\$194,564	\$212,066
Gross profit	85,494	78,717	75,920	85,946
Net income	28,995	24,604	24,285	29,161

Statement of Cash Flows – Operating Section



Does Net Income = Cash Flow from Operations?

Reasons for difference?

(In thousands)	Fiscal Year Ended		
	April 29, 2017	April 30, 2016	May 2, 2015
OPERATING ACTIVITIES			
Net income	\$107,045	\$ 61,198	\$ 49,311
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Depreciation and amortization	12,834	12,056	11,580
Deferred income tax provision (benefit)	1,358	(1,299)	1,076
Loss (gain) on disposal of property, net	72	129	(1,188)
Stock-based compensation	208	228	307
Changes in assets and liabilities:			
Trade receivables	(10,273)	(1,095)	(1,746)
Inventories	(5,433)	(4,998)	990
Prepaid and other assets	(2,205)	(485)	(605)
Accounts payable	8,709	4,495	(710)
Accrued and other liabilities	1,457	8,726	(995)
Net cash provided by operating activities	113,772	78,955	58,020

Statement of Cash Flows – Investing & Financing



What does National Beverage do with its operating cash?

What happens when its not spent?

INVESTING ACTIVITIES			
Additions to property, plant and equipment	(14,015)	(12,140)	(11,630)
Proceeds from sale of property, plant and equipment	28	116	1,905
Net cash used in investing activities	(13,987)	(12,024)	(9,725)
FINANCING ACTIVITIES			
Dividends paid on common stock	(69,850)	—	—
Dividends paid on preferred stock	—	(186)	(239)
Repayments under credit facilities, net	—	(10,000)	(20,000)
Redemption of preferred stock	—	(6,000)	(6,000)
Proceeds from stock options exercised	365	848	228
Stock-based tax benefits	495	1,528	240
Net cash used in financing activities	(68,990)	(13,810)	(25,771)
NET INCREASE IN CASH AND EQUIVALENTS	30,795	53,121	22,524
CASH AND EQUIVALENTS - BEGINNING OF YEAR	105,577	52,456	29,932
CASH AND EQUIVALENTS - END OF YEAR	\$136,372	\$105,577	\$ 52,456