

Financial Statement Analysis

Dr. Monika Dhochak

Why Analysis is important?

The world would have been so beautiful

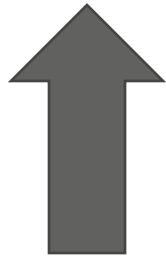
- If financial statement always reflect true economic reality of business.
- We can make our decision only using net profit and share price.
- Financial statements were comparable among companies.
- Consistent over time

How to read an annual report?

How to read the **Financial and Non-financial** Information of the company



-
1. Balance Sheet
 2. Income Statement
 3. Statement of Cash flow
 4. FSA - Quantitative Tools



Quantitative

Qualitative



1. Management Discussion & Analysis
2. Auditor Report
3. Explanatory Notes to Financial Statements
4. Supplementary Information
5. **Non-Financial Metrics**

Financial Statements of a company

Global Grocer		Global Grocer		Global Grocer	
Balance Sheet as of September 30, 2014		Income Statement		Statement of Cash Flows	
Assets		for month		for month ending September 30, 2014	
Current Assets		Sales		Cash Flows From Operating Activities	
Cash	\$95,500	Less: Cost of Goods Sold.....		Collections from customers.....	\$ 11,000
Accounts receivable	5,000	Gross Margin.....		Inventory purchase.....	(2,500)
Merchandise inventory.....	19,000	Less: Operating Expenses.....		Salaries paid.....	(3,000)
Prepaid expenses	2,000	Operating Income.....		Utilities paid.....	(500)
Total current assets	\$121,500	Less: Interest Expense.....		Interest paid.....	(350)
Non-current Assets		Income Before Income Taxes.....		Net cash provided (used) by operating activities.....	\$ 4,650
Land	30,000	Less: Tax Expense.....		Cash Flows From Investing Activities	
Warehouse building, at cost	\$40,000	Net Income.....		Van purchase.....	(10,000)
Less: Accumulated depreciation.....	300			Net cash provided (used) by investing activities.....	\$(10,000)
Warehouse building, net	39,700			Cash Flows From Financing Activities	
Van, at cost	10,000			Mortgage principal payment.....	(150)
Store fixtures, at cost	\$5,000			Five-year bank loan.....	30,000
Less: Accumulated depreciation	100			Net cash provided (used) by financing activities.....	\$ 29,850
Store fixtures, net	4,900			Net increase (decrease) in cash.....	24,500
Franchise fee, net	17,250			Beginning cash balance.....	56,000
Total Assets	\$223,350			Ending cash balance.....	\$ 80,500

Annual Report

- An **Annual report** is a comprehensive report of company's activities throughout the year
- Annual reports are intended to give shareholders and other interested people information about the company's activities and financial performance.

Importance

- It gives an opportunity to take a step back and look at the overall practical and financial health of the Company's business.
- To understand the company **inside out**
- You can know **how well the Company is doing.**
- You can find out **whether the Company is making more money than it is spending.**
- You can get an idea of **management's strategic plan** for the coming year.
- Which Product/Service is making how much revenue
- How much company owes to different stakeholders

Reasons for creating an Annual Report



People don't just share information, they tell stories.

Highlight your mission and results in stories that people want to tell and share.

Major Sections to focus on:

✦ Management Discussion and Analysis

- ✦ Overview of the Industry
- ✦ Managements' opinion about the business
- ✦ Key financial items effects and discussion
- ✦ Risks & Mitigation Strategies

2. Auditor Report

- Who are the Auditors?
- Auditors comments – Key Audit Matters (KAM)

3. Explanatory Notes to Financial Statements

4 Disclosures/Supplementary Information

5. Non-Financial Metrics



EBITDA vs. Adjusted EBITDA

Unusual Metric/Non-financial metric example

Alphabet



Paid Click and cost per click



Number of aircraft; Passenger load factor; Fuel Consumption

Can you think of similar metrics for other companies ?



Unusual Metric/Non-financial metric example

Name of Company	Industry	Non-GAAP Metrics
Google	Technology	User engagement rate
Starbucks	Food & Beverage	Customer loyalty program membership
Nike	Apparel	Social media followers
Amazon	E-commerce	Prime membership growth
Tesla	Automotive	Number of supercharging stations
Netflix	Entertainment	Hours watched per subscriber
Airbnb	Hospitality	Number of nights booked
Apple	Technology	App Store revenue growth
Patagonia	Outdoor Apparel	Percentage of recycled materials used
Johnson & Johnson	Healthcare	Patient outcomes improvement rate
Southwest Airlines	Aviation	On-time departure rate
Coca-Cola	Beverage	Market share in emerging markets
Unilever	Consumer Goods	Sustainable living plan progress
Facebook (Meta)	Social Media	Daily active users (DAUs)
IBM	Technology Service	Cloud services revenue growth
Disney	Media & Entertainment	Theme park attendance
Uber	Ride-sharing	Ride completion rate
Walmart	Retail	Online sales growth
Microsoft	Technology	Azure usage growth
Pfizer	Pharmaceuticals	Number of clinical trials initiated

Financial Statement Analysis - Quantitative

Dr. Monika Dhochak



Operational Highlights

The following table sets forth key operational data for the periods indicated

Particulars	FY Ended March 31		
	2019	2018	Change
ASK (in million)	81,028	63,510	27.6%
RPK (in million)	69,811	55,524	25.7%
Passenger Load Factor (%)	86.2%	87.4%	-1.3 pts
Number of Scheduled Passengers Carried (in thousands)	64,743	52,142	24.2%
Block Hours	853,553	654,040	30.5%
Number of Scheduled Destinations Served as of period end	68	50	36.0%
Total Number of Flights	448,904	347,640	29.1%
Number of Aircraft at period end	217	159*	36.5%

Indigo

ASK – available Seat kms
 RPK = revenue passenger kms
 RASK= revenue per available seat km
 CASK=Unit cost per available seat km

Financial Highlights

The following table sets forth key financial data for the periods indicated

Particulars	FY Ended March 31		
	2019	2018	Change
EBITDAR Margin	18.3%	29.0%	-10.7 pts
Net Profit Margin	0.5%	9.7%	-9.2 pts
RASK (Rs.)	3.57	3.64	-2.0%
CASK (Rs.)	3.59	3.15	13.9%
CASK Ex-Fuel (Rs.)	2.11	1.93	9.7%



Indian Hotels Co. Ltd.

2017-18

30% consumer loyalty revenue

64% average occupancy

Rs. 5530 revenue per available room

Rs. 8634 average room rate

30.56 Lakhs guests welcomed during the year

115

YEARS LEGACY

165+

HOTELS*

20,000+

ROOMS*

380

RESTAURANTS
AND BARS

74

SPAS

4

CONTINENTS

12

COUNTRIES

80

LOCATIONS

32,242

EMPLOYEES

67

HOTELS AWARDED
WITH GOLD
CERTIFICATION BY
EARTHCHECK

7th

CONSECUTIVE
GALLUP GREAT
WORKPLACE AWARD



Global Presence



FY2020

Highlights

Revenues

₹ 174.6 billion

EBITDA

₹ 46.4 billion

Profit after tax

₹ 19.5 billion

Diluted EPS

₹ 117.4

Filings

Generic filings

8 ANDA filings

As on 31 March 2020, 99 generic filings are pending for approval (97 ANDAs and 2 NDAs). Of these, 97 ANDAs, 54 are Para IV filings and we believe 30 of these have 'First-to-File' status.

DMF filings

10 DMFs filed in the US.

Launches

New products

168

NAG

27

Europe

40

Emerging Markets

80

India

21

Dr. Reddy's



Making India self-sufficient in high-impact sectors

Operating leading businesses

Retail

India's largest retailer by reach, revenue and profitability. Only Indian retailer to feature in the list of Global Powers of Retailing.

Digital Services

Through Jio Platforms Limited (JPL), Reliance operates India's largest telecom network.

Media and Entertainment

One of India's largest media houses with omni-channel presence, bringing the world to households.

Oil to Chemicals

One of the world's most integrated Oil to Chemicals operations, driving India's energy security.

Oil and Gas E&P

Upstream portfolio consisting of deep water acreage and CBM blocks in India and Shale Gas in the United States of America.

Creating large-scale social impact



India's largest corporate CSR programme, covering Rural Transformation, Education, Health, Sports for Development, Arts, Culture and Heritage, Disaster Response and Urban Renewal.

PG 34

Incubating the future



JioGenNext is a startup accelerator backed by Reliance Industries. We advise and mentor exceptional founders for launching their startup in the Jio ecosystem.

PG 36

REVENUE ▼ 5.6%
₹1,53,818 crore

EBITDA ▲ 1.5%
₹9,842 crore

RETAIL AREA (million sq. ft.)
33.8



REVENUE ▲ 29.7%
₹90,287 crore

EBITDA ▲ 45.8%
₹34,035 crore

JIO SUBSCRIBERS (million)
426.2



REVENUE ▼ 11.8%
₹5,459 crore

EBITDA ▲ 29.0%
₹796 crore

TV VIEWERSHIP SHARE (%)
12.6



REVENUE ▼ 29.1%
₹3,20,008 crore

EBITDA ▼ 29.1%
₹38,170 crore

PRODUCTION MEANT FOR SALE (MMT)
63.6



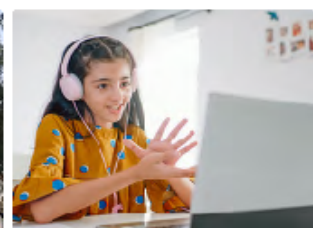
REVENUE ▼ 33.4%
₹2,140 crore

EBITDA ▼ 26.9%
₹258 crore

PRODUCTION (RIL's share) (BCFe)
126.6



PG 50



PG 68



PG 82



PG 94

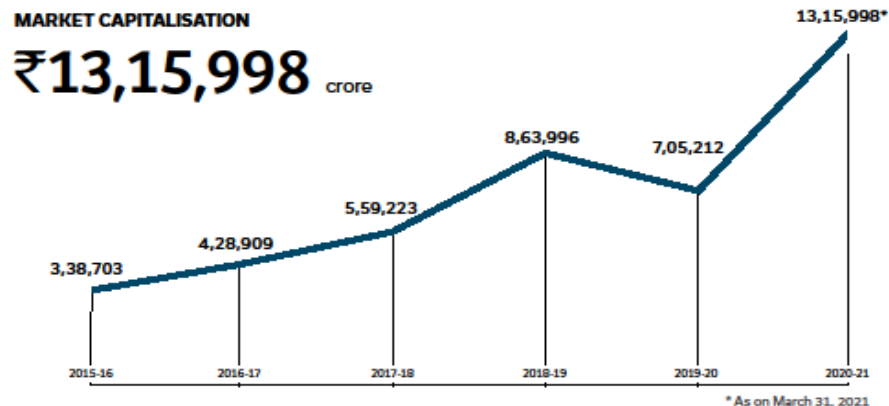
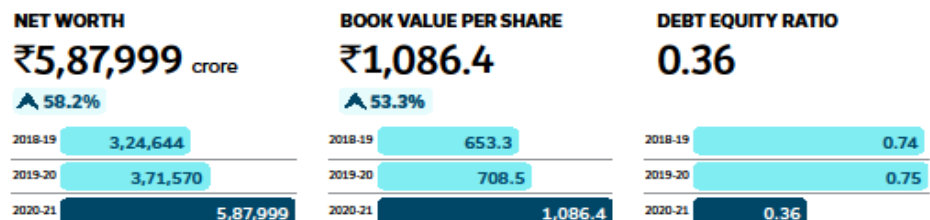
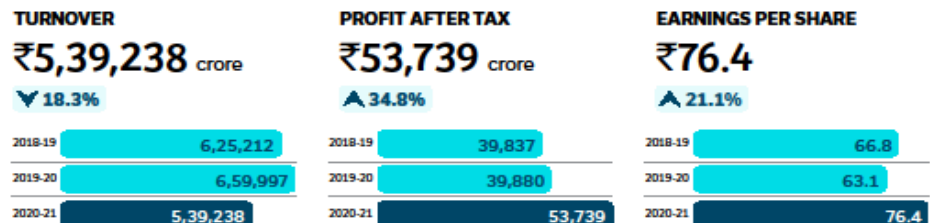


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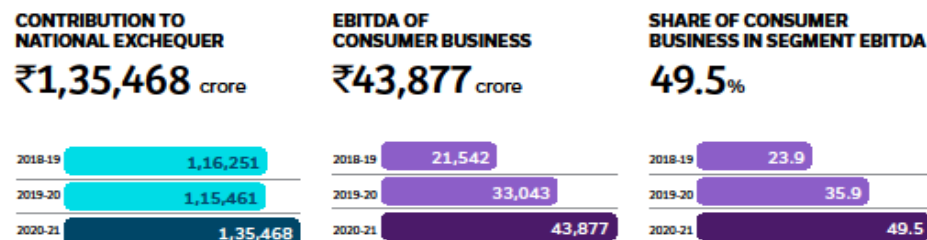
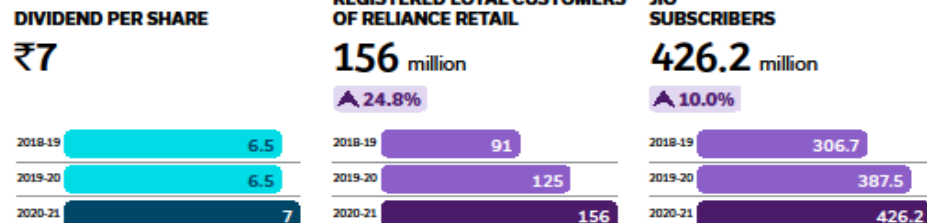


Promise meets performance

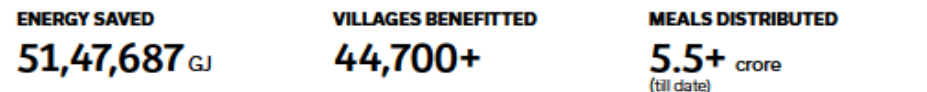
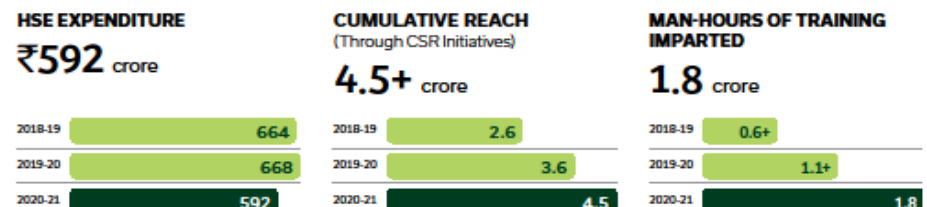
Financial



Consumer Business Metrics



ESG





Our Business



Refining, Pipelines and Marketing

With a distinguished legacy of more than 100 years (since the inception of our Digboi refinery in 1901), IndianOil enjoys the largest market share among downstream companies in India. We manage one of the largest oil pipeline networks in the world. We have an extensive petroleum marketing and distribution network, one of Asia's largest, enabling us to reach customers in the farthest corners of the country.

32.2#

share of national refining capacity (%)



80.55#

group refining capacity (MMTPA)

15,000+

oil pipeline network (km)

56,336*

marketing and distribution touchpoints

4,93,127**

PETROLEUM REVENUE
(₹ In Crore)



Petrochemicals

Built with an investment of ₹ 24,000 Crore, in the last 16 years we have been integrating our downstream operations and positioning ourselves as the second largest petrochemicals player in India with an international presence.

35,000

proposed investment in petrochemicals over next 5 years (₹ In Crore)

19,169**

PETROCHEMICAL REVENUE
(₹ In Crore)



Natural Gas

Leveraging decades of experience, we have fast-tracked growth in the natural gas segment, establishing ourselves as the second largest player in the field. We have been investing across the natural gas value chain, scaling up LNG sourcing, import terminals, pipelines, city gas distribution networks and improving the 'LNG at the Doorstep' service continuously.

13,000

proposed investment in natural gas segment over the next 3-5 years (₹ In Crore)

1100+##

gas pipeline network (km)

1,059

CNG stations in India

Read more about our businesses on page 42 to 49

Note: *This includes retail outlets, LPG Distributors, Lubricant Network and Lubricant Plants; #including CPCL | **Refer segment reporting note in financials. | **Including JV pipelines



Framework for Financial Analysis

- The purpose of financial analysis is to evaluate **financial performance** (Income Statement), **financial position** (Balance Sheet) and **liquidity/solvency** position of a company.
- Such an evaluation (Benchmarking) is done in 3 ways:
 - Compare the data/results of the **same company** over a period of time – trend analysis
 - Compare the data with that of **other companies/competitor**
 - Compare the data with **industry average**



GVK – The House of Debt

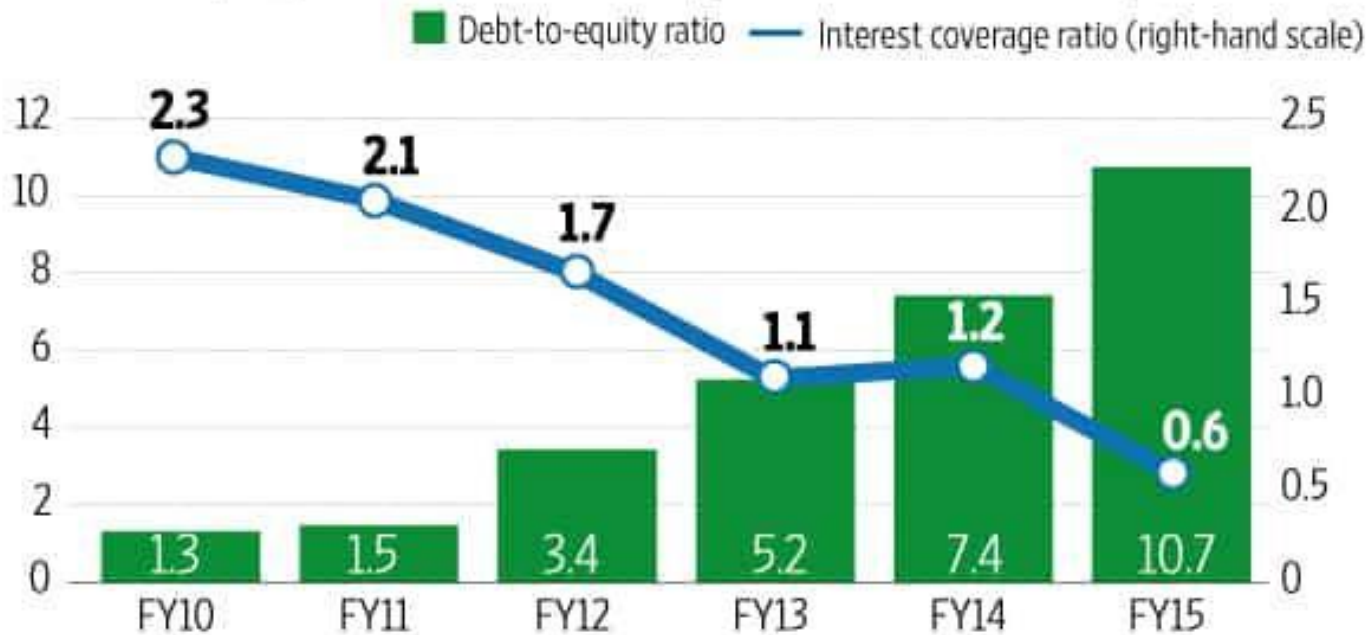
- The GVK group built India's first six-lane expressway, airports in Bengaluru, Mumbai and Bali.
- In the boom years after 2008, Indian companies borrowed heavily.
- Unfortunately, their growth expectations were over-optimistic.



HEAVY EXPOSURE

- Total consolidated debt for GVK Power and Infrastructure (the parent company) has risen from ₹5,500 crore in fiscal year 2011 to ₹22,300 crore in 2015, while its debt-to-equity ratio has risen from 1.5 times to 10.7 over the same period. Its interest coverage ratio is also low at 0.6 times.
- It has committed investments of over \$20 billion globally.
- Invested over \$4.3 billion in India.
- Over \$6.6 billion in the pipeline in India.
- \$10 billion investment plans in Australia.

Debt-to-equity and interest coverage ratio for GVK Group



Source: Capitaline, UBS

Raghuram Rajan, RBI governor said

“Debt is very much like a dynamite. It is an instrument which is very useful in right places and explosive in others”



Analyzing financial statements involves:

Characteristics

- ◆ Liquidity
- ◆ Profitability
- ◆ Efficiency/
Turnover
- ◆ Solvency

Comparison Bases

- ◆ Intracompany
- ◆ Industry
averages
- ◆ Intercompany

Tools of Analysis

- ◆ Horizontal
- ◆ Vertical
- ◆ Ratio



Horizontal Analysis

Horizontal analysis, also called **trend analysis**, is a technique for evaluating a series of financial statement data over a period of time.

- ◆ **Purpose** is to determine the increase or decrease.
- ◆ **Commonly applied to the**
 - ▶ balance sheet,
 - ▶ income statement, and
 - ▶ statement of retained earnings.

Horizontal Analysis



QUALITY DEPARTMENT STORE INC. Condensed Balance Sheets December 31

	2013	2012	Increase or (Decrease) during 2013	
			Amount	Percent
Assets				
Current assets	\$1,020,000	\$ 945,000	\$ 75,000	7.9%
Plant assets (net)	800,000	632,500	167,500	26.5%
Intangible assets	15,000	17,500	(2,500)	(14.3%)
Total assets	<u>\$1,835,000</u>	<u>\$1,595,000</u>	<u>\$240,000</u>	<u>15.0%</u>
Liabilities				
Current liabilities	\$ 344,500	\$ 303,000	\$ 41,500	13.7%
Long-term liabilities	487,500	497,000	(9,500)	(1.9%)
Total liabilities	<u>832,000</u>	<u>800,000</u>	<u>32,000</u>	<u>4.0%</u>
Stockholders' Equity				
Common stock, \$1 par	275,400	270,000	5,400	2.0%
Retained earnings	727,600	525,000	202,600	38.6%
Total stockholders' equity	<u>1,003,000</u>	<u>795,000</u>	<u>208,000</u>	<u>26.2%</u>
Total liabilities and stockholders' equity	<u>\$1,835,000</u>	<u>\$1,595,000</u>	<u>\$240,000</u>	<u>15.0%</u>

Changes suggest that the company expanded its asset base during 2013 and financed this expansion primarily by retaining income rather than assuming additional long-term debt.

Horizontal Analysis



QUALITY DEPARTMENT STORE INC. Condensed Income Statements For the Years Ended December 31

	2013	2012	Increase or (Decrease) during 2013	
			Amount	Percent
Sales revenue	\$2,195,000	\$1,960,000	\$235,000	12.0%
Sales returns and allowances	98,000	123,000	(25,000)	(20.3%)
Net sales	2,097,000	1,837,000	260,000	14.2%
Cost of goods sold	1,281,000	1,140,000	141,000	12.4%
Gross profit	816,000	697,000	119,000	17.1%
Selling expenses	253,000	211,500	41,500	19.6%
Administrative expenses	104,000	108,500	(4,500)	(4.1%)
Total operating expenses	357,000	320,000	37,000	11.6%
Income from operations	459,000	377,000	82,000	21.8%
Other revenues and gains				
Interest and dividends	9,000	11,000	(2,000)	(18.2%)
Other expenses and losses				
Interest expense	36,000	40,500	(4,500)	(11.1%)
Income before income taxes	432,000	347,500	84,500	24.3%
Income tax expense	168,200	139,000	29,200	21.0%
Net income	<u>\$ 263,800</u>	<u>\$ 208,500</u>	<u>\$ 55,300</u>	<u>26.5%</u>

Overall, gross profit and net income were up substantially.

Gross profit increased 17.1%, and net income, 26.5%.

Quality's profit trend appears favorable.

Horizontal Analysis



QUALITY DEPARTMENT STORE INC.				
Retained Earnings Statements				
For the Years Ended December 31				
			Increase or (Decrease)	
			during 2013	
	2013	2012	Amount	Percent
Retained earnings, Jan. 1	\$525,000	\$376,500	\$148,500	39.4%
Add: Net income	263,800	208,500	55,300	26.5%
	788,800	585,000	203,800	
Deduct: Dividends	61,200	60,000	1,200	2.0%
Retained earnings, Dec. 31	<u>\$727,600</u>	<u>\$525,000</u>	<u>\$202,600</u>	38.6%

The ending retained earnings increased 38.6%. As indicated earlier, the company retained a significant portion of net income to finance additional plant facilities.



Vertical Analysis

Vertical analysis, also called **common-size analysis**, is a technique that expresses each financial statement item as a percent of a base amount.

- ◆ On an **income statement**, we might say that selling expenses are 16% of net sales.
- ◆ Vertical analysis is commonly applied to the
 - ▶ balance sheet and
 - ▶ income statement.



Vertical Analysis

QUALITY DEPARTMENT STORE INC. Condensed Balance Sheets December 31

	2013		2012	
	Amount	Percent	Amount	Percent
Assets				
Current assets	\$1,020,000	55.6%	\$ 945,000	59.2%
Plant assets (net)	800,000	43.6%	632,500	39.7%
Intangible assets	15,000	0.8%	17,500	1.1%
Total assets	<u>\$1,835,000</u>	<u>100.0%</u>	<u>\$1,595,000</u>	<u>100.0%</u>
Liabilities				
Current liabilities	\$ 344,500	18.8%	\$ 303,000	19.0%
Long-term liabilities	487,500	26.5%	497,000	31.2%
Total liabilities	<u>832,000</u>	<u>45.3%</u>	<u>800,000</u>	<u>50.2%</u>
Stockholders' Equity				
Common stock, \$1 par	275,400	15.0%	270,000	16.9%
Retained earnings	727,600	39.7%	525,000	32.9%
Total stockholders' equity	<u>1,003,000</u>	<u>54.7%</u>	<u>795,000</u>	<u>49.8%</u>
Total liabilities and stockholders' equity	<u>\$1,835,000</u>	<u>100.0%</u>	<u>\$1,595,000</u>	<u>100.0%</u>

Quality is choosing to finance its growth through retention of earnings rather than through issuing additional debt.

Helpful Hint

The formula for calculating these balance sheet percentages is:

$$\frac{\text{Each item on B/S}}{\text{Total assets}} = \%$$

Vertical Analysis



QUALITY DEPARTMENT STORE INC.

Condensed Income Statements

For the Years Ended December 31

	2013		2012	
	Amount	Percent	Amount	Percent
Sales revenue	\$2,195,000	104.7%	\$1,960,000	106.7%
Sales returns and allowances	98,000	4.7%	123,000	6.7%
Net sales	2,097,000	100.0%	1,837,000	100.0%
Cost of goods sold	1,281,000	61.1%	1,140,000	62.1%
Gross profit	816,000	38.9%	697,000	37.9%
Selling expenses	253,000	12.0%	211,500	11.5%
Administrative expenses	104,000	5.0%	108,500	5.9%
Total operating expenses	357,000	17.0%	320,000	17.4%
Income from operations	459,000	21.9%	377,000	20.5%
Other revenues and gains				
Interest and dividends	9,000	0.4%	11,000	0.6%
Other expenses and losses				
Interest expense	36,000	1.7%	40,500	2.2%
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Income tax expense	168,200	8.0%	139,000	7.5%
Net income	\$ 263,800	12.6%	\$ 208,500	11.4%

Quality appears to be a profitable enterprise that is becoming even more successful.

Helpful Hint

The formula for calculating these income statement percentages is:

$$\frac{\text{Each item on I/S}}{\text{Net sales}} = \%$$



Vertical Analysis

Enables a comparison of companies of different sizes.

Condensed Income Statements For the Year Ended December 31, 2013 (in thousands)				
	Quality Department Store Inc.		Macy's, Inc.	
	Dollars	Percent	Dollars	Percent
Net sales	\$2,097	100.0%	\$27,931,000	100.0%
Cost of goods sold	<u>1,281</u>	<u>61.1%</u>	<u>16,725,000</u>	<u>59.9%</u>
Gross profit	816	38.9%	11,206,000	40.1%
Selling and administrative expenses	<u>357</u>	<u>17.0%</u>	<u>8,440,000</u>	<u>30.2%</u>
Income from operations	459	21.9%	2,766,000	9.9%
Other expenses and revenues (including income taxes)	<u>195</u>	<u>9.3%</u>	<u>1,280,000</u>	<u>4.6%</u>
Net income	<u><u>\$ 264</u></u>	<u><u>12.6%</u></u>	<u><u>\$ 1,486,000</u></u>	<u><u>5.3%</u></u>