



BACHELOR of ECONOMICS



**Thammasat University
Faculty of Economics
Bachelor of Economics (International Program)**

AC201 Fundamental Accounting

Semester 2/2013

Course Materials

Topic:

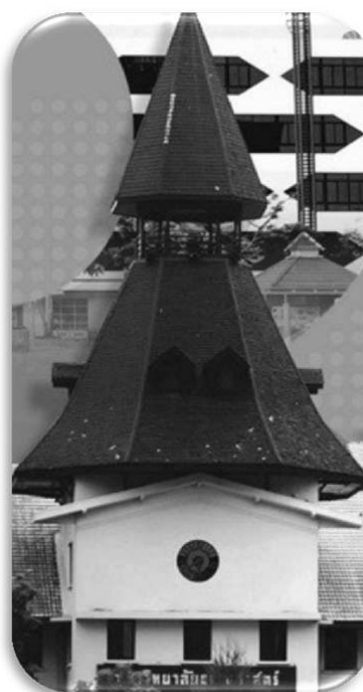
Chapter 3 Operating Decisions and the
Statement of Comprehensive Income

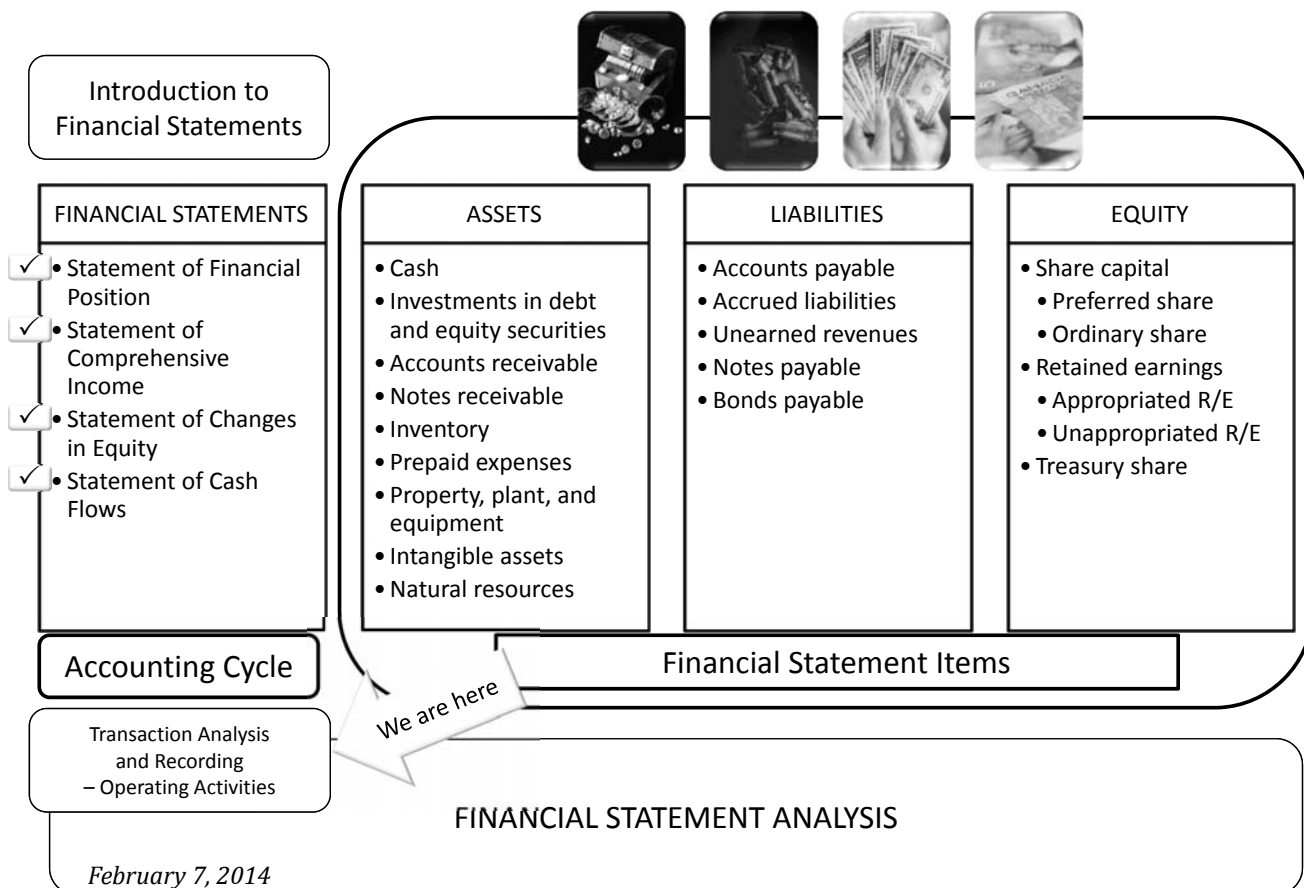
Session:

Sessions #4

Instructor:

Ajarn Santana Singhasaneh





AC201 Fundamental Accounting



**BACHELOR
of ECONOMICS**



CHAPTER 3: OPERATING DECISIONS AND THE STATEMENT OF COMPREHENSIVE INCOME

Ajarn Santana Singhasaneh
Department of Accounting
Thammasat Business School
Thammasat University



How do Business Activities Affect the Statement of Comprehensive Income ?



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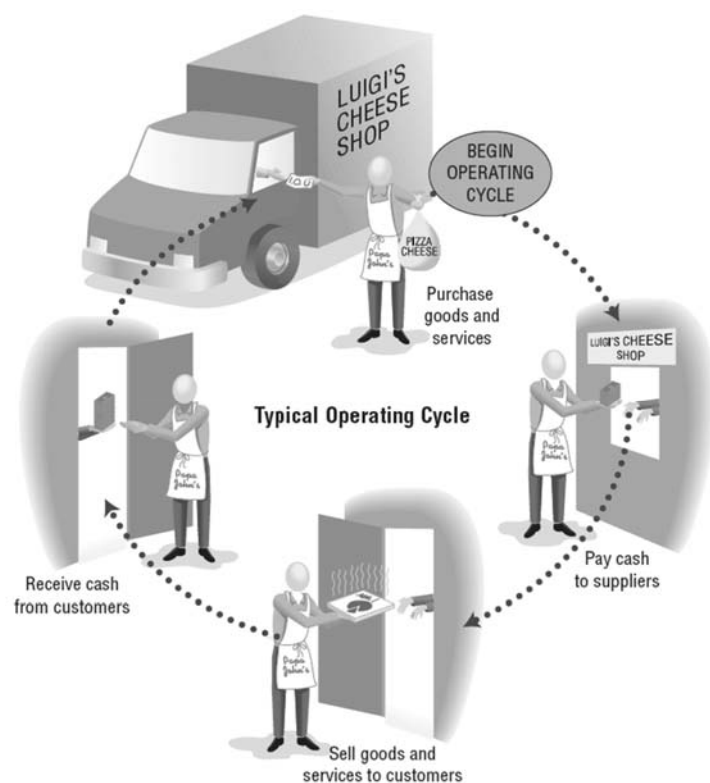
The Operating Cycle

Operating (Cash-to Cash) Cycle:

is the time it takes to receives goods or services from suppliers, to pay cash to suppliers, to sell them to customers, and to collect cash from customers.

Time Period Assumption:

To measure and report financial information periodically, we assume that the long life of a company can be cut into shorter period.



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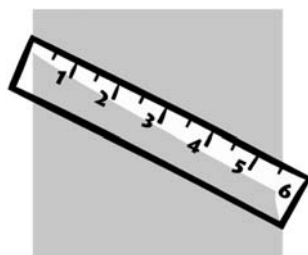
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The Operating Cycle

Issues arise in reporting periodic income to users:

1. **Recognition Issues:**
When should the effects of operating activities be recognized (recorded)?
2. **Measurement Issues:**
What amounts should be recognized ?

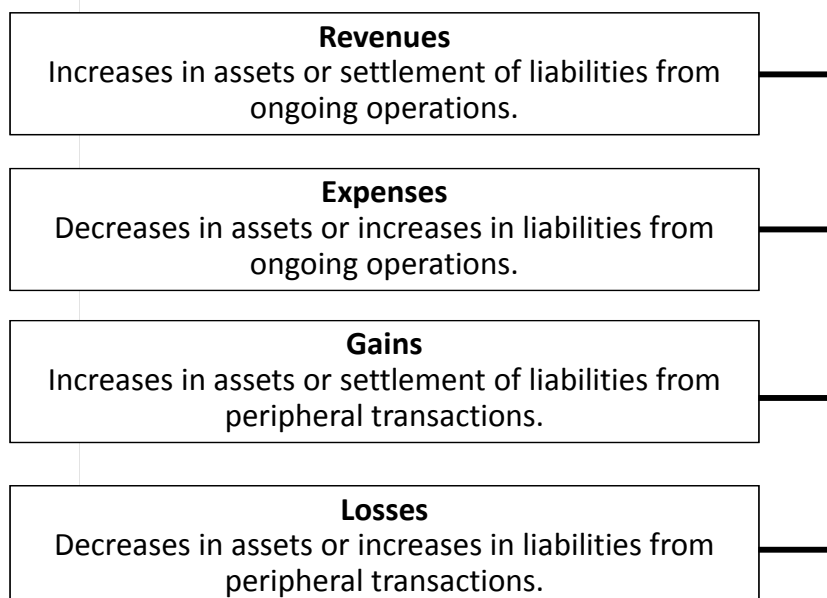


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Elements on the Statement of Income



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PAPA JOHN'S INTERNATIONAL, INC.
Consolidated Statement of Income
For the Year Ended December 31, 2008
(dollars in thousands)

Operating Revenues			
Restaurant sales revenue	\$ 996,000		
Franchise fee revenue	136,000		
Total revenues	1,132,000		
Operating Expenses			
Cost of sales	483,000		
Salaries expense	193,000		
Rent expense	35,000		
Advertising expense	49,000		
General and administrative expenses	100,000		
Depreciation expense	33,000		
Other operating expenses	172,000		
Total expenses	1,065,000		
Operating Income	67,000		
Other Items			
Investment income	1,000		
Interest expense	(8,000)		
Loss on restaurants sold	(3,000)		
Income before Income Taxes	57,000		
Income tax expense	20,000		
Net Income	<u>\$ 37,000</u>		
Earnings per Share	<u>\$ 1.32</u>		

} *Operating activities (central focus of the business)*
 ← Includes insurance, repairs, utilities, and fuel expenses
 ← Subtotal of operating revenues minus operating expenses
 } *Peripheral activities (not the main focus of the business)*
 ← Subtotal of all revenues minus all expenses except taxes
 ← = \$37,000,000 Net Income ÷ 28,100,000 Average Number of Shares Outstanding (from Papa John's annual report)

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PAPA JOHN'S INTERNATIONAL, INC.
Consolidated Statement of Income
For the Year Ended December 31, 2008
(dollars in thousands)

Papa John's
Primary Operating Expenses

Cost of sales
(used inventory)

Salaries
and benefits to
employees

Other costs
(like advertising,
insurance, and
depreciation)

Operating Revenues		
Restaurant sales revenue	\$ 996,000	
Franchise fee revenue	136,000	
Total revenues	1,132,000	
Operating Expenses		
Cost of sales	483,000	
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Net Income	<u>\$ 37,000</u>	
Earnings per Share	<u>\$ 1.32</u>	

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International Perspective

From Page 143



As indicated in Chapter 2, under IFRS, the income statement is usually titled the Statement of Operations. There is also a difference in how expenses may be reported:

	GAAP	IFRS
Presentation of Expenses Similar expenses are reported, but may be grouped in different ways	Public companies categorize expenses by business function (e.g., production, research, marketing, general operations).	Companies can categorize expenses by either function or nature (e.g., salaries, rent, supplies, electricity).

In addition, foreign companies often use account titles that differ from U.S. companies. For example, GlaxoSmithKline (a U.K. pharmaceutical company), Parmalat (an Italian food producer of milk, dairy products, and fruit-based beverages), and Unilever (a U.K. and Netherlands-based company supplying food, home, and personal care products such as Hellman's mayonnaise, Dove soap, and Popsicle treats) use the term *turnover* to refer to sales revenue, *finance income* for income from investments, and *finance cost* for interest expense. BMW Group, on the other hand, reports *revenues* and uses *financial result* for the difference between income from investments and interest expense. All four companies follow IFRS.

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How are Operating Activities Recognized and Measured ?



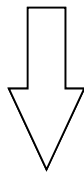
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How Are Operating Activities Recognized and Measured?

Cash Basis



Revenues are recorded when cash is received.



Expenses are recorded when cash is paid.

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How Are Operating Activities Recognized and Measured?

Accrual Basis

Revenues and **Expenses** should be **recognized** (recorded) when the transaction that causes them occurs, **NOT** necessarily when cash is paid or received.

Basic accounting principles that determine **when** revenues and expenses are recorded:

1. Revenue principle
2. Matching principle

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Accrual Basis: Revenue Principle



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Revenue Principle

ALL 4 criteria must be met for *Revenue* to be *recognized*:

1. Delivery has occurred or services have been rendered;
2. There is persuasive evidence of an arrangement for customer payment;
3. The price is fixed or determinable; and
4. Collection is reasonably assured.

regardless of when cash is paid.

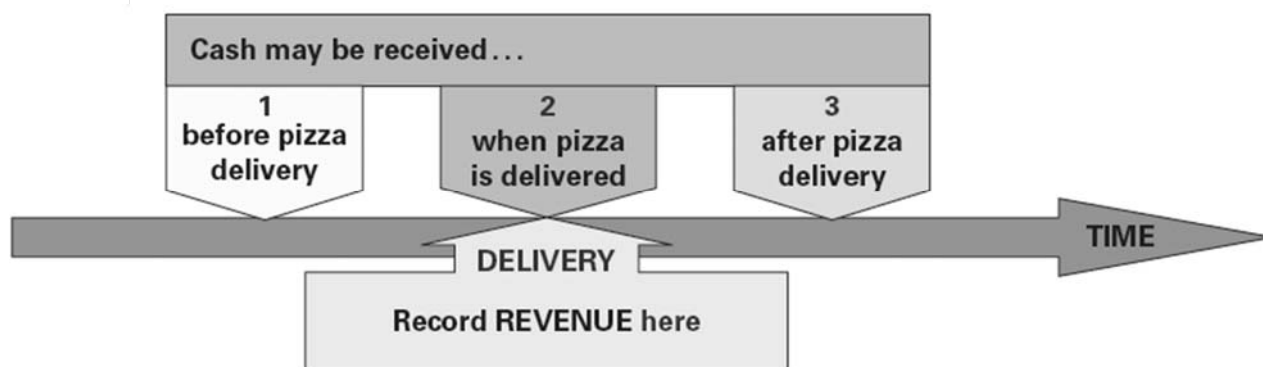
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Revenue Principle

Recording revenues v/s cash receipts



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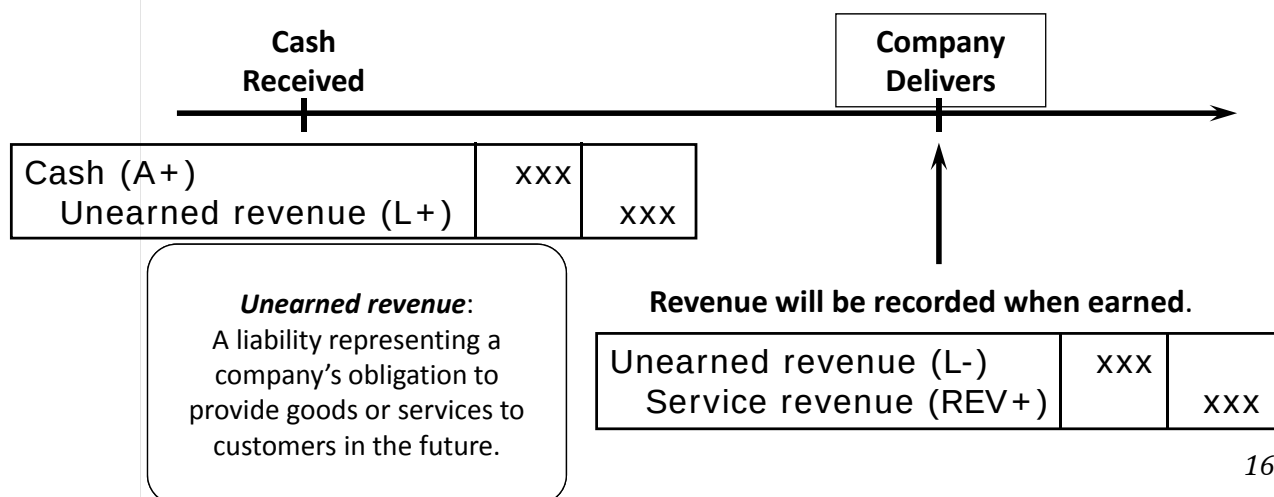


Revenue Principle

If cash is received **before** the company delivers goods or services, the liability account **UNEARNED REVENUE** is recorded.

When the company delivers the goods or services, **UNEARNED REVENUE** is reduced and **REVENUE** is recorded.

Cash received **before** revenue is earned -

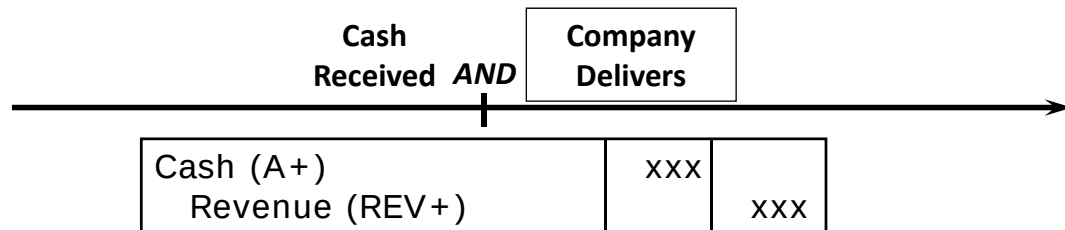


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Revenue Principle

When cash is received **on** the date the **Revenue** is earned, the following entry is made:



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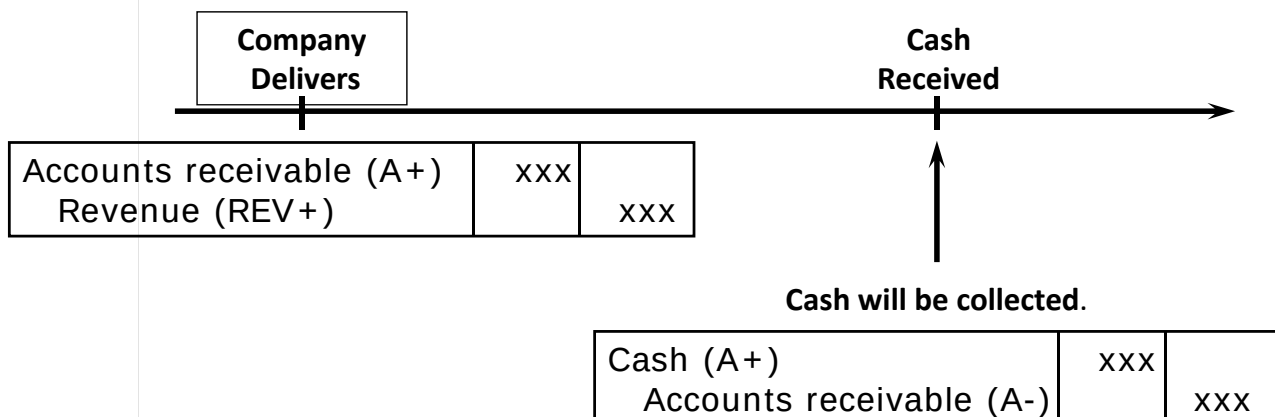


Revenue Principle

If cash is received **after** the company delivers goods or services, an asset **ACCOUNTS RECEIVABLE** is recorded.

When the cash is received the **ACCOUNTS RECEIVABLE** is reduced.

Cash received **after** revenue is earned -



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Accrual Basis: Matching Principle



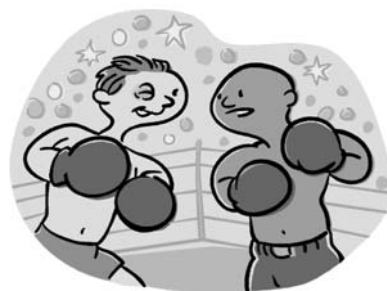
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Matching Principle

Expenses are ***recognized***
when they are incurred in generating revenue,
regardless of when cash is paid.



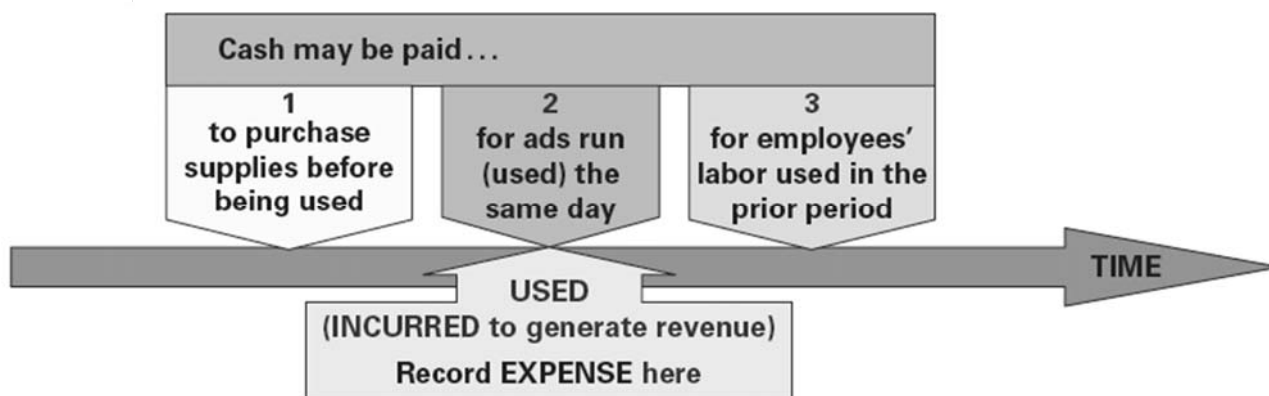
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Matching Principle

Recording expenses v/s cash payments



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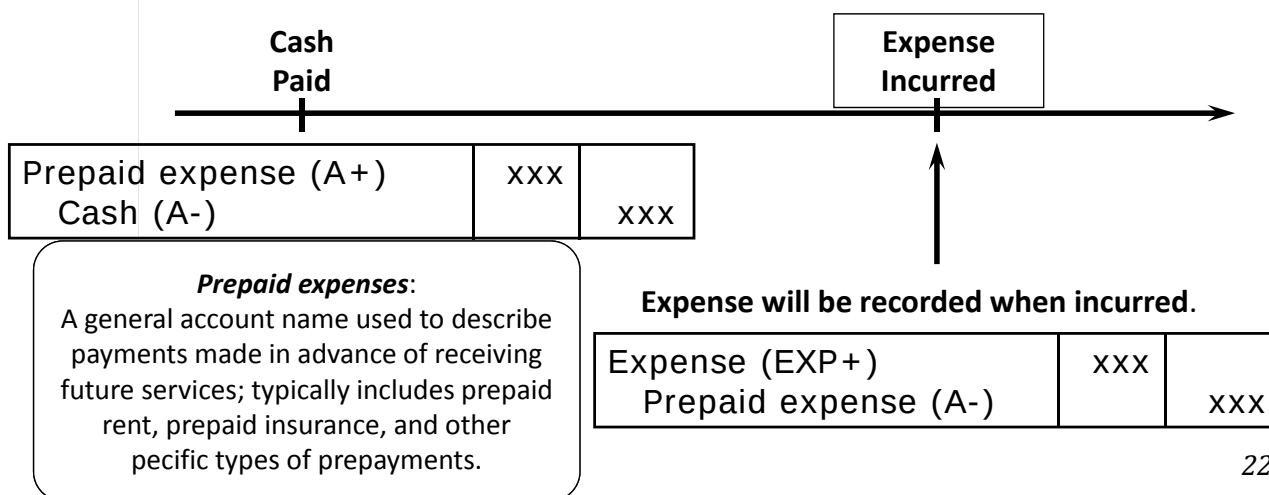


Matching Principle

If cash is paid **before** the company receives goods or services, an asset account, **PREPAID EXPENSE** is recorded.

When the expense is incurred **PREPAID EXPENSE** is reduced and an **EXPENSE** is recorded.

Cash is paid **before** expense is incurred -



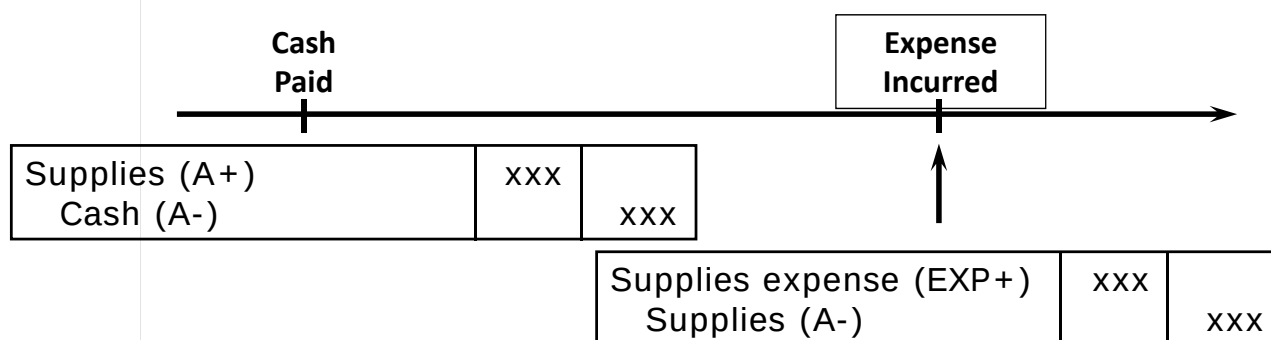
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Matching Principle

Typical assets and their related expense accounts include. . .

CASH PAID FOR	as USED over time becomes	EXPENSE
Supplies	→	Supplies expense
Prepaid insurance	→	Insurance expense
Buildings and equipment	→	Depreciation expense



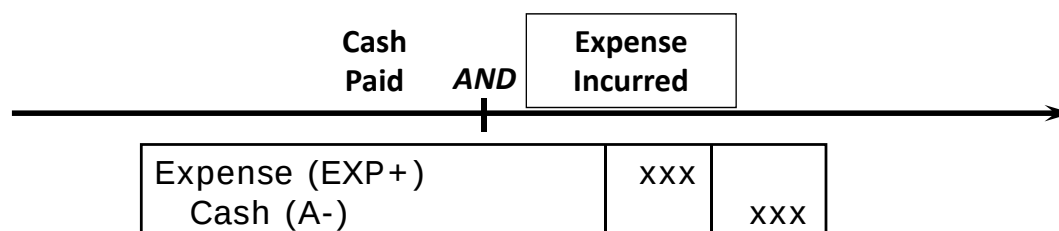
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Matching Principle

When cash is paid **on** the date the **Expense** is incurred, the following entry is made:



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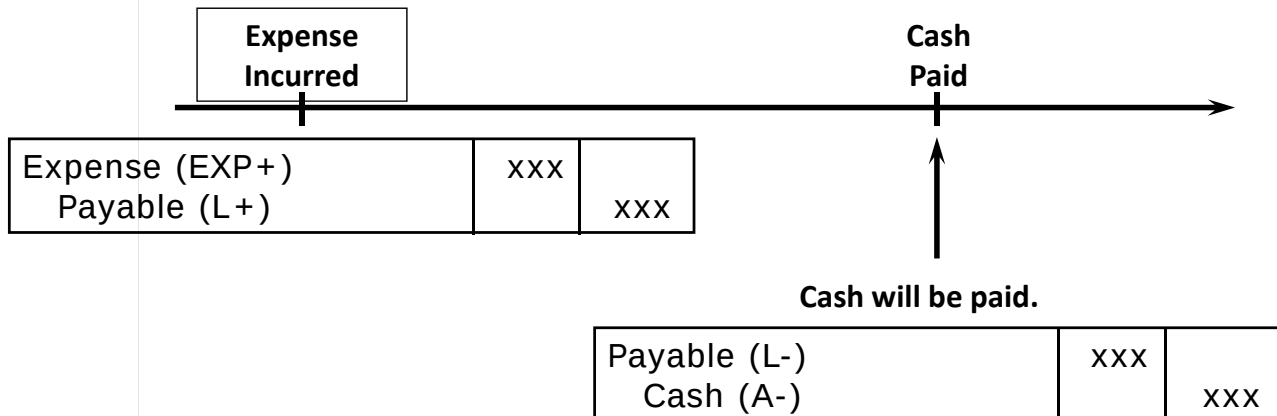
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Matching Principle

If cash is paid **after** the company receives goods or services,
a liability **PAYABLE** is recorded.
When cash is paid, the **PAYABLE** is reduced.

Cash paid **after** expense is incurred -



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A Question of Ethics

Management's Incentives to Violate Accounting Rules



Investors in the stock market base their decisions on their expectations of a company's future earnings. When companies announce quarterly and annual earnings information, investors evaluate how well the companies have met expectations and adjust their investing decisions accordingly. Companies that fail to meet expectations often experience a decline in stock price. Thus, managers are motivated to produce earnings results that meet or exceed investors' expectations to bolster stock prices. Greed may lead some managers to make unethical accounting and reporting decisions, often involving falsifying revenues and expenses. While this sometimes fools people for a short time, it rarely works in the long run and often leads to very bad consequences.

Fraud is a criminal offense for which managers may be sentenced to jail. Samples of fraud cases, a few involving faulty revenue and expense accounting, are shown below. Just imagine what it must have been like to be 65-year-old Bernie Ebbers or 21-year-old Barry Minkow, both sentenced to 25 years in prison for accounting fraud.

The CEO	The Fraud	Conviction/Plea	The Outcome
Bernard Madoff, 71 Madoff Investment Securities	Scammed \$50 billion from investors in a Ponzi scheme in which investors receive "returns" from money paid by subsequent investors.	Confessed, December 2008	Sentenced to 150 years
Bernie Ebbers, 65 Worldcom	Recorded \$11 billion in operating expenses as if they were assets.	Convicted, July 2005	Sentenced to 25 years
Sanjay Kumar, 44 Computer Associates	Recorded sales in the wrong accounting period.	Pleaded guilty, April 2006	Sentenced to 12 years
Martin Grass, 49 Rite Aid Corporation	Recorded rebates from drug companies before they were earned.	Pleaded guilty, June 2003	Sentenced to 8 years
Barry Minkow, 21 ZZZZ Best	Made up customers and sales to show profits when, in reality, the company was a sham.	Convicted, December 1988	Sentenced to 25 years

Many others are affected by fraud. Shareholders lose stock value, employees may lose their jobs (and pension funds, as in the case of Enron), and customers and suppliers may become wary of dealing with a company operating under the cloud of fraud. As a manager, you may face an ethical dilemma in the workplace. The ethical decision is the one you will be proud of 20 years later.

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The Expanded Transaction Analysis Model



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$$A = L + SE$$

Assets		=	Liabilities		+	Stockholders' Equity	
Debit (+)	Credit (-)		Debit (-)	Credit (+)		Debit (-)	Credit (+)
Accounts have debit balances				Accounts have credit balances			Accounts have credit balances

Contributed Capital		Retained Earnings	
Debit (-)	Credit (+)	Debit (-)	Credit (+)
	Investments by owners	Dividends declared	Net income

This is how Revenues and Expenses affect Retained Earnings.

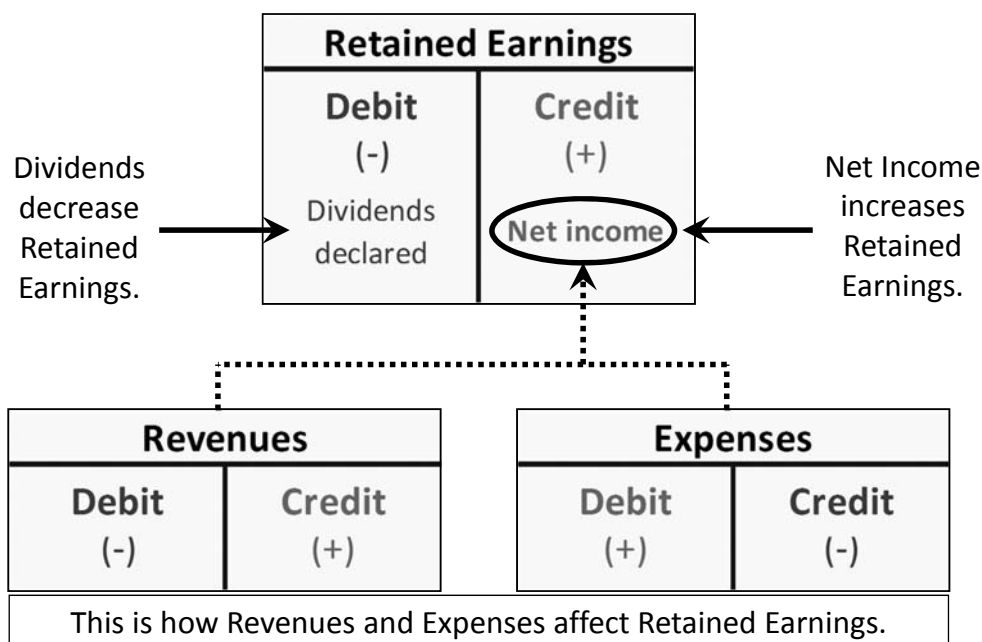
Revenues		Expenses	
Debit (-)	Credit (+)	Debit (+)	Credit (-)

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Expanded Transaction Analysis Model



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Analyzing Some of Papa John's Transactions

- (a) Papa John's restaurants sold pizza to customers for \$36,000 cash and sold \$30,000 in supplies to franchised restaurants, receiving \$21,000 cash with the rest due on account.

		Debit	Credit
(a) Cash (+A) [\$36,000 + \$21,000].....		57,000	
Accounts Receivable (+A)		9,000	
Restaurant Sales Revenue (+R, +SE)			66,000
Assets	=	Liabilities	+ Stockholders' Equity
Cash +57,000			Restaurant Sales Revenue (+R) +66,000
Accounts Receivable + 9,000			

Equality checks:

1. Debits \$66,000 equal Credits \$66,000,
2. The accounting equation is in balance.

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Analyzing Some of Papa John's Transactions

- (b) The cost of the dough, sauce, cheese, and other supplies for the restaurant sales in (a) on the previous screen was \$30,000.

				<u>Debit</u>	<u>Credit</u>
(b)	Cost of Sales (+E, -SE)			30,000	
	Supplies (-A)				30,000
	<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Stockholders' Equity</u>
	Supplies -30,000				Cost of Sales (+E) -30,000

Equality checks:

1. Debits \$30,000 equal Credits \$30,000,
2. The accounting equation is in balance.

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Analyzing Some of Papa John's Transactions

- (c) Papa John's sold new franchises for \$400 cash, earning \$100 immediately by performing services for franchisees; the rest will be earned over the next several months.

				<u>Debit</u>	<u>Credit</u>
(c)	Cash (+A)			400	
	Franchise Fee Revenue (+R, +SE)				100
	Unearned Franchise Fees (+L)				300
	<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Stockholders' Equity</u>
	Cash +400		Unearned Franchise Fees +300		Franchise Fee Revenue (+R) +100

for services
performed

for services
NOT yet performed

Equality checks:

1. Debits \$400 equal Credits \$400,
2. The accounting equation is in balance.

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Analyzing Some of Papa John's Transactions

- (d) In January, Papa John's paid \$7,000 for utilities, repairs, and fuel for delivery vehicles, all considered general and administrative expenses incurred during the month.

	<u>Debit</u>	<u>Credit</u>
(d) General and Administrative Expenses (+E, -SE)	7,000	
Cash (-A)		7,000

<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Stockholders' Equity</u>
Cash -7,000				General and Administrative Expenses (+E) -7,000

Equality checks:

1. Debits \$7,000 equal Credits \$7,000,
2. The accounting equation is in balance.

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Papa John's Statement of Financial Position Accounts

+ Cash (A) -				+ Accounts Receivable (A) -				+ Supplies (A) -			
Bal.	13,000			Bal.	24,000			Bal.	17,000		
(a)	57,000	7,000	(d)	(a)	9,000	12,800	(i)	(e)	29,000	30,000	(b)
(c)	400	9,000	(e)	Bal.	<u>20,200</u>			Bal.	<u>16,000</u>		
(h)	4,000	14,000	(f)								
(i)	15,500	9,000	(g)								
(k)	1,000	10,000	(j)								
Bal.	<u>41,900</u>										

+ Prepaid Expenses (A) -				+ Property and Equipment (A) -				- Accounts Payable (L) +			
Bal.	10,000			Bal.	200,000			(j)	10,000	29,000	Bal.
(g)	9,000				1,000	(h)			20,000	20,000	(e)
Bal.	<u>19,000</u>			Bal.	<u>199,000</u>				<u>39,000</u>		Bal.

- Unearned Franchise Fees (L) +											
	6,000		Bal.								
	300		(c)								
	<u>6,300</u>		Bal.								

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Papa John's Statement of Income Accounts

Beginning balances start at zero.

— Restaurant Sales Revenue (R) +			— Franchise Fee Revenue (R) +			— Gain on Sale of Land (R) +		
	0	Bal.		0	Bal.		0	Bal.
	66,000	(a)		100	(c)		3,000	(h)
	<u>66,000</u>	Bal.		2,700	(i)		<u>3,000</u>	Bal.
				<u>2,800</u>	Bal.			
— Investment Income (R) +			+ Cost of Sales (E) —			+ Salaries Expense (E) —		
	0	Bal.	Bal.	0		Bal.	0	
	1,000	(k)	(b)	30,000		(f)	14,000	
	<u>1,000</u>	Bal.	Bal.	<u>30,000</u>		Bal.	<u>14,000</u>	
+ General and Administrative Expenses (E) —								
Bal.	0							
(d)	7,000							
Bal.	<u>7,000</u>							

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How are Financial Statements Prepared and Analyzed ?

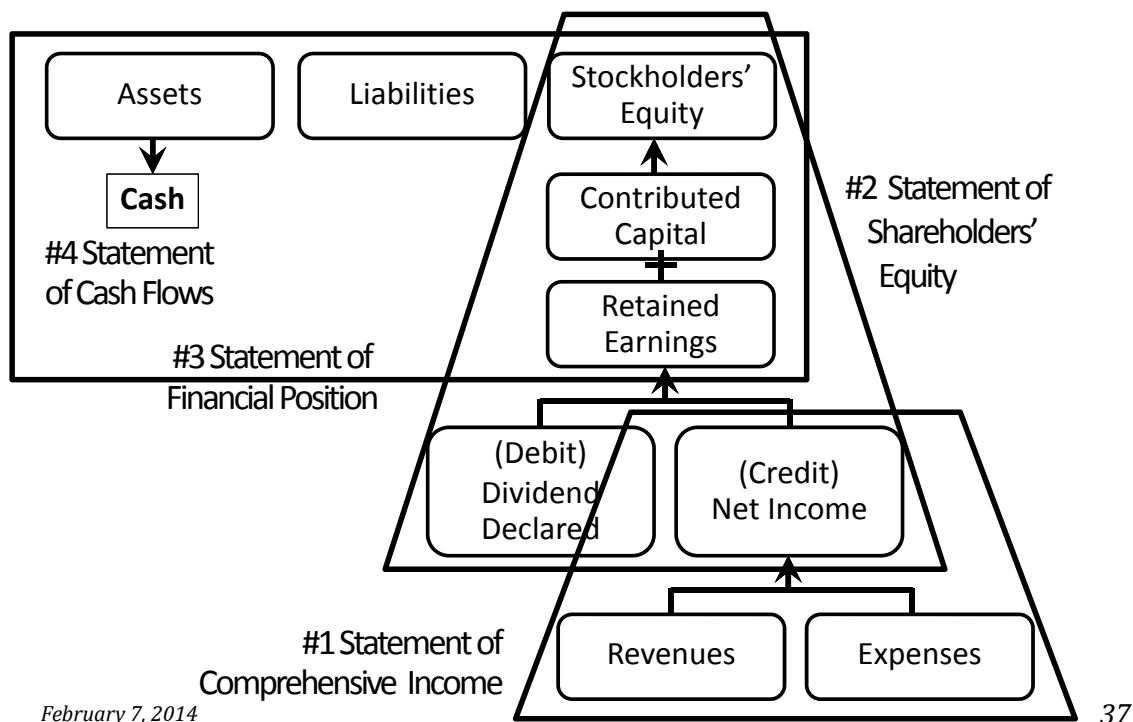


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How Are Financial Statements Prepared and Analyzed ?



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How Are Financial Statements Prepared and Analyzed ?

Statement	Formula
#1 Income Statement	Revenues – Expenses = Net Income
#2 Statement of Stockholders' Equity	$\text{Beginning Retained Earnings} + \text{Net Income} - \text{Dividends Declared} = \text{Ending Retained Earnings}$ $\text{Beginning Contributed Capital} + \text{Stock Issuances} - \text{Stock Repurchases} = \text{Ending Contributed Capital}$ $\text{Ending Retained Earnings} + \text{Ending Contributed Capital} = \text{Ending Stockholders' Equity}$
#3 Balance Sheet	$\text{Assets} = \text{Liabilities} + \text{Stockholders' Equity}$ (includes Cash)
#4 Statement of Cash Flows	$\begin{aligned} &\text{Cash provided by (or used in) Operating Activities} \\ &+/- \text{Cash provided by (or used in) Investing Activities} \\ &+/- \text{Cash provided by (or used in) Financing Activities} \\ &\hline &\text{Change in Cash} \\ &+ \text{Beginning Cash} \\ &\hline &\text{Ending Cash} \end{aligned}$



1. Statement of Comprehensive Income

PAPA JOHN'S INTERNATIONAL, INC. Consolidated Statement of Income (before adjustments) For the Month Ended January 31, 2009 (dollars in thousands)	
Operating Revenues	
Restaurant sales revenue	\$66,000
Franchise fee revenue	2,800
Total revenues	68,800
Operating Expenses	
Cost of sales	30,000
Salaries expense	14,000
General and administrative expenses	7,000
Supplies expense	0
Rent expense	0
Insurance expense	0
Utilities expense	0
Depreciation expense	0
Other operating expenses	0
Total expenses	51,000
Operating Income	17,800
Other Items	
Investment income	1,000
Interest expense	(0)
Gain on sale of land	3,000
Income before Income Taxes	21,800
Income tax expense	0
Net Income	\$21,800
Earnings per Share (for the month)	\$ 0.78

Note:

Normally, accounts with zero balances are not included on formal statements. However, we include them here to indicate that there are numerous expenses and revenues to be determined and recorded in the adjustment process described in Chapter 4.

\$21,800,000 unadjusted net income divided by approximately 28,100,000 shares (from Papa John's annual report)

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2. Statement of Shareholders' Equity

PAPA JOHN'S INTERNATIONAL, INC. Consolidated Statement of Stockholders' Equity (before adjustments) Month Ended January 31, 2009 (dollars in thousands)			
	Contributed Capital	Retained Earnings	Total Stockholders' Equity
Beginning balance, December 31, 2008	\$7,000	\$123,000	\$130,000
Additional stock issuances	2,000		2,000
Net income (prior to adjustments)		21,800	21,800
Dividends declared		(3,000)	(3,000)
Ending balance, January 31, 2009	<u>\$9,000</u>	<u>\$141,800</u>	<u>\$150,800</u>

The net income (\$21,800) comes from Statement of Comprehensive Income we just prepared.



3. Statement of Financial Position

PAPA JOHN'S INTERNATIONAL, INC.
Consolidated Balance Sheet (before adjustments)
January 31, 2009
(dollars in thousands)

ASSETS	
Current Assets	
Cash	\$ 41,900
Accounts receivable	20,200
Supplies	16,000
Prepaid expenses	19,000
Other current assets	13,000
Total current assets	110,100
Investments	2,000
Property and equipment (net)	199,000
Notes receivable	11,000
Intangibles	77,000
Other assets	36,000
Total Assets	\$435,100
LIABILITIES AND STOCKHOLDERS' EQUITY	
Current Liabilities	
Accounts payable	\$ 39,000
Dividends payable	3,000
Accrued expenses payable	71,000
Total current liabilities	113,000
Unearned franchise fees	6,300
Notes payable	138,000
Other long-term liabilities	27,000
Total liabilities	284,300
Stockholders' Equity	
Contributed capital	9,000
Retained earnings	141,800
Total stockholders' equity	150,800
Total liabilities and stockholders' equity	\$435,100

*From the Statement of
Stockholders' Equity*

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4. Statement of Cash Flows

Operating activities

Cash received:	Customers	+
	Interest and dividends on investments	+
Cash paid:	Suppliers	-
	Employees	-
	Interest on debt obligations	-
	Income taxes	-

Cash Flows from Operating Activities

Effect on Cash Flows

Total

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4. Statement of Cash Flows

Direct approach to preparing operating cash flows.

	Effect on Cash Flows
Operating activities	
Cash received: Customers	+
Interest and dividends on investments	+
Cash paid: Suppliers	-
Employees	-
Interest on debt obligations	-
Income taxes	-
Cash Flows from Operating Activities	Total
Investing Activities	
Purchase of property, plant or equipment	-
Purchase of other long-term assets	-
Sale of property, plant or equipment	+
Sale of other long-term assets	+
Cash Flows from Investing Activities	Total
Financing Activities	
Issuance of long-term debt	+
Issuance of contributed capital	+
Dividends paid	-
Repurchase of long-term debt	-
Repurchase of contributed capital	-
Cash Flows from Financing Activities	Total
Net increase or (decrease) in cash	
Beginning balance in cash account	
Ending balance in cash account	

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Total Asset Turnover Ratio

$$\text{Total Asset Turnover Ratio} = \frac{\text{Sales (or Operating) Revenues}}{\text{Average Total Assets}}$$

$$(\text{Beginning total assets} + \text{ending total assets}) \div 2$$

Papa John's Total Asset Turnover Ratio for 2008 (dollars in thousands):

$$\frac{\$1,132,000}{(\$402,000 + \$386,000) \div 2} = 2.87$$

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