

# Small Business Management <sup>19e</sup>

LAUNCHING AND GROWING ENTREPRENEURIAL VENTURES

Longenecker · Petty · Palich · Hoy



## CHAPTER

# 10

Understanding a Firm's Financial Statements

# Understanding Financial Statements

**Start by answering this question:**

What is meant by the term  
“creative accounting”?

**03:00**

## Financial Statements (Accounting Statements)

- Reports of a firm’s financial performance and resources
  - Helps determine a startup’s financial requirements
  - Assesses the financial implications of a business plan

**One of the First things to learn:**

- **Which numbers are most important to watch?**
- **Watch them like a hawk**

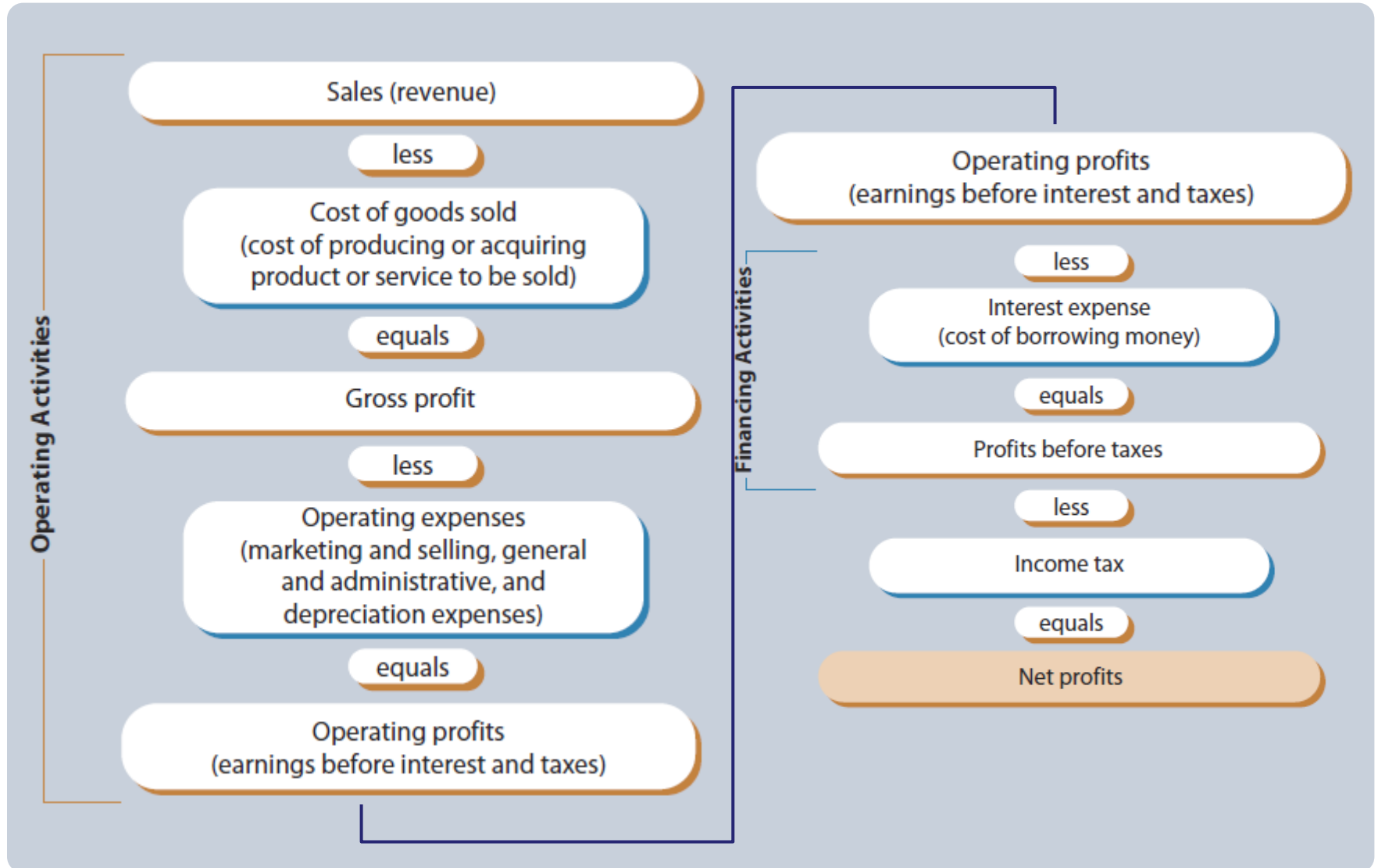


# Understanding the Income Statement

## Income Statement

- A report showing the **profit or loss** from a firm's operations over a given period of time.
- “How profitable is the business?”
  - Sales (revenue) – Expenses = Profits (income)
    - Revenue from product or service sales
    - Costs of producing product/service (cost of goods sold)
    - Operating expenses (marketing, selling, general and administrative expenses, and depreciation)
    - Financing costs (interest paid)
    - Tax payments

## The Income Statement: An Overview



# Amortization

Can only write off interest portion as an expense

**Loan Amount:** 200000  
**Interest Rate:** 5.25 %  
**Term (Years):** 30  
**Monthly Payment:** 1104.41 ←  
**Total of All Payments:** 397586.67  
**Total Interest Paid:** 197586.67

**Loan Amount:** 200000  
**Interest Rate:** 5.25 %  
**Term (Years):** 15  
**Monthly Payment:** 1607.76 ←  
**Total of All Payments:** 289395.98  
**Total Interest Paid:** 89395.98

Month	Interest Paid	Principle Paid	Remaining Balance
1	875.00	229.41	199,770.59
2	874.00	230.41	199,540.18
3	872.99	231.42	199,308.76
4	871.98	232.43	199,076.33
5	870.96	233.45	198,842.88
6	869.94	234.47	198,608.41
7	868.91	235.50	198,372.92
8	867.88	236.53	198,136.39
9	866.85	237.56	197,898.83
10	865.81	238.60	197,660.23
11	864.76	239.64	197,420.59
12	863.72	240.69	197,179.89
13	862.66	241.75	196,938.15
14	861.60	242.80	196,695.35

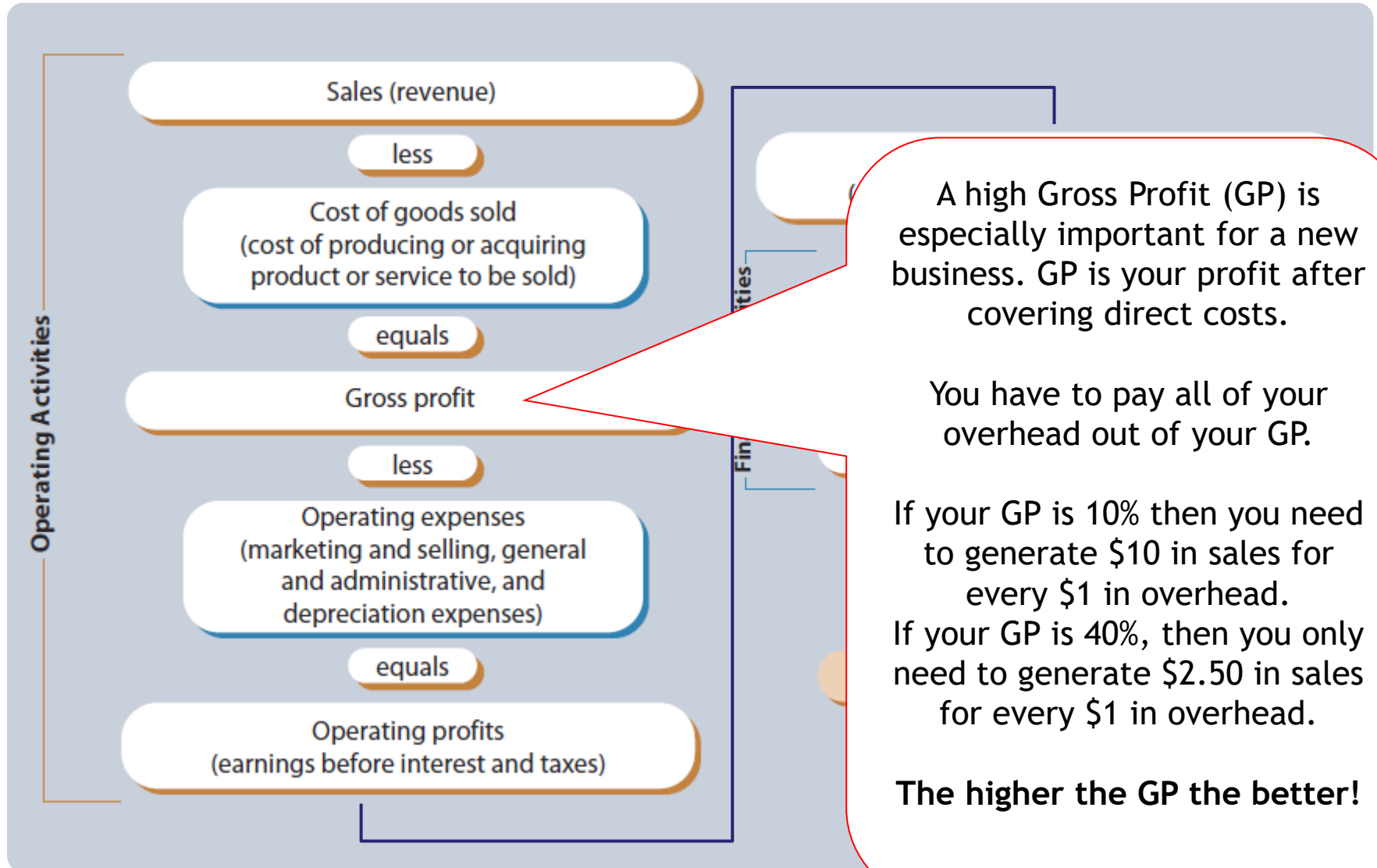
Month	Interest Paid	Principle Paid	Remaining Balance
1	875.00	732.76	199,267.24
2	871.79	735.96	198,531.28
3	868.57	739.18	197,792.10
4	865.34	742.41	197,049.69
5	862.09	745.66	196,304.02
6	858.83	748.93	195,555.10
7	855.55	752.20	194,802.90
8	852.26	755.49	194,047.40
9	848.96	758.80	193,288.61
10	845.64	762.12	192,526.49
11	842.30	765.45	191,761.04
12	838.95	768.80	190,992.24
13	835.59	772.16	190,220.07
14	832.21	775.54	189,444.53

349	56.37	1,048.04	11,835.54
350	51.78	1,052.63	10,782.91
351	47.18	1,057.23	9,725.68
352	42.55	1,061.86	8,663.82
353	37.90	1,066.50	7,597.32
354	33.24	1,071.17	6,526.15
355	28.55	1,075.86	5,450.29
356	23.85	1,080.56	4,369.73
357	19.12	1,085.29	3,284.44
358	14.37	1,090.04	2,194.40
359	9.60	1,094.81	1,099.60
360	4.81	1,099.60	0.00

169	82.06	1,525.70	17,229.74
170	75.38	1,532.38	15,697.36
171	68.68	1,539.08	14,158.28
172	61.94	1,545.81	12,612.47
173	55.18	1,552.58	11,059.89
174	48.39	1,559.37	9,500.53
175	41.56	1,566.19	7,934.34
176	34.71	1,573.04	6,361.29
177	27.83	1,579.92	4,781.37
178	20.92	1,586.84	3,194.53
179	13.98	1,593.78	1,600.75
180	7.00	1,600.75	0.00

## 10.1

## The Income Statement: An Overview



# Paper Profit

Looking at the income statement:

Which parts are often referred to as "**paper profit**"?

Deceptive nature of

(1) "depreciation", and

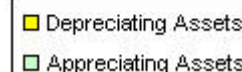
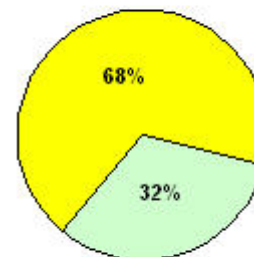
(2) "interest-only" accounting on debt repayment.

# Statement of Personal Net Worth

Statement of Personal Net Worth		
	Current Value	Percent of Total
<b>Cash Assets</b>		
Bank Accounts & Cash	\$13,000.00	15.48%
Money Market & CDs	\$0.00	0.00%
<b>Investments</b>		
Bonds	\$0.00	0.00%
Stocks	\$2,000.00	2.38%
Mutual Funds	\$5,000.00	5.95%
Annuities	\$0.00	0.00%
IRA's (Reg & Roth)	\$7,000.00	8.33%
Retirement Plans	\$0.00	0.00%
Businesses Owned	\$0.00	0.00%
Rental Real Estate	\$0.00	0.00%
<b>Personal Assets</b>		
Household Possessions	\$15,000.00	17.86%
Primary Home	\$0.00	0.00%
Automobiles	\$35,000.00	41.67%
Equipment and Other	\$7,000.00	8.33%
<b>Total Assets</b>	<b>\$84,000.00</b>	<b>100.00%</b>
<b>Liabilities</b>		
Mortgages	\$0.00	0.00%
Business or Personal Loans	\$0.00	0.00%
Rental Real Estate Loans	\$0.00	0.00%
Automobile Loans	\$14,500.00	100.00%
Credit Cards (Balance Only)	\$0.00	0.00%
Other	\$0.00	0.00%
<b>Total Liabilities</b>	<b>\$14,500.00</b>	<b>100.00%</b>
<b>Net Worth</b>	<b>\$69,500.00</b>	

How much are you worth?

Notice the percentage of depreciating assets



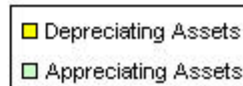
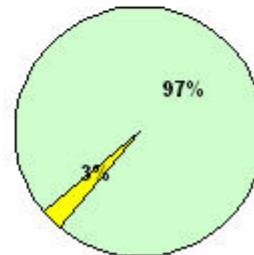


# Statement of Personal Net Worth

Statement of Personal Net Worth		
	Current Value	Percent of Total
<b>Cash Assets</b>		
Bank Accounts & Cash	\$26,000.00	1.30%
Money Market & CDs	\$10,000.00	0.50%
<b>Investments</b>		
Bonds	\$89,000.00	4.46%
Stocks	\$2,300.00	0.12%
Mutual Funds	\$23,000.00	1.15%
Annuities	\$47,000.00	2.36%
IRA's (Reg & Roth)	\$0.00	0.00%
Retirement Plans	\$58,000.00	2.91%
Businesses Owned	\$0.00	0.00%
Rental Real Estate	\$900,000.00	45.13%
<b>Personal Assets</b>		
Household Possessions	\$40,000.00	2.01%
Primary Home	\$780,000.00	39.11%
Automobiles	\$15,000.00	0.75%
Equipment and Other	\$4,000.00	0.20%
<b>Total Assets</b>	<b>\$1,994,300.00</b>	<b>100.00%</b>
<b>Liabilities</b>		
Mortgages	\$0.00	0.00%
Business or Personal Loans	\$0.00	0.00%
Rental Real Estate Loans	\$306,000.00	100.00%
Automobile Loans	\$0.00	0.00%
Credit Cards (Balance Only)	\$0.00	0.00%
Other	\$0.00	0.00%
<b>Total Liabilities</b>	<b>\$306,000.00</b>	<b>100.00%</b>
<b>Net Worth</b>	<b>\$1,688,300.00</b>	

Over time . . .

Notice the percentage of appreciating assets

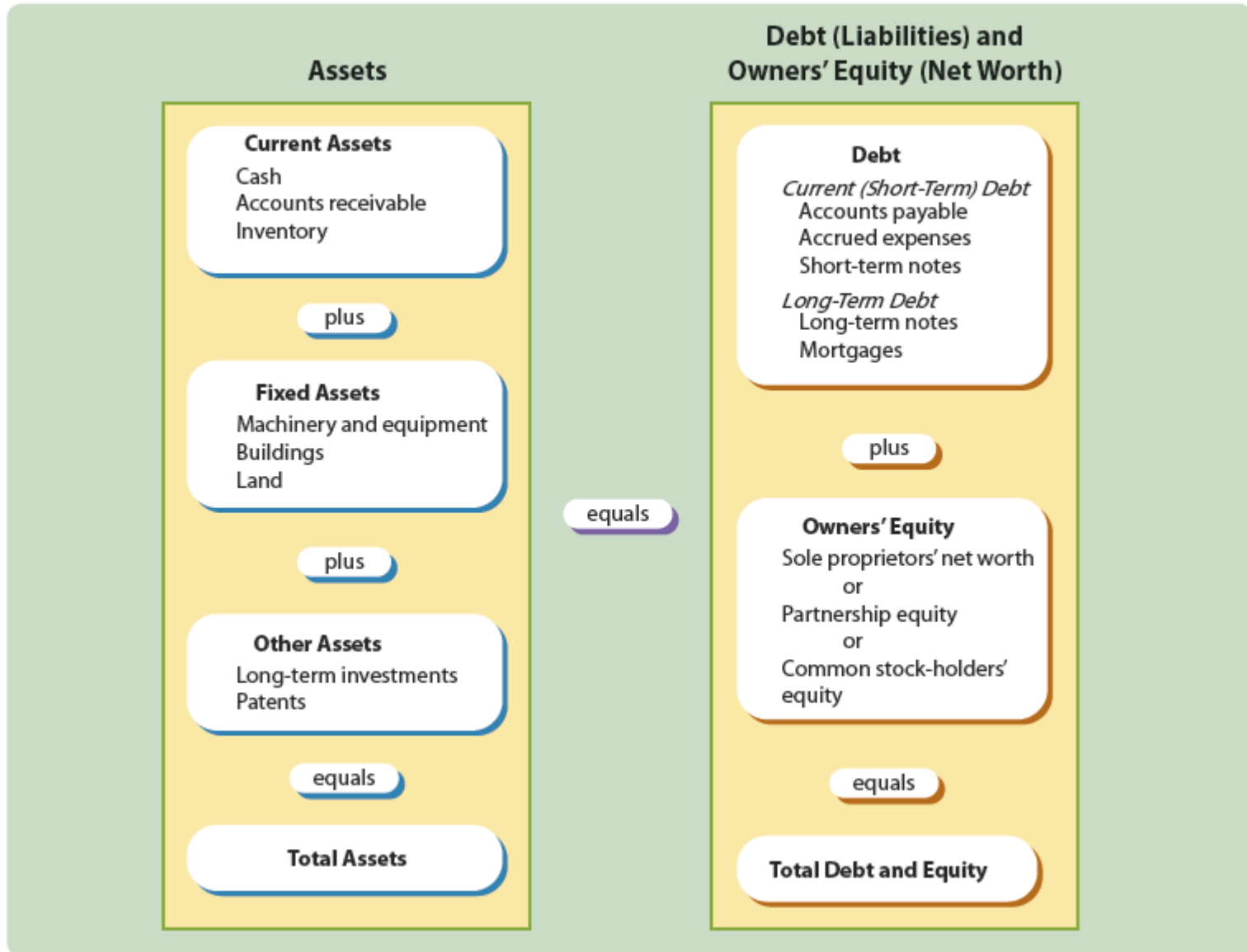


# The Balance Sheet

- Balance Sheet
  - A report showing a firm's assets, liabilities, and owners' equity at a specific point in time
  - **Total Assets = Debt + Owner's equity**



## The Balance Sheet: An Overview



# Profits Versus Cash Flows

- Accrual-Basis Accounting
  - Matches revenues when they are earned against the expenses associated with those revenues.
    - Sales reflect both cash and credit (noncash) sales.
    - Inventory purchased on credit is a noncash expense.
    - Depreciation is a noncash expense.
    - Income tax is accrued and not entirely expensed.
- Cash-Basis Accounting
  - Reports transactions **only when cash is received or a payment is made.**

# Create Your Personal Cash Budget

Personal Cash Flow Budget												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>Income:</b>												
Salary/ wages	1800	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Commissions	150	100	75	125	135	175	80	115	80	75	90	125
Interest Earned	28	28	28	28	30	30	30	34	34	35	38	38
Investment Income	0	0	0	0	0	400	0	0	0	0	0	400
Loans Repaid to us	300	0	0	0	0	0	0	0	0	0	0	0
<b>Total Income</b>	<b>2278</b>	<b>2228</b>	<b>2203</b>	<b>2253</b>	<b>2265</b>	<b>2705</b>	<b>2210</b>	<b>2249</b>	<b>2214</b>	<b>2210</b>	<b>2228</b>	<b>2663</b>
<b>Cash Expenses:</b>												
Rent/ Mortgage	900	900	900	900	900	900	900	900	900	900	900	900
Utilities	100	100	100	100	100	100	150	150	100	100	100	100
Telephone	150	75	70	125	65	115	125	40	80	70	80	170
Groceries	100	100	100	100	100	125	125	100	100	100	100	100
Clothing	200	0	0	175	50	0	60	0	115	0	225	70
Entertainment	240	60	50	175	80	155	200	800	60	55	70	125
Credit Card	50	40	60	35	55	45	60	600	70	40	60	800
Insurance	0	450	0	0	0	0	0	450	0	0	0	0
Property tax	0	0	1500	0	0	0	0	0	1500	0	0	0
Vehicle Expenses	100	100	600	100	100	100	100	100	350	100	100	100
Car Loan	150	150	150	150	150	150	150	150	150	150	150	150
<b>Total Expenses</b>	<b>1990</b>	<b>1975</b>	<b>3530</b>	<b>1860</b>	<b>1600</b>	<b>1690</b>	<b>1870</b>	<b>3290</b>	<b>3425</b>	<b>1515</b>	<b>1785</b>	<b>2515</b>
"+" or (-)	288	253	(1327)	393	665	1015	340	(1041)	(1211)	695	443	148
<b>Beginning Cash</b>	0	288	541	(786)	(393)	272	1287	1627	586	(625)	70	513
<b>Cash on Hand</b>	<b>288</b>	<b>541</b>	<b>(786)</b>	<b>(393)</b>	<b>272</b>	<b>1287</b>	<b>1627</b>	<b>586</b>	<b>(625)</b>	<b>70</b>	<b>513</b>	<b>661</b>

# The Cash Flow Statement

## Cash Flow Statement

- A financial report showing a firm's **income (cash) when it is received and expenses when they are paid.**
  - Cash flows from normal operations (**operating activities**)
  - Cash flows related to the investment in or sale of assets (**investment activities**)
  - Cash flows related to financing the firm (**financing activities**)
- Short [Video](#)



# Cash Flow Patterns

## CASH FLOW RELATED TO

Cash Flow Pattern	Operation	Investments	Financing
1	+	-	+
2	+	-	-
3	-	+	+
4	-	-	+

- Pattern 1.** This firm has positive cash flows from operations, negative investment cash flows, and positive cash flows from financing. It is using its cash flows from operations and new financing to expand the firm's operations.
- Pattern 2.** This firm is using cash flows from operations to expand the business, pay down debt, and/or pay its owners.
- Pattern 3.** This firm is encountering negative cash flows from operations, which are being covered by selling assets and by borrowing or acquiring more equity financing.
- Pattern 4.** This firm has negative cash flows from operations and is growing the company's fixed assets through increased financing. This firm is a startup business that has yet to break even, is investing in assets to produce future cash flows, and is having to raise capital to make that happen.

# Small Business Management <sup>19e</sup>

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## CHAPTER

# 11

Forecasting Financial  
Requirements



# The Purpose of Financial Forecasting

- Pro Forma Financial Statements (**Projections**)
  - Project a firm's financial performance and condition
  - Purposes of pro forma statements:
    1. How **profitable** is the firm be expected to be, given the projected sales levels and the expected sales–expense relationships?
    2. How much and what type of financing (**debt or equity**) will be needed to finance the firm's assets?
    3. Will the firm have **adequate cash flows**? If so, how will they be used; if not, where will the additional cash come from?

# Forecasting Profitability

## Net Income Depends On:

- Amount of sales
- Cost of goods sold
- Operating expenses
- Interest expense
- Taxes

“If we’re doing so well,  
then why am I always  
so broke?”

## Assets-to-Sales Financing Relationships



# Risk Management Association (RMA)

<http://www.rmahq.org>

<https://www.rmahq.org/annual-statement-studies/> - see the ratios and sample report

Balance sheet, income statement, and ratio analysis data for companies, based on their 6-digit NAICS.

– Get NAICS and SIC from my web page

[http://instruction2.mtsac.edu/rjagodka/NAICS/naics\\_2007\\_keyword.asp](http://instruction2.mtsac.edu/rjagodka/NAICS/naics_2007_keyword.asp)

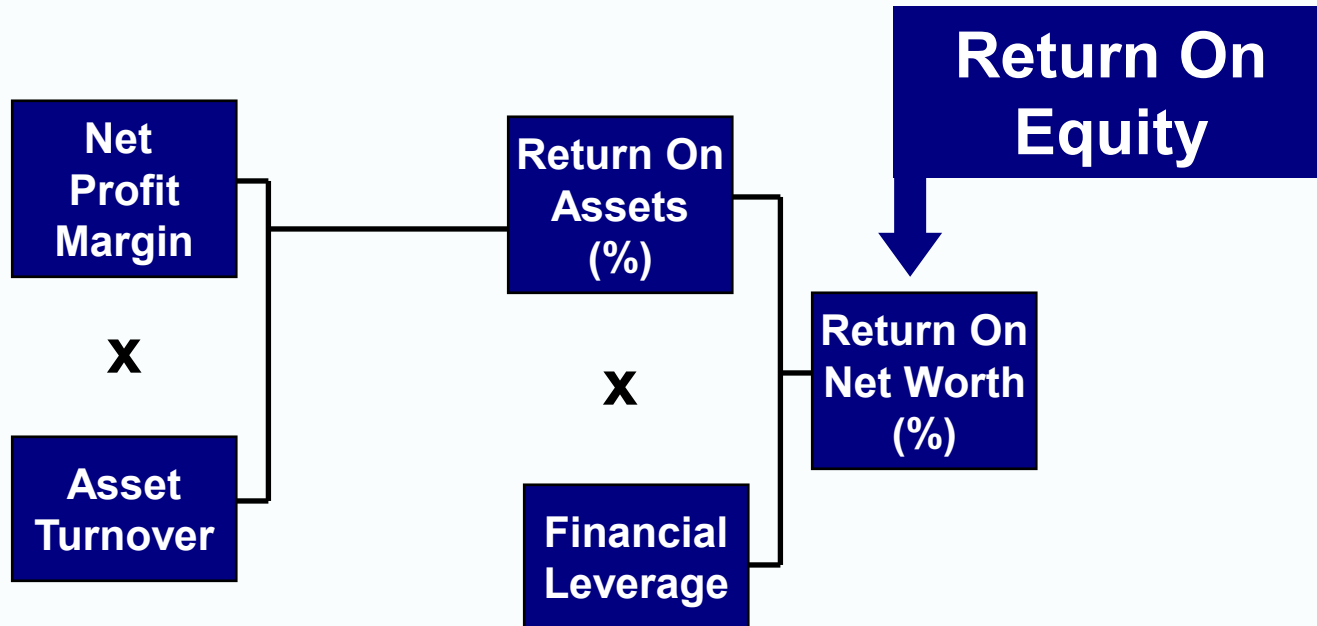
## **RMA:**

- Has current data based on small, small-med, med-large, and large firms (sales volume)
- Has historic data based on all firms for the most recent 3 years

## **Annual Statement Studies is available in three convenient formats:**

- ▶ **"The Books"** – National data is available in traditional print format for both *Financial Ratio Benchmarks (FRB)* and *Industry Default Probabilities and Cash Flow Measures (IDP)*.
- ▶ **Via the Web, eStatement Studies** – This valuable service combines both *Statement Studies* books—*Financial Ratio Benchmarks (FRB)* and *Industry Default Probabilities and Cash Flow Measures (IDP)*—plus regional breakouts, all via the Web.
- ▶ **Individual NAICS downloads** – Single industry data is available online 24/7 by individual NAICS (North American Industry Classification System) codes. You'll get the same timely, high-quality information displayed exactly as it appears in the printed format.

# DuPont Analysis Simplified



The above calculations may not be clear  
– so let's look at some details . . .

# DuPont Analysis

## DuPont System - Can Play “What if . . .”

*The DuPont System summarizes key relationships which determine the overall performance of the firm.*

**Return On Equity**



**Return On Net Worth (%)**

**Asset Management**

**Return On Assets (%)**

**x**

**Financial Leverage**

**Profit Management**

**Total Assets**

**Net Worth**

**Operating Strategy**

**Net Profit Margin**

**x**

**Asset Turnover**

**Financial Strategy**

**Net Profit**

**Sales**

**Sales**

**Total Assets**

**Gross Margin**

**Total Expenses**

**Current Assets**

**Fixed Assets**

**Sales**

**Cost of Goods Sold**

**Inventory**

**Accounts Receivable**

**Other Assets**

