



## Cash-Flow Analysis,

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Fundamentals of Financial Management, 12/e  
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## Statement of Cash Flows:

- ◆ The connection between two successive balance sheets & the statement of cash flows can be shown :

$$a. \quad \text{Assets} = \text{Liabilities} + \text{Owners' equity}$$

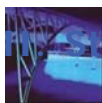
$$b. \quad \text{Cash} + \text{Noncash assets} = \text{Liabilities} + \text{Owners' equity}$$

$$c. \quad \text{Cash} = \text{Liabilities} - \text{Noncash assets} + \text{Owners' equity}$$

$$d. \quad \Delta \text{Cash} = \Delta \text{Liab} - \Delta \text{Noncash assets} + \Delta \text{Owners' equity}$$

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## Statement of Cash Flows:

$$\Delta \text{Cash} = \Delta \text{Liab} - \Delta \text{Noncash assets} + \Delta \text{Owners' equity}$$

- The cash flow statement simultaneously provides an **explanation** of why a firm's cash position has **changed** between successive balance sheet dates and **explains** changes that have taken place in the firm's noncash asset, liability, and stockholders' equity accounts over the same time period.

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## II. Statement of Cash Flows:

- ◆ The change in a firm's cash position **between successive balance sheet dates** will not equal the **reported earnings** for that period.



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## Flow of Funds Statement

A summary of a firm's changes in financial position from one period to another; it is also called a **sources and uses of funds statement** or a **statement of changes in financial position**.

Has been replaced by the **cash flow statement** (1989) in U.S. audited annual reports.

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## Flow of Funds Statement

What are “funds”?

All of the firm's **investments and claims** against those investments.

Extends **beyond just** transactions involving **cash**.

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## Sources and Uses Statement

The letters labeling the boxes stand for **Uses**, **Sources**, **Assets**, and **Liabilities** (broadly defined). The pluses (minuses) indicate increases (decreases) in assets or liabilities.

	A	L
S	-	+
U	+	-

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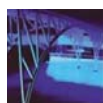


## BW's Determination of Sources and Uses

Assets	2007	2006	+/-	S/U
Cash and C.E.	\$ 90	\$ 100	-	S
Acct. Rec.	394	410	-	S
Inventories	696	616	+	U
Prepaid Exp	5	5	-	U
Accum Tax Prepay	10	9	+	U
Current Assets	\$ 1,195	\$ 1,140		N/A
Fixed Assets (@Cost)	1030	930		N/A
Less: Acc. Depr.	(329)	(299)		N/A
Net Fix. Assets	\$ 701	\$ 631	+	U
Investment, LT	50	50		-
Other Assets, LT	223	223		-
Total Assets	\$ 1,424	\$ 1,444		

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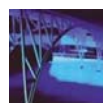
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## BW's Determination of Sources and Uses

Assets	2007	2006	+/-	S/U
Cash and C.E.	\$ 90	\$ 100	\$10	S
Acct. Rec.	394	410	16	S
Inventories	696	616	80	U
Prepaid Exp	5	5	--	
Accum Tax Prepay	10	9	1	U
<b>Current Assets</b>	<b>\$ 1,195</b>	<b>\$ 1,140</b>		N/A
Fixed Assets (@Cost)	1030	930		N/A
Less: Acc. Depr.	(329)	(299)		N/A
<b>Net Fix. Assets</b>	<b>\$ 701</b>	<b>\$ 631</b>	70	U
Investment, LT	50	50	--	
Other Assets, LT	223	223	--	
<b>Total Assets</b>	<b>\$ 2,469</b>	<b>\$ 2,244</b>		

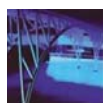
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## BW's Determination of Sources and Uses

Liabilities and Equity	2007	2006	+/-	S/U
Notes Payable	\$ 290	\$ 295	-	U
Acct. Payable	94	94	--	
Accrued Taxes	16	16	--	
Other Accrued Liab.	100	100	--	
<b>Current Liab.</b>	<b>\$ 500</b>	<b>\$ 505</b>		N/A
<b>Long-Term Debt</b>	<b>530</b>	<b>453</b>	77	S
<b>Shareholders' Equity</b>				
Com. Stock (\$1 par)	200	200	--	
Add Pd in Capital	729	729	--	
Retained Earnings	210	157	53	S
<b>Total Equity</b>	<b>\$ 1,139</b>	<b>\$ 1,086</b>		N/A
<b>Total Liab/Equity</b>	<b>\$ 2,469</b>	<b>\$ 2,244</b>		

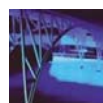
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## BW's Determination of Sources and Uses

Liabilities and Equity	2007	2006	+/-	S/U
Notes Payable	\$ 290	\$ 295	\$ 5	U
Acct. Payable	94	94	--	
Accrued Taxes	16	16	--	
Other Accrued Liab.	100	100	--	
<b>Current Liab.</b>	<b>\$ 500</b>	<b>\$ 505</b>		N/A
<b>Long-Term Debt</b>	<b>530</b>	<b>453</b>	77	S
<b>Shareholders' Equity</b>				
Com. Stock (\$1 par)	200	200	--	
Add Pd in Capital	729	729	--	
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<b>Total Equity</b>	<b>\$ 1,139</b>	<b>\$ 1,086</b>		N/A
<b>Total Liab/Equity</b>	<b>\$ 2,469</b>	<b>\$ 2,244</b>		

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## "Basic" Sources and Uses Statement

SOURCES	
Increase, Retained Earnings	\$ 53
Decrease, Accounts Receivable	16
Increase, Long-Term Debt	77
Decrease, Cash + Cash Equivalents	10
<b>USES</b>	<b>\$156</b>
Increase, Inventories	\$80
Increase, Accum Tax Prepay	1
Decrease, Notes Payable	5
Increase, Net Fixed Assets	70
	<b>\$156</b>

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## Adjusting the “Basic” Sources and Uses Statement

The following three slides are  
Basket Wonders’ Balance Sheet  
and Income Statement that was  
discussed in Chapter 6.

This information will be needed  
to adjust the “basic” Sources  
and Uses Statement.

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## Basket Wonders’ Balance Sheet (Asset Side)

### Basket Wonders Balance Sheet (thousands) Dec. 31, 2007<sup>a</sup>

Cash and C.E.	\$ 90
Acct. Rec. <sup>c</sup>	394
Inventories	696
Prepaid Exp. <sup>d</sup>	5
Accum Tax Prepay	10
<b>Current Assets<sup>e</sup></b>	<b>\$1,195</b>
Fixed Assets (@Cost) <sup>f</sup>	1030
Less: Acc. Depr. <sup>g</sup>	(329)
<b>Net Fix. Assets</b>	<b>\$ 701</b>
Investment, LT	50
Other Assets, LT	223
<b>Total Assets</b>	<b>\$2,469</b>

- How the firm stands on a specific date.
- What BW owned.
- Amounts owed by customers.
- Future expense items already paid.
- Cash/likely convertible to cash within 1 year.
- Original amount paid.
- Acc. deductions for 1 year.

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## Basket Wonders’ Balance Sheet (Liability Side)

### Basket Wonders Balance Sheet (thousands) Dec. 31, 2007

Notes Payable	\$ 290
Acct. Payable <sup>c</sup>	94
Accrued Taxes <sup>d</sup>	16
Other Accrued Liab. <sup>d</sup>	100
<b>Current Liab.<sup>e</sup></b>	<b>\$ 500</b>
Long-Term Debt <sup>f</sup>	530
<b>Shareholders’ Equity</b>	
Com. Stock (\$1 par) <sup>g</sup>	200
Add Pd in Capital <sup>g</sup>	729
Retained Earnings <sup>h</sup>	210
<b>Total Equity</b>	<b>\$1,139</b>

- Note, Assets = Liabilities + Equity.
- What BW owed and ownership position.
- Owed to suppliers for goods and services.
- Unpaid wages, salaries, etc.
- Debts payable < 1 year.
- Debts payable > 1 year.
- Original investment.

7-15 **Total Liab/E**

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s reinvested.



## Basket Wonders’ Income Statement

### Basket Wonders Statement of Earnings (in thousands) for Year Ending December 31, 2007<sup>a</sup>

Net Sales	\$ 2,211
Cost of Goods Sold <sup>b</sup>	1,599
Gross Profit	\$ 612
SG&A Expenses <sup>c</sup>	402
EBIT <sup>d</sup>	\$ 210
Interest Expense <sup>e</sup>	59
EBT <sup>f</sup>	\$ 151
Income Taxes	60
EAT <sup>g</sup>	\$ 91
Cash Dividends	38
<b>Increase in RE</b>	<b>\$ 53</b>

- Measures profitability over a time period.
- Received, or receivable, from customers.
- Sales comm., adv., officer’s salaries, etc.
- Operating income.
- Cost of borrowed funds.
- Taxable income.
- Amount earned for shareholders.

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## Adjusting the "Basic" Sources and Uses Statement

### Recognize Profits and Dividends

Change in retained earnings is composed of profits and dividends.

Source:	Net Profit	\$91
Less Use:	Cash Dividends	<u>38</u>
<b>(Net) Source:</b>	<b>Incr., R.E.</b>	<b>\$53</b>

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## Adjusting the "Basic" Sources and Uses Statement

### Recognize Depreciation and Gross Changes in Fixed Assets

Change in net fixed assets is composed of depreciation and fixed assets.

Source:	Depreciation	\$ 30
Less Use:	Add. to F.A.	<u>100</u>
<b>(Net) Use:</b>	<b>Incr., Net F.A.</b>	<b>\$ 70</b>

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## Sources and Uses Statement (Sources Side)

### SOURCES

Funds provided by operations	
Net Profit	\$ 91
Depreciation	30
Decrease, Accounts Receivable	16
Increase, Long-Term Debt	77
Decrease, Cash + Cash Equivalents	<u>10</u>
	<b>\$224</b>

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## Sources and Uses Statement (Uses Side)

### USES

Dividends	\$ 38
Additions to fixed assets	100
Increase, Inventories	80
Increase, Accum. Tax Prepay	1
Decrease, Notes Payable	<u>5</u>
	<b>\$224</b>

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## Analyzing the Sources and Uses Statement

### Sources

Primarily through net profit from operations and long-term debt increases.

### Uses

Primarily through an increase in inventories and expenditures on capital assets.

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## Statement of Cash Flows

A summary of a firm's payments during a period of time.

This statement reports cash **inflows** and **outflows** based on the firm's

**operating activities,**  
**investing activities,** and  
**financing activities.**

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## Statement of Cash Flows

### Cash Flow from Operating Activities

Shows impact of transactions not defined as investing or financing activities.

- ◆ These cash flows are generally the cash effects of transactions that enter into the determination of net income.

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## Cash Flow From Operating Activities

### Cash Inflows

From sales of goods or services  
From interest and dividend income

### Cash Outflows

To pay suppliers for inventory  
To pay employees for services  
To pay lenders (interest)  
To pay government for taxes  
To pay other suppliers for other operating expenses

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## **Cash Flow From Operating Activities**

It would seem more logical to classify **interest and dividend income** as an “investing” inflow, while **interest paid** certainly looks like a “financing” outflow.

But, the U.S. Financial Accounting Standards Board -- by a slim 4 to 3 vote -- classified these items as “operating” flows.

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## **Statement of Cash Flows**

### **Cash Flow from Investing Activities**

Shows impact of buying and selling fixed assets and debt or equity securities of other entities.

### **Cash Flow from Financing Activities**

Shows impact of all cash transactions with shareholders and the borrowing and repaying transactions with lenders.

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## **Cash Flow From Investing Activities**

### **Cash Inflows**

- From sale of fixed assets (property, plant, equipment)
- From sale of debt or equity securities (other than common equity) of other entities

### **Cash Outflows**

- To acquire fixed assets (property, plant, equipment)
- To purchase debt or equity securities (other than common equity) of other entities

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## **Cash Flow From Financing Activities**

### **Cash Inflows**

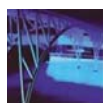
- From borrowing
- From the sale of the firm's own equity securities

### **Cash Outflows**

- To repay amounts borrowed
- To repurchase the firm's own equity securities
- To pay shareholders dividends

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## Indirect Method -- Statement of Cash Flows

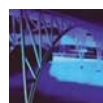
### Cash Flow from Operating Activities

Net Income	\$ 91
Depreciation	30
Decrease, accounts receivable	16
Increase, inventories	( 80)
Increase, accum. tax prepay	( 1)

<b>Net cash provided (used) by operating activities</b>	<b>\$ 56</b>
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## Indirect Method -- Statement of Cash Flows

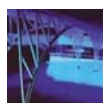
### Cash Flow from Investing Activities

Additions to Fixed Assets	<b>\$(100)</b>
---------------------------	----------------

<b>Net cash provided (used) by investing activities</b>	<b>\$(100)</b>
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## Indirect Method -- Statement of Cash Flows

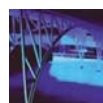
### Cash Flow from Financing Activities

Increase, notes payable	\$ ( 5)
Increase, long-term debt	77
Dividends paid	( 38)

<b>Net cash provided (used) by financing activities</b>	<b>\$ 34</b>
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## Indirect Method -- Statement of Cash Flows

<b>Increase (decrease) in cash and cash equivalents</b>	<b>\$ ( 10)</b>
<b>Cash and cash equivalents, 2006</b>	<b>100</b>
<b>Cash and cash equivalents, 2007</b>	<b>\$ 90</b>

<b>Supplemental cash flow disclosures</b>	
Interest paid	\$ 59
Taxes paid	60

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