

Financial Management: Cash Management



FAO Livelihood Development Via Agro-Processing
Dr. Reccia Charles

Today's Plan

After today, you should be able to

- Identify the purposes of the statement of cash flows
- Classify activities affecting cash as operating, investing, or financing activities
- Compute and interpret cash flows from financing activities
- Compute and interpret cash flows from investing activities
- Use the direct method to calculate cash flows from operations

Today's Plan

After today, you should be able to

- Use the indirect method to explain the difference between net income and net cash provided by (used for) operating activities
- Understand why we add depreciation to net income when using the indirect method for computing cash flow from operating activities
- Show how the balance sheet equation provides a conceptual framework for the statement of cash flows
- Identify free cash flow, and interpret information in statements of cash flow

Financial Statements

- Statements of Cash Flows
 - Describes yearly cash receipts and cash payments
 - **Cash Flows from Operations:** Concerns main operating activities: cash transactions involved in buying and selling goods and services
 - **Cash Flows from Investing:** Net cash used in or provided by investing
 - **Cash Flows from Financing:** Net cash from all financing activities
- The Budget
 - A detailed report on estimated receipts and expenditures for a future period of time

Google's Statements of Cash Flows

Google, Inc.
Summary of Statement of Cash Flows (condensed)
as of December 31, 2007
Increase (Decrease) in Cash
(in millions)

Net cash provided by operating activities		\$5,775.41
Cash flows from investment activities:		
Payment for purchase of property, equipment, and securities	(3,681.59)	
Net cash used in investing activities		(3,681.59)
Cash flows from financing activities:		
Proceeds from sale of stock (IPO)	23.86	
Other	<u>419.24</u>	
Net cash provided by financing activities		443.10
Net increase in cash		2,536.92
Cash at beginning of year		<u>3,544.67</u>
Cash at end of year		\$6,081.59

Google's statement of cash flows for year ended December 31, 2007. The final entry shows yearend cash position resulting from operating activities, investing activities, and financing activities.

Perfect Posters' Sales Budget

 Perfect Posters, Inc. 555 RIVERVIEW, CHICAGO, IL 60606				
Perfect Posters, Inc. Sales Budget First Quarter, 2009				
	January	February	March	Quarter
Budgeted sales (units)	7,500	6,000	6,500	20,000
Budgeted selling price per unit	\$3.50	\$3.50	\$3.50	\$3.50
Budgeted sales revenue	\$26,250	\$21,000	\$22,750	\$70,000
Expected cash receipts:				
From December sales	\$26,210			\$26,210
From January sales	17,500	8,750		26,250
From February sales		14,000	7,000	21,000
From March sales			15,200	15,200
Total cash receipts:	\$43,710	\$22,750	\$22,200	\$88,660

FINANCIAL STATEMENTS REVIEW

Balance Sheet

Assets – Liabilities = Owners' Equity

Income Statement

Revenues – Expenses = Profit (or Loss)

Statement of Cash Flows

Cash In and Cash Out

Budget

Estimate – Actual = Variance

Purpose of Cash Flow Statement

- The concept underlying the statement
 - Same as statements of income and retained earnings
 - Explains change in an account (cash) from the beginning to the end of the reporting period
 - What is "cash"
 - Money in bank accounts and on hand
 - Cash equivalents (maturity less than 90 days and easily and quickly convertible into cash)
 - Money market funds
 - Treasury bills
- } Very low probability of change in value

Purpose of Cash Flow Statement

- Helps predict future cash flows
- Evaluates how management generates and uses cash
- Determines a company's ability to pay interest, dividends, and debts when they are due
- Identifies specific increases and decreases in a firm's productive assets

Purpose of Cash Flow Statement

Cash Flows from Operating Activities

Net income	\$ 57,900	
Adjustments to reconcile net income to net cash provided by (used for) operating activities		
Depreciation	100	
Increase in accounts receivable	(155,000)	
Increase in inventory	(59,200)	
Increase in accounts payable	25,200	
Increase in prepaid rent	<u>(4,000)</u>	
Net cash provided by (used for) operating activities		\$(135,000)

Cash Flows from Investing Activities

Purchase of store equipment	\$ (15,000)	
Proceeds from sale of store equipment	<u>1,000</u>	
Net cash provided by (used for) investing activities		\$ (14,000)

Cash Flows from Financing Activities

Proceeds from initial investment	\$ 400,000	
Proceeds from bank loan	<u>100,000</u>	
Net cash provided by (used for) financing activities		<u>\$ 500,000</u>
Net increase in cash		\$ 351,000
Cash, January 2, 20X2		<u>0</u>
Cash, January 31, 20X2		<u>\$ 351,000</u>

Purpose of Cash Flow Statement

- What information may users find/derive from the statement?
 - Past
 - Why net income differs from cash flows
 - Identifies specific increases and decreases in a firm's productive assets
 - Evaluates how management generated/used cash
 - Present – determines a company's ability to pay interest, dividends, and debts when they are due
 - Future – helps predict future cash flows

Cash Flow Activities

Cash Inflows	Cash Outflows
Operating activities	
Collections from customers	Cash payments to suppliers
Interest and dividends collected	Cash payments to employees
Other operating receipts	Interest and taxes paid
	Other operating cash payments
Investing activities	
Sale of property, plant, and equipment	Purchase of property, plant, and equipment
Sale of securities that are not cash equivalents	Purchase of securities that are not cash equivalents
Receipt of loan repayments	Making loans
Financing activities	
Borrowing cash from creditors	Repayment of amounts borrowed
Issuing equity securities	Repurchase of equity shares (including the purchase of treasury stock)
Issuing debt securities	Payment of dividends

Financing Cash Flows

From two successive balance sheets, observe:

Meaning

Short/long term debt (related to borrowing)

- Increase → Cash inflow
- Decrease → Cash outflow

Capital stock accounts

- Increase → Cash inflow
- Decrease → Cash outflow

Treasury Stock

- Increase → Cash outflow
- Decrease → Cash inflow

Investing Cash Flows

From two successive balance sheets, observe:

Meaning

Intangible Assets

- Increase → Cash outflow
- Decrease → Cash inflow

Long-term Investments

- Increase → Cash outflow
- Decrease → Cash inflow

Loans to others

- Increase → Cash outflow
- Decrease → Cash inflow

Operating Cash Flows

- Operating cash flows
 - All cash flows other than investing and financing
 - Cash flows with the normal operations of the business

Type of Transaction	Increase (+) or Decrease (-) in Cash
Operating Activities	
Sales of goods and services for cash	+
Sales of goods and services on credit	No effect
Collection of accounts receivable	+
Receive dividends or interest	+
Recognize cost of goods sold	No effect
Purchase inventory for cash	-
Purchase inventory on credit	No effect
Pay accounts payable	-
Accrue operating expenses	No effect
Pay operating expenses	-
Accrue taxes	No effect
Pay taxes	-
Accrue interest	No effect
Pay interest	-
Prepay expenses for cash	-
Record the use of prepaid expenses	No effect
Charge depreciation	No effect

Operating Cash Flows

- Operating cash flows
 - Cash can precede an income statement event
 - Buy supplies before using them
 - Receive cash before earning it
 - An income statement event can precede a cash flow
 - Sell goods on credit with collection next month
 - Consume utilities before paying for them
 - Cash/income statement event occur simultaneously
 - Cash sale to customer
 - Pay for advertising used this reporting period

Operating Cash Flows

Operating Cash Flows - Two methods

Direct method

- Operating cash inflows less operating cash outflows = operating cash flows
- Preferred method because it is easily understood
- If use this method, must also show indirect method

Indirect

- Explains why net income is different from net operating cash flows
- Do not have to show the direct method
- Most commonly used method

Operating Cash Flows - Direct

- If have access to all cash flow information, just select and list operating cash flows

Payments for inventory \$(865,000) (next page)

Collections from customers \$1,500,000

Payments for interest \$(15,000)

Tax refund \$20,000

Etc.

Operating Cash Flow \$640,000

Operating Cash Flows - Indirect

Background

Many do not understand accrual accounting produces information different than cash accounting

When the cash flow statement was being considered by the FASB, concern arose that operating cash flow presented by direct method might confuse some who believed that amount should match net income.

The FASB would prefer the operating section be prepared using the direct method. If it is, it must be accompanied by another statement explaining why net income is different than operating cash flows.

Operating Cash Flows - Indirect

- Indirect method of preparing the operating section of the statement of cash flows

Net income	Start	\$ 57,900
Adjustments to reconcile net income to net cash provided (used) by operating activities		
Depreciation		100
Increase in accounts receivable		(155,000)
Increase in inventory		(59,200)
Increase in accounts payable		25,200
Increase in prepaid rent		<u>(4,000)</u>
Net cash provided by (used for) operating activities	End	<u><u>\$(135,000)</u></u>

Operating Cash Flows - Indirect

Critical steps in deriving operating cash flow from net income

Assume all items found in net income were related to operating activities and in the form of cash flows

If analysis shows some are not cash or operating flows, remove them from net income

What should be left is an adjusted net income figure that represents only cash and operating cash flows

Then examine changes in most current balance sheet accounts (assets and liabilities) to see if they suggest further adjustments are needed.

Operating Cash Flows - Indirect

Depreciation Expense

– Was deducted in net income

– Is not a cash item and applies to investing activities

– To remove it from net income, add it back

Net Income	\$57,900
Add back Depreciation Expense	100

Operating Cash Flows - Indirect

Accounts Receivable

By assuming net income is all in cash, all revenue (\$160,000) is assumed to be in cash

Accounts Receivables increased from \$0 to \$155,000 this year, meaning \$155,000 of this year's revenue (\$160,000) was not collected in cash by year-end

Net Income	\$57,900
Add back Depreciation Expense	100
Increase in Receivables	(155,000)

Operating Cash Flows - Indirect

Inventory

$$\begin{array}{rcccccc} \text{Beginning} & + & \text{Bought} & - & \text{Sold} & = & \text{Ending} \\ 0 & & ? & & 100,000 & & 59,200 \end{array}$$

Bought \$159,200

Net income includes only \$100,000 deduction

Deduct an additional \$59,200

Net Income	\$57,900
Add back Depreciation Expense	100
Increase in Receivables	(155,000)
Increase in Inventory	(59,200)

Operating Cash Flows - Indirect

Accounts Payable

Beginning	+	Charged	-	Paid off	=Ending
0		159,200		? 25,200	

Paid off \$134,000

Net income includes \$100,000 + adjustment \$59,200

Add back \$25,200

Net Income	\$57,900
Add back Depreciation Expense	100
Increase in Receivables	(155,000)
Increase in Inventory	(59,200)
Increase in Accounts Payable	25,200

Operating Cash Flows - Indirect

Accounts Payable - continued

Deducted in net income for cost of goods sold)	(100,000)
Subtracted from net income due to inventory increase	(59,200)
Added back to net income because accounts payable increased	<u>25,200</u>
Cash paid for inventory	\$134,000

Operating Cash Flows - Indirect

Prepaid Rent

Beginning + Bought - Used = Ending

0 ? 2,000 4,000

Bought \$6,000 (no payable so all in cash)

Net income includes only \$2,000 deduction

Deduct an additional \$4,000

Net Income	\$57,900
Add back Depreciation Expense	100
Increase in Receivables	(155,000)
Increase in Inventory	(59,200)
Increase in Accounts Payable	25,200
Increase in Prepaid Rent	(4,000)
Net cash used for operations	\$135,000

Operating Cash Flows - Indirect

Summary of the process

- Start with net income
- Remove noncash and nonoperating items such as depreciation
- Further adjust net income by the changes that occurred in most current asset/liability accounts by
 - Adding decreases in operating assets
 - Deducting increases in operating assets
 - Adding increases in operating liabilities
 - Deducting decreases in operating liabilities

Adjustments to Net Income (NI)

- Noncash and Nonoperating items
 - Assumption is NI is all in cash and operating
 - NI includes many noncash and nonoperating items (discussed in later chapters)
 - Loss on inventory Bad debts expense
 - Gain on sale of equipment Contingent losses
 - Premiums and discounts related to interest expense on long-term debt
 - If it was subtracted in NI, remove it by adding it back
 - If it was added in NI, remove it by subtracting it

Balance Sheet Equation & Statement of Cash Flows

	Cash Assets	+	Noncash Assets	=	Liabilities	+	Owners' Equity
Begin	100		1,000	=	500	+	600
Change	30		40	=	80	+	-10
End	130		1040	=	580	+	590
			1,170	=			1170

- Change in Cash = Change in all other accounts

	Cash Assets	=	Liabilities	+	Owners' Equity	-	Assets Noncash
Begin	100	=	500	+	600	-	1,000
Change	30	=	80	+	-10	-	40
End	130	=	580	+	590	-	1040
	130	=					130

Free Cash Flow

(Net) Operating Cash flows

Less capital expenditures

Less dividends – sometimes

Free Cash Flow

Includes operating outflows

Essential nonoperating
cash outflows

Negative – must go outside of company to finance capital expenditures

- If for growth – ok
- If for essential capital expenditures – bad

Positive – own operations can finance growth and essential capital expenditures – good

Interpreting Cash Flow Information

Income statement

– Uses accrual accounting to measure overall economic performance and change in owners' equity

– Matches revenues and expenses

Cash flow statement

– Identifies sources and uses of one asset, cash, for

- Investing activities
- Financing activities
- Operating activities (if using the direct method)