**CLASSIFICATIONS OF THE STATEMENT OF CASH FLOWS**

Basically, the statement of cash flows explains how the amount of cash on the balance sheet at the beginning of the period has become the amount of cash reported at the end of the period. For purposes of this statement, the definition of cash includes cash and cash equivalents. **Cash equivalents** are short-term, highly liquid investments that are both

* Readily convertible to known amounts of cash.
* So near to maturity there is little risk that their value will change if interest rates change.

Cash Flows from Operating Activities

**Cash flows from operating activities** (cash flows from operations) are the cash inflows and outflows that relate directly to revenues and expenses reported on the income statement. There are two alternative approaches for presenting the operating activities section of the statement:

1. The **direct method** reports the components of cash flows from operating activities as gross receipts and gross payments

|  |  |
| --- | --- |
| Inflows | Outflows |
| Cash received from; | Cash paid for; |
| * Customers | * Purchase of services or goods for resale |
| * Dividends and interest from investments. | * Salaries/ wages, Income taxes, interest on liabilities. |

The difference between the inflows and outflows is called **net cash inflow (outflow) from operating activities.** Though the IASB recommends the direct method, it is rarely used.Many financial executives have reported that they do not use it because it is more expensive toimplement than the indirect method. The IASB is considering a proposalto require this method, but intense opposition from the preparer community continues.

The **indirect method** starts with net income from the income statement and then eliminates noncash items to arrive at net cash inflow (outflow) from operating activities.

Net income

+/− Adjustments for noncash items

Net cash inflow (outflow) from operating activities

Most companies use the indirect method Note that income and cash flows will not always be equal. Why should income and cash flows from operating activities differ? Remember that on the income statement, revenues are recorded when they are earned, without regard to when the related cash inflows occur. Similarly, expenses are matched with revenues and recorded without regard to when the related cash outflows occur.

NB: The total amount of **cash flows from operating** **activities is always the same regardless** **of whether it is computed using the direct or indirect method.**

|  |  |
| --- | --- |
| Direct | Indirect |
| Cash collected from customers XXX | Net income XXX |
| Cash collected from interest XXX | Depreciation XXX |
| Cash payments to suppliers (XXX) | Changes in assets and liabilities XXX |
| Cash payments for other expenses (XXX) |  |
| Cash payments for income taxes (XXX) |  |
|  |  |
| Net cash provided by operating activities XXX | Net cash provided by operating activities XXX |

Cash Flows from Investing Activities

**Cash flows from investing activities** are cash inflows and outflows related to the purchase and disposal of long-lived productive assets and investments in the securities of other companies. Typical cash flows from investing activities include:

|  |  |
| --- | --- |
| **Inflows** | **Outflows** |
| Cash received from; | Cash paid for; |
| Sale or disposal of property, plant, and equipment | Purchase of property, plant, and equipment |
| Sale or maturity of investments in securities | Purchase of investments in securities |
|  |  |

The difference between these cash inflows and outflows is called **net cash inflow (outflow) from investing activities.**

Cash Flows from Financing Activities

**Cash flows from financing activities** include exchanges of cash with creditors (debt-holders) and owners (stockholders). Usual cash flows from financing activities include the following:

|  |  |
| --- | --- |
| **Inflows** | **Outflows** |
| Cash received from; | Cash paid for; |
| Borrowings on notes, mortgages, bonds, e.t.c., from creditors | Repayment of principal to creditors (excluding interest, which is an operating activity) |
| Issuing stock to owners | Repurchasing stock from owners |
|  | Dividends to owners |

The difference between these cash inflows and outflows is called **net cash inflow (outflow) from financing activities.**

Net Increase (Decrease) in Cash

This is the combination of **the net cash flows from operating activities, investing activities, and financing activities must equal the net increase (decrease) in cash** for the reporting period.

Net cash provided by operating activities XXXXX

Net cash used in investing activities XXXX

Net cash provided by financing activities XXX

Net increase in cash and cash equivalents XXXX

Cash and cash equivalents at beginning of period XXXX

Cash and cash equivalents at end of period XXXXX

To give you a better understanding of the statement of cash flows, we now discuss the way the statement of cash flows relates to the balance sheet and income statement. Then we examine each section of the statement of cash flows.

Relationships to the Balance Sheet and Income Statement

Preparing and interpreting the cash flow statement requires an analysis of the balance sheet and income statement accounts that relate to the three sections of the cash flow statement. Previously, we emphasized that companies record transactions as journal entries that are posted to T-accounts, which are used to prepare the income statement and the balance sheet. But companies cannot prepare the statement of cash flows using the amounts recorded in the T-accounts because those amounts are based on accrual accounting. Instead, they must analyze the numbers recorded under the accrual method and adjust them to a cash basis. To prepare the statement of cash flows, you need the following data:

**1. Comparative balance sheets** used in calculating the cash flows from all activities (operating, investing, and financing).

**2.** A **complete income statement** used primarily in calculating cash flows from operating activities.

**3. Additional details** concerning selected accounts where the total change amount in an account balance during the year does not reveal the underlying nature of the cash flows.

Our approach to preparing and understanding the cash flow statement focuses on the changes in the balance sheet accounts. It relies on a simple manipulation of the balance sheet equation:

**Assets** = **Liabilities** + **Stockholders’ Equity**

**Table 1: Selected cash transactions and their effects on other balance sheet accounts**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Transaction** | **Cash effect** | **Other account affected** |
| **Operating** | Collect accounts receivables | **+** | Accounts receivable |
|  | Pay accounts payable | **-** | Accounts payable |
|  | Prepay rent | **-** | Prepaid rent |
|  | Pay interest | **-** | Retained earnings |
|  | Sale for cash | **+** | Retained earnings |
| **Investing** | Purchase equipment for cash | **-** | Equipment |
|  | Sell investment securities for cash | **+** | Investments |
| **Financing** | Pay back debt to bank | **-** | Note payable |
|  | Issue shares of stock for cash | **+** | Capital |

First, assets can be split into cash and noncash assets:

**Cash** + **Noncash Assets** = **Liabilities** + **Stockholders’ Equity**

If we move the noncash assets to the right side of the equation, then:

**Cash** = **Liabilities** + **Stockholders’ Equity** − **Noncash Assets**

Given this relationship, the changes (Δ) in cash between the beginning and the end of the period must equal the changes (Δ) in the amounts on the right side of the equation between the beginning and the end of the period:

Δ **Cash** = Δ **Liabilities** + Δ **Stockholders’ Equity** − Δ **Noncash Assets**

Thus, **any transaction that changes cash must be accompanied by a change in liabilities, stockholders’ equity, or noncash assets.** Next, we compute the change in each balance sheet account (Ending Balance – BeginningBalance) and classify each change as relating to operating (O), investing (I), or financing (F) activities by marking it with the corresponding letter. **The balance sheet accounts related to earning** **income (operating items) should be marked with an O.** These accounts are often called **operating** **assets and liabilities.** The accounts that should be marked with an O include the following:

* Most current assets (other than short-term investments, which relate to investing activities and cash).
* Most current liabilities (other than amounts owed to investors and financial institutions, all of which relate to financing activities).
* Retained Earnings because it increases by the amount of net income, which is the starting point for the operating section. (Retained Earnings also decreases by dividends declared and paid, which is a financing outflow noted by an F.)

**The balance sheet accounts related to investing activities should be marked with an I.**

**These include all of the remaining assets on the balance sheet.** These items include:

* Short-Term Investments
* Property, Plant, and Equipment, net

**The balance sheet accounts related to financing activities should be marked with an F. These include all of the remaining liability and stockholders’ equity accounts on the balance sheet.** These items include:

* Contributed Capital
* Retained Earnings (for decreases resulting from dividends declared and paid)

Next, we use this information to prepare each section of the statement of cash flows.

REPORTING AND INTERPRETING CASH FLOWS FROM OPERATING ACTIVITIES

**As noted above, the operating section can be prepared in two formats, and virtually all companies choose the indirect method. As a result, we discuss the indirect method here and the direct method at the end.**

Recall that:

**1.** Cash flow from operating activities is always the **same** regardless of whether it is computed using the direct or indirect method.

**2.** The investing and financing sections are always presented in the **same** manner regardless of the format of the operating section.

Reporting Cash Flows from Operating Activities—Indirect Method

Exhibit 1 below shows National Beverage’s comparative balance sheet and income statement. Remember that the indirect method starts with net income and converts it to cash flows from operating activities. This involves adjusting net income for the differences in the timing of accrual basis net income and cash flows. The general structure of the operating activities section is:

**Operating Activities**

Net income

Adjustments to reconcile net income to cash flow from operating activities:

+Depreciation and amortization expense

−Gain on sale of long-term asset

+Loss on sale of long-term asset

+Decreases in operating assets

+Increases in operating liabilities

−Increases in operating assets

−Decreases in operating liabilities

**Net Cash Flow from Operating Activities**

|  |  |  |
| --- | --- | --- |
| **National Beverage Corp**  **Consolidated balance Sheet** | | |
|  | **April 30, 2009** | **April 30, 2008** |
| **Assets** | **Ksh. 000** | **Ksh. 000** |
| **Current assets** |  |  |
| Cash and cash equivalents | 84,140 | 51,497 |
| Short term investments | - | 3,000 |
| Accounts receivables | 53,735 | 49,186 |
| Inventories | 39,612 | 38,754 |
| Prepaid expenses | 5,552 | 12,009 |
| **Total current assets** | **183,039** | **154,446** |
| Property, plant and equipment, net | 79,381 | 81,781 |
| **Total assets** | **262,420** | **236,227** |
| **Liabilities and stockholders equity** |  |  |
| **Current liabilities** |  |  |
| Account payable | 48,005 | 49,803 |
| Accrued expenses | 44,403 | 41,799 |
| **Total current liabilities** | **92,408** | **91,602** |
| **Stockholders equity** |  |  |
| Contributed capital | 9,803 | 9,158 |
| Retained earnings | 160,209 | 135,467 |
| **Total stockholders equity** | **170,012** | **144,625** |
| **Total liabilities and stockholders equity** | **262,420** | **236,227** |

|  |  |
| --- | --- |
| **National Beverage Corp**  **Consolidated statement of income**  **For the fiscal year ended April 30, 2009** | |
|  | **Ksh. 000** |
| **Net sales** | 575,177 |
| **Cost of sales** | 405,322 |
| **Gross profit** | **169,855** |
| **Operating expenses** |  |
| **Selling, general and administrative expense** | 123,027 |
| **Depreciation and amortization expense** | 8,891 |
| **Total operating expenses** | **131,918** |
| **Operating income** | **37,937** |
| **Interest income** | 860 |
| **Income before provision for income taxes** | **38,797** |
| **Provision for income taxes** | 14,055 |
| **Net income** | **24,742** |

To keep track of all the additions and subtractions made to convert net income to cash flows from operating activities, it is helpful to set up a schedule to record the computations. We construct a schedule for National Beverage below.

|  |  |  |
| --- | --- | --- |
| **Items** | **Amount** | **Explanation** |
| Net income | 24,742 | From income statement |
| Depreciation and amortization | 8,891 | Add back because depreciation and amortization expense does not affect cash. |
| Accounts receivable increase | -4,549 | Subtract because cash collected from customers is less than accrual basis revenues. |
| Inventory increase | -858 | Subtract because purchases are more than cost of goods sold expense. |
| Prepaid expense decrease | 6,457 | Add because cash prepayments for expenses are less than accrual basis expenses. |
| Account payable decrease | -1,798 | Subtract because cash payments to suppliers are more than amounts purchased on account (borrowed from suppliers). |
| Accrued expenses increase | 2,604 | Add because cash payments for expenses are less than accrual basis expenses. |
| Net cash used in operating activities | 35,489 | Reported on the statement of cash flows. |

**Step 1: Adjust net income for depreciation and amortization expense and gains and losses on sale of investing assets such as property, plant, and equipment and investments**

**.** Recording depreciation and amortization expense does not affect the cash account (or any other operating asset or liability). It affects a noncurrent investing asset (Property, plant, and equipment, net). **Since depreciation and amortization** **expense are subtracted in computing net income but do not affect cash, we** **always add each back** to convert net income to cash flow from operating activities . In the case of National Beverage, we need to remove the effect of depreciation and amortization expense by adding back Ksh. 8,891 to net income. If National Beverage had sold property, plant, and equipment at a gain or loss, the amount of cash received would be classified as an investing cash inflow. Since all of the cash received is an investing cash flow, an adjustment must also be made in the operating activities section to avoid double counting the gain or loss. **Gains** **on sales of property, plant, and equipment are subtracted and losses on such** **sales are added** to convert net income to cash flow from operating activities.

**Step 2: Adjust net income for changes in assets and liabilities marked as operating (O).**

Each **change** in operating assets (other than cash and short-term investments) and liabilities (other than amounts owed to owners and financial institutions) causes a difference between net income and cash flow from operating activities. When converting net income to cash flow from operating activities, apply the following general rules:

**Reporting Cash Flows from Investing Activities**

Preparing this section of the cash flow statement requires an analysis of the accounts related to property, plant, and equipment; intangible assets; and investments in the securities of other companies. Normally, the relevant balance sheet accounts include Short-Term Investments and long-term asset accounts such as Long-Term Investments and Property, Plant, and Equipment. The following relationships are the ones that you will encounter most frequently:

|  |  |  |
| --- | --- | --- |
| Related balance sheet account(s) | Investing activity | Cash flow effect |
| Property, plant, and equipment and  intangible assets (patents, etc.) | Purchase of property, plant, and  equipment or intangible assets for cash Outflow Sale of property, plant, and equipment or intangible assets for cash  Sale of property, plant, and equipment or intangible assets for cash | Outflow  Inflow |
| Short- or long-term investments  (stocks and bonds of other companies) | Purchase of investment securities  for cash  Sale (maturity) of investment securities for cash | Outflow  Inflow |

**NB: Only purchases paid for with cash or cash equivalents are included. The amount of cash that is received from the sale of assets is included, regardless of whether the assets are sold at a gain or loss.**

Reporting Cash Flows from Financing Activities

Financing activities are associated with generating capital from creditors and owners. This section of the cash flow statement reflects changes in two current liabilities, Notes Payable to Financial Institutions (often called short-term debt) and Current Maturities of Long-Term Debt, as well as changes in long-term liabilities and stockholders’ equity accounts. These balance sheet accounts relate to the issuance and retirement of debt and stock and the payment of dividends. The following relationships are the ones that you will encounter most frequently:

|  |  |  |
| --- | --- | --- |
| Related Balance sheet accounts | Financing activity | Cash flow effect |
| Short term debt / notes payable | Borrowing cash from banks  or other financial institutions  Repayment of loan principal | Inflow  Outflow |
| Long term debt | Issuance of bonds for cash  Repayment of bond principal | Inflow  Outflow |
| Common stock and additional paid in capital | Issuance of stock for cash  Repurchase or retirement of stock with cash. | Inflow  Outflow |
| Retained earnings | Payment of cash dividends | Outflow |
|  |  |  |
|  |  |  |
|  |  |  |

Remember this:

**Cash repayments of principal are cash flows from financing activities. Interest payments are cash flows from operating activities.**

Since interest expense is reported on the income statement, the related cash flow is shown in the operating section.

**Dividend payments are cash flows from financing activities.**

Dividend payments are not reported on the income statement because they represent a distribution of income to owners. Therefore, they are shown in the financing section.

**If debt or stock is issued for other than cash, it is not included in this section.**

To compute cash flows from financing activities, you should review changes in debt and stockholders’ equity accounts. In the case of National Beverage Corp., the analysis of changes in the balance sheet finds that only contributed capital changed during the period

**Format for the Statement of Cash Flows**

**Statement of Cash Flows (Indirect Method)**

**Operating Activities:**

Net Income

+Depreciation and amortization expense

−Gain on sale of long-term asset

+Loss on sale of long-term asset

+Decreases in operating assets

+Increases in operating liabilities

−Increases in operating assets

−Decreases in operating liabilities

**Net Cash Flow from Operating Activities**

**Investing Activities:**

−Purchase of property, plant, and equipment or intangible assets

+Sale of property, plant, and equipment or intangible assets

−Purchase of investment securities

+Sale (maturity) of investment securities

**Net Cash Flow from Investing Activities**

**Financing Activities:**

+Borrowing from bank or other financial institution

−Repayment of loan principal

+Issuance of bonds for cash

−Repayment of bond principal

+Issuance of stock

−Repurchase (retirement) of stock

−Payment of (cash) dividends

**Net Cash Flow from Financing Activities**

**Net increase or decrease in cash and cash equivalents**

Cash and cash equivalents at beginning of period

Cash and cash equivalents at end of period

Noncash Investing and Financing Activities

Certain transactions are important investing and financing activities but have no cash flow effects. These are called **noncash investing and financing activities.** For example, the purchase of a Ksh. 100,000 building with a Ksh. 100,000 mortgage given by the former owner or bank does not cause either an inflow or an outflow of cash. As a result, these noncash activities are not listed in the three main sections of the cash flow statement. However, supplemental disclosure of these transactions is required, in either narrative or schedule form. National Beverage’s statement of cash flows does not list any noncash investing and financing activities. if non-cash investing and financing activities are present, these amounts are disclosed at the bottom of its cash flow statement.

Supplemental Cash Flow Information

Companies that use the indirect method of presenting cash flows from operations also must provide two other figures: **cash paid for interest** and **cash paid for income taxes.** These are normally listed at the bottom of the statement or in the notes.

**Review Questions**

During a recent year (ended December 31), R.K. Brewery, a Nakuru based brewer, reported net income of Ksh.3,182 (all numbers in thousands of Shillings) and cash and cash equivalents at the beginning of the year of Ksh.472. It also engaged in the following activities:

*a.* Paid Ksh.18,752 in principal on debt.

*b.* Received Ksh.46,202 in cash from initial public offering of common stock.

*c.* Incurred other noncurrent accrued operating expenses of Ksh.857.

*d.* Paid Ksh.18,193 in cash for purchase of fixed assets.

*e.* Accounts receivable increased by Ksh.881.

*f.* Borrowed Ksh.16,789 from various lenders.

*g.* Refundable deposits payable increased by Ksh.457.

*h.* Inventories increased by Ksh.574.

*i.* Made cash deposits on equipment of Ksh.5,830.

*j.* Income tax refund receivable decreased by Ksh.326.

*k.* Sold (issued) stock to employees for Ksh.13 in cash.

*l.* Accounts payable decreased by Ksh.391.

*m.* Received Ksh.4 from other investing activities.

*n.* Accrued expenses increased by Ksh.241.

*o.* Prepaid expenses increased by Ksh.565.

*p.* Recorded depreciation of Ksh.1,324.

*q.* Paid Ksh.5 cash in other financing activities.

***Required:***

Based on this information, prepare the cash flow statement using the indirect method.