

Cash Flow

SUBMITTED BY: Michael Moore, University of Pennsylvania

SUBJECT(S): Accounting, Management

GRADE LEVEL(S): 9, 10, 11, 12

≡ OVERVIEW:

This lesson focuses on reading and interpreting the statement of cash flows. Students will learn the definition of a statement of cash flows (and its component parts). Students will learn to read and decode an actual statement of cash flows from a 10-K filing. Finally, students will use statement of cash flows to reason about the well being of individual companies.

≡ RELATED ARTICLES:

- [“The Silicon Valley Start-up that Began with Legos and a Market Need”](#)
- [“Research Strategies for New Investors”](#)
- [“Portfolio Management: Making Decisions about Your Investments”](#)
- [“Career Spotlight: Inside Actuarial Science”](#)
- [“10 Terms New Investors Should Know”](#)

NBEA Standard(s):

- Accounting: Financial Reports
- Accounting: Financial Analysis
- Accounting: Interpretation and Use of Data
- Management: Industry Analysis
- Finance: Financial Decision Making

Common Core Standard(s): Comprehension and Collaboration, Vocabulary Acquisition and Use, A-CED

Objectives/Purposes: The purpose of this lesson is for students to understand what a statement of cash flows is, and why the statement of cash flows is useful for investment analysis. Following this lesson, students should be able to 1) define, 2) read, and 3) analyze the statement of cash flows of a publicly traded company. Moreover, building on previous lessons, students should be able to critically interpret the statement of cash flows in context, using both the balance sheet and income statement as complimentary resources.

Knowledge@Wharton Article: [“Netflix: One Eye on the Present and Another on the Future”](#)

Tying It All Together:

The lesson is divided into five parts: (1) Introduction, (2) Definitions, (3) Guided Reading, (4) Practice, and finally (5) Closing

Introduction (5 mins)

Start today’s lesson by having the students define both the income statement and the balance sheet. An **income statement** (or statement of operations) shows a company’s revenues and expenses over a specific period of time. The income statement tells an investor how much money a company has earned in sales and how much money the company has spent in order to make those sales (i.e. cost of goods sold, cost of operation). The **balance sheet** gives investors an idea of what a company owns (i.e. assets) and what a company owes (i.e. liabilities). The value of a company, its equity, is equal to total assets minus total liabilities. By looking at a firm’s balance sheets over time, investors can see growth (or loss) in equity.

Today we will be looking at the last of the large financial documents: the statement of cash flows.

Decisions (10-20 mins)

It is important to open the lesson with a review of the income statement and balance sheet, because the statement of cash flows is in some ways derived from each. The statement of cash flows shows how much cash a company had on hand at the beginning of the year (or quarter), how much it has on hand at the end of the year, and what happened in between. In other words, the statement of cash flows will reflect the difference in cash assets on two consecutive balance sheets.

Before explaining this in detail, have students reflect on what *they* think a statement of cash flows shows. Students will often answer this directly: “It shows cash.” Encourage students to push their explanation further. What does the cash flow tell an investor *that other financial documents do not*? Doesn’t the balance sheet show cash as an item? During this example, have students continue to look at the 10-K filings from Apple Incorporated (available [online](#)). In this filing, the statement of cash flows is on page 46.

NOTE: The 10-K and 10-Q filings are very long documents that contain large amounts of information. For this and all other lessons, students only need to focus on the three financial statements (income statement, statement of cash flow, and balance sheet). In the Apple filing, these span ONLY pages 43-46. If you plan to print these documents out for class, print only pages 43-46.

Once students have the Apple filing in hand, have them compare both the balance sheet and the statement of cash flows. Why would investors want both documents?

After students work through this question, introduce them to the formal definition above. Have students look at the “Cash and Cash Equivalents” line item on the Apple balance sheet (page 44). In 2010, Apple had \$11,261 million in cash. In 2011, Apple had \$9,815 million in cash. Next, have students look at the 2011 Statement of Cash Flows. The first number on this document is the same \$11,261 from above. The last number on this document is the \$9,815. The statement of cash flows shows us how Apple went from \$11,261 to \$9,815.

Now that students know what the statement of cash flows is, ask them to use it critically. Based on the statement, *WHY* did Apple’s cash flow decrease? (Students should notice a huge expenditure labeled “purchase of marketable securities”. In other words, Apple spent a large amount of cash on its own investments.)

Guided Reading (5-10 mins)

After working through the statement of cash flows for Apple Inc., have students read through the article “[Netflix: One Eye on the Present and Another on the Future](#).” Provide students with a few guided questions for the article. Based on the article, do you think Netflix is a good investment? Why or why not? How do you think Netflix’s statement of cash flows will compare to Apple’s? (More cash on hand? Less? Will the amount of cash be increasing or decreasing?)

Practice (10-15 mins)

After the class discussion, have students break into small groups. During this activity, students will take on the role of financial analysts. Provide each group with a copy of pages 48-50 of Netflix's 2012 10-K filings (available [online](#)). Using the 2012 10-K, each group must decide whether they would like to invest in Netflix.

Groups will have 10-15 minutes. Encourage students to compare and contrast the years listed on the Statement of Cash Flows (2009, 2010 and 2011). Are things getting better or worse for Netflix? How do they know? Which items are they looking at?

Once again, after looking through the 10-K each group will prepare an investment brief.

However, the teacher should now demand even stronger evidence from each group. After completing the previous lessons, students should be able to read and analyze all three financial statements (income statement, balance sheet, cash flow statement). Each group *must* refer to all three financial statements in their presentation. During this presentation, the group must convince the teacher and the audience whether they should invest in Netflix. Regardless of the group's decision (invest or not invest), the group must provide **evidence** based on financial documents.

Closing (5 mins)

Close the lesson by discussing the value of all three financial documents. This entire unit has been tied to a single question: How do investors choose their investments? Financial documents give investors key evidence (or information) about the health and future prospects of an individual company. In combination, the income statement, balance sheet and cash flows provide a comprehensive picture of a company's day-to-day financial health. In the upcoming lessons, we will look at how investors use these documents to create even more useful metrics and financial ratios.

Practice Outside of the Classroom:

Encourage students to continue their compare/contrast homework assignment. In the last two lessons, students were encouraged to find 10-K forms from companies of their choosing, and then compare their company to the examples in class. For this lesson, students should compare the statement of cash flows of their chosen company to the statement of cash flows from Netflix's 10-K filing. Based on this information, which company seems like a better investment? Why?

What Worked and What I Would Do Differently: