

The Statement of Cash Flows in a Nutshell: A Practical Approach

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Abstract

Public companies are required to provide the statement of cash flows, and accounting majors are required to take the course that covers the statement of cash flows. The statement of cash flows can be prepared either by direct method or indirect method. Even when direct method is used, it is still required the first section of the statement be prepared by indirect method and provided as a reconciliation schedule in the notes, which means indirect method is required either by direct and indirect method.

Learning the indirect method, the focal issue is on the adjustments to net income under cash flows from operating activities because the rest of statement is prepared by direct method. The author suggested a different conceptual approach in his paper of this subject in 2021.

In this paper, a suggested practical approach is presented using an exercise question from one of the most popular intermediate accounting textbooks. The exercise question requires preparing a statement of cash flows using indirect method. Assuming the format of cash flows statement is given, it is illustrated how to fill out the cash flows statement in a step-by-step approach, following the suggested conceptual approach from his paper in 2021.

It is demonstrated in the current paper that the challenging exercise question can be done step-by-step following the order of steps shown in the illustration.

Combined with his suggested conceptual approach from 2021, the suggested step-by-step illustration in this paper is tested on students and found to be a step easier way for the students to learn the indirect method of cash flows statement.

Keywords: Statement of cash flows, Indirect method, Adjustments, Practical, Step-by-step approach

1. Introduction

The statement of cash flows is one of four required financial statements of public companies by U.S. GAAP (Generally Accepted Accounting Principles): income statement, statement of retained earnings (statement of owners' equity), balance sheet, and statement of cash flows. All students majoring in business learn good details of income statement, statement of owners' equity, and balance sheet in an introductory financial accounting course, but the statement of cash flows is briefly covered in the introductory financial accounting course and reserved for an intermediate accounting course for accounting majors. While learning the mechanism of cash flows statement, a significant number of students struggle understanding the logics of cash flows statement and get a significantly lower level of understanding than those of the other three financial statements. The importance of cash flows statement is also confirmed on accounting professional exams such as CPA (Certified Public Accountants), CMA (Certified Management Accountants), CFE (Certified Fraud Examiners), etc. On every accounting professional exam where financial accounting is tested, the cash flows statement is a regular test topic.

In this paper, presented is a practical approach to explaining the cash flows statement to students. The author found the approach to be most effective on students learning the system of cash flows statement.

2. Literature Review

Regarding pedagogical approaches to the statement of cash flows, there are only a handful of researches on this topic.

Dugan et al. (1991) shed light on this subject much earlier than the others. In their research, a couple of different modular approaches were utilized to help students better understand the rules and principles underlying the statement of cash flows. More than a decade later, Brickner and McCombs (2004) published an alternative approach to the ways of explanations commonly used by financial accounting textbooks. They made use of basic accounting entry systems: journal entries and T-accounts to explain the indirect method of the statement of cash flows. Another decade and a year later, McNellis (2015) researched on instructional approaches to the statement of cash flows. His findings are different from other researches in this line and even interesting. His research was in search of new approaches to better explaining the statement of cash flows. He called it a *massed* presentation that the statement of cash flows is covered in only one chapter. To make it worse, the chapter is almost at the end of textbook, which is true of most of widely used intermediate financial accounting textbooks. Argued in his paper was that "the SCF (statement of cash flows) is a topic that is cross-sectional in nature, and is applicable to the textbook material on the accounting transactions that are spread throughout the texts." His finding was that "instruction of SCF material across the major (*middle skipped*) chapters, a *spaced* presentation format, potentially yields enhanced learning outcomes in comparison to the *massed* presentation." Just a few years later, Stice et al. (2019) conducted their research on the instruction of the statement of cash flows by intuitive approach. Their intuitive approach illustrated a process by which they first analyzed balance sheet and income statement and next presented the analyzed

information in the ‘cash flows from operating activities’ section. They said either direct or indirect method goes through the process. The purpose of the process was to provide students with rather an intuitive approach than simply memorizing and applying the mechanical rules of each method, especially when students compute the cash flows from operation activities.

After searching for researches on how competent the accounting majors are with the statement of cash flows, little research is found that tested whether or not the students who passed the accounting course that covered the cash flows statement knew the basics of cash flows statement. In reality, it is found that a serious number of graduating accounting students could not prepare the basic statement of cash flows. Making this issue worse, some instructors who teach the cash flows statement don’t have complete understanding of how the statement of cash flows works. Even if they have complete understanding of it, they still need a better way to get their students to understand how it works. Between direct and indirect method of preparing the cash flows statement, most of the issues lie with indirect method: particularly with adjustments to net income. Because further researches are still warranted to explore an easier way to explain how to prepare the cash flows statement, it would be worthwhile to present the author’s pedagogical approach that worked better than a textbook illustration on his students.

Since the start of the author’s teaching of cash flows statement in 2012, it has been constantly heard from the students that the statement of cash flows is so challenging that it is hard to develop confidence on it, especially the indirect method. In the journey of finding one-step better pedagogy to enhance students’ understanding of cash flows statement, the author’s personal teaching experience of the subject subsidizes literature review. The author has taught the cash flows statement for the past 13 years at a few state-supported universities across the Northeast and the South.

3. Purpose of the Paper

After publishing the paper titled, *Finding an Easier Way to Explain the Statement of Cash Flows* in 2021, the author has continued teaching the cash flows statement every semester and sought a further easier way to explain the statement of cash flows. For the four years since 2021, the way to explain the statement of cash flows published in the paper has been refined furthermore. The more refined, which means even simpler and easier, way to explain the statement of cash flows is developed and presented in this paper.

4. Application of a Suggested Approach to Indirect Method

The information given to prepare the statement of cash flows is comparative balance sheet for two consecutive periods, income statement for current period, and additional information. When students are given all the information, they looked overwhelmed and not sure how to juggle all the information to fill out the cash flows statement. It is only the first item they can do easily on the cash flows statement: net income, which comes straight from income statement. Thereafter, it looks like they don’t have any guidelines or manuals to follow to fill out the rest of the cash flows statement. So, in order to address this issue that most students are faced with always, presented in this paper is a three-step approach that has been tested on

students in a real class for eight semesters. All the students preferred this approach than the solutions of the textbook and any other explanations they found elsewhere.

After putting the net income from income statement under cash flows from operating activities, the first step is to go through all the accounts on comparative balance sheet and make adjustments for the differences of the accounts between prior year and current year, assuming the comparative balance sheet is the only information given. Don't do anything about retained-earnings account and just skip it. It works always that way. Whether students understand the reason or not, they love to skip the most uneasy account and remember it.

The second step is to go through income statement looking for depreciation expense, amortization expense, and gain or loss on sale of PPE (property, plant, and equipment), and make adjustments and entries under their respective activities, also assuming no more information is given.

The third step is to go through additional information, make entries and/or changes to their respective activities, and see if the statement of cash flows works out.

This step-wise approach is clearly more manageable for students than handling all the information at once and completing the cash flows statement all in one step.

Following is an exercise question from Wiley *Intermediate Accounting*, 18th edition, which is used to illustrate the suggested approach of the paper to preparing the statement of cash flows by indirect method.

Brecker Inc., a greeting card company, had the following statements prepared as of December 31, 2025.

BRECKER INC.

Comparative Balance Sheet

As of December 31, 2025 and 2024

	12/31/2025	12/31/2024
Cash	\$ 6,000	\$ 7,000
Accounts receivable	62,000	51,000
Short-term debt investments (available for sale)	35,000	18,000
Inventory	40,000	60,000
Prepaid rent	5,000	4,000
Equipment	154,000	130,000
Accumulated depreciation-equipment	35,000	25,000
Copyrights	46,000	50,000
Total assets	\$ 313,000	\$ 295,000
Accounts payable	\$ 46,000	\$ 40,000
Income taxes payable	4,000	6,000
Salaries and wages payable	8,000	4,000
Short-term loans payable	8,000	10,000
Long-term loans payable	60,000	69,000
Common stock, \$10 par	100,000	100,000
Contributed capital, common stock	30,000	30,000
Retained earnings	57,000	36,000
Total liabilities and stockholders' equity	\$ 313,000	\$ 295,000

BRECKER INC.
Income Statement
For the Year Ending December 31, 2025

Sales revenue			\$ 338,150		
Cost of goods sold			<u>175,000</u>		
Gross profit			163,150		
Operating expenses			<u>120,000</u>		
Operating income			43,150		
Interest expense		\$ 11,400			
Gain on sale of equipment		<u>2,000</u>	<u>9,400</u>		
Income before tax			33,750		
Income tax expense			<u>6,750</u>		
Net income			<u>\$ 27,000</u>		

Additional information:

1. Dividends in the amount of \$6,000 were declared and paid during 2025.
2. Depreciation expense and amortization expense are included in operating expenses.
3. No unrealized gains and losses have occurred on the investments during the year.
4. Equipment that had a cost of \$20,000 and was 70% depreciated was sold during 2025.

BRECKER INC.
Statement of Cash Flows (Indirect Method)
For the Year Ended 12/31/2025

Cash Flows from Operating Activities:

Net income		⁴ <u>+\$27,000</u>
Adjustments to reconcile net income to cash basis:		
• Increase in Accounts Receivable		⁵ -11,000
• Decrease in Inventory		⁷ +20,000
• Increase in Prepaid Rent		⁸ -1,000
• Depreciation Expense	²¹ +24,000	¹⁰ +10,000
• Amortization Expense		¹¹ +4,000
• Increase in Accounts Payable		¹² +6,000
• Decrease in Income Taxes Payable		¹³ -2,000

• Increase in Salaries and Wages Payable		¹⁴ +4,000	
• Gain on Sale of Equipment		¹⁷ -2,000	²² +42,000
Net cash provided (used) by operating activities		<u>²³ +69,000</u>	
Cash Flows from Investing Activities:			
• Purchase of Short-Term Debt Investments		⁶ -17,000	
• Purchase of Equipment	²⁰ -44,000	⁹ -24,000	
• Sale of Equipment		<u>¹⁹ +8,000</u>	
Net cash provided (used) by investing activities			<u>²⁴ -53,000</u>
Cash Flows from Financing Activities:			
• Decrease in Short-Term Loans Payable		¹⁵ -2,000	
• Decrease in Long-Term Loans Payable		¹⁶ -9,000	
• Payment of Dividends		<u>¹⁸ -6,000</u>	
Net cash provided (used) by financing activities			<u>²⁵ -17,000</u>
Net change in cash			<u>³ -1,000</u>
Cash, beginning			<u>² 7,000</u>
Cash, ending			<u>¹ \$6,000</u>

To do the exercise question, it is suggested to do it in the order of note numbers. Following the note numbers, students will do the easiest things first, and do the most complicated ones last, which allows students to get maximum partial credit for the exercise question, if not full credit.

Note numbering is done following the order of accounts on comparative balance sheet, income statement, and additional information, except net income.

1. This ending cash balance is given for current year on comparative balance sheet.
2. The cash beginning balance for current year is the ending cash balance for prior year that is also given on comparative balance sheet.
3. 'Net change in cash' is figured out by taking the difference of the last two numbers: 6,000 - 7,000, or by solving the equation: Net change in cash + 7,000 cash beginning = 6,000 cash ending.
4. 'Net income' comes straight from the bottom line of income statement.
5. It is assumed that Sales Revenue on income statement was cash sales. But, as much as the increase in Accounts Receivable was not cash sales; then, subtract the amount of increase.

6. The increase in Short-Term Debt Investments is assumed to be a cash purchase of short-term debt investments. Otherwise, there will be additional information on this. Then, the amount of increase is subtracted. This falls under cash flows from investing activities because the account name says Short-Term Debt *Investments*.
7. Inventory has decreased by \$20,000 that is assumed to be inventory damaged or stolen that is a non-cash transaction but is reported as net loss on income statement. This is to assume the simplest and easiest transaction possible for the decrease in inventory. Then, add the amount of decrease to cancel the net loss.
8. Prepaid Rent has increased by \$1,000 that must be paid in cash. Subtract the amount of increase.
9. Equipment increased by \$24,000 that is assumed to be a cash purchase of equipment. Subtract the amount of increase.
10. Accumulated Depreciation increased by \$10,000 which is assumed to the amount of depreciation expense for current year. Depreciation expense is a non-cash transaction but is reported as net loss on income statement. Then, add the amount of depreciation expense to cancel the net loss.
11. Copyrights decreased by \$4,000. It is assumed that the value of copyrights went down by \$4,000 that is a non-cash transaction but is reported as net loss on income statement. Then, add the amount of amortization expense to cancel the net loss.
12. Accounts Payable increased by \$6,000 that is for inventory purchase. The \$6,000 inventory was assumed to be a cash purchase but that is turned out to be a non-cash purchase now. Add the amount of increase in Accounts Payable.
13. Decrease in Income Taxes Payable is assumed to be a cash payment for the amount of decrease. Subtract the amount.
14. Salaries and Wages Payable increased by \$4,000 that is for Salaries and Wages Expenses. The \$4,000 is assumed to be a cash payment for the expenses but that is turned out to be a non-cash transaction now. Add the amount of increase.
15. Decrease in Short-Term Loans Payable for \$2,000 is assumed to be a cash payment for the amount. Subtract the amount. Loans Payable is one kind of notes payable, which is borrowing money from a bank to finance the company business. It is a financing activity.
16. Decrease in Long-Term Loans Payable for \$9,000 is assumed to be a cash payment for the amount. Subtract the amount.
17. Gain on Sale of Equipment is to be subtracted from net income under cash flows from operating activities because the whole selling price of equipment, including this gain, should be reported under cash flows from investing activities, which is the FASB (Financial Accounting Standards Board) rule.

18. Additional information says \$6,000 dividends were paid. Subtract the amount. It is defined as a financing activity.
19. The last additional information says, “Equipment that had a cost of \$20,000 and was 70% depreciated was sold during 2025.” The increase in equipment on comparative balance sheet was previously assumed to be a cash purchase of equipment. Now it is necessary to make change to the Purchase of Equipment⁹ reflecting this equipment sale. First, the journal entries for the sale of equipment can be prepared as follows:

Cash	\$8,000 [=2,000 Gain+6,000 Book Value (=20,000 – 14,000)]
Accumulated Depreciation	\$14,000 (=20,000×.7) from additional information
Equipment	\$20,000 from additional information
Gain on Sale of Equipment	\$2,000 from income statement

From the journal entries, the selling price of the equipment can be calculated to be \$8,000 which includes gain. So, add Sale of Equipment¹⁹ for 8,000 under cash flows from investing activities.

20. To calculate an updated Purchase of Equipment⁹ reflecting the equipment sale, it is helpful to use a ‘T’ account for equipment as follows:

Equipment	
Beg. 130,000	
Equipment Purchased=X	20,000 Equipment Sold
End. 154,000	

Then, the equation can be set up as follows:

$$130,000 + X - 20,000 = 154,000$$

$$X = 154,000 - 130,000 + 20,000$$

$$X = 44,000$$

This goes to replace Purchase of Equipment⁹ under cash flows from investing activities.

21. Depreciation Expense¹⁰ was previously calculated without considering the additional information on equipment sale. To calculate an updated Depreciation Expense¹⁰ reflecting the equipment sale, it is helpful to use a ‘T’ account for accumulated depreciation as follows:

Accumulated Depreciation

	Beg. 25,000
Accumulated Depreciation on Equipment Sold	
14,000	Depreciation Expense for Current Year=Y
	End. 35,000

Then, the equation can be set up as follows:

$$25,000 + Y - 14,000 = 35,000$$

$$Y = 35,000 - 25,000 + 14,000$$

$$X = 24,000$$

This goes to replace Depreciation Expense¹⁰ under cash flows from operating activities.

22. Sum of adjustments
23. Net income plus sum of adjustments that is cash flows provided by operating activities
24. Cash flows used by investing activities
25. Cash flows used by financing activities

5. Conclusions and Suggestions

From the beginning of the first accounting course, a highly significant number of business students get lost anywhere in the accounting cycle, never get back on track, and just hope to pass the course. In the second accounting course that is usually required of all business majors, it is common to see that quite some of them swear that will be their last accounting class to take ever. For accounting majors, even after they pass the first intermediate financial accounting course with pride, it is a commonplace that many of them get lost along the adjustment of indirect method on the statement of cash flows and have unsolved cash-flow mysteries in their minds with hurt pride.

In an effort to make the statement of cash flows under indirect method any easier to learn, a challenging but practice-worthy exercise question was chosen from across the exercise questions and problem questions at the end of the chapter of the textbook cited.

It is hoped that the step-by-step approach in this paper allow students to learn the principles of adjustment step-by-step, which then leads to help students to solve cash-flow mysteries and recover their pride in their accounting knowledge. The statement of cash flows is one of the required financial statements. Then, it is fair to say that accounting majors should be able to prepare the statement of cash flows by either method. Also, it is fair to say that it is the instructor's job to find an easier and better way, if possible, to teach this thorny topic. This

paper presented the author's pedagogy that has been proven to be more effective unanimously on his students for the past four years.

It is suggested that students learn the required statement of cash flows at the beginning of semester, while they have reserved energy and while the instructors have enough room to schedule the course chapters for the semester as well.

Lastly, future researches may try new adjustment items, new transactions, and so on to test the suggested approach of the paper, which would further enrich this piece of work and enhance the significance of the study.

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