

Cash is King: An Easy Way to Understand Debits and Credits

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Abstract — In Accounting, it is a well-known problem that many students often have difficulty in deciding whether to debit or credit an account to increase its balance. After practicing and teaching Accounting for more than forty years, the authors have developed a simple, practical and fault-proof method of handling debits and credits--the Cash is King method. Ten representative examples are provided to demonstrate how to use the Cash is King Method to assist the students handle debits and credits and guide them in recording all accounting transactions correctly.

Keywords — *double-entry accounting system, basic accounting equation, accrual accounting, debits and credits*

I. INTRODUCTION

Various accounting scholars and historians have suggested that Pacioli, an Italian Franciscan monk and author of “Summa de Arithmetica, Geometria, Proportioni et Proportionalita”, was the first to develop the double entry accounting system [1], [2] and [3]. Recently, other researchers are debating that Benedikt, a Croatian’s “Book on the Art of Trade” [4], or the Indian’s “Bahi-Khata” [5] and [6] was the first recorded double-entry accounting system. For educators and practitioners, the most important and more compelling task is how to teach this basic but essential accounting concept and the related skills to our students more effectively and efficiently. Utilizing a simple lemonade stand example, Cushing simplified the understanding of *accrual accounting*, *double-entry accounting*, and the *basic accounting equation* without using the terms of “*debits*” and “*credits*” [7]. VanZante also succinctly illustrated how to use the basic accounting equation to solve both simple and complex accrual accounting problems [8]. These authors lamented in their papers about the enormous difficulty students encountered in mastering accrual accounting. We believe that a major impediment that students experience is when a transaction involves sales and purchases where cash receipt or payment is delayed and therefore requiring the presence of receivables and payables.

II. CASH IS KING METHOD TO TEACH DEBITS AND CREDITS

“Cash is King!” That is the buzz word we hear all the time in business and finance. Cash is also a king in helping us understand debits and credits. In Accounting, it is a well-known problem that many students and some practitioners often have difficulty in deciding whether to debit or credit an account to increase its balance [6] and [7]. After practicing and teaching Accounting for more than forty years, the authors have developed a simple, practical and fault-proof method of handling debits and credits-- the “Cash is King” method, or the “cross-out method.” Essentially we instruct students to assume that all transactions result in either the increase of cash (usually a selling activity) or a decrease of cash (usually a purchase activity). We then advance the student to arrive at the correct recording of the transaction by using a cross out and replacement procedure where cash is deleted and supplanted with the correct account. This method should be used only during the early introduction phase to accrual accounting. It should be discontinued once the students develop a comfort zone and are able to master the fundamentals of double-entry accounting.

III. THREE SIMPLE RULES

Using the “Cash is King” method to record any journal entry correctly, you only need to remember three simple rules:

- (1) We need to have a good understanding of the basic accounting equation: $A = L + E$ ¹

That is total assets (A) always equal to the combination of total liabilities (L) and owners’ equity (E). A tenet of the accounting equation is that the normal account balance for any account on the left side of the equation is ‘debit’ or (left). Logically, the normal account balance for any account on the right side of the equation is ‘credit’ or (right). Thus, to increase the balance of any account on the left side of the equation, we

¹ Please note that the Basic Accounting Equation and T Account are two different concepts for different applications. Misconceptions and misapplications of these two accounting concepts are fairly common for some

students and practitioners. Detailed explanation will be provided in Example 5 (footnote 4) when the utilization of the extended version of the accounting equation is necessary the first time.

need to debit the account. Conversely, for the accounts on the right side, we need to do the exact opposite.

(2) Under the double-entry accounting system, debit(s) always equal to credit(s) for any journal entry. That is if the transaction affects only one account that is debited and one account that is credited, the amount must be the same. If the transaction affects multiple accounts, the total amount debited must equal to the total amount credited.²

(3) We need to emphasize that Cash is an Asset. To increase its balance, we need to debit the account. The flip side is to decrease its balance with a credit to the account.

These are three fairly easy tasks and most students should have no difficulty in comprehending them. For the “Cash is King” method, that is all you need to know to make ANY journal entries correctly ALL the time. We always record each journal entry with the Cash account first (even when Cash is not affected by the transaction).

IV. A FEW SIMPLE EXAMPLES

Our first goal is to use a few basic transactions to teach the students how to handle the Cash account. The following are some simple examples:

A. *Denim Company issued \$40 million in new common stock for cash on 12/02/2015.*

Analysis: The Company received cash in this transaction. Following rule (3), we first debit the Cash account to increase its balance as shown in the following journal entry:

12/02/2015	Cash		40,000,000	
		Common Stock	40,000,000	

To record issuance of common stock for cash.

(Explanation: Following Rule (3), we first debit Cash \$40 million to increase its balance. Then we credit Common Stock for the same amount according to Rule (2) to balance the transaction. Cash (an asset account) is on the left side of the equation. Common Stock (an Equity account) is on the right side of the equation. Since both accounts are increased by the same amount, Rule (1) is also satisfied):

A	=	L	+	E
40,000,000				40,000,000

B. *Denim Company purchased office supplies that cost \$1,000 for cash on 12/03/2015.*

Analysis: In Example 1, we received cash and we debit the Cash account to increase its balance. In this transaction, we paid cash and require the opposite procedure—to credit the Cash account:

12/03/2015	Supplies		1,000	
		Cash	1,000	

To record the purchase of supplies for cash.

(Explanation: Following Rule (3), we first credit Cash \$1,000 to decrease its balance. Then we debit Supplies for the same amount according to Rule (2) to balance the transaction. Cash and Supplies³ are both assets and on the left side of the equation. Since one account is increased while the other account is decreased by the same amount, Rule (1) is also satisfied):

A	=	L	+	E
		1,000		
		(1,000)		

This would also be an appropriate time to inform the students that the transaction is an “asset exchange”.

C. *Denim Company purchased land that cost \$150,000 for cash on 12/08/2015.*

Analysis: This transaction is very similar to Example 2 but for a different asset. In Example 1, we received cash and we debit the Cash account to increase its balance. This time we need to do the opposite—credit the Cash account:

12/08/2015	Land		150,000	
		Cash	150,000	

To record purchase of land for cash.

(Explanation: Following Rule (3), we first credit Cash \$150,000 to decrease its balance. Then we debit Land for the same amount according to Rule (2) to balance the transaction. Cash and Land are both assets and on the left side of the equation. Since one account is increased while the other account is decreased by the same amount, Rule (1) is also satisfied):

A	=	L	+	E
		150,000		
		(150,000)		

The three previous entries will be the easiest to comprehend for the students because they require the increase

² Ellerman (1985) validated the accounting equation and the double-entry accounting system theoretically and mathematically [9].

³ Supplies and Supplies Expenses are two different accounts. For example, in the purchase of a ream of printer paper that is stored for future use, the cost is

recorded in the Supplies account as an asset (an unexpired cost). However, if the paper is used to make copies of advertising flyers to be immediately mailed to customers, the cost should be recorded in the Supplies Expenses account as expenses (an expired cost).

or decrease in cash. There is no necessity to implement the cross out method when the Cash accounting is affected by the transaction. The following transactions will demonstrate how to utilize the cross out method where the receipt or payment of cash is delayed, thus requiring the recording of accounts receivable and accounts payable. The cross out method will lead the student to the correct recording of each transaction.

V. SOME COMPLEX APPLICATIONS

D. On 12/08/2015, Denim Company purchased one thousand pairs of denim jeans that cost \$30,000 on account (assume a periodic inventory system is used).

Analysis: This transaction is somewhat similar to Example 2. Instead of Supplies, we acquired merchandise, an expense. There is a big difference though—cash is not paid immediately at the time of the purchase. However, we can always assume the transaction as a cash purchase and then let Cash guide the students to record the transaction correctly:

12/08/2015	Purchases	30,000	
	Cash Accounts Payable	30,000	
	To record purchase on account.		

(Explanation: The key of the “Cash is King” method is to utilize the Cash account to help students journalize the debits and credits correctly with the appropriate accounts. In this case, Cash is not affected by the transaction; however, we can always assume and start with Cash. Following Rule (3), we first credit Cash \$30,000 to decrease its balance. However, since the purchase is “on account” (cash will be paid in the future), we cross out Cash and replace it with Accounts Payable. We debit Purchases for the same amount according to Rule (2) to balance the transaction. Purchases (an Equity/Revenue (Expenses)⁴ account) is on the right side of the equation. Accounts Payable (a liability) is also on the right side of the equation. Because one account is increased while the other account is decreased by the same amount, Rule (1) is also satisfied):

$$\begin{aligned}
 A &= L + E \\
 &= C/C + R/E \\
 &= - \text{Dividend} + N/I \\
 &\qquad\qquad\qquad = \text{Revenue} - \text{Expenses} \\
 30,000 &\qquad\qquad\qquad (30,000)
 \end{aligned}$$

Note: The students will need to understand how the equity account is disaggregated to other temporary accounts (Dividend and Income Statement accounts) where revenue increases equity but dividends and expenses decreases equity. If this is the first time your students are introduced to the extended

⁴ The extended accounting equation is: A = L + E where E = Contributed Capital (C/C) + Retained Earnings (R/E), where R/E = Beginning Balance + Net Income (N/I) – Dividend, and N/I = Revenue – Expenses. Therefore, an

accounting equation, enough time should be allocated to help the students understand all the related concepts.

E. Denim Company sold a pair of jeans for \$60 cash on 12/12/2015.

Analysis: This transaction is somewhat similar to Example 1. Instead of receiving cash from shareholders, cash is collected from a customer:

12/12/2015	Cash	60	
	Sales Revenue		60
	To record cash sales.		

(Explanation: Following Rule (3), we first debit Cash \$60 to increase its balance. Then we credit Sales Revenue for the same amount according to Rule (2) to balance the transaction. Cash (an asset) is on the left side of the equation. Sales Revenue (an Equity/Revenue account) is on the right side of the equation. Since both accounts are increased by the same amount, Rule (1) is also satisfied):

$$\begin{aligned}
 A &= L + E \\
 &= C/C + R/E \\
 &\qquad\qquad\qquad = - \text{Dividend} + N/I \\
 &\qquad\qquad\qquad = \text{Revenue} - \text{Expenses} \\
 60 &\qquad\qquad\qquad 60
 \end{aligned}$$

The recording for cash is similar to entry (1); however, let us reiterate that the students will need to understand how the equity account is disaggregated to other temporary accounts (Dividend and Income Statement accounts) where revenue increases equity but dividends and expenses decreases equity.

F. Denim Company sold 100 pairs of jeans for \$5,000 on account on 12/20/2015.

Analysis: This transaction is very similar to Example 5 with the exception that the receipt of cash is postponed until the future. However, we can always assume that the transaction is a cash deal and then let Cash guide the students to record the transaction correctly with the appropriate account (Accounts Receivable):

12/20/2015	Cash Accounts Receivable	5,000	
	Sales Revenue		5,000
	To record sales on account.		

(Explanation: In this transaction, Cash is also not affected. Similar to Example 3 above, we assume and start with Cash. Following Rule (3), we first debit Cash \$5,000 to increase its balance. However, since the sales is “on account” (cash is

increase in C/C, R/E, N/I or Revenue increases Equity. On the other hand, an increase In Dividend or Expenses decreases Equity.

received in the future), we cross out Cash and replace it with Accounts Receivable. We credit Sales Revenue for the same amount according to Rule (2) to balance the transaction. Accounts Receivable (an asset) is on the left side of the equation. Sales Revenue (an Equity/Revenue account) is on the right side of the equation. Since both accounts are increased by the same amount, Rule (1) is also satisfied):

$$\begin{aligned}
 A &= L + E \\
 &= C/C + R/E \\
 &= - \text{Dividend} + N/I \\
 &= \text{Revenue} - \text{Expenses} \\
 5,000 & \qquad \qquad \qquad 5,000
 \end{aligned}$$

G. On 12/23/2015, Denim Company purchased a warehouse that cost \$1,500,000 for \$500,000 cash and a two-year promissory note for the balance. The assessed value of the land is \$300,000.

Analysis: This transaction is very similar to Example 3. There is a significant difference though—only some cash is initially paid. However, we may always utilize Cash to help to record the transaction:

12/23/2015	Land	300,000	
	Building	1,200,000	
	Cash		500,000
	Cash Notes Payable-L/T	1,000,000	

To record purchase of warehouse for cash and credit.

(Explanation: Following Rule (3), we first credit Cash \$500,000 to decrease its balance for the cash payment. For the payment due in two years, we may also assume and start with Cash similar to Example 3. Therefore, we also credit Cash \$1,000,000 for the future payment. Since cash is to be paid later, we cross out Cash and replace it with Notes Payable-L/T. We debit Land for \$300,000 and debit Building for the balance according to Rule (2) in order to balance the transaction. Cash, Building and Land are all assets and are on the left side of the equation. Notes Payable-L/T (a liability) is on the right side of the equation. Since the total debits equals to the total credits, Rule (1) is also satisfied):

A	=	L	+	E
300,000				
1,200,000				
(500,000)		1,000,000		

The examples above have demonstrated how to use the Cash method to assist the students handle debits and credits and guide them to record the transactions correctly. The following examples will demonstrate how to use the Cash method to help the students handle the more difficult accounting period ending accrual and deferral adjusting journal entries.

H. Denim Company found that it only had half of the supplies remaining on 12/31/2015 per physical count.

Analysis: This indicates that half of the supplies had been consumed, or expensed during the month. We need to update both the Supplies account and the Supplies Expenses account with the following deferral adjusting journal entry:

12/31/2015	Supplies Expenses	500	
	Cash Supplies		500

To record deferral adjustment for supplies usage per physical count.

(Explanation: In this transaction, Cash is also not affected. We can always assume and start with Cash. Assume you had bought the paper, made copies of advertising flyers and sent them out to your customers immediately; the cost should be recorded in the Supplies Expenses account as expenses and credit Cash concurrently. Following Rule (3), we first credit Cash \$500 to decrease its balance. However, since cash was previously paid when we purchased the supplies on 12/03/2015; we cross out Cash and replace it with Supplies for the portion that was used during the month (beginning balance minus ending balance, or \$1,000 - \$500). We now debit Supplies Expenses for the same amount according to Rule (2) to balance the transaction. Supplies (an asset account) are on the left side of the equation. Supplies Expenses (an Expenses account that has a negative effect on Equity) is on the right side of the equation. Since both the left side and the right side of the accounting equation are decreased by the same amount, Rule (1) is also satisfied):

$$\begin{aligned}
 A &= L + E \\
 &= C/C + R/E \\
 &= - \text{Dividend} + N/I \\
 &= \text{Revenue} - \text{Expenses} \\
 (500) & \qquad \qquad \qquad (500)
 \end{aligned}$$

I. Denim Company incurred \$800 of accrued wage expenses on 12/31/2015 which will be paid on 01/03/2016.

Analysis: We will assume that Denim Company actually made a cash payroll payment on 12/31/2015. Cash is reduced with a credit and wage expense is debited. We then use the cross-out method and supplant it with wages payable.

12/31/2015	Wage Expense	800	
	Cash Wages Payable		800

To record accrual adjustment for P/R.

(Explanation: In this transaction, Cash is also not affected. But we can always assume and start with Cash. Following Rule (3), we first credit Cash \$800 to decrease its balance. However, since the wage expenses were “accrued” (cash will be paid in the future), we cross out Cash and replace it with Wages

Payable. Then we debit Wage Expenses for the same amount according to Rule (2) to balance the transaction. Wage Payable (a liability) and Wage Expenses (an Expenses account that has a negative effect on Equity) are both on the right side of the equation. Since one account is increased while the other account is decreased by the same amount, Rule (1) is also satisfied):

$$\begin{aligned}
 A &= L + E \\
 &= C/C + R/E \\
 &= - \text{Dividend} + N/I \\
 &= \text{Revenue} - \text{Expenses} \\
 800 & \qquad \qquad \qquad (800)
 \end{aligned}$$

J. *Denim Company's depreciation for the warehouse for the month of December was \$1,500.*

Analysis: We assume that denim actually paid cash as if the warehouse were leased for the month. Cash is reduced with a credit and Depreciation expense is debited. We then use the cross-out method and replace Cash with Accumulated Depreciation-Building (Acc. Dep-BLDG), a contra asset account utilized to track the expiration of long-term assets:

12/31/2015	Depreciation Expense	1,500	
	Cash Acc. Dep-BLDG	1,500	

To record depreciation for the month of December.

(Explanation: In this transaction, Cash is also not affected. But we may always assume and start with Cash. Following Rule (3), we first credit Cash \$1,500 to decrease its balance. However, since the purpose of a depreciation entry is to spread the total cost of a fixed asset over its economic useful life, we cross out Cash and replace it with Accumulated Depreciation-Building, a contra asset account. We now debit Depreciation Expense for the same amount according to Rule (2) to balance the transaction. Accumulated Depreciation-Building (an asset account, or more correctly, a contra asset account) is on the left side of the equation. Depreciation Expenses (an Expenses account that has a negative effect on Equity) is on the right side of the equation. Since both the left side and the right side of the accounting equation are decreased by the same amount, Rule (1) is also satisfied):

$$\begin{aligned}
 A &= L + E \\
 &= C/C + R/E \\
 &= - \text{Dividend} + N/I \\
 &= \text{Revenue} - \text{Expenses} \\
 (1,500) & \qquad \qquad \qquad (1,500)
 \end{aligned}$$

VI. CONCLUSIONS

The objective of this paper is to facilitate students' understanding of the double-entry accounting system in an introductory accounting course to transition from a cash base accounting model to an accrual base accounting model. The "Cash is King" method, or the "cross-out method" is a very useful, easy and practical tool to assist entry-level accounting students understand the double-entry accounting system. This method only requires the students to understand three basic rules: (1) the basic accounting equation, (2) debit(s) always equal to credit(s) in any transaction, and (3) Cash is an Asset, and is therefore increased by a debit and decreased by a credit. We have used ten representative examples to demonstrate how to use the "Cash is King" method to help the students handle debits and credits and guide them in recording all the transactions correctly. The authors plan to test the effectiveness of the cross-out method in a future empirical study. We plan to incorporate the cross-out method in one or more introductory accounting sections and compare the students' mastery levels of double-entry accounting of an experimental group and a control group that uses the conventional accrual method.

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