

Chapter 2

2022年1月29日 23:32

Investing and Financing Decisions and the Accounting System

By Yunhao Cao, for UGBA 102A Spring 2022 by Prof. Gary Pieroni.

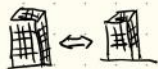
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Reading Ch.2 2021/1/27

Transactions

- Certain events that have economic impact on the business entity recorded as part of the accounting process.



External Events

exchanges of assets, goods, or services by one party for assets, services or promises to pay (liabilities) from one or more parties.

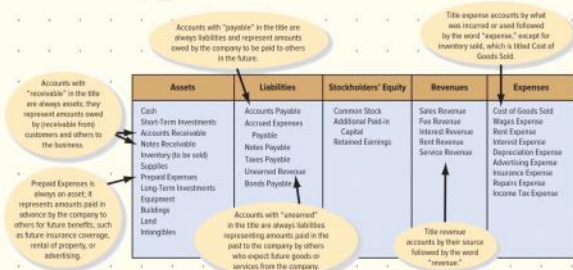


Internal Events

Certain events that do not count as external events but have a measurable effect on the entity

Accounts

- A standard format that organizations use to accumulate the dollar effect of transactions on each financial statement item.
- Each company establishes a "chart of accounts" (a list of all account titles and unique numbers)



- Some important events that have future economic impact are not reflected in the financial statements (signing a contract is only exchange of promises) \Rightarrow needs to be disclosed in notes to the financial statements

Transaction Analysis

- process of studying a transaction to determine its economic impact on the entity in terms of the accounting equation (fundamental accounting model)

$$\text{Assets (A)} = \text{Liabilities (L)} + \text{Stockholders' equity (SE)}$$

- ① **Dual Effects**— Every transaction has at least two effects on the basic accounting equation

\therefore Most transactions with external parties involve an exchange by which the business entity both receives something and gives up something in return.

- ② The accounting balance must remain in balance after each transaction.

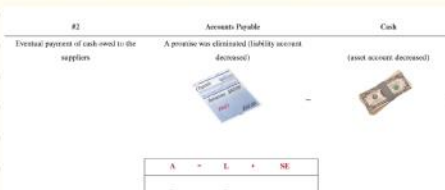
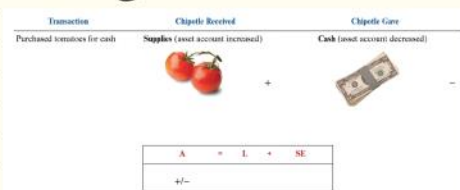
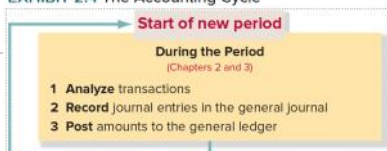


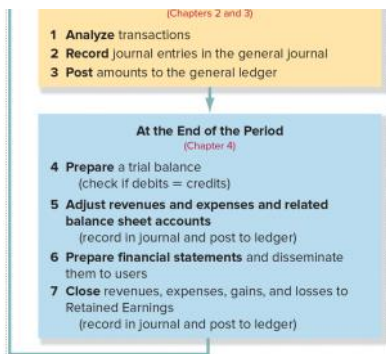
EXHIBIT 2.4 The Accounting Cycle



The Accounting Cycle

For most organizations, recording transaction effects and keeping track of account balances in the manner just presented is **impractical**.

To handle the multitude of daily transactions that a business



track of account balances in the manner just presented is **impractical**.

To handle the multitude of daily transactions that a business generates, **companies establish accounting systems**, usually computerized, that follow a cycle.

The Direction of Transaction Effects

transaction effects increase and decrease assets, liabilities, and stockholders' equity accounts. To reflect these effects efficiently, we need to structure the transaction analysis model in a manner that shows the **direction** of the effects.

EXHIBIT 2.5 Basic Transaction Analysis Model

ASSETS (many accounts)		=	LIABILITIES (many accounts)		+	STOCKHOLDERS' EQUITY	
+	-		-	+		Contributed Capital (2 accounts)	Earned Capital (1 account)
Debit	Credit		Debit	Credit		Common Stock and Additional Paid-in Capital	Retained Earnings
						+ Credit Investment by owners	- Debit Dividends declared
							+ Credit Net income (expanded in Ch. 3)

Each account is set up as a "T" with the following structure:

- **Increases in asset accounts are on the left** because assets are on the left side of the accounting equation ($A = L + SE$).
- **Increases in liability and stockholders' equity accounts are on the right** because they are on the right side of the accounting equation ($A = L + SE$).

As a consequence:

- **Asset** accounts increase on the left (debit) side and **normally have debit balances**. It would be highly unusual for an asset account, such as Inventory, to have a negative (credit) balance.
- **Liability and stockholders' equity** accounts increase on the right (credit) side and **normally have credit balances**.

The accounting equation will remain in balance. **The total dollar value of all debits will equal the total dollar value of all credits** in a transaction. For an extra measure of assurance, add this equality check (Debits = Credits) to the transaction analysis process.

Assets	=	Liabilities	+	Stockholders' Equity
+ with Debits		+ with Credits		+ with Credits
Accounts have debit balances		Accounts have credit balances		Accounts have credit balances

Analytical Tools

The Journal Entry

In a bookkeeping system, transactions are recorded in chronological order in a **general journal**

After analyzing the business documents (such as purchase invoices, receipts, and cash register tapes) that describe a transaction, the bookkeeper enters the effects on the accounts in the journal using debits and credits.

The **journal entry**, then, is an accounting method for expressing the effects of a transaction on accounts. It is **written in a debits-equal-credits format**.

Account Titles:
Debited accounts on top.
Credited accounts on bottom, usually indented.

	Debit	Credit
(a) Cash (+A)	300	
Common stock (+SE)		1
Additional paid-in capital (+SE)		299

Reference:
Letter, number, or date

Amounts:
Debited amounts on left.
Credited amounts on right.

While you are learning to perform transaction analysis, use the symbols A, L, and SE next to each account title in journal entries, as is illustrated in the journal entry for event (a). Specifically identifying an account as an asset (A), a liability (L), or a stockholders' equity account (SE) clarifies the transaction analysis and makes journal entries easier to write.

Note:

It is useful to include a date or some form of reference for each transaction. The debited accounts are written first (on top) with the amounts recorded in the left column. The credited accounts are written below the debits and are usually indented in manual records; the credited amounts are written in the right column.

Total debits (\$300) equal total credits (\$1 + \$299 = \$300).

Three accounts are affected by this transaction. Any journal entry that affects more than two accounts is called a **compound entry**.

In a formal bookkeeping system, an additional line is written below the journal entry as an explanation of the transaction.

EXHIBIT 2.6 Posting Transaction Effects from the Journal to the Ledger

General Journal					Page G1	
Date	Account Titles and Explanation (in millions)	Ref.	Debit	Credit		
1-2-18	Cash (+A)	101	300			
	Common stock (+SE)	301		1		
	Additional paid-in capital (+SE)	302		299		
	(Investment by stockholders.)					

General Ledger CASH 101					
Date	Explanation	Ref.	Debit	Credit	Balance
	Balance				186
1-2-18		G1	300		486

General Ledger COMMON STOCK 301					
Date	Explanation	Ref.	Debit	Credit	Balance
	Balance				1
1-2-18		G1		1	2

General Ledger ADDITIONAL PAID-IN CAPITAL 302					
Date	Explanation	Ref.	Debit	Credit	Balance
	Balance				1,305
1-2-18		G1		299	1,604

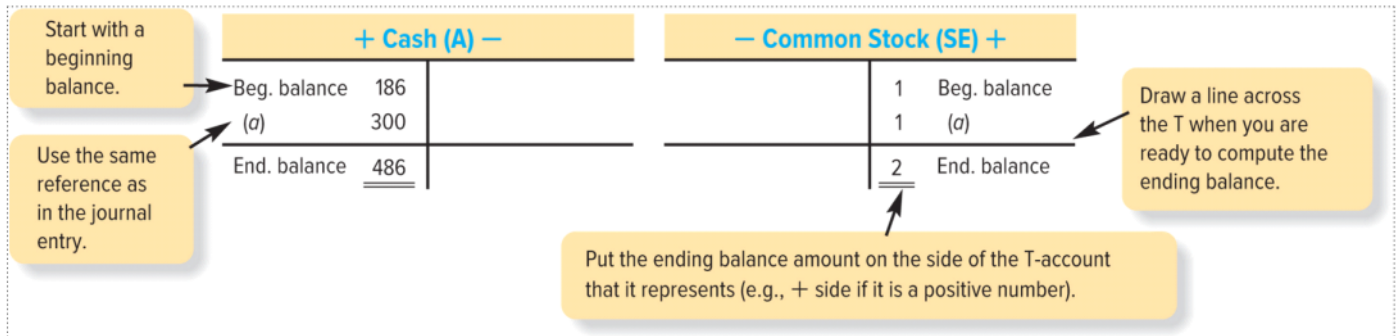
The T Account

Journal entries do not provide the balances in accounts. After the journal entries have been recorded, the bookkeeper **posts** (transfers) the dollar amounts to each account affected by the transaction to determine the new account balances.

As a group, the accounts are called a **general ledger** 总分类账簿. In the manual accounting system used by some small businesses, the ledger is often a three-ring binder with a separate page for each account. In a computerized system, accounts are stored on a disk.

One very useful tool for summarizing the transaction effects and determining the balances for individual accounts is a **T-account**, a simplified representation of a ledger account.

EXHIBIT 2.7 T-Accounts Illustrated



Notice the following:

- For Cash, which is classified as an asset, increases are shown on the left and decreases appear on the right side of the T-account. For Common Stock, however, increases are shown on the right and decreases on the left because Common Stock is a stockholders' equity account.
- Every T-account starts with a beginning balance.
- It is important to include the reference to the journal entry next to the debit or credit in each T-account. In our illustration, it is (a). For companies, it would be a date. This cross-referencing allows the transactions to be traced between the journal entries and T-accounts.
- When all of the transactions have been posted to a T-account, a horizontal line is drawn across it, similar to the line that is drawn in a mathematical problem, to signify that a balance is to be determined.
- An ending balance is written on the appropriate side of the T-account.

EXHIBIT 2.8 Chipotle Mexican Grill's First Quarter 2018 Balance Sheet (based on hypothetical investing and financing activities)

CHIPOTLE MEXICAN GRILL, INC. Consolidated Balance Sheets*		
(in millions of dollars, except per share data)		
	March 31, 2018	December 31, 2017
ASSETS		
Current Assets:		
Cash	\$ 389	\$ 186
Short-term investments	333	324
Accounts receivable	49	49
Supplies	20	20
Prepaid expenses	51	51
Total current assets	842	630
Property and equipment:		
Land	21	13
Buildings	1,711	1,677
Equipment	637	627
Total cost	2,369	2,317
Accumulated depreciation	(979)	(979)
Net property and equipment	1,390	1,338
Long-term investments	35	—
Intangible assets	81	78
Total assets	<u>\$2,348</u>	<u>\$2,046</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	\$ 82	\$ 82
Unearned revenue	64	64
Dividends payable	2	—
Income taxes payable	18	18
Accrued expenses payable:		
Wages payable	83	83
Utilities payable	77	77
Total current liabilities	326	324
Notes payable	80	78
Other liabilities	279	279
Total liabilities	685	681
Stockholders' Equity:		
Common stock (\$0.01 par value per share)	2	1
Additional paid-in capital	1,604	1,305
Treasury stock	(2,334)	(2,334)
Retained earnings	2,391	2,393
Total stockholders' equity	1,663	1,365
Total liabilities and stockholders' equity	<u>\$2,348</u>	<u>\$2,046</u>

Trial Balance

it is possible to create a balance sheet based solely on the investing and financing activities recorded previously. Usually, businesses first will create a trial balance spreadsheet for internal purposes before preparing statements for external users. A trial balance lists the names of the T-accounts in one column, usually in financial statement order (assets, liabilities, stockholders' equity, revenues, and expenses), with their ending debit or credit balances in the next two columns.

**CHIPOTLE MEXICAN GRILL—
TRIAL BALANCE**
(based on hypothetical investing
and financing transactions only
during the first quarter ended
March 31, 2018)

(in millions)	Debit	Credit
Cash	389	
Short-term investments	333	
Accounts receivable	49	
Supplies	20	
Prepaid expenses	51	
Land	21	
Buildings	1,711	
Equipment	637	
Accumulated depreciation		979
Long-term investments	35	
Intangible assets	81	
Accounts payable		82
Unearned revenue		64
Dividends payable		2
Income taxes payable		18
Wages payable		83
Utilities payable		77
Notes payable (<i>current</i>)		0
Notes payable (<i>noncurrent</i>)		80
Other liabilities		279
Common stock		2
Additional paid-in capital		1,604
Treasury stock	2,334	
Retained earnings		2,391
Total	5,661	5,661

Classified Balance Sheet

- The assets and liabilities are **classified** into two categories: **current** and **noncurrent**. Current assets are those to be used or turned into cash within the upcoming year, whereas noncurrent assets are those that will last longer than one year. Current liabilities are those obligations to be paid or settled within the next 12 months with current assets.
- Dollar signs are indicated at the top and bottom of the asset section and top and bottom of the liabilities and shareholders' equity section. More than that tends to look messy.
- The statement includes **comparative data**. That is, it compares the actual but simplified account balances at December 31, 2017, with those at March 31, 2018, based on assumed quarterly transactions. When multiple periods are presented, the most recent balance sheet amounts are usually listed on the left, but not always (look carefully).
- Unlike Chipotle, most companies do not provide a total liabilities line on the balance sheet. To determine total liabilities on those statements, add total current liabilities and each of the noncurrent liabilities.

Current Ratio

- Does the company have the short-term resources to pay its short-term debt?

- Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$**