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## Introduction to Stockholders' Equity

This note examines the accounting for stockholders' equity. It discusses the various components found in the equity section of a company's balance sheet by using Alcoa Inc. as an illustration. Alcoa, a Dow Jones Industrial Average component, is the world's leading producer of primary aluminum, fabricated aluminum, and alumina and is active in all major aspects of the industry.<sup>1</sup> On December 31, 2000, the company's market capitalization, or market value of equity, stood at \$28.9 billion.<sup>2</sup> At the same time, Alcoa's book value of equity, the total equity amount reported on the balance sheet, was only \$11.4 billion.<sup>3</sup> (See **Exhibit 1** for the company's balance sheet.) The company disclosed that the book value of equity was comprised of preferred stock, common stock, additional capital, retained earnings, treasury stock, and accumulated other comprehensive loss. (See **Exhibit 2** for Alcoa's statement of shareholders' equity.) This note addresses each component of the stockholders' equity section in turn and discusses the accounting entries for such transactions as issuance of common stock, repurchase of treasury stock, payment of dividends, and other equity-related transactions. The note concludes with a brief discussion of why book value of equity is usually different from a company's market value of equity.

### Common Stock

In most cases corporations will start out by issuing common stock. In that situation, the owners of the common stock will be the only owners of the corporation, and they will share among themselves, in proportion to the number of shares, all the rights shareholders have in a corporation. These rights include the right to vote on corporate issues, the right to the corporation's profits, and a right to the corporation's assets if the corporation is liquidated. Sometimes corporations establish more than one class of common stock and distribute the rights of shareholders in a nonequal way. For example, a corporation might have two classes of common stock, one of which carries the right to vote for directors and the other of which does not.

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<sup>1</sup> Alcoa Inc. Web site description, "Alcoa at a Glance," September 24, 2002.

<sup>2</sup> Alcoa Inc. 10K filing with the Securities and Exchange Commission, December 31, 2000.

<sup>3</sup> Ibid.

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Instructor Thomas D. Fields and Jacob Cohen prepared this note as the basis for class discussion.

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The process of equity financing begins with the certificate of incorporation (or, in some states, the articles of incorporation), which identifies the corporation's name, location, and business purpose and establishes the organization's capital stock and all the rights and privileges associated with it. There are various forms for business organizations ranging from sole proprietorships to limited liability corporations (LLCs). This note concentrates on the corporate structure, as most publicly traded companies are organized in this manner. The certificate of incorporation also sets limits on how many shares can be issued to the market. This limit is referred to as the number of shares authorized.

**Authorized** The amount of stock that the corporation is authorized to sell is indicated in its articles of incorporation. The total amount of authorized stock at the time of incorporation normally anticipates both initial and subsequent capital needs. If all authorized stock is issued, a corporation must obtain consent of the state and shareholders to amend its charter before it can issue additional shares.

**Issued** The issued number of shares relates to the number of authorized shares that were sold to the public. This includes the number of shares that were sold in the initial public offering and any subsequent sales of stock.

**Outstanding shares** The number of shares that have been issued less the number of shares that have been reacquired (i.e., the treasury stock, see below):

*Alcoa Inc.*

*At the Company's annual meeting on May 12, 2000, Alcoa shareholders approved an amendment to increase the authorized shares of Alcoa common stock from 600 million to 1.8 billion.*

Neither the initial authorization of capital stock nor amendments to the amount results in a formal accounting entry. However, most companies disclose the number of shares that have been authorized and issued, thus allowing financial statement users the ability to calculate the number of unissued but authorized shares.

*Alcoa Inc.*

*Common Stock: Alcoa has 1.8 billion common stock shares authorized at a par value of \$1 per share. On December 31, 2000, there were 924,574,538 shares issued.*

## Issuing Stock

Accounting for the issuance of stock depends on the stock's par value.

**Par value** The articles of incorporation will indicate whether the shares are to be issued with a stated par value or for no par value. The concept of par has little economic meaning. The best way to view par value is as a dollar figure specified in the charter, from which certain well-defined consequences flow. The following are two such consequences:

1. When the corporation issues par value shares, a dollar figure equal to the par value is shown on the corporation's books as stated capital. In many states there are limitations, spelled out in the corporation statute, about what can be done with stated capital. For example, in order to protect creditors' interests no dividends may be paid out of stated capital.

2. Fees and taxes payable to the state of incorporation are often based on par value. A typical arrangement sets fees or taxes as a percentage of a number that is derived by multiplying par value by the number of shares authorized in the corporation's charter. (This explains par values of \$0.00001.)

Some companies elect to issue no-par stock. However, an interesting twist in some states (e.g., Delaware) is that stock without par value is typically taxed as if it had a par value of \$100.

## Additional Capital

Additional capital, otherwise referred to as surplus capital or additional paid-in capital in excess of par, is the difference between the issuance price of the stock and its par value. When recording the transactions resulting from the issuance of stock, the amount of cash or other assets received is recorded as an asset and the equity is allocated into the par value and the additional paid-in capital in excess of par value.

*Alcoa Inc.*

*Assuming Alcoa issued 10,000 shares of its \$1 par value common stock for \$25 per share, the accounting entry would be the following:*

<i>Cash</i>	<i>\$250,000</i>
<i>Common Stock</i>	<i>\$ 10,000</i>
<i>Additional Capital</i>	<i>\$240,000</i>

## Preferred Stock

To appeal to more potential investors, a corporation may issue an additional class of equity, called preferred stock. Preferred stock has contractual provisions that give it a preference or priority over common stock in certain areas. Typically, preferred stock has a priority as to (1) distribution of earnings (dividends) and (2) assets in the event of liquidation. Preferred stock may also have a required dividend payment. However, preferred stock generally does not have voting rights.

Preferred stock often contains a cumulative dividend feature. This means that preferred stockholders must be paid both current-year preferred stock dividends and any unpaid prior-year dividends before common stockholders receive dividends.

*Alcoa Inc.*

*Alcoa has two classes of preferred stock. Serial preferred stock has 557,740 shares authorized, with a par value of \$100 per share and an annual \$3.75 cumulative dividend preference per share. Class B serial preferred stock has 10 million shares authorized (none issued) and a par value of \$1 per share.*

Accounting for the issuance of preferred stock is identical to that for common stock.

## Retained Earnings

The retained earnings account represents the sum of the company's cumulative net income since inception less dividends paid to shareholders and certain other adjustments. This account is often

referred to as “accumulated losses” when the aggregate earnings of the company are negative. The equation that captures the essence of the retained earnings account is:

$$\begin{array}{rcccl} \text{Beginning} & & \text{Current} & & \text{Distributed} & & \text{Ending} \\ \text{Retained} & + & \text{Period} & - & \text{Earnings} & = & \text{Retained} \\ \text{Earnings} & & \text{Earnings} & & \text{(Dividends)} & & \text{Earnings} \\ & & \text{(Net Income)} & & & & \end{array}$$

## Dividends

A dividend is a distribution of retained earnings by a corporation to its stockholders *pro rata*. A dividend is a distribution of capital and as such does not appear on the income statement. Dividends can take various forms such as cash, property, or stock. Cash dividends are most common and are generally reported quarterly as a dollar amount per share. Cash dividends are recorded in the following manner:

*Alcoa Inc.*

*September 14, 2000 – The Board of Directors of Alcoa today declared a quarterly common stock dividend of 12.5 cents per common share. The dividend is payable November 25, 2000 to shareholders of record at the close of business on November 3, 2000.*

**Date of declaration (September 14, 2000):** On the declaration date, the board of directors formally declares a dividend and announces it to stockholders. Prior to the declaration there is no legal obligation on the company to pay a dividend. However, after the declaration is made, the company has a legal binding obligation to the shareholders similar to any creditor. Retained earnings is reduced, and a liability called dividend payable is recorded. For example, for each 1,000 shares of common stock, the company will record the following:

*Retained Earnings \$125*  
*Dividend Payable \$125*

**Date of Record (November 3, 2000):** At the record date, ownership of the outstanding shares is determined for dividend purposes.

*No entry is recorded on this date.*

**Date of Payment (November 25, 2000):** On the payment date, dividend checks are mailed to stockholders and the payment of the dividend is recorded.

*Dividend Payable \$125*  
*Cash \$125*

*Alcoa Inc.*

*Overall, in 2000, dividends paid to shareholders increased by approximately \$120 million to \$418 million. The increase was due to a higher number of shares outstanding as well as an increase in the dividend per share in 2000.*

## Distinction between Stock Dividend and Stock Split

Corporations may issue additional shares to stockholders at no cost. These issuances may be referred to as a stock dividend or a stock split.

Accounting Research Bulletin (ARB) 43 distinguishes for accounting purposes between stock dividends and stock splits based on the rationale for the additional distribution of shares. According to ARB 43, if the main reason for the distribution is to “give the recipient shareholders some ostensibly separate evidence of a part of their respective interests in accumulated corporate earnings without distribution of cash or other property,” then the transaction should be accounted for as a stock dividend. If, on the other hand, the distribution is mainly intended to “increase the number of outstanding shares for the purpose of effecting a reduction in their unit market price and, thereby, of obtaining wider distribution and improved marketability of the shares,” then the transaction should be accounted for as a stock split. The ARB also suggests that any distribution of more than 20%–25% of the existing shares should be considered to be a stock split.

## Stock Dividends

Firms use stock dividends for several reasons. First, a corporation may simply not have sufficient amounts of cash to declare and pay a cash dividend. Stock dividends do not require the use of the corporations' resources and allow cash to be retained for other purposes. Second, stock dividends result in additional shares of stock outstanding and may decrease the market price per share of stock if the dividend is large. The lower price may make the stock more attractive to a wider range of investors and allow enhanced financing opportunities. Finally, unlike cash dividends, which are treated as ordinary income for tax purposes, stock dividends are typically tax free. The shareholder's proportionate share of the business does not change as a result of stock dividends.

*Alcoa Inc.*

*If Alcoa were to issue a 10% stock dividend when the stock price of the company was at \$50 on 1 million shares, \$1 par value common stock outstanding, the company would record the following entry for the 100,000 additional shares:*

<i>Retained Earnings</i>	<i>\$5,000,000</i>	
<i>Common Stock</i>		<i>\$ 1,00,000</i>
<i>Additional Paid-in Capital</i>		<i>\$4,900,000</i>

The charge to retained earnings is equal to the number of new shares issued times the current market price per share.

## Stock Splits

A stock split may or may not result in a reduction in the par value per share. The purpose of a stock split is to increase the marketability of the stock by lowering its market value per share. A stock split where the par value per share is adjusted downward to reflect the greater number of shares outstanding does not affect the balances in any stockholders' equity accounts. Therefore, no entry is required.

*Alcoa Inc.*

*On January 10, 2000, the board of directors declared a two-for-one common stock split and cut the par value per share in half. As a result of the stock split, shareholders of record on May 26, 2000, received an additional common share for each share held. The additional shares were distributed on June 9, 2000.*

*No Entry*

A corporation may declare a stock split, but retains the pre-split par value per share. This declaration is referred to as a stock split in the form of a dividend.

*On January 10, 2000, the board of directors declared a two-for-one common stock split in the form of a dividend. One million, \$1 par value shares were outstanding. As a result, shareholders of record on May 26, 2000 received an additional common share for each share held. The additional shares were distributed on June 9, 2000. The entry is:*

*Retained earnings \$1,000,000*

*Common Stock \$1,000,000*

The charge to retained earnings is equal to the number of new shares issued times the par value per share.

## Treasury Stock

Treasury stock is a corporation's own stock that has been issued and subsequently reacquired by the corporation. Treasury stock is a contra-equity account. A corporation may acquire treasury stock for various reasons: to reissue the shares to officers and employees under bonus and stock compensation plans; to increase trading of the company's stock in the market in the hopes of enhancing its market value; to have available for use in acquisitions of other companies; to reduce the number of shares outstanding and thereby increase earnings per share; and to avoid a takeover.

*Alcoa Inc.*

*September 25, 2000 – Alcoa announced today that it would immediately begin repurchasing stock under its previously authorized stock repurchase program. Alcoa has approximately 868 million shares outstanding. The company from time to time buys back shares of its outstanding common stock with open-market purchases. The stock will be used for employee benefit plans and general corporate purposes.*

*In 2000, Alcoa used approximately \$763 million to repurchase 21,742,600 shares of the company's common stock at an average price of approximately \$35 per share.*

*Treasury stock is generally accounted for by the cost method. This method uses the cost of the shares purchased to value the treasury stock. For example, if 1,000 shares were purchased at \$35, Alcoa would record the following transaction:*

<i>Treasury Stock</i>	<i>\$35,000</i>
<i>Cash</i>	<i>\$35,000</i>

*Alcoa Inc.*

*On December 31, 2000, Alcoa reported the following number of shares in its financial footnotes:*

*Issued: 924,574,538**Treasury: (59,057,298)**Outstanding: 865,517,240*

When treasury stock is sold back into the market, the accounting for its sale is different when the treasury stock is sold above cost than when it is sold below cost. When the selling price of the shares is greater than the cost, the difference is credited to paid-in capital from treasury stock.

*For example, if 1,000 shares that were purchased by Alcoa in 2000 for \$35 are sold back into the market at \$40 per share, the following transaction will get recorded:*

Cash	\$40,000
Treasury Stock	\$35,000
Paid-in capital from Treasury Stock	\$ 5,000

When treasury stock is sold below its cost, the excess of cost over selling price reduces the balance in the paid-in capital from treasury stock account.

*For example, if Alcoa subsequently sold 1,000 shares to the market when the stock was at \$32, the following transaction would get recorded:*

Cash	\$32,000
Paid-in Capital from Treasury Stock	\$ 3,000
Treasury Stock	\$35,000

## Accumulated Other Comprehensive Income or Loss

This section of owners' equity captures the changes in owners' equity during an accounting period that arises from transactions that do not involve owners that are not reflected in the income statement, such as unrealized gains and losses from certain investments and gains and losses arising from translating foreign subsidiary financial statements expressed in local currency into U.S. dollars.

<sup>4</sup>

## Market Versus Book Value of Equity

At the end of 2000, the book value of Alcoa's equity stood at \$11.4 billion, while the market value of the equity was \$28.9 billion. There are many reasons why the book value of equity does not equal the market value of equity. As you recall from discussions regarding asset accounting, most assets are carried on the books of companies at historical cost. Thus, appreciation in the value of many assets (such as land) are not captured in the book value of equity but will be reflected in the market value of equity. A similar situation arises for many internally developed intangibles, such as skill of employees or brand value. Under the conventions of accounting, these intangibles do not get recorded on the books of companies. However, the market does incorporate such intangibles when determining the market value of equity.

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<sup>4</sup> The FASB now requires other comprehensive income to be presented outside of owners' equity in a separate statement or as part of a statement of comprehensive income.

**Exhibit 1** Alcoa Inc., Balance Sheet from 10K Filing with the SEC, December 31, 2000

In Millions for Period Ended December 31,	2000	1999
Current assets:	--	--
Cash and cash equivalents	315	237
Short-term investments	56	77
Receivables from customers, less allowances	3,461	2,199
Other receivables	354	165
Inventories	2,703	1,618
Deferred income taxes	385	233
Prepaid expenses and other current assets	304	271
Total current assets	<u>\$7,578</u>	<u>\$4,800</u>
Properties, plants, and equipment	12,850	9,133
Goodwill, net of accumulated amortization	6,003	1,328
Other assets	5,260	1,805
<b>TOTAL ASSETS</b>	<u><b>\$31,691</b></u>	<u><b>\$17,066</b></u>
<b>LIABILITIES</b>	--	--
Current liabilities:	--	--
Short-term borrowings	2,719	343
Accounts payable, trade	1,876	1,219
Accrued compensation and retirement costs	928	582
Taxes, including taxes on income	702	368
Other current liabilities	1,302	424
Long-term debt due within one year	427	67
Total current liabilities	<u>\$7,954</u>	<u>\$3,003</u>
Long-term debt, less amount due within one year	4,987	2,657
Accrued postretirement benefits	2,719	1,720
Other noncurrent liabilities and deferred credits	2,126	1,473
Deferred income taxes	969	437
Total liabilities	<u>\$18,755</u>	<u>\$9,290</u>
Minority interests	1,514	1,458
<b>SHAREHOLDERS' EQUITY</b>	--	--
Preferred stock	56	56
Common stock	925	395
Additional capital	5,927	1,704
Retained earnings	7,127	6,061
Treasury stock, at cost	(1,717)	(1,260)
Accumulated other comprehensive loss	(896)	(638)
Total shareholders' equity	<u>\$11,422</u>	<u>\$6,318</u>
<b>TOTAL LIABILITIES AND EQUITY</b>	<u><b>31,691</b></u>	<u><b>17,066</b></u>

Source: Alcoa Inc., balance sheet form 10K filing with the SEC, December 31, 2000.



**Exhibit 2** Alcoa Inc., Statement of Shareholders' Equity from 10K Filing with the SEC, December 31, 2000

December 31	Comprehensive Income	Preferred Stock	Common Stock	Additional Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
Balance at end of 1999		\$56	\$395	\$1,704	\$6,061	\$(1,260)	\$(638)	\$6,318
Comprehensive income—2000:								
Net income—2000	\$1,484				1,484			1,484
Other comprehensive income (loss):								
Change in minimum pension liability, net of \$(3) tax expense	5							
Unrealized translation adjustments	(263)						(258)	(258)
Comprehensive income	\$1,226							
Cash dividends:								
Preferred @ \$3.75 per share					(2)			(2)
Common @ \$0.500 per share					(416)			(416)
Treasury shares repurchased						(763)		(763)
Stock issued: Reynolds acquisition			135	4,367				4,502
Stock issued: compensation plans				251		306		557
Stock issued: two-for-one split			395	(395)				--
Balance at end of 2000		\$56	\$925	\$5,927	\$7,127	\$(1,717)	\$(896)	\$11,422

Source: Alcoa Inc., statement of shareholders' equity from 10K filing with the SEC, December 31, 2000.