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The Balance Sheet[1]

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The balance sheet of a firm contains a list of its resources and of its sources of capital as of a particular day. It is by far the most important financial statement. The balance sheet gives a picture of the financial position of the firm at a specific date. For this reason, it is also called the *statement of financial position*. Every day, the firm engages in new transactions and the composition of the balance sheet changes accordingly. The resources of the firm are the *assets* (A); the sources of capital are the *liabilities* (L) and the *owners' equity* (OE). By construction, assets are always equal to liabilities plus owners' equity. This is known as the *accounting identity*: A = L + OE.

Assets are a) resources owned or controlled by the firm b) that are expected to generate future economic benefits and c) that arise from a past transaction or event. Ownership by the company is a necessary requirement for a resource to be an asset. However, not all the resources of the firm are in the balance sheet, because some do not meet the ownership requirement. For instance, having a talented work force is clearly an important resource but, because the firm does not own its employees, they cannot be considered an asset in accounting terms. In this case, there is also an issue of measurement: it would be extremely difficult and subjective to measure the value of a talented work force. The key characteristic of an asset is that it is expected to generate future economic benefits. This characteristic determines whether or not the asset is recognized in the balance sheet.

Asset recognition: an asset is recognized in the balance sheet if a) it is probable that economic benefits will flow to the firm and if b) these benefits can be measured reliably. If only one of these conditions is fulfilled, the asset is not recognized in the balance sheet. In this case, if the value of the asset is significant, the firm discloses its existence in a note to the balance sheet. Assessing whether an asset will generate future economic benefits requires certain judgment and it is an essential task of management. In any case, the probability of generating future profits must be high for the asset to be recognized, and firms are expected to err on the side of caution when there are doubts. The second aspect is the measurement of the economic benefits.

[1] It is highly advisable to read first "Introduction to Financial Accounting", CN-230-E to further understand this note.

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Sometimes it is hard to assess the value of the future economic benefits even though it is clear that they will occur. For example, a company discovers a promising new technology but it is unable to estimate the size of the market and the revenues that it will generate. This new asset fails the measurement test and cannot be recognized as an asset.

Liabilities are a) present obligations of the firm b) arising from past events, c) the settlement of which is expected to result in outflows of economic benefits. For an obligation to be an accounting liability, it must be a present obligation. Future obligations are not liabilities. For instance, commitments are not liabilities because they are future obligations. A firm does not recognize liabilities for the salary of employees who have yet to perform their work or for the cost of future purchases of raw materials.

Liability recognition: a liability is recognized in the balance sheet if a) it is probable that economic benefits will flow from the firm and if b) these benefits can be measured reliably. If only one of these conditions is met, the liability is not recognized in the balance sheet. In such a case, if the value of the liability is significant, the firm discloses its existence in a note to the balance sheet. Lawsuits for business malpractice are typical examples of liabilities not recognized but simply disclosed. Quite often the firm considers that it will prevail in the lawsuit (no economic benefits will flow from the firm) or that it is impossible to measure reliably the eventual costs of the litigation.

Owners' equity is the wealth of the owners in the firm. It consists of two elements: a) the capital contributed by them and b) the earnings generated by the operations and retained in the firm. You can think of owners' equity as the residual claim of the owners on the assets of the firm after all the liabilities have been paid: A – L = OE. The difference between assets and liabilities (A – L) is called net assets. Owners' equity is also referred to as *shareholders' equity*.

To understand why the accounting identity is always true, look at the figure below. The company raises capital from its owners (OE) and from lenders (L). With this capital, the company invests in productive resources (A). The portion of the capital not yet invested in productive resources is shown as cash, another asset, in the balance sheet. The company uses the assets to generate earnings, which are used to reward the capital providers and to be reinvested in the firm in order for it to grow. The right side of the balance sheet tells us how the assets on the left side were financed.

Balance sheet of company X as of December 31, year x1

Uses of capital		**Capital sources**	
		Liabilities	xx
Assets	xx	Owners' equity	xx
		Total L + OE	xx

Assets are classified into two categories: current assets and non-current assets. *Current assets* (CA) are the resources of the firm that are either cash or that the firm expects to convert into cash, to sell, or to consume during the next 12 months or during the firm's operating cycle, whichever is longer. For example, imagine a winery in which the time to produce wine is two years. Its operating cycle is two years and the threshold to define current assets is therefore 24 months. *Non-current assets* (NCA) are assets that are not current. They are resources that the firm intends to use for a long period of time to conduct its operations.

By the same token, liabilities are classified into current and non-current liabilities. *Current liabilities* (CL) are present obligations of the firm that have to be paid in less than one year or the firm's operating cycle, whichever is longer. *Non-current liabilities* (NCL) are present obligations of the firm that will be paid in more than one year. Current assets less current liabilities is referred to as *working capital* (WC).

Most Common Current Assets

Cash. Cash includes cash (cash in hand and bank deposits) and cash equivalents, which are highly liquid, short-term investments with maturities lower than three months, such as treasury bills, commercial paper, etc. Cash is the most liquid asset of the firm.

Short-term investments or Marketable securities. These are short-term financial investments in debt or equity instruments with maturities between three and 12 months, such as bonds and shares of other firms.

Accounts receivable. The amounts owed by the customers of the firm. They are reported net of expected defaults.

Inventories. Products purchased or produced by the firm that are held for sale. Manufacturing firms have three types of inventory accounts: a) raw materials inventory, which contains the items that will be used in production; b) work in progress inventory, which contains products undergoing production; and c) finished goods inventory, which contains the finished products ready for sale. Inventories are valued at acquisition cost or at production cost (all the costs incurred to make the product). If the inventories become obsolete or the goods prove difficult to sell, they must be written down using a lower-of-cost-or-market rule LOCOM). The goal is to avoid having an overstated asset on the balance sheet. For example, if the cost of making a product was €100 but after a few months the firm observes that it is unable to sell it and that the competition sells the same product for €90, then the firm must reduce the value of this item.

Prepaid expenses. These are payments for insurance, rent, etc. that will provide benefits to the firm in the future: for example, a one-year fire insurance policy that provides coverage to the firm or prepaid rent that grants the firm the right to use office space for a specific period of time.

Interest receivable. Interest earned on the firm's investments not yet received.

Taxes receivable. Taxes not yet refunded by the tax authorities.

Non-current assets held for sale. These are non-current assets that the firm has put up for sale. They have been reclassified from the non-current asset section to the current asset section of the balance sheet.

Most Common Non-Current Assets

Property, plant and equipment. These are long-lived assets with physical substance that the firm intends to use in its operations for a long period of time. Examples are land, buildings, machines, vehicles, tools, etc. Even though the firm can sell these assets at will, it is not its intention to do so. A non-current asset for one firm can be a current asset for another. If a firm produces cars, it classifies them as current assets. If a firm uses cars in its operations, it classifies them as non-current assets. With the exception of land, property, plant and equipment must be depreciated because of use or obsolescence. Property, plant and equipment are usually reported in the balance sheet net of accumulated depreciation. Some firms report the original cost of these assets on the face of the balance sheet and, below, a negative line called accumulated depreciation, which contains all the depreciation recognized up to the balance sheet date (see Walmart in the **Exhibit**). Depreciation is an allocation of the cost of the depreciable assets to different accounting periods to take into account that these assets lose value because of usage in the normal course of business. An example will clarify this assertion. A firm buys a computer for €900 that is expected to last three years and have no salvage value at the end of its useful life. The firm will systematically allocate the cost of the computer as an expense over the next three years, at the rate of €300 per year. The accumulated depreciation account will have ending balances of €300, €600 and €900 at the end of each year. The net value of the computer will be €600, €300 and €0 at the end of each year. Note that the firm does not allocate as an expense the full cost of the computer in the first year because the asset is expected to contribute to generating profits for three years.

Deferred tax assets. Income taxes recoverable in the future.

Intangible assets. These are long-lived assets, with no physical substance and not financial in nature. They include acquired patents, copyrights, trademarks, etc. If these assets do not have indefinite lives, they must be amortized in a systematic way. Amortization is the word used for depreciation when the assets are intangible.

Financial investments. These are long-term investments of the firm in debt or equity securities.

Goodwill. This is an intangible asset that only arises when a firm acquires another firm. It captures the value of intangibles that cannot be separated from the rest of assets acquired (e.g., growth opportunities, the reputation of the acquired firm, the know-how of its workforce, synergies, etc.). Note that these elements of goodwill cannot be sold separately and, for this reason, they are lumped together in this asset. Goodwill is assumed to have indefinite life and it is not amortized. Nevertheless, goodwill must be tested for impairment every year. An impairment test verifies that the asset has not lost value during the period. If this were the case, the goodwill would be written down and the firm would recognize a goodwill impairment loss.

Most Common Current Liabilities

Accounts payable. The amounts owed to suppliers of merchandise, services and goods used in the business.

Salaries payable, utilities payable, interest payable. These are amounts owed by the firm to employees, utilities and lenders. These payables are also referred to as *accrued expenses*.

Taxes payable. Amounts owed to the tax authorities.

Advances from customers or Deposits from customers or Deferred revenue or Unearned revenue. This liability reflects the money received from customers for goods or services not yet delivered.

Short-term loans. Borrowings due in the next 12 months.

Notes payable. These are like accounts payable but are based on a formal written contract; they usually carry explicit interest. Notes payable have stronger legal enforceability in case of default than accounts payable.

Current portion of long-term loans. Quite often, long-term loans require annual repayments of the principal borrowed. This liability reflects the amount of the next repayment due. For example, a firm took a five-year loan of €50,000. The contract calls for annual repayments of €10,000, in addition to the interest expense. Initially, the firm records the loan in the non-current liabilities section of the balance sheet as long-term loan (€40,000) and in the current liabilities section as current portion of long-term loan (€10,000).

Most Common Non-Current Liabilities

Long-term loans, Mortgages. Amounts due for borrowings with maturities longer than one year. They are interest-bearing obligations.

Pension obligations. Obligations with employees, payable when they retire.

Restructuring provisions, Litigation provisions. These are obligations of the firm for losses incurred but not yet paid as a result of restructuring plans (e.g., the closing of certain lines of business, the elimination of redundant employees) or lawsuits that the firm expects to lose with certainty.

Capital lease obligations. These are the amounts owed for the right to use leased assets during periods longer than one year. Technically, these obligations are the present value of the future lease payments for the use of the leased asset.

Deferred tax liabilities. Income taxes payable in the future as a result of temporary taxable differences.

Most Common Owners' Equity Accounts

Share capital or Common stock. The par or nominal value of the ordinary shares multiplied by the number of shares issued. The par value is an arbitrary value selected by the firm that does not usually coincide with the amount paid by the investors who purchase the shares. Ordinary shares are also called common shares.

Share premium or Additional paid in capital. Price of issued shares in excess of their par value. For instance, a firm issues 10,000 shares that are purchased by investors at €20 per share. The shares have been assigned a par value of €1 per share. The firm receives €200,000 (10,000 x €20). In the balance sheet, this amount is recorded as follows: Share capital €10,000 (10,000 x €1 par) and Share premium €190,000 (10,000 x €19). The total contributed capital is always the addition of share capital and share premium. The separation between these two accounts is a relic from the past and it does not have any economic meaning. It is maintained because many provisions of current corporate and mercantile laws still contain references to the par value of shares.

Preferred shares or Preferred stock. These are shares different from the common or ordinary shares that have different voting and/or dividend rights. Usually, preferred shares have priority over common shares when the firm distributes dividends and they may have limited voting rights.

Retained earnings or Retained profits. Earnings of the current and past periods that have been retained in the firm and not distributed to the owners. If the accumulated earnings are negative, this account is referred to as accumulated losses.

Accumulated other comprehensive income. This is the accumulation of gains or losses that affect the wealth of the owners but that are not recognized in retained earnings. For example, if certain financial assets increase in value during the period, the owners are richer and must recognize a gain. However, accounting rules call for this unrealized gain (i.e., the gain has not been realized because the financial asset has not been sold) to be excluded from current earnings; instead the gain is taken directly to accumulated other comprehensive income. Sometimes, especially in Europe, this account is referred to as reserves.

Non-controlling interests. These are the equity interests of minority shareholders in firms controlled by the reporting company. They represent the claims of the minority shareholders on the consolidated assets and liabilities. They only appear in consolidated balance sheets. A consolidated balance sheet aggregates the different balance sheets of the firm's subsidiaries.

Asset and Liability Measurement

Most assets and liabilities are reported on the balance sheet at *historical cost*. In some instances, certain assets or liabilities are reported at *current value* (also called fair value, or fair market value, or market value). When an asset is acquired or a liability is incurred, historical cost and current cost are the same. However, as time goes by, both values tend to diverge. For example, when a building is purchased, its acquisition cost coincides with its current cost (fair value). However, five years later, both values will differ substantially.

The historical cost measurement basis has a long standing in accounting. It is fairly reliable and it is easy to apply and verify by auditors. Under this basis, assets and liabilities are reported at acquisition cost. Historical cost always means depreciated historical cost. For example, most non-current assets have finite useful lives and must be depreciated annually. Historical cost is always applied under a lower-of-cost-or-market rule. This means that, for instance, assets must be tested for impairment to ensure that the value recorded on the balance sheet never exceeds the market value. If this were the case, the asset must be written down. Note that this is a one-sided rule because it only recognizes declines in value but never increases in value if the value of an asset happens to be higher than the amount in the balance sheet.

The current cost or fair value is a measurement basis of more recent adoption and it is rapidly gaining ground in accounting. It presents the advantage that it makes the balance sheet more relevant for users but it can potentially make it less reliable. The reason is that, in many cases, it is very hard to measure reliably the fair value of many assets or liabilities. Fair value measurement is only required for most financial assets and certain financial liabilities.

Regarding the measurement of liabilities, a) current monetary liabilities (e.g., accounts payable) are recorded at the amount to be paid off, b) current non-monetary liabilities (e.g., deposits from customers) are recorded at the amount received and c) non-current liabilities are recorded at present value.[2]

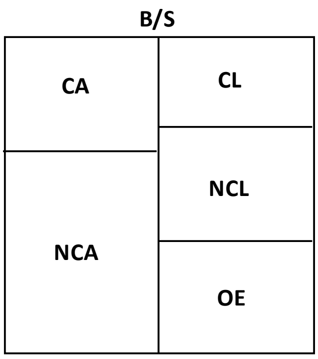
[2] Present value takes into account the time value of money. For instance, if we could invest €100 now to earn 5% per year, the value of our investment would be €105 a year later. This means that the present value of a payment of €105 to be received in a year is €100.

Key Conventions Underlying Asset and Liability Measurement

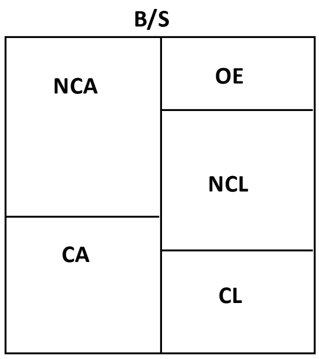
- Going concern assumption. The firm is expected to operate long enough to carry out its business plans.
- Relevance. Relevant financial information is capable of making a difference in the decisions made by users. Financial information is capable of making a difference in decisions if it has predictive value, confirmatory value, or both.
- Faithful representation. This means that the reported numbers are reasonably free from error or bias. This property is also referred to as *reliability*.
- Conservatism. No asset (liability) should be overstated (understated) in the balance sheet.

Usual Presentation Formats for the Balance Sheet

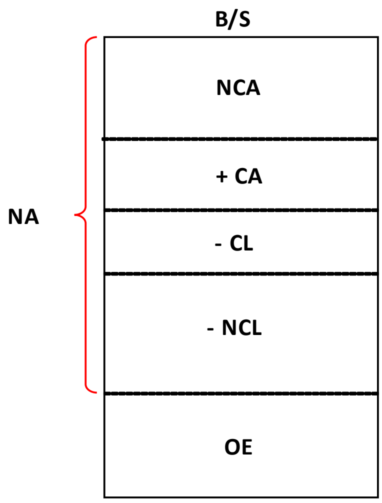
There are three formats used by firms to present the balance sheet accounts. The following diagrams show these formats:



MOST ANGLO-SAXON COUNTRIES (Walmart)



CONTINENTAL EUROPEAN COUNTRIES (Metro Group)



UK & IRELAND (J Sainsbury PLC)

The first two formats, at left and center, give a stakeholder view, as both show the accounting identity as A = L + OE. The only difference between the two is in the order of presentation of current versus non-current assets and liabilities. The third format, on the right, gives a shareholder view: the accounting identity is displayed in net asset form (NA) as A – L = OE. There is no informational difference among the three formats, as they contain the same data. In the **Exhibit**, you will find several real-life examples.

Exhibit

Walmart Stores

Consolidated balance sheets (audited) (USD) In millions, unless otherwise specified	Jan. 31, 2014	Jan. 31, 2013
Current assets:		
Cash and cash equivalents	$7,281	$7,781
Receivables, net	6,677	6,768
Inventories	44,858	43,803
Prepaid expenses and other	1,909	1,551
Current assets of discontinued operations	460	37
Total current assets	**61,185**	**59,940**
Property and equipment:		
Property and equipment	173,089	165,825
Less accumulated depreciation	-57,725	-51,896
Property and equipment, net	115,364	113,929
Property under capital leases:		
Property under capital leases	5,589	5,899
Less accumulated amortization	-3,046	-3,147
Property under capital leases, net	2,543	2,752
Goodwill	19,510	20,497
Other assets and deferred charges	6,149	5,987
Total assets	**204,751**	**203,105**
Current liabilities:		
Short-term borrowings	7,670	6,805
Accounts payable	37,415	38,080
Accrued liabilities	18,793	18,808
Accrued income taxes	966	2,211
Long-term debt due within one year	4,103	5,587
Obligations under capital leases due within one year	309	327
Current liabilities of discontinued operations	89	0
Total current liabilities	**69,345**	**71,818**
Long-term debt	41,771	38,394
Long-term obligations under capital leases	2,788	3,023
Deferred income taxes and other	8,017	7,613
Redeemable non-controlling interest	1,491	519
Equity:		
Common stock	323	332
Capital in excess of par value	2,362	3,620
Retained earnings	76,566	72,978
Accumulated other comprehensive income (loss)	-2,996	-587
Total Walmart shareholders’ equity	76,255	76,343
Nonredeemable non-controlling interest	5,084	5,395
Total equity	**81,339**	**81,738**
Total liabilities, redeemable non-controlling interest and equity	**$204,751**	**$203,105**

Exhibit (Continued)

Metro Group
Consolidated balance sheets

Assets € million	June 30, 2013	June 30, 2014
Non-current assets	**16,763**	**15,902**
Goodwill	3,778	3,671
Other intangible assets	389	367
Property, plant and equipment	10,770	10,164
Investment properties	188	151
Financial investments	280	323
Investments accounted for using the equity method	92	94
Other financial and non-financial assets	370	311
Deferred tax assets	896	821
Current assets	**12,923**	**12,816**
Inventories	6,246	6,265
Trade receivables	540	634
Financial investments	9	3
Other financial and non-financial assets	2,834	3,048
Entitlements to income tax refunds	368	226
Cash and cash equivalents	2,209	2,357
Assets held for sale	717	283
Total assets	**29,686**	**28,718**

Equity and liabilities € million	June 30, 2013	June 30, 2014
Equity	**5,287**	**5,044**
Share capital	835	835
Capital reserve	2,551	2,551
Reserves retained from earnings	1,891	1,661
Non-controlling interests	10	-3
Non-current liabilities	**8,794**	**7,067**
Provisions for pensions and similar commitments	1,522	1,696
Other provisions	429	464
Borrowings	6,508	4,6
Other financial and non-financial liabilities	186	162
Deferred tax liabilities	149	145
Current liabilities	**15,605**	**16,607**
Trade liabilities	9,768	9,845
Provisions	642	530
Borrowings	2,025	3,559
Other financial and non-financial liabilities	2,493	2,396
Income tax liabilities	134	197
Liabilities related to assets held for sale	543	80
Total equity and liabilities	**29,686**	**28,718**

Exhibit (Continued)

J. Sainsbury plc

Balance sheets	Group March 15, 2014 £m	 March 16, 2013 £m
Non-current assets		
Property, plant and equipment	**9,880**	9,804
Intangible assets	**286**	171
Investments in subsidiaries	**–**	–
Investments in joint ventures and associates	**404**	532
Available-for-sale financial assets	**255**	189
Other receivables	**26**	38
Amounts due from Sainsbury's Bank customers	**1,292**	–
Derivative financial instruments	**28**	47
Deferred income tax asset	**–**	–
	12,171	10,781
Current assets		
Inventories	**1,005**	987
Trade and other receivables	**433**	306
Amounts due from Sainsbury's Bank customers	**1,283**	–
Derivative financial instruments	**49**	91
Cash and bank balances	**1,592**	517
	4,362	1,901
Non-current assets held for sale	**7**	13
	4,369	1,914
Total assets	**16,540**	12,695
Current liabilities		
Trade and other payables	**-2,692**	-2,726
Amounts due to Sainsbury's Bank customers	**-3,245**	–
Borrowings	**-534**	-165
Derivative financial instruments	**-65**	-65
Taxes payable	**-189**	-148
Provisions	**-40**	-11
	-6,765	-3,115
Net current liabilities (CA – CL)	**-2,396**	-1,201
Non-current liabilities		
Other payables	**-204**	-173
Amounts due to Sainsbury's Bank customers	**-302**	–
Borrowings	**-2,250**	-2,617
Derivative financial instruments	**-21**	-4
Deferred income tax liability	**-227**	-277
Provisions	**-29**	-39
Retirement benefit obligations	**-737**	-632
	-3,770	-3,742
Net assets	**6,005**	5,838
Equity		
Called up share capital	**545**	541
Share premium account	**1,091**	1,075
Capital redemption reserve	**680**	680
Other reserves	**127**	140
Retained earnings	**3,560**	3,401
Equity attributable to owners of the parent	**6,003**	5,837
Non-controlling interests	**2**	1
Total equity	**6,005**	5,838