3. Balance Sheet Analysis. Assets, Liabilities and Equity

Table 5. Consolidated Balance Sheets

THE COCA-COLA COMPANY			
CONSOLIDATED BALANCE SHEETS			
In millions except par value			
	Dec. 31, 2014	*Dec. 31, 2013*	*Dec. 31, 2012*
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	8 958	10 414	8 442
Short-term investments	9 052	6 707	5 017
TOTAL CASH, CASH EQUIVALENTS AND SHORT-TERM INVES	18 010	17 121	13 459
Marketable securities	3 665	3 147	3 092
Trade accounts receivable, less allowances of $61 and $53, respectively	4 466	4 873	4 759
Inventories	3 100	3 277	3 264
Prepaid expenses and other assets	3 066	2 886	2 781
Assets held for sale	679	0	2 973
TOTAL CURRENT ASSETS	32 986	31 304	30 328
EQUITY METHOD INVESTMENTS	9 947	10 393	9 216
OTHER INVESTMENTS, PRINCIPALLY BOTTLING COMPANIES	3 678	1 119	1 232
OTHER ASSETS	4 407	4 661	3 585
PROPERTY, PLANT AND EQUIPMENT - net	14 633	14 967	14 476
TRADEMARKS WITH INDEFINITE LIVES	6 533	6 744	6 527
BOTTLERS' FRANCHISE RIGHTS WITH INDEFINITE LIVES	6 689	7 415	7 405
GOODWILL	12 100	12 312	12 255
OTHER INTANGIBLE ASSETS	1 050	1 140	1 150
TOTAL ASSETS	92 023	90 055	86 174
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Accounts payable and accrued expenses	9 234	9 577	8 680
Loans and notes payable	19 130	16 901	16 297
Current maturities of long-term debt	3 552	1 024	1 577
Accrued income taxes	400	309	471
Liabilities held for sale	58	0	796
TOTAL CURRENT LIABILITIES	32 374	27 811	27 821
LONG-TERM DEBT	19 063	19 154	14 736
OTHER LIABILITIES	4 389	3 498	5 468
DEFERRED INCOME TAXES	5 636	6 152	4 981
THE COCA-COLA COMPANY SHAREOWNERS' EQUITY			
Common stock, $0.25 par value; Authorized - 11,200 shares; Issued - 7	1 760	1 760	1 760
Capital surplus	13 154	12 276	11 379
Reinvested earnings	63 408	61 660	58 045
Accumulated other comprehensive income (loss)	-5 777	-3 432	-3 385
Treasury stock, at cost - 2,638 and 2,571 shares, respectively	-42 225	-39 091	-35 009
EQUITY ATTRIBUTABLE TO SHAREOWNERS OF THE COCA-C(	30 320	33 173	32 790
EQUITY ATTRIBUTABLE TO NONCONTROLLING INTERESTS	241	267	378
TOTAL EQUITY	30 561	33 440	33 168
TOTAL LIABILITIES AND EQUITY	92 023	90 055	86 174

Source: Form 10K of Coca-Cola Company for the fiscal year ended December 31, 2014

A balance sheet is a summary of a firm's "financial position", its assets and the claims on those assets, at a particular time, typically the last day of the year. It shows the ending values for all assets, liabilities, and equity accounts. The names of the assets and their respective values are listed in increasing (Poland) or descending (USA, Canada) order of liquidity. The claims on assets are listed on the balance sheet roughly in order on decreasing (Poland) or increasing (USA, Canada) maturity.

The balance sheet (statement of financial position) is a snapshot of the firm. It is a convenient means of organizing a summarizing what a firm owns (its assets), what a firm owes (its liabilities), and the difference between this two, the firm's equity (the owners' interest in the firm) at a given time. The left hand-side lists the assets of the firm and the right-hand side lists the liabilities and equity.

3.1 Assets

Assets are divided into two major categories: current and non-current (long-term). In the United States some industries, such as financial institutions do not divide assets (or liabilities) into current and noncurrent. When a subsidiary is consolidated from an industry that does not use the concept of current and noncurrent, the consolidated statements will also not use this concept.

3.1.1 Current Assets

Current assets are those resources that will be converted to cash within one year or within the firm's normal operating cycle. A typical current asset has a life of less than one year. The operating cycle covers the time between the acquisition of inventory and the realization of cash form selling the inventory.

Current assets are listed on the balance sheet in order of liquidity (the ability to be converted to cash).

Liquidity refers to the speed and ease with each an asset can be converted to cash. A highly liquid asset is the one that can be quickly sold without significant loss of value. An illiquid asset is one that cannot be quickly converted to cash without a substantial price reduction. Fixed assets are, for the most part, relatively illiquid. Liquidity is valuable. The more liquid a business is, the less likely is to experience financial distress (that is, difficulty in paying debts or buying needed assets) in the short-run.

Current assets typically include cash and cash equivalents, marketable securities, short-term receivable, inventories and prepaid expenses.

Cash and cash equivalents

Cash is the most liquid asset. It includes cash in hand, negotiable checks and unrestricted balances in checking accounts. Savings accounts are also classified as cash.

Marketable Securities

The purpose of investments in marketable securities is to maintain liquidity and achieve short-term profits.

Accounts Receivable

Accounts receivable are monies due on accounts that arise from sales or services rendered to customers. Accounts receivable are shown net of allowances to reflect their realizable value. The typical allowances are for bed debts (uncollectible accounts).

Inventories

In a manufacturing firm inventories include raw materials, work in process (work in progress) and finished goods.

Raw materials are goods purchased for direct use in manufacturing a product.

Work in process represents goods started but not ready for sales. Work in process includes the cost of raw materials, labor costs and factory overheads.

Finished goods are inventory ready for sale.

Inventories of a manufacturing company are divided into: raw materials, work in progress and finished goods.

FIFO and LIFO

The most common methods of accounting techniques used in managing inventory are: FIFO, LIFO and average cost.

The FIFO (first in, first out) method assumes that that the first inventory required is the first sold or used. The LIFO (last in, first out) assumes that the latest inventory purchased or produced is matched against current sales. An average cost rule results in inventory amount and cost of goods sold (COGS) is somewhere between FIFO and LIFO.

In periods of **rising prices** and stable or increasing inventory quantities, the impact of LIFO and FIFO on the financial statements can be summarized as

	LIFO	FIFO
COGS	**Higher**	**Lower**
Income before taxes	Lower	Higher
Income taxes	Lower	Higher
Net income	Lower	Higher
Cash flow	**Higher**	**Lower**
Inventory balance	Lower	Higher
Working capital	Lower	Higher

FIFO accounting assumes that the costs of items first purchased are deemed to be the costs of items first sold. LIFO accounting assumes that the costs of items last purchased are deemed to be the costs of items first sold.

Example 2. FIFO and LIFO

Beggining inventory:

	20	units	x	$	5	=	$ 100

Quarter	Purchases Units	Unit Cost	Purchases $
1	10	$ 6	$ 60
2	10	$ 7	$ 70
3	15	$ 8	$ 120
4	15	$ 9	$ 135
	50		$ 385

Ending inventory:

30 units

(a) How many units are sold ?

(b) Calculate COGS and ending inventory using FIFO.

(c) Calculate COGS and ending inventory using LIFO.

(d) Calculate COGS and ending inventory using average cost method.

(e) Discuss the impact of FIFO and LIFO on the income statement, balance sheet and cashflows.

Solution												
(a)												
	Units sold = Beginning inventory + Purchases - Ending Inventory											
	40	units										
(b)	FIFO											
	COGS						Ending inventory					
	20	$	5	$	100		15	$	9	$	135	
	10	$	6	$	60		15	$	8	$	120	
	10	$	7	$	70		0	$	7	$	-	
	40			$	230		30			$	255	$ 485
(c)	LIFO											
	COGS						Ending inventory					
	15	$	9	$	135		20	$	5	$	100	
	15	$	8	$	120		10	$	6	$	60	
	10	$	7	$	70			$	7	$	-	
	40			$	325		30			$	160	$ 485
(d)	Weighted - average											
	$ 485	:		70		=	6.93					
COGS		40		x		6.93	=	277.1429				
Ending Inventory		30		x		6.93	=	207.8571				
(e)												

	Beggining Inventory	Purchases	Total	COGS	Ending Inventory	Total
FIFO	$ 100	$ 385	$ 485	$ 230	$ 255	$ 485
LIFO	$ 100	$ 385	$ 485	$ 325	$ 160	$ 485
Weighted - average	$ 100	$ 385	$ 485	$ 277	$ 208	$ 485

	Income Statement	Balance Sheet	Cash Flows
FIFO	Higher Income	Higher Inventory	Lower
LIFO	Lower Income	Lower Inventory	Higher

Prepaids

A prepaid is an expenditure made in advance of the use of service or goods. For example, if insurance is paid in advance for three years, at the end of the first year, the two years' worth of insurance will be prepaid.

3.1.2 Noncurrent assets

Noncurrent or long-term assets take longer than a year or an operating cycle to be converted to cash. They are expected to provide benefits and services over periods longer than one year.

Long-term assets are usually divided into four categories: tangible assets, investments, intangible assets and other.

Accountants refer to these assets as **fixed assets** or **capital assets**.

Tangible assets

Tangible assets are the physical facilities used in the operations of business.

Land is shown at acquisition cost and is not depreciated. Land containing resources that will be used up, such as mineral deposits is subject to depletion. It is similar to depreciation of fixed assets.

Buildings are presented at a cost plus the cost of permanent improvements. Buildings are depreciated (expensed) over the estimated useful life.

Machinery is presented at a historical cost, including delivery and installation. It is depreciated over its estimated useful life.

Investments

They may be long-term or short term assets. The company may want to be the owner of other companies. It buys shares of other companies and does not want to sell them in the nearest future (shares held-to-maturity). But sometimes it buys shares of other companies listed on the stock exchange to sell them in the short time to realize profits (shares available-for-sale).

The company may also invest in long term financial instruments like bonds, long-term loans, ABS and MBS, etc. and also short-term financial instruments like bills, CD, commercial papers etc. Debt securities are classified as **held-to-maturity securities carried at amortized cost or available-for-sale securities carried at fair value**.

Long-term investments, usually stocks and bonds of other companies, are often held to maintain a business relationship or to exercise control.

Accounting rules for financial reporting of intercorporate investments depend primarily on the degree of investor influence or control over investee measured by the percentage of ownership in the investee firm.

Ownership level	Degree of control	Reporting Rule
< 20%	No significant influence	Cost or market
20-50%	Significant influence	Equity method
>50%	Control	Consolidation

The cost method is used for securities with no available market price (not publicly traded). Equity securities that have a public market value usually follow the market value rule. Most of equity securities should be presented at fair value.

The equity method must be used when the investor can exercise significant influence on the investee. Under the equity method the investment account is adjusted by the proportionate share in the stock of a subsidiary company. For example, if a subsidiary company earns $100 and a parent company owns 20%, the parent should increase investment account by $20. If a subsidiary company pays dividends $30, the parent should decrease investment account by $6.

Example 3. Equity Method

The balance sheet of a Parent and of a Subsidiary are shown below.
A subsidiary company reports a profit of $100 of which $ 30 is paid as dividends.
Other accounts are the same.
(a) Calculate the share of a Parent in a Subsidiary.
(b) Construct the balance sheet of a Parent including profit and dividends of a Subsidiary.

	Parent	Subsidiary
Current assets	470	40
Investment in subsidiary	30	
Other long-term assets	500	160
Total assets	1 000	200
Current libilities	100	30
Long-term liabilities	300	20
Equity	600	150
Total liabilities and equity	1 000	200

Solution

(a)

The share is

30 / 150 = 20%

(b)

Current assets	470
Investment in subsidiary	44
Other long-term assets	500
Total	1 014
Current libilities	100
Long-term liabilities	300
Equity	614
Total	1 014

The Parent reports the share in income of a subsidiary in its income statement and increases its investment in a subsidiary.
Dividends of a subsidiary are not included in income stetement of a Parent.
Dividends of a subsidiary are reducing the investment of a Parent.

Under consolidation, all the assets, liabilities, revenues, expenses, and cash flows of the subsidiary are included in the corresponding accounts of the parent. When ownership in a subsidiary is less than 100%, a minority interest results. Minority interest (noncontrolling interest) is the amount of the consolidated net assets and income that does not belong to the parent.

Example 4. Consolidated Balance Sheet. Minority Interest

The balance sheet of a Parent and a Subsidiary are shown below.
(a) Calculate minority interest.
(b) Construct the consolidated balance sheet of a Parent.

	Parent	Subsidiary
Current assets	400	40
Investment in subsidiary	100	
Other long-term assets	500	160
Total assets	1 000	200
Current libilities	100	30
Long-term liabilities	300	20
Equity	600	150
Total liabilities and equity	1 000	200

Solution

(a)

Equity of a subsidiary - Investment of Parent

150 - 100 = 50

(b)

Current assets	440
Other long-term assets	660
Total	1 100
Current libilities	130
Long-term liabilities	320
Minority interest	50
Equity	600
Total	1 100

Intangible Assets

Intangibles are nonphysical assets. Intangibles are recorded at historical cost and amortized over their useful or legal lives.

Research and development costs must be expensed as incurred (they are not an intangible).

Patents are exclusive legal rights granted to a company. They are recorded at acquisition cost and are amortized over its legal or its useful life.

Trademarks are distinctive names or symbols.

Organizational costs are legal costs incurred when a business is organized.

Franchises are the legal rights to operate under a particular corporate name, providing trade-name products or services. The cost should be amortized over the life of franchise.

Copyrights are rights that authors, painters, musicians, sculptors, and other artists have in their creation and expressions. The copyright is granted for the life of the creator, plus 70 years.

Other Assets

Construction in progress is classified as part of tangible assets. A company cannot use assets under construction. Such items are usually classified as long-term other assets and they should not be included in the analysis of company's assets efficiency. These costs are transferred to the proper tangible asset account upon completion of construction.

Leases. Leases are classified as operating or capital leases. Assets leased under a capital lease are classified as long term assets.

Special funds are monies set aside for example for pensions.

3.2 Liabilities

Liabilities are usually classified as either current or long-term liabilities.

3.2.1 Current Liabilities

Current liabilities are obligations that must be paid within one year or within the firm's normal operating cycle, whichever is longer.

Payables include short-term obligations created by the acquisition of goods and services, wages payable, and taxes payable.

Unearned income includes payments collected in advance of the performance of service.

Other current liabilities include deferred taxes, dividends payable, litigation and derivatives.

3.2.2 Long Term Liabilities

Long-term liabilities are payable in more than one year or one operating cycle, whichever is longer. Long-term liabilities are generally of two types: financing arrangements and operational obligations.

Financing Arrangements

Financing agreements such as notes payable, bonds payable and credit arrangements require systematic payment of principal and interest.

Promissory notes due in periods longer than one year are classified as long term. Promissory notes secured by a claim against real property are called mortgage notes.

Bonds payable are usually for a longer maturity than notes payable.

Long-term loans are similar to bonds. Sometimes companies arrange loan commitments from banks. Such credit commitments do not represent liability unless a company requests the funds. In return for giving a credit commitment, the bank obtains a fee. Also banks often require that a company holds a specified sum in its bank account, reefed to as a compensating balance.

Operational Obligations

Operational obligations include deferred taxes, pension obligations and service warranties.

Deferred taxes are caused by using different accounting methods for tax purposes and reporting purposes. For example, a company may use accelerated depreciation for tax purposes and straight-line depreciation (lower) for reporting purposes. The tax expense for reporting purposes is higher and net income is lower. The difference is deferred tax. In the later years straight-line depreciation will give higher depreciation, lower taxes and higher income. Deferred taxes should disappear. But as companies constantly buy fixed assets, the taxes may be deferred for a very long time.

Warranty obligations are arising out of product warranties. Product warranties require the seller to correct any deficiencies in quantity, quality, or performance of the product for a specified period of time after the sale.

Minority interest reflects the ownership of minority shareholders in the consolidated balance sheet. It is equal to equity of a subsidiary less investment of a parent company in subsidiary. Some companies include minority interests in liabilities, others present it in the stockholders equity.

3.3 Equity

Stockholders' equity (**net worth**) indicates stockholders' wealth in book-value terms. This implies that actual wealth of the shareholders (i.e. in market value terms) may be higher or lower than the stockholders' equity. This feature of the balance sheet is intended to reflect the fact that, if the firm were to sell all of its assets and use the money to pay off its debts, whatever residual value remained would belong to shareholders.

Stockholders' equity is the residual ownership interest in the assets of a company that remains after deducting its liabilities.

It is usually divided into two basic categories: **paid-in capital and retained earnings**.

Paid-in capital consists of **common stock**, **preferred stock** and sometimes **donated capital**.

Common stock represents ownership that has voting and liquidation rights. Common stockholders elect the board of directors and vote on strategic corporate decisions. The liquidation rights give them claims to company assets after all creditors' and preferred stockholders' rights have been fulfilled.

Preferred stockholders seldom have voting rights. When preferred stock has voting rights, it is usually because of missed dividends. When preferred stock has a preference as to dividends, the preferred dividend must be paid before a dividend can be paid to common stockholders.

Donated capital may be included in the paid-in capital. Donators are usually stockholders, but sometimes creditors, or even other parties (such as a city). For a example a city may donate land to a company to locate a factory there to increase employment.

Retained earnings as part of equity are the accumulated undistributed earnings of the company (net income minus dividends) for all past periods.

Other accounts include **other comprehensive income, equity oriented deferred compensation, and employee stock ownership plans (ESOPs)**.

The companies are required to disclose the separate categories that make up accumulated other comprehensive income.

Equity-oriented deferred compensation includes a wide variety of plans. If stock is issued in a plan before some services are performed, the unearned compensation should be shown as a reduction of equity and accounted for as an expense of future services as services are performed.

An ESOP is a qualified stock-bonus plan. It must be a permanent trusteed plan for the exclusive benefit of employees. From a company's perspective there are advantages (reduction of a potential unfriendly takeover risk) and disadvantages (significant amount of voting rights of employees) to an ESOP.

Treasury stock arises when a company repurchases its own stock (it is possible in the United States, but not possible in Poland and many other countries).

3.4 Balance Sheet Analysis

Many problems inherent in balance sheet presentation may cause difficulties in financial analysis. Many assets and liabilities are valued at cost. Market values (or replacement costs) of many assets cannot be determined. Assets are presented with different measurement attributes and do not reflect the actual market (or liquidation values). Liabilities related to contingencies also may not appear on the balance sheet.

It is also important to understand that:

1. Non-current (fixed) assets are more profitable and less liquid than current assets.
2. Equity is more costly than long-term debt. Long-term debt is more costly than current liabilities. More costly sources of finance provide more flexible liquidity.

The first task of balance sheet analysis should be to compare market value of equity (if a company is listed on exchange) with the book value of equity in the balance sheet. These values may be significantly different. A company with a higher market value equity than book value of equity represents an **accumulated wealth created** for equity holders.

The second task is to determine **capital risk**. Capital risk is measured by D/E (long term debt to equity ratio). The use of debt in a firm' capital structure is called financial leverage. Financial leverage (D/E) is a measure of capital risk. The higher ratio (greater than 3) implies a growing risk of default and risk of bankruptcy. The ideal approach is to calculate market value of debt to market value of equity. Sometimes the market value of debt may be difficult to obtain and book value of debt is used instead.

The greater financial leverage means that the weighted average cost of capital is lower, and thus return for stockholders can be magnified.

The third task is to determine liquidity position. Liquidity can be measured by comparing current assets and current liabilities (current ratio).

A conservative company uses more equity than long term debt. Current assets are usually greater than current liabilities.

Net current assets refer to the difference between current assets and current liabilities. Net current assets are positive when current assets exceed current liabilities.

Net working capital refers to the difference between equity and long term debt and fixed assets. It is the long-term capital of a firm used to finance net current assets.

Net current assets (investment) = Net working capital (source of finance)

Task 3

Insert sheet Balance Sheet from a file Financial_Report.xlsx into the new worksheet named AllTasks.xlsx and name it "Balance".
Read all the balance sheet items. Be sure to understand all items. Most of them are explained in my Teaching Notes.

1. Prepare a condensed balance sheet.
   Discuss the structure of assets (left side of a balance sheet) and equity and liabilities (right side).
   Calculate and discuss:
    Capital risk measures
      Book LT Debt/Book Equity
      Book (LT Debt+CL)/Book Equity
    Liquidity measures
     CA/CL
2. Find the market value of equity (for example from NYSE).
   Try to explain the difference between market value of equity and book value of equity.
   Calculate and explain NCA and NWC
   Explain "Wealth created to stockholders".
   Prepare a condensed economic balance sheet using market value of equity.
   Calculate
     Book LT Debt/Market Equity
   Discuss
     Value for shareholders and debt holders.
     Cost of equity and cost of debt.
3. Calculate Net Debt and Enterprise Value
4. Find the number of shares authorized, issued, Treasury, outstanding, closely held, and free float.

Problem 1. Condensed Balance Sheet

Required:

(a) Based on a consolidated balance sheet prepare a condensed balance sheet.

(b) Discuss the horizontal structure of assets (left side of a balance sheet) and equity and liabilities (right side).

(c) Calculate

LT Debt/Book Equity

(LT Debt+CL)/Book Equity

CA/CL

Solution

(a) A condensed balance sheet.

Assets	*Dec. 31, 2014*	*Dec. 31, 2013*	*Dec. 31, 2012*
Cash and cash equivalents, short-term investments, marketable securities	21 675	20 268	16 551
Other Current Assets (book value)	11 311	11 036	13 777
Long-Term Assets (book value)	59 037	58 751	55 846
Total	92 023	90 055	86 174

Equity and Liabilities	*Dec. 31, 2014*	*Dec. 31, 2013*	*Dec. 31, 2012*
Current Liabilities (book value)	32 374	27 811	27 821
Long Term Debt (book value)	19 063	19 154	14 736
Other Liabilities	10 025	9 650	10 449
Equity (book value)	30 320	33 173	32 790
Minority Interests	241	267	378
Total	92 023	90 055	86 174

(b) Horizontal Structure of Condensed Balance Sheet

Assets	*Dec. 31, 2014*	*Dec. 31, 2013*	*Dec. 31, 2012*
Cash and cash equivalents, short-term investments, marketable securities	23,6%	22,5%	19,2%
Other Current Assets (book value)	12,3%	12,3%	16,0%
Long-Term Assets (book value)	64,2%	65,2%	64,8%
Total	100,0%	100,0%	100,0%

Equity and Liabilities	*Dec. 31, 2014*	*Dec. 31, 2013*	*Dec. 31, 2012*
Current Liabilities (book value)	35,2%	30,9%	32,3%
Long Term Debt (book value)	20,7%	21,3%	17,1%
Other Liabilities	10,9%	10,7%	12,1%
Equity (book value)	32,9%	36,8%	38,1%
Minority Interests	0,3%	0,3%	0,4%
Total	100,0%	100,0%	100,0%

(c)

	Dec. 31, 2014	*Dec. 31, 2013*	*Dec. 31, 2012*
LT Debt/Book Equity	0,63	0,58	0,45
(LT Debt+CL)/Book Equity	1,70	1,42	1,30
CA/CL	1,02	1,13	1,09

Problem 2. Condensed Economic Balance Sheet

Required:			
(a) Find the market value of equity of a selected company.			
(b) Calculate NCA and NWC			
(c) Prepare an economic condensed balance sheet.			
(d) Calculate and interpret			
LT Debt / Market Value of Equity			
CL+LT Debt / Market Value of Equity			
Solution			
Market Value of Equity can be found on NYSE web page.			
(a)			
Market Value of Equity	*Dec. 31, 2014*	*Dec. 31, 2013*	*Dec. 31, 2012*
	184 928	182 422	162 587
(b) Net Current Assets and Net Working Capital			
NCA = Current Assets - Current Liabilities	612	3 493	2 507
NWC = LT Debt +Equity - LT Assets	612	3 493	2 507
Small part of long term capital (equity and long-term debt) is used to finance net current assets.			
(c) Condensed Economic Balance Sheet			
Assets	*Dec. 31, 2014*	*Dec. 31, 2013*	*Dec. 31, 2012*
Net Current Assets (book value)	612	3 493	2 507
Long-term Assets (book value)	59 037	58 751	55 846
Wealth created	154 608	139 332	118 970
Total	214 257	201 576	177 323
Capital			
Long Term Debt (book value)	19 063	19 154	14 736
Other Long-Term Liabilities	10 266		
Equity (market value)	184 928	182 422	162 587
Total	214 257	201 576	177 323
(d)			
LT Debt / Market Value of Equity	0,10	0,10	0,09
CL+LT Debt / Market Value of Equity	0,28	0,26	0,26

Problem 3. Enterprise Value

Required:			
(a) Calculate Net Debt			
(b) Calculate enterprise value			
(c) Calculate Debt to EV			
Solution			
(a)	*Dec. 31, 2014*	*Dec. 31, 2013*	*Dec. 31, 2012*
Total Debt	41 745	37 079	32 610
Minus Cash and Cash Eqivalents and Markateble Securities	-21 675	-20 268	-16 551
Minority Interests	241	267	378
Net Debt	20 311	17 078	16 437
(b)	*Dec. 31, 2014*	*Dec. 31, 2013*	*Dec. 31, 2012*
Market Cap	184 928	182 422	162 587
Net Debt	20 311	17 078	16 437
EV	205 239	199 500	179 024
(c)			
Total Debt / EV	20,3%	18,6%	18,2%

Problem 4. Number of Shares

Required:			
Find the number of shares authorized, issued, Treasury, outstanding, closely held, and free float.			
Solution			
	Dec. 31, 2014	*Dec. 31, 2013*	*Dec. 31, 2012*
Authorised	11 200 000 000	11 200 000 000	11 200 000 000
Issued	7 040 000 000	7 040 000 000	7 040 000 000
Treasury	2 674 000 000	2 638 000 000	2 571 000 000
Outstanding	4 366 000 000	4 402 000 000	4 469 000 000
Closely Held	10 820 643	24 969 310	13 858 907
Free Float	4 355 179 357	4 377 030 690	4 455 141 093

In the consolidated balance sheet the line “Treasury stock, at cost - 2,638 and 2,571 shares, respectively”, shows the number of shares **in millions** at the end and **at the beginning of accounting year respectively**.

The authorized shares is the maximum number of shares of stock that a company can issue. This number can be changed by shareholder’s approval. The part of authorized capital remains usually unissued. The issued shares are divided into outstanding (default shares outstanding) and treasury stock. Treasury stock represents the number of its own shares bought by a company.

The outstanding shares are divided into closely held and free float. Closely held shares are not publically traded. These shares are held by persons closely related to a company and usually not traded. The free float is the number of shares that can be publically traded.

Diluted shares is the number of shares outstanding plus the number of shares if convertible bonds or stock options were exercised.