Iqra National University

Mid Term Exam Paper

Subject: Construction Financial Management

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1- Introduction:

Investors, regulators, academics, and researchers all emphasize the importance of financial statement comparability. However, an empirical construct of comparability is typically not specified. In addition, little evidence exists on the benefits of comparability to users. We know that every Business requires some amount of money to start and run the business financial is like life blood of Business. To become successful in their occupation or business all of them need some amount of money to buy the required materials, tools and equipment's. Any type of Business or occupation requires money at every stages of its operation financial statement are prepared primary for decision making. So every company will be Interested in knowing its financial performance against other company.

Financial analysis is a process of appraising business and finance-related entity to determine the performances and suitability. It is used to analyze whether an entity is stable, solvent, liquid or profitable enough to make decision on a monetary investment. Financial analysis compares past performance of many consecutive historical periods of the same company. Moreover, in order to know whether the performance of a company is better or worse than other companies within the same industry, comparative performance is conducted. By obtaining the result of comparing past and comparative performance, the future performance can be prospectively predicted. The role of the financial analysis is to supply reliable financial information to managers to utilize to predict future events. Most big companies might analysis only a specific part of the company's performance, and supply this financial analysis information to the relevant executives. Those executives are communicators spreading the financial analysis information to other influential managers. In case they forecast radical perturbations in the future, they will persuade management to take precautionary actions. However, in case the company forecast to have extremely best performance, their expectations will be extended to highlight that the long term performance will need cautious re-investment of earnings. Financial statements of a company are the main sources of financial information for financial analysis to derive ratios, create trend and compare against other companies in the industry.

Financial statement reports are prepared by a company's management to present the financial performance and position at a point in time. A general purpose set of financial statement usually includes a balance sheet, Income statement, statement of owns equity and statement of cash flow. These statement are prepared to give users outside of the company, like Investors, and creditors more information about the company's financial positions.

Financial statements of a company are the main sources of financial information for financial analysis to derive ratios, create trend and compare against other companies in the industry. This report will devote for analysis of financial performance of Toyota for financial analysis of two consecutive accounting years 2018 and 2019.

The goal of this report is to investigate and to check the financial stability of Toyota and will find its Assets (Fixed, Current and total), Liabilities (current, long term and total) and Equity.

Furthermore we will try to find its Capital and current ratios. We will check that weather the company is over billing or under billing in these two 2018 and 2019 years. Finally we will provide a detailed assessment for its financial health.

2-Balance Sheet:

A balance sheet is a financial statement that reports a company's assets, liabilities and shareholders' equity at a specific point in time, and provides a basis for computing rates of return and evaluating its capital structure. It is a financial statement that provides a snapshot of what a company owns and owes, as well as the amount invested by shareholders.

It is used alongside other important financial statements such as the income statement and statement of cash flows in conducting fundamental analysis or calculating financial ratios.

2.1-Asset:

In financial accounting, an asset is any resource owned by the business. Anything tangible or intangible that can be owned or controlled to produce value and that is held by a company to produce positive economic value is an asset. Simply stated, assets represent value of ownership that can be converted into cash.

2.2-Liabilities:

A liability is something a person or company owes, usually a sum of money. Liabilities are settled over time through the transfer of economic benefits including money, goods, or services. Recorded on the right side of the balance sheet, liabilities include loans, accounts payable, mortgages, deferred revenues, earned premiums, unearned premiums, and accrued expenses. Even marriages can change your liability.

In general, a liability is an obligation between one party and another not yet completed or paid for. In the world of accounting, a financial liability is also an obligation but is more defined by previous business transactions, events, sales, exchange of assets or services, or anything that would provide economic benefit at a later date. Liabilities are usually considered short term (expected to be concluded in 12 months or less) or long term (12 months or greater).

2.3-Equity:

In finance and accounting, **equity is the value attributable to the owners of a business**. The book value of equity is calculated as the difference between assets and liabilities on the company's balance sheet, while the market value of equity is based on the current share price (if public) or a value that is determined by investors or valuation professionals. The account may also be called shareholders/owners/stockholders equity or net worth.
There are generally two types of equity value:

1. Book value   2.Market value

Balance Sheet of Toyota

3. Consolidated Financial Statements

Balance Sheet

(1) Consolidated Balance Sheets

(Yen in millions)

	FY2018 (March 31, 2018)	FY2019 (March 31, 2019)	Increase (Decrease)
Assets			
Current assets:			
Cash and cash equivalents	3,052,269	3,574,704	522,435
Time deposits	901,244	1,126,352	225,108
Marketable securities	1,768,360	1,127,160	(641,200)
Trade accounts and notes receivable, less allowance for doubtful accounts of ¥25,925 million at March 31, 2018 and ¥16,370 million at March 31, 2019	2,219,562	2,372,734	153,172
Finance receivables, net	6,348,306	6,647,771	299,465
Other receivables	489,338	568,156	78,818
Inventories	2,539,789	2,656,396	116,607
Prepaid expenses and other current assets	833,788	805,964	(27,824)
Total current assets	18,152,656	18,879,237	726,581
Noncurrent finance receivables, net	9,481,618	10,281,118	799,500
Investments and other assets:			
Marketable securities and other securities investments	7,999,323	7,479,926	(519,397)
Affiliated companies	3,162,917	3,313,723	150,806
Employees receivables	22,562	21,683	(879)
Other	1,221,500	1,275,768	54,268
Total investments and other assets	12,406,302	12,091,100	(315,202)
Property, plant and equipment:			
Land	1,404,611	1,386,308	(18,303)
Buildings	4,659,753	4,802,175	142,422
Machinery and equipment	11,535,381	11,857,425	322,044
Vehicles and equipment on operating leases	5,934,393	6,139,163	204,770
Construction in progress	509,851	651,713	141,862
Total property, plant and equipment, at cost	24,043,989	24,836,784	792,795
Less – Accumulated depreciation	(13,776,316)	(14,151,290)	(374,974)
Total property, plant and equipment, net	10,267,673	10,685,494	417,821
Total assets	50,308,249	51,936,949	1,628,700

(Yen in millions)

	FY2018 (March 31, 2018)	FY2019 (March 31, 2019)	Increase (Decrease)
Liabilities			
Current liabilities:			
Short-term borrowings	5,154,913	5,344,973	190,060
Current portion of long-term debt	4,186,277	4,254,260	67,983
Accounts payable	2,586,657	2,645,984	59,327
Other payables	1,048,216	1,102,802	54,586
Accrued expenses	3,104,260	3,222,446	118,186
Income taxes payable	462,327	320,998	(141,329)
Other current liabilities	1,254,241	1,335,475	81,234
Total current liabilities	17,796,891	18,226,938	430,047
Long-term liabilities:			
Long-term debt	10,006,374	10,550,945	544,571
Accrued pension and severance costs	931,182	963,406	32,224
Deferred income taxes	1,118,165	1,014,851	(103,314)
Other long-term liabilities	533,561	615,599	82,038
Total long-term liabilities	12,589,282	13,144,801	555,519
Total liabilities	30,386,173	31,371,739	985,566
Mezzanine equity			
Model AA Class Shares, no par value,	491,974	498,073	6,099
authorized: 150,000,000 shares at March 31, 2018 and March 31, 2019			
issued: 47,100,000 shares at March 31, 2018 and March 31, 2019			
Shareholders' equity			
Toyota Motor Corporation shareholders' equity:			
Common stock, no par value,	397,050	397,050	—
authorized: 10,000,000,000 shares at March 31, 2018 and March 31, 2019			
issued: 3,262,997,492 shares at March 31, 2018 and March 31, 2019			
Additional paid-in capital	487,502	487,162	(340)
Retained earnings	19,473,464	21,987,515	2,514,051
Accumulated other comprehensive income (loss)	435,699	(916,650)	(1,352,349)
Treasury stock, at cost,	(2,057,733)	(2,606,925)	(549,192)
353,073,500 shares at March 31, 2018 and 430,558,325 shares at March 31, 2019			
Total Toyota Motor Corporation shareholders' equity	18,735,982	19,348,152	612,170
Noncontrolling interests	694,120	718,985	24,865
Total shareholders' equity	19,430,102	20,067,137	637,035
Commitments and contingencies			
Total liabilities, mezzanine equity and shareholders' equity	50,308,249	51,936,949	1,628,700

Note: The total number of authorized shares for common stock and Model AA Class Shares is 10,000,000,000 shares.

(2) Consolidated Statements of Income and Consolidated Statements of Comprehensive Income

Consolidated Statements of Income

(Yen in millions)

	FY2018 (For the year ended March 31, 2018)	FY2019 (For the year ended March 31, 2019)	Increase (Decrease)
Net revenues:			
Sales of products	27,420,276	28,105,338	685,062
Financing operations	1,959,234	2,120,343	161,109
Total net revenues	29,379,510	30,225,681	846,171
Costs and expenses:			
Cost of products sold	22,600,474	23,389,495	789,021
Cost of financing operations	1,288,679	1,392,290	103,611
Selling, general and administrative	3,090,495	2,976,351	(114,144)
Total costs and expenses	26,979,648	27,758,136	778,488
Operating income	2,399,862	2,467,545	67,683
Other income (expense):			
Interest and dividend income	179,541	225,495	45,954
Interest expense	(27,586)	(28,078)	(492)
Foreign exchange gain, net	22,664	12,400	(10,264)
Unrealized gains (losses) on equity securities	—	(341,054)	(341,054)
Other income (loss), net	45,948	(50,843)	(96,791)
Total other income (expense)	220,567	(182,080)	(402,647)
Income before income taxes and equity in earnings of affiliated companies	2,620,429	2,285,465	(334,964)
Provision for income taxes	504,406	659,944	155,538
Equity in earnings of affiliated companies	470,083	360,066	(110,017)
Net income	2,586,106	1,985,587	(600,519)
Less – Net income attributable to noncontrolling interests	(92,123)	(102,714)	(10,591)
Net income attributable to Toyota Motor Corporation	2,493,983	1,882,873	(611,110)

Note: Net income attributable to common shareholders for the fiscal year ended March 31, 2019 and 2018 is 1,868,085 million yen and 2,481,692 million yen, respectively, which is derived by deducting dividend and accretion to Model AA Class Shares of 14,788 million yen and 12,291 million yen, respectively, from Net income attributable to Toyota Motor Corporation.

(Yen)

Net income attributable to Toyota Motor Corporation per common share			
Basic	842.00	650.55	(191.45)
Diluted	832.78	645.11	(187.67)

3-Identification of Assets, Equity and Liabilities:

Equity + Total Liabilities = Total Assets

Current Assets = Working capital + Current Liabilities

Current Ratio = Current Assets /Current Liabilities

Assets:

Equity + Total Liabilities = Total Assets

(19,430,102+491,974) + 30,386,173 = 50,308,249 Yen (Total Asset)

Total Equity (2018) = 19,430,102 +491,974 = 19,922,076 Yen

Total Liabilities (2018) = 30,386,173 Yen

Fixed Assets (2018) = 10,267,673 Yen

Fixed Assets (2019) = 10,685,494 Yen

Current Assets (2018) = 18,152,656 Yen

Current Assets (2019) = 18,879,237 Yen

Total Assets (2018) = 50,308,249 Yen

Total Assets (2019) = 51,936,949 Yen

Equity:

Total Equity (2018) = 19,430,102 + 491,974 = 19,922,076 Yen

Total Equity (2019) = 20,067137 + 498,073 = 20,565,210 Yen

Liabilities:

Fixed Liabilities (2018) = 12,589,282 Yen

Fixed Liabilities (2019) = 13,144,801 Yen

Current Liabilities (2018) = 17,796,891 Yen

Current Liabilities (2019) = 18,226,938 Yen

Total Liabilities (2018) = 30,386,173 Yen

Total Liabilities (2019) = 31,371,739 Yen

As per the accounting equation (**Equity + total liability=Total assets**)

50,308,249 Yen for 31-Dec-2018

51,936,949 Yen for 31-Dec-2019

3-Analyzing of Working Capital and Current ratios:

3.1-Working Capital:

Working capital represents a company's ability to pay its current liabilities with its current assets. Working capital is an important measure of financial health since creditors can measure a company's ability to pay off its debts within a year.

Working capital represents the difference between a firm's current assets and current liabilities. The challenge can be determining the proper category for the vast array of assets and liabilities on a corporate balance sheet and deciphering the overall health of a firm in meeting its short-term commitments.

Components of Working Capital

Current Assets

This is what a company currently owns—both tangible and intangible—that it can easily turn into cash within one year or one business cycle, whichever is less. More obvious categories include checking and savings accounts; highly liquid marketable securities such as stocks, bonds, mutual funds and ETFs; money market accounts; cash and cash equivalents, accounts receivable, inventory, and other shorter-term prepaid expenses. Other examples include current assets of discontinued operations and interest payable. Current assets do not include long-term or illiquid investments such as certain hedge funds, real estate, or collectibles.

Current Liabilities

In similar fashion, current liabilities include all the debts and expenses the firm expects to pay within a year or one business cycle, whichever is less. This typically includes all the normal costs of running the business such as rent, utilities, materials and supplies; interest or principal payments on debt; accounts payable; accrued liabilities; and accrued income taxes. Other current liabilities include dividends payable, capital leases due within a year, and long-term debt that is now coming due.

3.2-Current Ratio:

The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors and analysts how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payables.

Calculation of Working Capital and Current Ratio

Working capital is calculated by using the current ratio, which is current assets divided by current liabilities. A ratio above 1 means current assets exceed liabilities, and generally, the higher the ratio, the better.

To calculate the ratio, analysts compare a company's current assets to its current liabilities. Current assets listed on a company's balance sheet include cash, accounts receivable, inventory and other assets that are expected to be liquidated or turned into cash in less than one year. Current liabilities include accounts payable, wages, taxes payable, and the current portion of long-term debt.

$$Current\ ratio = \frac{Current\ assets}{Curent\ liabilities}$$

Working Capital = Current Assets-Current Liabilities

Working Capital (2018) = **18,152,656 - 17,796,891** = 335,765

Working Capital (2019) = **18,879,237** - **18,226,938** = 652,299

Current Ratio= Current Assets / Current Liabilities

Current Ratio (2018) = **18,152,656 / 17,796,891** = 1.019

Current Ratio (2019) = **18,879,237** / **18,226,938** = 1.035

4- Over and under billing of two consecutive years:

Under billing:

Under billing in the construction industry describes the practice of not fully billing for all of the labor, materials, and services delivered in a billing cycle. Under billing can lead to significant cash flow problems for contractors on their projects and jobs.

Over billing:

Overbilling occurs when a contractor bills for contracted labor and materials prior to that work actually being completed.

<u>Over Billing= Bill to date –Revenue to date</u>

As the company has the following project financial data for year 2018:

Construct sum= 50,308,249 Yen

Bill to date= 26,979,648 Yen

Cost incurred to the date =29,379,510 Yen

Estimated cost to complete project = 2,586,106 Yen

Up to the present moment:

$$\left[\frac{cost\ incured\ to\ the\ date}{(cost\ incured\ to\ the\ date + estimated\ to\ complete)}\right] \times 100$$

$$\left[\frac{29{,}379{,}510}{(29{,}379{,}510 + 2{,}586{,}106)}\right] \times 100 = 91.9\%$$

Revenue to the date= (Contract sum) x (Percentage of completion)

Revenue to date= 50,308,249 x 91.9 = 4,623,328,083.1

Gross profit to date=Revenue to date-cost of revenue to date

Gross Profit to date= 4,623,328,083.1 - 29,379,510 = 4593948573.1 Yen

Over billing=Bill to the date –Revenue to the date

Over billing = 26,979,648 - 4,623,328,083.1 = -4596348435.1

Overbilling is a negative value, so it is called under billing

over billing means that the construction company is borrowing money from the client by billing the latter of revenue more then what the company has actually done and it mean that company received more money at the early stage of work . Under billing means that the company is allowing the client to borrow money from it.

Now same calculation will be done for year 2019:

Construct sum= 501,936,949 Yen

Bill to date= 27,758,136 Yen

Cost incurred to the date =30,225,681 Yen

Estimated cost to complete project = 1,985,587 Yen

$$\left[\frac{cost\ incured\ to\ the\ date}{(cost\ incured\ to\ the\ date + estimated\ to\ complete)}\right] \times 100$$

$$\left[\frac{30{,}225{,}681}{(30{,}225{,}681 + 1{,}985{,}587\,)}\right] \times 100 = 93.83\%$$

Revenue to the date= (Contract sum) x (Percentage of completion)

=501,936,949 x 93.83 = 47,096,743,924.6

Gross profit to date=Revenue to date-cost of revenue to date

= 47,096,743,924.6 -30,225,681 = 47066518243.6

Over billing=Bill to the date –Revenue to the date

= 27,758,136 -47,096,743,924.6 = -47068985788.6

Overbilling is a negative value, so is called under billing

over billing means that the construction company is borrowing money from the client by billing the latter of revenue more then what the company has actually done and it mean that company received more money at the early stage of work . Under billing means that the company is allowing the client to borrow money from it.

5. Financial Health

As capital work comparison Toyota Company has more profit in year 2019 than year 2018 also comparison of current ratio shows us that the financial situation was healthy in 2019 more than 2018.