Scientific Research Publishing

Financial Situation Analysis of Entities

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Abstract

The study aims to define the financial situation of Mongolian entities. The objective of research determines the nature of its trend and evaluates the role of accounting and its reporting by reviewing the accuracy and transparency of the reporting information by making analysis including core financial indicators. The data is based on the "Financial statements of the entities" issued by the Accounting policy department, Ministry of Finance of Mongolia and related statistical information. The significance of the study will be more useful to understand a Mongolia's entities' financial nature and make better economic decisions.

Keywords

Entities, Company Assets, Liabilities, Owners' Equity,
Financial Characteristics, Proper Structure of Assets
Liabilities Plus Owner's Equity

1. Introduction

The purpose of the financial analysis is to provide information to financial managers and analysts to make thorough decisions about their business. Assessing financial position and performance of an enterprise is a skill that every manager needs to have to make the best and right decisions for the company [1]. From this concept, financial reporting analysis plays an important role in making decision to provide the resources needed to increase corporate efficiency and in maximizing profitability by increasing production with minimal labor and capital costs. It is imperative to strengthen the Accounting and Reporting role to identify the current financial status and development trends of all entities and thus, it requires to evaluate the accuracy and transparency of the reporting information.

To ensure accuracy and transparency of reporting it is important to make analysis including core financial indicators. Financial analysis is of special importance to outside stakeholders, because it is based on public financial statements which are the main source of information for outsiders [2]. Our study examines the nature of its trend and evaluates the role of accounting and its reporting by reviewing the accuracy and transparency of the reporting information by making analysis including core financial indicators.

2. Data and Methodology

The data of this study consist of financial statements from E-balance data base from the website of Ministry of Finance. An available and reliable data was between 2011 and 2018 to ensure the freshness of the data. The Accounting Law governs accounting in Mongolia. Mongolia has also adopted IFRS. The Accounting Law requires all for-profit and non-profit entities. Related regulations require that electronic filing of financial statements must be within law time and the related financial organization must receive the financial statements and review within 15 workdays.

This research consists a number of qualitative and quantitative analysis. Quantitative analysis uses a ratio analysis including core financial indicators. The ratio analysis is an art of determining relationship between different components of financial statement to derive a significant understanding of liquidity, solvency, profitability and efficiency of entities of Mongolia especially in mining sector. The comparison method was used and the company's financial statements. The analyses construct the current trend, financial conditions of entities and the ratio analysis of the main financial indicators during year of 2013-2018. At last section, we aim to be set the constraints to determine the target balance to meet the minimum level of financial indexes for mining companies. Mathematical methods were used to determine the optimal structure of capital sources. It focuses to the target balance sheet to keep it at a minimum optimal structure. There are mathematical constraints to determine the target balance to meet the minimum level of financial indexes for mining companies using methodology of research of Naranchimeg L[1] [3].

$$\min\left(\delta_1 x_1 + \delta_2 x_2\right) \tag{1}$$

$$x_1 + x_2 \geq 2\text{STL} - \text{CA} \tag{2}$$

$$x_1 + x_2 \leq \text{TA} - 2\text{CA} \tag{3}$$

$$x_2 \leq \text{TA} - \text{OE} \tag{4}$$

$$0.1x_1 \leq \text{NI} - 0.1\text{OE} \tag{5}$$

$$x_1 - x_2 \leq 10\text{NI} - \text{TA} \tag{6}$$

$$x_1 + x_2 \geq 2\text{TL} - \text{TA} \tag{7}$$

Significance to offer these arguments, it effects company independent activity

and the financial stability. The research problem is to find a systematic way to solve on obtaining, collecting and analysis of data with different formats of financial information data seen on the system.

3. Analyses

3.1. Current Structure of Consolidation Data of Financial Statements

The Accounting Law governs accounting in Mongolia. Mongolia has also adopted IFRS. The Accounting Law requires all for-profit and non-profit entities, including small and medium enterprises (SME), state-owned enterprises (SOE), and other entities to prepare financial statements in full compliance with IFRS. Related regulations require that electronic filing of financial statements must be within law time (The clause No.9.1 of Accounting Law) and the related financial organization must receive the financial statements and review within 15 workdays (The clause 3.1, Order No. 243/2017 by Ministry of Finance).

This section determines the current E-balance system[2] introduced by the Ministry of Finance, Mongolia to consolidation data base of financial statements for all entities. E-balance system for allowing electronic filing and submission of financial statements by firms with more than 60,000 entities was upgraded and implemented in Mongolia by 2013. The system, used to be accepted for the only one form of reporting, has revised to be submitted by 7 types of entities (including entities, non-governmental organizations, securities institutions, banks, insurance companies, non-bank financial institutions, savings and credit cooperatives) and the data entries give the possibility to enter manual financial statements, computer files and, import information. Furthermore, the database enables to consolidate and analyze for the financial statements by each sector, business and ownership types. It is also possible to exchange information with the Ministry of Finance and other government agencies, and currently, based on more than 40 requests, including the Bank of Mongolia, the National Statistical Office, the State Property Committee, Mongolian State University of Agriculture, National Police Agency and the General Department of Taxation have been granted the right to receive data of financial statements.

Table 1 shows numbers of firms registered on the "E-balance" database. The data exhibits about 100,000 entities in 2018, which is 40% more than in 2011. There is different growth in each industry. Entities including non-governmental organizations, companies, non-banking financial institutions and savings cooperatives have grown every year. Non-governmental organizations are expected to grow as the role of non-governmental organizations has increased in recent years. Brokerage company has declined to the weak development of the Mongolian stock market.

The below Figure 1 and Figure 2 present the total assets and sales revenue by total firms.

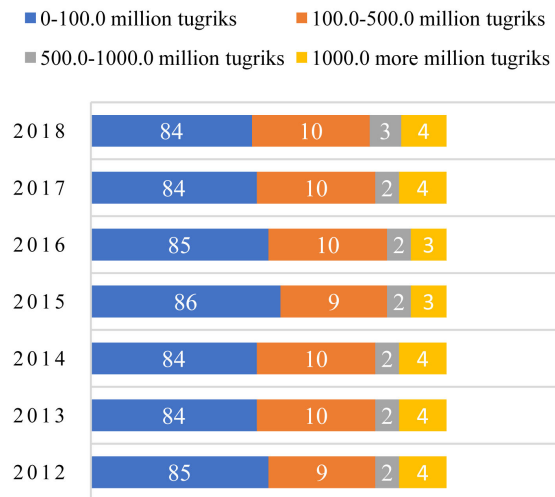[2]E-balance system, Introduced by Ministry of Finance, Mongolia, Link: https://e-balance.mof.gov.mn

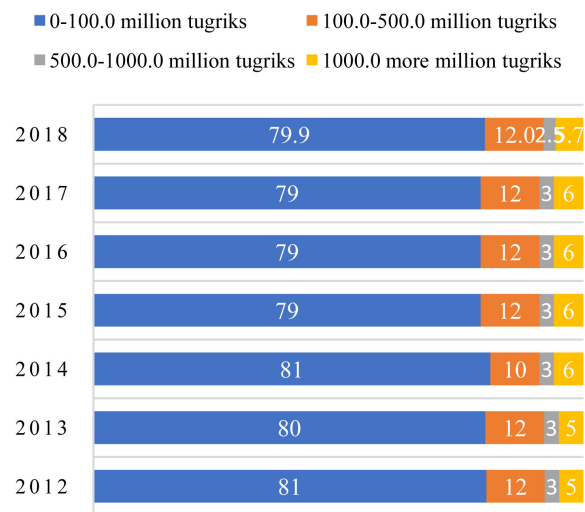**Figure 1.** Sales revenue by firms (by percentage).

Figure 2. Total assets by firms (by percentage).

Table 1. Number of firms E-balance database.

Year	LLC	SC	Other	NGO	NBFI	MSE	SCC	Bank	Insurance	Amount
2011		52,510	3183				233			**60,198**
2012		58,449	3909				192			**67,381**
2013		66,767	4111	270	77		120	17	13	**71,375**
2014		72,859	5579	348	67		190	18	14	**79,075**
2015		77,508	6447	390	67		215	17	14	**84,658**
2016		79,058	6759	430	48		226	17	16	**86,564**
2017		81,091	7319	459	55		247	16	17	**89,204**
2018		90,164	9845	471	55		278	14	14	**100,841**

Source: The consolidation of the financial statements by firms, years 2007-2018. LLC: Limited Liability Company; PC: Public company; NBFI: Non-Bank Financial Institutions; MSE: Mongol Securities Exchange; SCC: Savings and Credit Cooperatives.

According to the above figures, the number of firms reached to MNT 500.0 million for total assets and up to MNT 1.5 million for sales revenue accounts for 91% to 94% of total firms. But these firms occupy only 2 - 3 percent of total assets and 10 percent of sales revenues of all firms. However large enterprises occupy 14% to 21% of all firms, they represent 98% of the total assets and 90% of their sales revenue and, their participation in the market has increased for the last 6 years.

The survey shows increasing number of entities reporting submitting their reports on the E-Balance Sheet Financial Reporting System year by year (Figure 1). The result presents 84% of all entities that have sales revenue of MNT 0-100.0 million. It means that the most of entities in Mongolia are small sized firms in Mongolia.

3.2. Survey on Financial Conditions of Entities

The average mean in the data (Table 2) of last 6 years shows that current assets are 57.3%, non-current assets are 42.7% of total assets and, the proportion of current assets is declining in recent years (2013-2017), thus, affecting negatively to asset liquidity and asset turnover.

Total assets have increased by 88.5% or from MNT 78,254 to MNT 147,254 billion since 2013 and by 1% or MNT 1808.0 billion in 2018.

However, the significant growth has been done for years of 2012 to 2013 and the growth rate stabilized in the next year and, because of the average increase in the non-current assets in 2017 increased by 1.5 times compared to the previous year, by accumulating average mean of total assets for years of 2013-2018. It shows that current assets occupy 57.2% and 42.8% non-current assets of total assets.

Table 2. The structure of assets, liabilities and owners' equity (by percentage).

Accounts	2014	2015	2016	2017	2018	Average between 2013-2018	
						Percentage	Growth percentage
Asset							
Current asset	63.4	50.9	61.5	53.9	55.5	57.3	112.25
Non-current asset	36.6	49.1	38.5	46.1	44,.5	42.7	120.25
Total assets	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**115.41**
liabilities and Owners' equity							
Short term liabilities	57.3	54.0	50.5	44.1	43.7	50.0	109.16
Long term liabilities	20.5	19.0	22.9	15.8	16.7	18.8	110.64
Total liabilities	**77.80**	**73.0**	**73.4**	**59.9**	**60.4**	**68.8**	**109.56**
Owners' equity	**21.20**	**27.0**	**26.6**	**40.1**	**39.6**	**31.2**	**130.22**
Total liabilities and Owners' equity	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**115.41**

Source: The consolidation of the financial statements by firms, years 2007-2018.

Total assets are divided into 60.4% for liabilities and 39.6% for equity respectively by 2018 and owner's equity has been increased for the last 3 years. The short-term liabilities exhibit 50% and are long-term liabilities exhibit 18.8% of the total liabilities of the business entities.

Table 3 exhibits that the result of balance sheet that the variable current assets are provided by the short-term liabilities and 41% of the fixed current assets is occupied by the owner's equity in 2016, then the financing is decreased by 24.3% in 2017 and 24.5 percent in 2018 respectively.

The non-current assets are financed by long-term loans, liabilities and owner's equity which occupied 24.3% - 75.7%.

About two thirds (69.2%) (Table 4) of the increase of the total assets is referred to the rise in liabilities (especially 72.9% by short-term liabilities) in case of the average mean between 2013 and 2018. 30.8% as the remaining total assets is provided with a growth for owner's equity. However, the percentage of debt occupied in total financing has declined, indicating an improvement in financial independence of companies (especially between 2014 and 2015). By the end of 2018, a non-current asset which shows 45.2% of the total assets and liabilities which shows 61.6% of the total assets respectively, but the proportion of owner's equity has declined significantly compared with the previous year. A not more portion of owner's equity due to the lack of financing of long-term liabilities are used for financing for non-current assets. It also should not take into consideration that negatively affects the supply of current assets.

In the last 6 years, ¾ or 69.2% and 30.8%of the total assets were financed by the long and short-term debt and, owner's equity respectively, and the growth for the owner's equity was increased by 2017.

Table 3. Matrix balance sheet (billion, MNT).

Accounts	Он	Variable current assets	Fixed non-current assets	Non-current assets	Balance sheet
	2016	56,909			56,909
Short-term liabilities	2017	64,272			64,272
	2018	70,011			70,011
	2016			25,795	25,795
long-term liabilities	2017			22,991	22,991
	2018			26756	26,756
	2016		12,379	17,547	29,926
Owner's equity	2017		14,241	44,241	58,482
	2018		18,880	44,432	63,312
	2016	56,909	12,379	43,342	112,630
Balance sheet	2017	64,272	14,241	67,232	145,745
	2018	70,011	18,880	71,188	160,079

Besides defining the percentage of business activity and its growth direction of any business entity to the quantities produced, products or services produced and the percentage of their income, it is desirable to determine the dynamic analysis of the growth of key economic indicators in a particular order [3]. The researchers emphasized that the growth ratio of the assets financing structure, its growth rate or the growth normative ratio of the basic parameters, would have relationships like that are OE > NCA > TA > CA > TL [4]. However the normative of the growth ratio is referred to the dependence of the financial stability, it would be differed in case of the yield for capital the invested. In comparison with the growth ratio, it would be possible if the not only for the current year but also for the average growth over the last 3 to 5 years [5] (Table 5).

Totally, the information data covering the amount number of entities covered by the financial statements was consolidated for firms shows that profit and sales are 56,582.0 billion MNT and earned 2377 billion MNT (7.58 dollars per income). The sales revenue was comparable to the total cost of the sales sold, the sales and general management (operating costs) structure of the company as a whole company.

Table 4. Assets and its funding sources.

Year	Liabilities and Owner's equity	Percentage	Assets
2016	Short-term liabilities	100	Variable current assets
2017	Short-term liabilities	100	Variable current assets
2018	Short-term liabilities	100	Variable current assets
2016	Long-term liabilities	100	Non-current assets
2017	Long-term liabilities	100	Non-current assets
2018	Long-term liabilities	100	Non-current assets
2016	Owner's equity	41.0	Fixed non-current assets
	Owner's equity	59.0	Non-current assets
2017	Owner's equity	24.3	Fixed non-current assets
	Owner's equity	75.7	Non-current assets
2018	Owner's equity	29.8	Fixed non-current assets
	Owner's equity	71.2	Non-current assets

Table 5. The growth of core indicators for firms.

Indicators		Owner's equity	Non-current assets	Total assets	Current assets	Total liabilities
Normative ratings (R)		1	2	3	4	5
The report as consolidated	Increase or decrease in 2018	108.5 (4)	106.1 (5)	109.93 (3)	113.2 (1)	110.89 (2)
	The average growth for last year	130.22 (1)	120.2 (2)	115.41 (3)	112.2 (4)	109.5 (5)

3.3. Survey of Financial Indicators of Entities

According to consolidated data for financial statements it is reported of MNT 56,582 billion for the sales and MNT 2,377 billion (MNT 7.58 per sales) interest incomes.

We analyzed a structure of the total cost of the sales sold referred to the sales revenue and the sales and general management (operating costs) costs for as a whole firms (Table 6 and Table 7).

Independence coefficient defines a percentage of equity in total assets and it is preferable that the theoretical value is less than 60% for that ratio [6]. Companies' independence coefficients and the own financing tend to increase coming years, resulting 21% to 40.1% especially the last six years, and the dependence of external sources has decreased from 79% to 60.9%.

A regulation coefficient exhibits the current capital to equity ratio [7] [8]. This ratio shows the results of 26.9% - 27.8% in 2013-2014 and it was sharply reduced due to short-term debt growth in 2015. This means that a financial situation of enterprises is getting deterioration and a dependent on years having loan. However, resulting of the growth for the ratio during years of 2016-2018, the equity

Table 6. Total revenues and its structure.

Indicators	Percentage						Average between 2013-2018	
	2013	2014	2015	2016	2017	2018	Percentage	Annual growth (%)
1) Sales revenue and interest income	100	100	100	100	100	100	100.00	111.8
2) Cost of the sales sold	73.7	74.0	72.8	74.9	71.8	71.3	72.89	111.0
3) Sales and general management (operating costs) costs	20.1	22.3	23.7	28.7	25.8	18.2	23.02	109.6
4) Operating revenue (loss)	6.2	3.7	3.5	−3.7	2.7	10.5	4.09	124.2
5) Income before tax (loss)	1.1	1.8	1.0	−5.7	7.6	6.4	2.70	159.5
6) Income After Tax (loss)	(1.3)	(0.9)	(3.2)	−6.0	5.5	4.2	0.47	-

Table 7. Key financial indicators.

Indicators	2013	2014	2015	2016	2017	2018	6-year average
1) Independence coefficient	21.6	22.2	26.7	26.5	40.1	38.4	30.8
2) Regulation coefficient	27.8	27.1	−12.9	41.3	24.4	24.5	21.7
3) Payable turnover	3.62	3.51	2.74	2.76	1.49	1.6	2.2
4) Current assets turnover	1.1	1.1	0.94	1.22	1.22	1.21	1.1
5) Asset turnover ratio/%	2.55	1.4	1.04	−1.26	0.87	0.36	0.5
6) Equity turnover ratio/%	2.08	3.13	1.05	−1.97	6.96	4.13	0.5

ratio to current assets financing reached 21.7% over average of 5 years. The debt-to-debt ratio is likely to decline due to the small increase in the equity ratio.

The current ratio measures whether or not your business has enough resources to pay its bills over the short time [9] [8]. This ratio is 0.94 to 1.2, which is almost twice lower than the required amount, indicating insufficient liquidity.

The ratio as net profit relative to its total net assets is considered to be an indicator of how effectively a company is using its assets to generate earnings [8] [10].

The average mean of return on investment for 6 years is 0.5% of the total assets and 0.5% of the equity respectively, which has been decreasing consecutively; moreover it shows a negative return in 2015 and 2016.

At conclusion, our research suggests that there are needs to be strengthened financial independence in way of increasing the current assets financing, reducing the interest rate and the tax burden, and increasing its equity remaining by distributing income for stock companies and LLC occupying more than 80% of the total income of a whole entities to overcome the financial crisis.

3.4. Asset and Its Financing Structure (Main Industries)

We made the analysis of the main financial indicators including the ratio of current assets, return on invested capital, the regulation coefficient and the independence coefficient in the previous section. These results present lower values than the appropriate level for indicators. Thus, there is a need to determine the target balance to meet the minimum level of financial indexes for mining companies.

The objective of the "State Minerals Policy" is to establish stable investment environment, to improve quality of mineral exploration, mining and processing by encouraging use of environment friendly and advanced techniques, technologies and innovations, to produce value-added final products and strengthening competitiveness of the country in the international market [11].

Our study of current financial situation of Mongolian mining companies shows that increasing role of the mining sector in the Mongolian economy has a positive impact on economic growth. However, the study shows the result of unstable financial conditions, higher ratio of debt to equity and not enough yield of assets for the mining sector. We aim to be set the following constraints to determine the target balance to meet the minimum level of financial indexes for mining companies [12] [13].

$$\min\left(\delta_1 x_1 + \delta_2 x_2\right) \tag{8}$$

$$x_1 + x_2 \geq 2\text{STL} - \text{CA} \tag{9}$$

$$x_1 + x_2 \leq \text{TA} - 2\text{CA} \tag{10}$$

$$x_2 \leq \text{TA} - \text{OE} \tag{11}$$

$$0.1 x_1 \leq \text{NI} - 0.1 \text{OE} \tag{12}$$

$$x_1 - x_2 \leq 10\text{NI} - \text{TA} \tag{13}$$

$$x_1 + x_2 \geq 2\text{TL} - \text{TA} \tag{14}$$

STL: *short-term liability*; *CA*: *current assets*; *TA*: *total assets*; *OE*: *owner's equity*;
NI: *net income*; *TL*: *total liability*.

According to the study, to meet the target balance (structure) we offer, the mining sector and representative companies need to have followings:

1) A balance of current assets should be increased by at least 80%;

2) Reducing short-term financing by 47%;

3) Increase 1.6 times the owner's equity by increasing retained earnings and issuing shares.

Condition 1: Calculate the optimal balance sheet structure in average means for 19 companies selected in the mining sector to keep the amount of $\delta_1 x_1 + \delta_2 x_2$ up to the minimum;

Condition 2: Reach to at the normative level or 2:1 for the average turnover ratio of the mining sector is 1:1 and the average mean of the 19 companies selected is 0.5;

Condition 3 and 4: For the mining sector, the independence coefficient 0.12, the average mean of the 19 companies surveyed is 0.1, should be no less than 0.5 or more than 1;

Condition 5: Average mean of a return on equity for the industry companies and for 19 companies is 0.1, should be no less than 0.1;

Condition 6: Increase the total return on the industry by sector (0.01), to 5 percent;

Condition 7: The proportion of external capital is 88%, should be no more than 50%.

In a result of implementing these arguments, mining companies will be able to work independently, and will be possible to create a new balance sheet structure to meet the financial stability, asset utilization, and the lowest return on total assets and equity.

The result of our analysis shows that there is a need to increase working capital by 80%, reduce short-term loans by 47% and increase equity by 1.6 times in order to meet the minimum level of financial basic indicator in sector of mining companies.

4. Conclusions

The financial condition of entities that national wealth is created in a scope of the entity including initial financial distribution is the basis of economic stability. However, most companies are small for their size and large enterprises occupy about 14% to 21%, large enterprises occupy over 80% of the total revenues.

Our results show that there is a tendency to have decrease for financial dependence and increase in the effectiveness of its activities in the comparative data of 2018 and the last 6 years, but the industry sustainability principles can't be implemented. In recent years, debt-to-equity ratio has been declining, however, the financing of current assets is inadequate, and companies shifting to classification of B or C in a result that the return on equity has been reduced annually.

The higher level of small-sized entities occupied in entities may be effect on their proper structure which has not yet been formed but also, their poor effect on economic growth and their financial vulnerability. The fact that entities have financed over 50% of their equity through short-term loans and insufficient availability long-term financing. Their financing mostly converts into their non-current assets or this causes a poor liquidity to the entities. It concludes that entities will be good if they make regularly analyze their financial statements, manage their assets properly, and possible to maintain a proper balance management for meeting the target level of main financial indicators [14] [15] [16].

We suggest that it will be more supportable in defining sector policies by creating cumulative data series of financial circumstances of firms, providing transparency information of the reporting and improving the usefulness of the data for research, moreover, analyzing and evaluating the factors affecting the financial difficulties by the size, ownership in a result of improving the consolidation of the financial statements of Mongolian entities.

Our study is limited for industry. This study only considers mining companies. Moreover, an attention should be paid to the behavior of financial ratios in different industries.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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