

ANALYSIS OF ASSET AND ASSET SOURCES

Naranchimeg.l¹, Khurelbaatar.b², Deluungere³

¹Professor, Accounting department, Business School of National University of Mongolia

²Associate professor, Accounting department, Business School of National University of Mongolia

³PhD student NUM

Abstract

The outcomes of production, financial activities are determined by the analysis of financial statements. Thus, 2 trends of the financial analysis are defined:

1. to gain important insights into the general capacity of economic condition of a company, its deviation and tendency through the financial analysis determination and to propose the decision;
2. to determine the outcomes and yields of capacity utilization and production-financial activities and to propose the decision;

In order to gain accurate decision to the levels and the fluctuations these indicators have reached, it is crucial to diagnose whether the indicators have been at the balanced level.

The finance of a business enterprise illustrates the correlation, balance and structure of the assets and asset sources. The provision of the most comprehensive picture of an organization's financial situation is given by the balance sheet, also called the Statement of Financial Position, which reports on an organization's assets (what is owned) and liabilities (what is owed). We have done extensive research on the ways to lining the items on the assets and asset sources in the Balance sheet for the analysis purpose and the possibilities of asset financing and their compatible ratios by interpreting the processed data of a number of business enterprises and we have proposed certain conclusions.

Keywords: asset, asset source, vertical analysis, horizontal analysis, the structure of assets and the sources, ways to asset financing

One Theoretical part

In order to get a fair picture of the changes made in the components of assets and asset sources utilized by the enterprise and whether the amounts of the components are at the proper level, the ratio of each line item in the grouping is compared at the beginning and end of the period in the amount of net balance. This is considered as the initial step or the method of financial statement analysis and is called the **vertical analysis**. Vertical analysis makes it easier to understand the correlation between single items on a balance sheet and the bottom line, expressed in a percentage.

To propose the conclusion, it is crucial to determine the asset liquidity and its role; the duration of stable utilization of assets and asset recoverable period; the utilization of assets in full capacity for the initial purpose; outcomes and yields. Moreover, it is required to make comparisons on operations and the specifics of the sector of the enterprises that are on the list of the research¹.

To compare historical data, such as ratios, or line items, over a number of accounting periods the method of analysis is used, which is called the **horizontal analysis** and it can either use absolute comparisons or percentage comparisons.

To do a reasonable assessment on the incurring changes and deviation of the indicators it is vital to select the comparison bases. In relation with the analysis' purpose, the scope and the time, the comparison bases are chosen. The criteria of the selection are following:

- It is determined by the only one estimation method, the principle;
- It is crucial to be cohesive in relation with the covered period, the unit of measurement and the assessment.

The average speed of indicators' growth can be defined by making comparisons of the timing not only by 2 years, but also a number of years. In case the speed of the growth and the tendency is likely to be stable at the certain periods in the future, it is possible to define the indicators and the future outlooks of the indicators, which are directly related with the ones above. This method of the assessment is called **trend analysis**.

To make estimation of the asset components, the deviation and changes, it is required to emphasize at whether there have been changes in the quality, not in the quantity. For instance:

- The dominancy in ratio, growth of active items
- The amount of easily convertible assets
- Rational placing and effective utilizing idle assets

The asset sources are estimated approximately by the internal component, growth speed and the ratio such as:

1. Involvement of individual and external sources
2. The growth of owner's capital, the ways of its provision
3. The choice of external sources, specification, utilization
4. Fixed and current amount of liabilities, credits with interest, the over accumulation of credits, the growth of the liabilities to be paid firstly².

The level, at which the asset, its internal components of financing that are aligned, directly depends on the numerous factors such as; the scope of business activities, the enterprise is conducting, the production cycle, the provision of resources, enacted rules and regulations, business environment, and economic situation of the country.

The main equations of the Balance sheet³:

- $\text{Asset} = \text{Liabilities} + \text{Shareholder's equity}$
- $\text{Variable Current Assets} = \text{Cash} + \text{Liability} + \text{Inventory}$
- $\text{Fixed Current Assets (Working capital)} = \text{Current Assets} - \text{Short-term Payables}$
- $\text{Owner's Current capital} = \text{Fixed Capital} - \text{Slow saleable assets}$

¹ Sainjargal, B. "Analysis of financial statements" Ulaanbaatar, 1999, p.25

³ Naranchimeg, L. "The handbook of financial, economic analysis" Ulaanbaatar, 2013

- Fixed Capital=Owner’s capital+ Long-term Payables
- Working capital = Owner’s Current capital
- External sources= Short-term Payables + Long-term Payables
- Owner’s capital > Slow saleable assets
- Current Assets > Loans, Payables, received for the Stock

Fixed Current Assets are considered the parts of current assets that are financed by the own sources and that are not dependent of the factors such as: seasonal deviation of company’s business operations, production amounts, and sales of goods. Fixed Current Assets are financed by the owner’s capital and long-term loans and payables⁴

Variable Current Assets are called the assets, fully funded by Short-term Payables, because the amounts are changeable in relation with the production volume and sales of goods and it is regarded that no more than 50 percent of the variable current assets for the C corp. business enterprises is funded by the owner’s capital.

Owner’s Current capital (OCC) is the amount of owner’s capital, financed to offset the current capitals, whilst Working capital determines the current capital, offset by the owner’s capital and in most cases in the estimation it equals to Working capital = Owner’s Current capital.

Table 1. Balance structure

Active	Passive
Current Assets	Short-term Payables
OCC	Shareholder’s equity
Non -Current Assets	Long-term Payables

- Owner’s capital > Slow saleable assets
- Current Assets > Loans, Payables, received for the Stock

In the case of the inequality is provided, the Owner’s Current capital (OCC) and Working capital becomes more than 0; thus, the financial stability can be provided in some quantity.

In the financial statement assets, capitals are illustrated in the following classifications.

Source items:

- 1.1 By to the ownership: the owner’s and the capital mobilized from outside (external capital);
- 1.2 By the stability of the utilization and by the dates of reimbursement: Fixed and Variable assets, Long-term Payables and Short-term Payables;

⁴ Sainjargal, B. “Intermediate Accounting” Ulaanbaatar, 2009 Chap.23

1.3 By the utilization appropriation: Slow saleable assets and the sources to finance current assets. For instance:

Table 2. Classification of asset sources of “XXX” company

Contents of Classification	Classification	At the beginning of the financial year		At the end of the financial year	
		Thousand MNT	%	Thousand MNT	%
By to the ownership:	Internal sources	18 864,7	73%	21 872,7	62%
	External sources	6 817,8	27%	13 460,9	38%
Totals		25 682,5	100%	35 333,6	100%
By the stability of the utilization:	Variable sources	1 850,8	7,2%	8 381,2	24%
	Fixed sources	23 831,7	92,8%	26 952,4	76%
Totals		25 682,5	100%	35 333,6	100%

The table shows that of the total assets, the owner’s capital covered 73 percent, and the liabilities covered 27 percent, while at the end of the financial year the owner’s capital covered 62 percent, and the liabilities covered 38 percent. Thus, the amount of the owner’s capital has decreased, whilst we have seen the increase of the liabilities. The increase of the temporary source (Short-term Payables) in more than 5 times from the beginning of the year has been directly related to the paying capacity or soundness of the capital.

Classification of assets (Active):

1.1 By the liquidity: Current and Slow saleable assets;

1.2 By the utilization appropriation: Assets in the internal production circulation and externally mobilized assets;

1.3 By the sources of the financing: Internally funded assets and Assets, funded by external capitals;

1.4 By the current type of Assets Placement: cash, receivables, material resources, current and intangible assets

Table 3. Classification of assets of XXX Co. Ltd

Contents of classification	Classification	At the beginning of the financial year		At the end of the financial year	
		Thousand MNT	Percentage	Thousand MNT	Percentage
By the liquidity:	Current Assets	12 834,5	50%	22 787,9	64%
	Non-Current Assets	12 848	50%	12 545,7	36%
Totals		25 682,5	100%	35 333,6	100%
By the internal Utilization:	In the internal production circulation	21 894,1	85%	30 988,2	88%
	Externally mobilized assets	3 788,4	15%	4 345,4	12%
Totals		25 682,5	100%	35 333,6	100%

The table above describes the percentage of Current Assets covered in the total assets was in the increase by 14 percent from the beginning of the financial year; however, the amounts of Non - Current Assets went down. 88 percent of the total assets is being utilized in the internal production circulation, while 12 percent accounted for the externally mobilized assets. However, this ratio is directly related to the specifics of the entities.

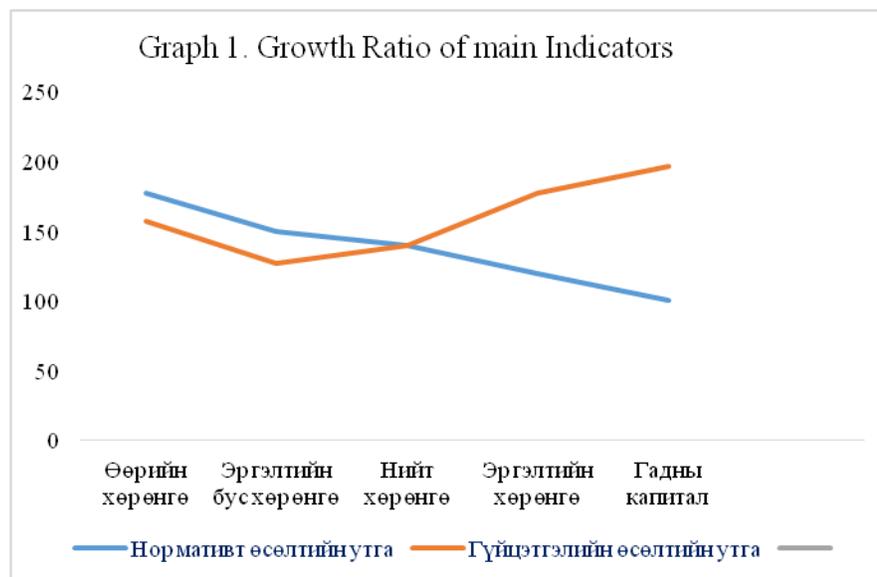
The scope of the business activities and the growth trends are determined in most cases by the unit weights of the produced goods, the amounts of transactions, services and the sales income. Moreover, it is appropriate to do the growth dynamic analysis of the main economic indicators following the logic sequences suited to the proper methodology⁵. The structure, contents and the growth speed of assets and sources were identified by Russian scholars in the following ways.⁶. To be more precise, they suggest the proper means of the Normative ratio of the main indicators to be: Owner’s capital >Non-current Asset>Total Asset>Current Asset>External Capital

Table 4 Normative Ratio of the main indicators

	Owner’s Assets	Non-current Assets	Total Assets	Current Assets	External Capital
Normative ranking	1	2	3	4	5

⁵ Sainjargal, B. “ Analysis of financial statements” Ulaanbaatar, 1999

⁶ Factor Analysis of Financial Stability ConSi



From Table 4 we have noticed that even though it is obvious that the growth of the owner's capital should exceed the growth of other indicators; however, in the case of XXX Co.Ltd, the growth of External Capital and Current Assets has been in the dominance in reverse of the Normative Growth. This illustrates that a large number of companies have been financing their Current Assets mostly by the Long-term and Short-term Liabilities. In the market economy business entities are conducting their business activities by their own financing and when they are in short of their own finances, the entities are required to mobilize external resources. The chief necessity of the market is to mobilize financial resources and improve the liquidity ratio. To do so,

business entities are required to make profit, to increase the production effectiveness and to accumulate the effective portfolio financing. One of the main components of Current Assets is considered Material resource and expenditure and it is regarded not only the parameter that defines the production capacity, but also the parameter that estimates the financial stability to determine the financing sources of Current Assets and Material resources and their sufficiency.

Considering extra financing needs of business entities and development tendency of business sector, the scholars and researchers have suggested the effective financing scheme of company assets in the following ways⁷.

⁷ L.Naranchimeg, Ch. Enkhamgalan Some Issues of Financial Stability Analysis (scirp.org) DOI: 10.4236/ib.2020.124010. IBusiness > Vol.12 No.4, December 2020

Table 5. Asset financing Opportunities

Asset types	Asset financing Opportunities		
	Innovative(A)	Average (B)	Out dated (C)
Non-current Assets	40%-Long-term Liabilities	20%-LTL	10%-LTL
	60%-Owner's Capital	80%- Owner's Capital	90%- Owner's Capital
Fixed Current Assets	50%- Long-term Liabilities	25%- Long-term Liabilities	100%- Owner's Capital
	50%- Owner's Capital	75%- Owner's Capital	
Variable Current Assets	100%- Short-term Liabilities	100%- Short-term Liabilities	50%- Owner's Capital
			50%- Short-term Liabilities

The more extension of business, the more requirements to effective placement of the external financing. Owner's, loan and external sources to comprise Current Assets and their ratio and interrelation is tightly connected with the specifics of asset circulation of the business entities. The financial independence and stability of the enterprise is directly related to the adequacy and utilization the Current Assets, it possesses.

Table 6. Interrelation between Assets, Sources

Assets (Active)				Sources (Passive)			
1. Current Assets				Short-term Liabilities			
Cash, bonds	Receivables	Material resources	Expenditures and advance	Short-term Liabilities, accounts			
				Owner's Capital			
1. Investment				Stock Capital	Additional paid-in capital	A	Others
2. Slow saleable assets							
3. Tangible and Intangible Assets				Short-term Liabilities			

TWO. A study part:

The careful study of the data of 3- year- period Financial Statements of the companies, conducting business in the industry sector in Mongolia reveals that 50,9 percent of total assets accounts for the Current Assets, and 49,1 percent accounts for Non- Current Assets. Moreover, in relation to the financing of the total Assets, 55,8 covers debts and liabilities and the remaining 44,2 percent covers the Owner’s Capital relatively. Regarding the trends of the latest years the percentage of the liabilities has always been in increase.

Table 6. The structure of assets, sources of industry companies

Indicators	2018		2019		2020		Average	
	Billion MNT	% Weight						
Current Assets	223,750.9	50.6	314,124.3	55.5	352,743.5	47.6	296,872.9	50.9
Non-Current Assets	218,308.6	49.4	251,477.7	44.5	387,654.3	52.4	285,813.5	49.1
Total Assets	442,059.5	100.0	565,602.0	100.0	740,397.8	100.0	582,686.4	100.0
Liabilities	235,794.2	53.3	305,866.2	54.1	434,614.9	58.7	325,425.1	55.8
Shareholder’s Equity	206,265.4	46.7	259,735.8	45.9	305,782.9	41.3	257,261.4	44.2
Liabilities and Shareholder’s Equity	442,059.6	100.0	565,602.0	100.0	740,397.8	100.0	582,686.5	100.0

With the expansion of the business, the contribution of external funding is in the increase; thus, the effective placement and utilization of this funding has become vital. Individual, loan and external sources to comprise Current Assets and their ratio and interrelation is tightly connected with the specifics of asset circulation of the business entities. The financial independence and stability of the enterprise is directly related to the adequacy and utilization the Current Assets, it possesses.

Fixed Current Assets are considered the parts of current assets that are financed by the own sources and that are not dependent of the factors such as: seasonal deviation of company’s business operations, production amounts, and sales of goods. Fixed Current Assets are financed by the owner’s capital and long-term loans and payables⁸

Variable Current Assets are called the assets, fully funded by Short-term Payables, because the amounts are changeable in relation with the production volume and sales of goods and it is regarded that no more than 50 percent of the variable current assets for the C corp. business enterprises is funded by the owner’s capital.⁹

⁸ Sainjargal, B. “Intermediate Accounting” Ulaanbaatar, 2009 Chap.23

⁹ Sainjargal, B. “Intermediate Accounting” Ulaanbaatar, 2009 Chap.23

To do the estimation of the scheme of the financing resources of 2018-2020 financial- year-average from the Financial Statements of the above-mentioned companies:

Table 7. Comparative Balance of Assets, Sources (Approximately)

Assets	Thousand MNT	Sources	Thousand MNT
Variable Current Assets: Out of:	195 255,06	Short-term Receivables	195 255,06
Cash		Long-term Receivables	28 495,84
Receivables		Net Owner's Current Assets (Net Current Assets - Short-term Receivables)	
Inventory			
Fixed Current Assets (A/K)	28 495,84	Totals of owner's and Liabilities	223750,9
Totals of Current Assets	223 750,9	Long-term Receivables	12 043,3
Totals of Non-Current Assets	218 308,6	Shareholder's Equity	206 265,4
Total Assets	442 059,5	Total Sources	442 059,6

Fixed Current Assets -6,4%, Variable Current Assets -44,2, Non-Current Assets -49,4%
 The study reveals that in the financing of the Variable Current Assets of the shareholding companies, conducting business in the industry sector, the involvement of the Short-term Liabilities accounted a lot higher and they were classified or grouped to (B) level according to the structure they possess.¹⁰ The certain parts of Non-Current Assets were funded by Long-term Liabilities. To develop the proper balance structure, required by the minimum level of the financial stability of the industry sector we have estimated that of the total assets 49,4 % accounted for the non-Current assets, 6,4 % accounted for the Fixed Current Assets, and 44,2 % accounted for the Variable Current Assets and we have made the conclusion regarding to the financing contribution of own and external capital and the Normative of Own Capitals in the following scheme:

Advanced (A)

- $COS = 49,4 \cdot 0,6 + 6,4 \cdot 0,5 + 44,2 \cdot 0 = 32,8\%$ /the percentage of own capital /
- $COS = 100 - 32,8 = 67,2\%$ /the percentage of debts and liabilities/
- $COS = 67,2 : 32,8 = 2,04$ / financial leverage/

Average (B)

- $COS = 49,4 \cdot 0,8 + 6,4 \cdot 0,75 + 44,2 \cdot 0 = 44,3\%$ /the percentage of own capital /
- $COS = 100 - 44,3 = 55,7\%$ /the percentage of debts and liabilities/

1. ¹⁰ Naranchimeg, L. 2021, *Theoretical and Methodological Issues of Financial Stability Analysis*, NUM Printing, Ulaanbaatar

- $COS = 55,7:44,3 = 1,25$ / financial leverage/

Outdated (C)

- $COS = 49,4 * 0,9 + 6,4 * 1 + 44,2 * 0,5 = 72,9\%$ /the percentage of own capital /
- $COS = 100 - 72,9 = 27,1\%$ /the percentage of debts and liabilities/
- $COS = 27,1:72,9 = 0,37$ / financial leverage/

Table 8. Asset Funding Opportunities

Assets	Current Structure	Sources	Current structure	A	B	C
Non-current Assets	49,4	Owner's capital	44,2	32,8	44,3	72,9
Fixed Assets	Current 6,4	Liabilities	55,8	67,2	55,7	27,1
Variable Assets	Current 44,2					

As related to the industry sector companies, the study results have been revealed the financing schemes, estimated by the current asset structure as of 49,4, 6,4, 44,2 to have the “A” level 44,2:55,8, “B” level 44,3:55,7, and “C” level 72,9:27,1.

Studying of the current scheme, the industry sector companies that have been chosen as the study objects, are placed at the B level and further efforts are required to reach A level financing by mobilizing and utilizing low-cost resources from the market.

Table 9. The structure and components of companies' income and expenditures

№	Indicators	2018		2019		2020	
		Billion MNT	(%)	Billion MNT	(%)	Billion MNT	(%)
1	Sales income	403,310.4	100.0	481,432.4	100.0	413,729.3	100.0
2	Sales costs	247,817.4	61.4	284,034.6	59.0	292,057.3	70.6
3	Operating costs	117,043.6	29.0	147,604.9	30.7	80,826.6	19.5
4	Net profit	26,080.9	6.5	43,740.9	9.1	27,685.1	6.7

With the estimation by the total amounts of the shareholding companies, 70.5 percent of the net sales covered sales costs; 19.5 percent covered operational costs relatively. Moreover, the net income after the deduction of taxes accounted for 6,7 percent and the companies gain the annual income worth 32502,3 million MNT per year.

Table 10. Main Financial ratios of companies

№	Indicators	2018	2019	2020	Average
1	Independence Coefficient	0.47	0.46	0.41	0.45
2	Regulation coefficient	0.34	0.44	0.23	0.34
3	Liability rates	0.53	0.54	0.59	0.55
4	Liability ratio	1.14	1.18	1.42	1.25

Considering the main financial ratios, of the total resources 45 percent covers Owner's Capital and 55 percent covers external debts and the ratio illustrates it is at the average level. Looking back at the study of 3 years earlier, the percentage of Owner's Capital went down regularly; however, there was increase of debts and liabilities, which makes the debt ratio equal to 1,25 approximately. Regulation coefficient, or the percentage of Own Current Assets in the total Assets accounts for 34 percent relatively. This ratio shows the capability of financing the certain parts of Owner's Assets to Current Asset funding.

CONCLUSION:

1. In the market economy period, the entities conduct business activities by creating finance through their own resources and when the finance is limited, the external resources are mobilized. The effective placement and utilization of the asset resources has been recognized as the main condition to sustain the financial stability;
2. The Assets and Asset sources of any business entity can be studied according to the following segments:
 - To state whether the main equations of the balance are sustained;
 - To study for the purpose of Asset analysis and to do a fair comparative analysis with the previous periods and the sector averages;
 - Asset sources are classified and studied thoroughly and to do a fair comparative analysis with the previous periods and the sector averages;
 - To develop the comparative balance of Assets, Sources and to complete the study on the Asset financing scheme;
3. The Asset financing scheme should be identified at the 3 levels as Advanced, Average and Outdated and it is required to define the further development trends.
4. The careful study of the Financial Statement data of 50 companies, conducting business in the industry sector in Mongolia has revealed that 49.4 percent of total assets accounted for the Non-Current Assets, and 6,4 percent accounted for Fixed Current Assets and 44,2 percent accounted for the Variable Current Assets relatively, and with this estimation we have concluded that Owner's Capital covers 32.8 percent and debt and liabilities cover 67.2 percent considering "A" level of the Asset financing.
5. Studying of the current scheme, the industry sector companies are placed at the relatively equal level; and further efforts are required to reach higher level financing by mobilizing and utilizing low-cost resources from the asset market.

REFERENCES

- Sainjargal, B., 2009, *Intermediate Accounting - II*, Chapter 23, pp 693-699, Huh sudar Printing, Ulaanbaatar
- Naranchimeg, L. 2021, *Theoretical and Methodological Issues of Financial Stability Analysis*, NUM Printing, Ulaanbaatar
- Lysenko D.V, Gylyarovskaya L.T, Yendovitsky D.A. 2008, *The Complex Economical Analysis of Business Activities*, Prospect Printing, Moscow
- Savitskaya G.V, 2006, *The methodology of complex Analysis of Business Activities* Prospect Printing, Moscow
- Thomas R. Robinson, Elaine Henry, Wendy L. Pirie, Michael A. Broihahn, 2012 by CFA. *International Financial Statement Analysis*, 7th edn, John Wiley & Sons, Inc, Hoboken, New Jersey.
- Sainjargal, B. “ Analysis of financial statements” Ulaanbaatar, 1999
- Deluungerel, D. “The Financial Statement Analysis and Evaluation of Civil Aviation Sector in Mongolia” *Journal of Accounting theory and practice*. Vol.4. June 2020
- L.Naranchimeg, Ch. Enkhamgalan Some Issues of Financial Stability Analysis (scirp.org) DOI: 10.4236/ib.2020.124010. *IBusiness* > Vol.12 No.4, December 2020
- Solongo Chuluunbat Comparative Analysis of Financial Advancements in Mongolia <https://doi.org/10.4236/jfrm.2021.101003>, *IBusiness* > Vol.1, 0 No.1, March 2021
- Erkki K. Laitinen Financial Reporting: Long-Term Change of Financial Ratios <https://doi.org/10.4236/ajibm.2018.89128>, Vol.8 No.9, September 2018