Company Value Assessment of Guangxi Yuegui Group

Li Xuan

School of Economics and Management, Nanjing University of Science and Technology, Nanjing 210094, China

312081567@qq.com

Keywords: Financial analysis, DCF, Business Valuation

Abstract: This paper chooses Yuegui Group as the case study object, and assesses the value of the business. The article mainly includes 3 parts: case overview, calculation of company value, and conclusion. The article concludes with a summary of the full text and an evaluation of the strategy chosen by the company.

1. Introduction

Securities investment has become an indispensable part of the people's economic life. However, most small and medium-sized investors are not professionals, lacking the necessary financial common sense. Many investors miss the opportunity to buy and sell stocks because they do not understand the statements. Therefore, how to correctly find listed companies that have real investment value is a top priority for investors. This paper uses financial knowledge to calculate the company's corporate value, in order to make a more scientific evaluation of the value of the listed company.

2. Case company profile

Guangxi Yuegui Guangye Holdings Co., Ltd. (referred to as Yuegui) was founded in 1956. In 1998, the sugar stock was successfully listed on the Shenzhen Stock Exchange (stock code 000833). The company's business scope Sugar, paper, pulp, edible alcohol, light calcium carbonate, distiller's dried powder, organic-inorganic compound fertilizer, organic fertilizer, food packaging paper.

3. Company value assessment

3.1 Analyze historical performance

First, calculate the net operating profit after tax. As shown in Table 1.

Table.1. Yuegui 2014-2018 After-tax Net Operating Profit Unit: Yuan

	2014	2015	2016	2017	2018
Operating income	1792229603	1735404707	1792118993	1973288909	1792229603
Less: operating costs	1392359402	1345489977	1543003691	1637852720	1392359402
Less: business tax and surcharge	18294209.42	20450890.78	36218114.41	36895506.11	18294209.42
Less: sales expenses	93264148.66	77677103.78	63161911.85	41588567.53	93264148.66
Less:Administrative expenses	188028999.5	189542333.7	140206268.2	139191461	188028999.5
Less: asset impairment loss	14955279.73	14201339.34	10002977.89	6125998.46	14955279.73
EBIT	85327563.67	88043062.84	-473969.95	111634655	85327563.67
Deduct: income tax expense	2863350.9	34700471.15	10394142.47	26516083.37	2863350.9

Net operating profit after tax 82464212.7	53342591.69	-10868112.42	85118571.64	82464212.77
---	-------------	--------------	-------------	-------------

Note: Data comes from the Resset database. Second, calculate the net increase in working capital. As shown in Table 2.

Table.2. Yuegui's net increase in working capital in 2012-2016 Unit: Yuan

	2014	2015	2016	2017	2018
Operating liquid assets	647742559.8	1491509840	1558834932	1478678810	1959197619
Interest-free current liabilities	312365600.1	502147136	531307825.2	664602726.1	1095797438
Working capital	335376959.7	989362703.9	1027527107	814076083.8	863400180.7
Net increase in working capital	26906647.05	653985744.2	38164403.01	-213451023.1	49324096.91

Third, calculate the capital expenditure and the amount of depreciation. As shown in Table 3.

Table.3. Depreciation and amortization of Yuegui 2014-2018 Unit: 10,000 yuan

	2014	2015	2016	2017	2018
Fixed Assets	449903285.4	829354175.4	744834162.4	867200119.3	797271989
Accumulated depreciation of fixed assets	735324822.9	17437787.27	17661836.84	1028047241	51414238.24
net value of fixed assets	250127558.5	8640371.53	1544232.48	412221777.9	6094616.48
Increase in net fixed assets	240504420	-241487187	243031419.5	410677545.4	-406127161.4
Construction in progress	15860415.48	20984801.24	40757335.94	71953059.07	191382760
Increase in net value of construction in progress	9806264.57	5124385.76	19772534.7	31195723.13	119429700.9
Intangible assets	77655375.95	998536839.5	974043947.4	1045130181	969960685.2
Increase in net worth of intangible assets	13034124.71	920881463.6	-24492892.18	71086233.97	-75169496.13
Capital expenditures	263344809.3	684518662.4	238311062	512959502.5	-361866956.6
Amortization of intangible assets	18867377.64	66078678.39	50790636.44	119039958.8	146890500
depreciation	735324822.9	17437787.27	17661836.84	1028047241	51414238.24
Long-term deferred expenses amortization	523015.77	727164.76	4889046.66	12436555.87	11940678.38
Depreciation and amortization	754715216.3	84243630.42	73341519.94	1159523755	210245416.6

Fourth, calculate historical free cash flow. As shown in Table 4.

Table.4. Historical Free Cash Flow of Yuegui 2014-2018 Unit: 10,000 yuan

	2014	2015	2016	2017	2018
Net operating profit after tax	82464212.77	53342591.69	-10868112.42	85118571.64	124095424.5
Net increase in working capital	26906647.05	653985744.2	38164403.01	-213451023.1	49324096.91
Increase in net fixed assets	240504420	-241487187	243031419.5	410677545.4	-406127161.4
Increase in net value of construction in progress	9806264.57	5124385.76	19772534.7	31195723.13	119429700.9
Increase in net worth of intangible assets	13034124.71	920881463.6	-24492892.18	71086233.97	-75169496.13
Depreciation and amortization	754715216.3	84243630.42	73341519.94	1159523755	210245416.6
Free cash flow	546927972.8	-1200918185	-214002057.5	945133847.5	646883700.8

According to Table 4, although the historical free cash flow of Yuegui in 2014-2018 is mostly negative, it is still rising in the volatility. The sharp decline in 2015-2016s mainly because Yuegui

has increased its capital investment, that is, it has introduced an advanced circular economy industrial chain.

3.2 Forecast future performance

The company continued to establish a market-based price adjustment mechanism and marketing model, strengthen internal management and control, reduce costs and costs; expand sugar trade and grasp market opportunities, so that the company remains stable Development. From the above analysis, Yuegui as one of the leading companies in the sugar industry, the core competitiveness advantage is obvious, the future development strategy is in line with the company the status will surely usher in a better development opportunity in the future. Table 5 is a quantitative analysis of the company's indicators in 2014-2018.

	2014	2015	2016	2017	2018
Operating income growth rate	-0.047868	-0.031706	0.032681	0.06431	0.60553
Operating cost / operating income	0.776886734	0.775317695	0.860993995	0.830011618	0.86195122
Sales expenses / operating income	0.082022	0.04476	0.035244	0.020241	0.01019
Management fee / operating income	0.063473	0.109221	0.078235	0.081256	0.046833
Net increase in working capital / net increase in operating income	0.039309453	-11.50878909	0.672923978	-1.178181391	0.041279345
Capital expenditure / operating income	0.146936982	0.394443244	0.132977254	0.259951546	-0.114219387
Depreciation and amortization / operating income	0.42110409	0.048544083	0.04092447	0.587609726	0.066361689

Table.5. Analysis of historical indicators

Note: Due to the introduction of the policy of the reform of the camp, this article canceled the adjustment of business tax and additional items. Combined with the above qualitative and quantitative analysis, this paper makes the following predictions, the forecast period is 5 years, that is, 2019-2023, 2023 and later is the sustainable development period. (1) Operating income. Considering that the company's industry status is relatively stable, and the company's products are relatively mature products, this article takes the average of the company's operating income growth rate from 2014 to 2018 as the operating income growth rate of the forecast period. As shown in Table 6.

Table.6. Forecast of future operating income growth rate

	2019	2020	2021	2022	2023
Operating income growth rate	0.12	0.12	0.12	0.12	0.12

(2) Various costs and expenses. As shown in Table 7. Depreciation and amortization/operating income is the arithmetic average after excluding abnormal values.

Table.7. Future Cost and Cost Forecast

	2014	2015	2016	2017	2018	Average value	Predictive value
Total operating cost / total operating income		0.775317695	0.860993995	0.830011618	0.86195122	0.821032252	0.8
Sales expenses / operating income	0.082022	0.04476	0.035244	0.020241	0.01019	0.0384914	0.03
Management	0.063473	0.109221	0.078235	0.081256	0.046833	0.0758036	0.07

fee / operating income							
Net increase in working capital / net increase in operating income	0.039309453		0.672923978		0.041279345	0.251170925	0.2
Capital expenditure / operating income	0.146936982	0.394443244	0.132977254	0.259951546	-0.114219387	0.164017928	0.2
Depreciation and amortization / operating income	0.42110409	0.048544083	0.04092447	0.587609726	0.066361689	0.232908812	0.2

Table.8. Future Free Cash Flow of Yuegui in Forecast Period Unit: Yuan

		2019	2020	2021	2022	2023
Operating income	3168174565	3548355513	3974158174	4451057155	4985184014	5583406096
Less: operating costs	2730811932	2838684410	3179326540	3560845724	3988147211	4466724877
Less: sales expenses	32284465.54	106450665.4	119224745.2	133531714.7	149555520.4	167502182.9
Less: Administrative expenses	148374886.2	248384885.9	278191072.2	311574000.9	348962881	390838426.7
EBIT	179196590	354835551.3	397415817.4	445105715.5	498518401.4	558340609.6
Less: Income tax	55101165.51	88708887.82	99353954.36	111276428.9	124629600.4	139585152.4
Net operating profit after tax	124095424.5	266126663.5	298061863.1	333829286.7	373888801.1	418755457.2
Plus: depreciation and amortization	210245416.6	252294499.9	302753399.9	363304079.9	435964895.8	523157875
Less: net increase in working capital	49324096.91	76036189.56	85160532.31	95379796.19	106825371.7	119644416.3
Less: Capital expenditure	267453415.9	53490683.18	10698136.64	2139627.327	427925.4655	85585.09309
Free cash flow	646883700.8	388894290.6	504956594	599613943	702600399.7	822183330.7

The following is the calculation of free cash flow during the next five years of Yuegui's forecast period. Note that in 2018, the capital expenditure of Yuegui is negative, and due to the company's development needs and strategic layout, the company will continue to invest capital in the future. Therefore, we set the capital expenditure data of the base period as the average value of capital expenditure in 2014-2018, namely 267453415.9

3.3 Estimated cost of capital

(1) Estimating the capital structure: Yuegui's2016 annual report shows that the debt ratio in 2016 was 0.317657, and the equity ratio was 0.682343. (2) Estimating the cost of debt capital Kb: Yuegui's credit status is good, and the possibility of loan default is very low. Therefore, we use the five-year benchmark lending rate set by the People's Bank of China in 2019 as its pre-tax debt capital cost. According to the inspection, the annual interest rate of the five-year coupon of the 2019 certificate government bond in China is 4.75%. Therefore, the debt capital cost is the bond interest rate of 4.75%, and the after-tax debt capital cost Kb is 0.035625. (3) Estimating the cost of equity capital Ks: This paper calculates the cost of equity capital based on the capital asset pricing model. The basic formula is: Re = Rf + (Rm - Rf). Where: Re is the equilibrium expected return on equity; Rf is the risk-free rate of return; β is the system risk factor of the firm relative to the market as a whole; Rm is the expected rate of return of the market portfolio. The risk-free rate of return Rf uses the yield

to maturity of long-term government bonds. It is generally considered that the government bond income is risk-free, or the risk is small and can be ignored. On the other hand, long-term national debt volatility is small, and it is more appropriate to assess the company's cash flow period. This article uses the 2019 national debt five-year coupon rate of 4.27%. According to the Resset database, the enterprise beta coefficient is 0.8525. (Yuegui shares 2018-12-28, risk factor _ total market capitalization weighting). The expected rate of return for the market portfolio of this paper is the average annual rate of return of the annual market of the Shanghai Composite Index for the period of 1993-2017, with an average of 13.58%. Then Ks=Re=4.27%+0.8525*(13.58%-4.27%)=0.122(4) Calculating the weighted capital cost:

WACC= $K_b \frac{B}{V} + K_s \frac{S}{V}$ WACC is the weighted capital cost, B is the market value of the debt, and S is the market value of the equity capital, V = B + S. Then WACC= K_b * debt ratio + K_s * equity ratio= 0.094562377

3.4 Calculate corporate value

After predicting the free cash flow and weighted average cost of capital of Yuegui from 2019 to 2023, you can discount the free cash flow for each year according to the free cash flow discount model. The results are shown in Table 9.

2019 2020 2021 2022 2023 388894290.6 504956594 599613943 702600399.7 822183330.7 Free cash flow Discount factor 0.0946 0.0946 0.0946 0.0946 0.0946 Present value of 355284387.6 421447187.8 457199126.1 489425527.2 523228568.3 free cash flow

Table.9. Present Value of Free Cash Flow in Forecast Period Unit: Yuan

The present value of free cash flow during the forecast period is total = 2246584797yuan. With the passage of time and the participation of competitors, the rate of return on capital will gradually stabilize. We believe that the period during which the company obtains excess profits is the forecast period, and then the company enters a stable period. According to the International Monetary Fund's 2016 forecast, China's economic growth will continue to slow down due to the slowdown in private investment activity and weak external demand, until it will maintain a level of 6.0% up to 2021. Therefore, for the sake of this article, it is planned to adopt 6% as the sustainable growth rate. So the PV=822183330.736751*(1+6%)/(0.0346*1.571365519)=16029545733, Enterprise value=16029545733+2246584797=18276130530 yuan

4. Conclusion

The economic growth engine of the dual industry of sugar industry and logistics industry enhances the company's ability to withstand risks. In terms of capital structure, the company's debt ratio is very low and the company's financial risk is low. But huge capital investment also makes the company's capital cost higher. Therefore, the company can properly borrow and increase financial leverage. In terms of corporate value, Yuegui shares continued to grow steadily and their value was stable. The enterprise value estimated by cash flow in this paper is higher than the current total market value of the company, indicating that the value of the enterprise is underestimated.

References

- [1] Pindyck R S. 1988. Irreversible Investment, Capacity Choice, and the Value of the Firm. *Social Science Electronic Publishing*, 969-985.
- [2] Grenadier S R. 2002. Option Exercise Games: An Application to the Equilibrium Investment Strategies of Frims. *Review of Financial Studies*, 691-721.

- [3] He Ying, Zhang Dawei.2015. Managerial traits, debt financing and corporate value, *Accounting research*, Vol. 8, No. 65-72.
- [4] Li Gang. 2017. EVA enterprise value evaluation system and its application—taking Huawei as an example. *Environmental Monitoring and Assessment*, Monthly Finance and Accounting, Vol. 22, No.82-86.
- [5] Wang Xiaorong, Zhang Junrui. 2003. Review of enterprise value assessment research, *Economics dynamics*. Vol. 7 (61-64).
- [6] Yuegui Corporation. Annual Report 2018 [CP/DK]. 2019-03