

Loblaw Companies Limited's Basic Financial Analysis and Calculation Display

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Abstract: For a company, financial analysis can help the company analyze its financing, investment, risk management, comparison with competitors and other issues to help company decision-makers make correct decisions. For the financial market, financial analysis can help investors understand the basic characteristics, current situation and future prospects of their target investment companies and help improve social and economic stability and development. This article is mainly based on a financial analysis of the current state of Loblaw Companies Limited (hereinafter referred to as Loblaw) in 2023. The research purpose of this article is to conduct an in-depth study of Loblaw by explaining the meaning and conceptual relationship of data collection, calculations and results, so that the public can have a more comprehensive understanding of the company's financial status in 2023. This paper uses literature analysis and data analysis research methods to mainly explore Loblaw's risks, financing costs, current capital plans and capital structure. The data analysis models used include linear regression model, dividend discount model (DDM), capital asset pricing model (CAPM), weighted average cost of capital (WACC), net present value model (NPV). The data used for calculation comes from authoritative websites such as Yahoo Finance, Bank of Canada, and Loblaw's official website. The results of the study found that Loblaw has a dominant position in the Canadian retail market. Loblaw is one company that relies more on debt financing. Its financing costs are lower than the industry average. Its capital structure has been very stable in recent years. The market has full confidence in Loblaw.

Keywords: Loblaw, WACC, NPV, financial analysis

1. Introduction

Founded in 1919, Loblaw is a Toronto-listed company. Loblaw focuses on food, health and cosmeceuticals. The company's value concept is to help Canadians "Live Life Well" [1]. As one of the largest retailers in Canada, Loblaw includes multiple supermarket chains such as Loblaws, Provigo, Zehrs, etc. [2]. Its credit rating has been confirmed by Dominion Bond Rating Service (DBRS) as BBB, which is lower than Class A level but above junk level, which means that the company has a default risk but currently has sufficient solvency [3]. However, in a bad economy, there may be greater risks under these conditions. This suggests that Loblaw is investment grade but has a slightly higher level of risk. Loblaw was selected as the research object because it has an important influence across Canada, and its various brands are inseparable and closely related to the

lives of local people and can be seen everywhere. Furthermore, there is currently no comprehensive study on the basic financial situation analysis of Loblaw in 2023. This paper mainly explores Loblaw's risk, financing cost, its current capital plan and its capital structure by using literature analysis and data analysis research methods. On this basis, this paper makes a comprehensive comparison of Loblaw's financial situation with its peer companies. The research significance of this paper is that through in-depth research on Loblaw, the public can have a more comprehensive understanding of the company's financial status in 2023, and readers can learn about the company's investment strategy and capital structure.

2. Company Risks and Costs

2.1. Beta

Beta is a measure of the sensitivity of a stock's returns to overall market movements. There are two ways to get the beta value. The first is to use a linear regression model approach, that is, the slope between the market rate of return and the firm's rate of return [4]. Because Loblaw is a company listed in Toronto, the return rate of Standard&Poor's/TorontoStockExchange (S&P/TSX) was chosen as the market return rate. First of all, the daily income of S&P/TSX and Loblaw in the past 5 years (2018-2023) was obtained on Yahoo Finance (columns B and E in Figure 1). Then calculate the daily returns corresponding to S&P/TSX and Loblaw based on the daily returns (columns C and F in Figure 1). Finally, use R_m and $R(\text{loblaw})$ to linear regression model to get a visualization graph (Figure 2) through Excel, and its slope is beta equal to 0.5093.

	A	B	C	D	E	F	G
1	Date	S&P/TSX	Rm	Date	Loblaw	R(Loblaw)	
2	2018/8/15	16148.5		2018/8/15	50.422199		
3	2018/8/16	16225.7002	0.476925%	2018/8/16	50.983688	1.107420%	
4	2018/8/17	16323.7002	0.602163%	2018/8/17	51.205322	0.433773%	
5	2018/8/20	16331	0.044709%	2018/8/20	50.858097	-0.680413%	
6	2018/8/21	16297	-0.208410%	2018/8/21	50.821159	-0.072656%	
7	2018/8/22	16347.29981	0.308169%	2018/8/22	50.28923	-1.052184%	
8	2018/8/23	16326.79981	-0.125482%	2018/8/23	50.540417	0.498241%	

Figure 1: S&P/TSX daily return and Loblaw daily return (2018—2023) [5-6].

*Given that there are 1255 rows in Excel, only the first 8 rows are intercepted due to the limited image space.

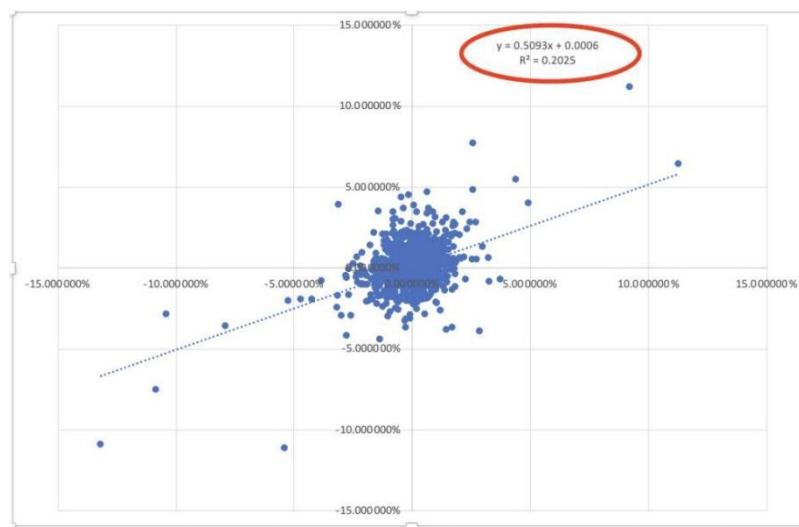


Figure 2: Regression model of S&P/TSX daily return and Loblaw daily return.

The second method is based on the traditional beta calculation formula:

$$\beta_i = \frac{Cov(R_i, R_M)}{\sigma^2(R_M)} \quad (1)$$

Similarly, beta can also be calculated (Figure 3). This method is the same as the beta value obtained by linear regression.



B	C	D	E	F	G	H	I
R(TSX)	Rm	Date	R(Loblaw)	R(Loblaw)		Beta Loblaw	
16148.5		2018/8/15	50.422199				0.509331809
16225.7002	0.476925%	2018/8/16	50.983688	1.107420%			

Figure 3: Use Excel to calculate beta by traditional formula method.

2.2. Cost of Equity

The two models commonly used to calculate Loblaw's Cost of Equity are the Gordon Wealth Growth Model and the Capital Asset Pricing Model (CAPM) [7]. The first one is calculated according to the Gordon wealth growth model, the formula is: $\text{Cost of Equity} = \frac{D_1}{r-g}$. But this method is not suitable for calculating the Cost of equity of Loblaw Company. Because the premise principle of using this formula is that the growth rate of its dividend is constant and permanent [7]. However, Loblaw's dividend growth rate isn't constant. Therefore, it is impossible to calculate the Cost of equity of Loblaw by this method. Therefore, the second calculation method, the CAPM model, is selected, and its formula is:

$$E(R_i) = r_f + \text{Beta} * [E(R_M) - r_f] \quad (2)$$

Because Loblaw is a listed company in Canada, the average rate of return of the three-month government of Canada Treasury bills is used as the risk-free rate. The average risk-free interest rate $r_f = 1.56387\%$ was calculated by selecting the rate of return in the past 5 years from the Bank of Canada [8]. Calculate the average value of $E(r_m)_{\text{daily}} = 0.018222\%$ in column C in Figure 1. Convert the market daily return rate into the market year by $E(R_m \text{ yearly}) = (1 + E(R_m \text{ daily}))^{365} - 1$ formula. The rate of return is $E(r_m)_{\text{yearly}} = 6.87667\%$. Finally, the cost of equity of Loblaw is calculated $= 1.56387\% + 0.5093 * (6.87667\% - 1.56387\%) = 4.26985\%$.

2.3. Cost of Debt

Currently, Loblaw has issued 6 bonds (Figure 4). First, multiply the volume and market price of each bond to get the Bond value of each bond. Then divide the bond value of each bond by the total bond value of the 6 bonds to get the respective proportion of each bond. Finally, the cost of debt is obtained by weighted average method. The specific steps are: multiplying the respective yield to maturity (YTM) of each bond with the respective proportion of each bond to get the average YTM of each bond; and then the sum of them is Loblaw's total cost of debt, which is 5.54%.

A	B	C	D	E	F	G
Bond name	Volume	Market price	Bond Value	Proportion	YTM	Average YTM
CA53947ZAC10	100,000,000	104.31	10431000000	0.084414034	5.49%	0.46%
CA53947ZAY30	300,000,000	102.89	30867000000	0.24979465	5.5257%	1.38%
CA53947ZAU18	200,000,000	102.63	20526000000	0.166108951	5.5937%	0.93%
CA53947ZAT45	200,000,000	108.05	21610000000	0.174881342	5.4803%	0.96%
CA53947ZAS61	200,000,000	108.82	21764000000	0.176127604	5.5813%	0.98%
CA53947ZAF41	175,000,000	104.98	18371500000	0.148673419	5.5286%	0.82%
		sum	1.2357E+11			5.54%

Figure 4: Use the weighted average method to find the average cost of debt through 6 bonds [9].

2.4. WACC

Weighted Average Cost of Capital (WACC) is to calculate the weighted average financing cost of a company, and its formula is:

$$WACC = E/V * \text{cost of equity} + D/V * \text{cost of debt} * (1 - T) \quad (3)$$

According to Yahoo Finance, Loblaw's total assets in the latest quarter of 2023 were 38096 million, total liability was 26639 million, and total equity was 11457 million [10]. At the same time, according to the Loblaw 2023 Q2 financial report, the tax of Loblaw was 26.3% [11]. Therefore, the weighted average financing cost of Loblaw is $(11457/38096) * 4.26985\% + (26639/38096) * 5.54\% * (1 - 26.3\%) = 4.13918\%$.

3. Capital Budgeting

Loblaw's current capital plan is to spend \$2 billion to renovate 600 old stores and open 38 new stores in 2023, which is scheduled to be completed by the end of 2023. At the same time, 6,000 new jobs will be created in the future which will help Canada solve the employment problem [12]. Strategic capital investment decisions are very important for a company. Using the net present value model (NPV) method can help Loblaw company judge the feasibility of investing in the project [13]. When $NPV = 0$, it means that investing in the project will not make a loss or make a profit.

$$NPV = \sum_{i=1}^n \frac{Cash\ Flow_i}{(1+r)^i} - Initial\ Investment \quad (4)$$

For Loblaw, $r = WACC = 4.26985\%$ in the formula, the initial investment is \$2 billion. Because Loblaw will renovate and rectify the store every 5-7 years [9]. Therefore, Loblaw needs to earn at least \$2 billion of the initial investment cost in the next 5-7 years to ensure that the capital plan does not lose money. Taking the average of n is 6 years. Assuming that the average annual income in the next 6 years is R and $NPV = 0$, then:

$$0 = R * \left[\frac{1 - (1+i)^{-n}}{i} \right] - Initial\ Investment \quad (5)$$

$$0 = R * \left[\frac{1 - (1 + 4.26985\%)^{-6}}{4.26985\%} \right] - 2\text{Billion}$$

Therefore, $R = 384.88$ million. This means that Loblaw's refurbished and newly opened stores will only be profitable when the average annual cash flow in the next 6 years is greater than 384.88 million.

4. Capital Structure

This paper obtained the balance sheet of Loblaw for the past three years (2020-2022) from Yahoo Finance [10]. Based on the annual total assets, total liabilities and total equity on the balance sheet, Loblaw's D/V ratio and E/V ratio for each of the past three years have been calculated (Figure 5). It

can be found that the D/V ratio and E/V ratio of Loblaw have not fluctuated much in the past three years. This shows that Loblaw has maintained a relatively stable capital structure. However, Loblaw's debt ratio is almost more than 2 times its equity ratio. This means that Loblaw relies more on debt financing to operate. Because the company's high debt ratio will bring many potential risks, such as high costs due to high debt and high interest, or greater financial difficulties when the industry is in a downturn, the higher the company's debt ratio, the possibility of being unable to repay The bigger the wait. Therefore, Loblaw can use it to repay debts by adjusting retained earnings or more through the issuance of new shares to minimize the risk of high debt.

Year	Total asset (million)	Total liability (million)	Total equity (million)	D/V	E/V
2022	38147	26691	11456	0.69968805	0.30031195
2021	36614	24877	11737	0.67943956	0.32056044
2020	35870	24751	11119	0.69001951	0.30998049

Figure 5: Loblaw D/V ratio and E/V ratio [10].

5. Comparison with Peers

5.1. Market Share

According to the 2022 U.S. Department of Agriculture (USDA) report, Loblaw accounts for 28% of national retailers, far exceeding its competitors Empire Company Limited (20%), Metro (11%), Costco and Walmart (together 76% - 28% - 20% - 11% = 17%) [14]. As a result, Loblaw dominates the Canadian retail market. This means that Loblaw has a strong influence in Canada and is recognized by the majority of local consumers. At the same time, it represents that Loblaw has a strong competitive advantage in the Canadian retail market and is a representative of high quality and high performance in the industry.

5.2. Comparison of WACC with Peers

As mentioned earlier, Loblaw's WACC is 4.13918%, which is lower than the average of its peers [15]. First, it means Loblaw can secure funding at lower interest rates or financing terms than competitors. Secondly, this shows that even though Loblaw relies on high debt financing, it has good control over the cost of the enterprise. Finally, it goes a step further to represent that Loblaw has these good factors that make the company's financing cost lower than its peers: a good financial position, a leading position in the industry, good credit, and the company has good risk management.

5.3. PE Ratio Compared with Peers

To a certain extent, the price-earnings ratio can reveal the company's future profit risk and dividend payout ratio. High P/E ratios can be associated with low risk and high payout ratios. Investors have higher expectations for the profitability of companies with higher P/E ratios [16]. Loblaw's PE ratio is higher than the peer average (Figure 6). In other words, investors are more than willing to pay a premium for every dollar of Loblaw's extra earnings compared to other companies in its peers. This shows that investors are optimistic about the company's prospects and confident in its ability to achieve strong profitability in the future.



Figure 6: PE ratio Loblaw vs. Peers [17].

6. Conclusion

This article mainly provides a financial analysis of Loblaw in 2023. Combined with the actual case of Loblaw, this thesis shows readers the calculation methods of β coefficient, cost of equity, cost of debt, WACC, capital structure and capital plan in detail through linear regression model, DDM model, CAPM model, NPV model, etc. The result shows that Loblaw is the leading giant in retailing in Canada. It has a stable capital structure, more debt financing is used to raise funds for the company, and the financing cost is lower than the average of its peers. Loblaw's prospects in the market are promising. The room for improvement in this paper lies in the capital budgeting part. Since the forecast data of the future return of this investment is not public, it is impossible to judge whether the NPV is greater than 0 according to forward logic. Therefore, it is only possible to assume an NPV of 0 and roughly estimate the minimum average future annual income which will not result in a Loblaw loss. Future research can use the financial analysis method to analyze more companies. The financial analysis method can be applied to any enterprise, not only to help company owners make correct decisions but also to help investors make a basic financial analysis of any enterprise they want to invest in, including mastering its current state and judging whether its prospects are worthy of investment.

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