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Research on the leverage effect of the retail chains in China

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ABSTRACT: With the development of market economy in China and the rising incomes of people, the level of consumption is continuously upgrading. Meanwhile, the chain retailing industry which is closely linked to people's daily life is developing rapidly. All these factors lead to the transformation of economic structure of China. Since the foreign retail enterprises, like wal-mart, Carrefour, and Metro, entering into China, the local chain retailing industry in China is facing more severe pressure due to the competition. In this situation, this paper will compare and analyze the differences between local retail chains and foreign retailing enterprises using the financial and operating leverage indicators .This paper will also put forward some feasible suggestions.

Keywords: chain retailing enterprises; financial leverage; operating leverage; suggestions

1 INTRODUCTION

In the late 80s and early 90s, the domestic market was very weak. The retailing business got into trouble. In order to get rid of the troubles, the eastern coastal areas adopted the chain operation mode first. This mode gradually extended to the central and western regions. At the same time, it spread from big cities to small cities and towns. After years of development, the chain operation has become a force in Chinese business system. However, due to the tardiness of macro economy and urban resident income growth, the chain retailing sales growth has been down. In 2014, a total retail sale of social consumer goods is 26239.4 billion, increased by 12% from a year earlier. The growth dropped for five consecutive years. The chain enterprises on top one hundred are no exception. Not only sales growth continues to fall, from 21% in 2010 to 5.1% in 2014, but also the share in the market is shrinking. The proportion of total retailing sales of social consumer goods decreased from 11% in 2010 to 8% in 2014. But the shopping center and convenience store growth situation is relatively good. The survey done by China Chain Operation Association shows that the average sales growth rate of shopping center and convenience sample store are respectively 6.7% and 3.6% in 2013 and 2014, higher than the growth of big supermarkets, supermarkets, department stores and pro shops. Shopping center is famous for its big size, containment and good experience [1]. It's regarded as the "safe haven" of offline retail. However, a large number of enterprises started to flood in, especially the foreign enterprises with rich experience entered. It made the competition intensified, and the profit pressure increased. In order to adapt our native retailing chains to the trend of differentiation, the brand and chaining, formulating reasonable financial policy and optimizing the capital structure have become the industry consensus and action.

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2 THE CURRENT SITUATION OF DOMESTIC CHAIN RETAILING ENTERPRISES

The retailing chain is under the leadership of the headquarters of the organization. It uses the principle of common operation and consistent marketing activities. And it implements centralized procurement and distributed sales, so as to realize the joint of scale and economic benefits. The Chains are consistent in four aspects: management idea, enterprise identification system and business brand, goods and services, operation and management. It uses synergies to enable enterprises to accelerate cash flow, to strengthen bar-gaining power and to integrate the logistics support, thus achieving economies of scale with strong market competitiveness, and promoting the rapid development of enterprises. No matter where the retailing goes to, it will move towards chain. According to the statistics analysis, the convenience stores, supermarkets, hypermarkets, specialty stores, gas stations, stores are several formats in larger scale, more labor-intensive, and higher sales.

Table 1. Our chain retail enterprises financial status list [2]

Category	Year	Funded	Hong Kong, Macau and Taiwan-funded	Foreign investment
Assets and liabilities	2014	0.7166	0.7318	0.7612
	2013	0.7154	0.6938	0.7835
	2012	0.7097	0.6936	0.7529
Equity ratio	2014	2.5207	2.7005	3.1872
	2013	2.5103	2.2661	3.6192
	2012	2.4356	2.2636	3.0462
EBIT margin	2014	0.0625	0.0649	0.0703
	2013	0.0573	0.0743	0.0671

As it can be seen from Table 1, on the one hand, China's domestic retailing chains have been expanding in recent years and been increasing the profit growth trend. On the other hand, the overall size of China's domestic retailing chain is much larger than that of Hong Kong, Macau and Taiwan-funded enterprises and foreign-invested retail chain enterprises. Our local chain retail enterprises take advantage of the way of debt management; the scale of our local retail chains is slightly larger than that of Hong Kong, Macau and Taiwan-owned retail chains, but lower than that of foreign-invested retail chain enterprises.

In summary, although our local chain retail enterprises have developed rapidly, but they started late and are small in scale and the degree of concentration is low. It is difficult to form the scale of economies or to achieve the purpose of reducing costs. Our country’s retail chains are in low level of standardizations; most companies have not yet established sound distribution centers and information systems. And it’s more difficult to form a complete, standardized operation management system. Some supermarket chains, convenience store chains expand blindly and have erected a shop outlet, leading to diseconomies of scale. The goods are in serious backlog; especially the fresh food can’t meet the daily consumption need of residents. In the background of economic globalization, the continuous influx of foreign-invested enterprises increased competition. Thus, the surface prosperity of China's domestic retail chains, in fact, is in a shrinking market share. For a more in-depth analysis of the financial status of local retail chains, this paper introduces indicators of financial leverage and operating leverage and it also does specific analysis [3].

3 THE THEORY OF FINANCIAL LEVERAGE AND OPERATING LEVERAGE

Ancient Greek physicist Archimedes once said, "Give me a fulcrum, I can tilt the entire Earth". This theory can be applied to the field of economics as well. In the field of finance, the debt cost is the equivalent of fulcrum; earnings before interest and tax equivalent of the lever of reaction. Speaking of operating, the fixed cost is an analogy to the pivot, affecting the strength of the sales force.

The so-called financial leverage is the change in earnings per share resulting from the presence of debt leverage which is greater than the change in EBIT. There are many sources of financing business. In the process of financing, companies need to pay certain interest expense. Of course, companies may also benefit from the proper use of the financing revenue. Generally speaking, of the same scale of funding, the cost of debt financing is relatively low. If the company maintains financial leverage a relatively reasonable level in the industry, it can use the finance to expand the scale of enterprises, reduce the overall cost of the capital, optimize the capital structure, enhance the efficiency and effectiveness of operations, and bring more revenue. However, if not properly controlled, the financial leverage will bring varying degrees of loss. [3]If the leverage is too high, it will result in excessive corporate pay cost of debt which could lead to a shortage of cash business, financial operations sluggish, and even funding strand broken, and disastrous consequences like production stagnation; if the leverage is too low, it is not conducive to increasing the value of the enterprise and promote long-term development.

Operating leverage refers to the existence of the business fixed costs in production and management, which led to changes in earnings before interest and tax rate is greater than the rate of change of laws. In general, the larger, higher degree of modernization, strict quality inspection of business lever coefficient is higher, the more business leverage will be. However, not the higher the leverage is the better operation is. Higher operating leverage means high fixed cost business, the less the liquidity, therefore, turnover is limited. The enterprise’s operating leverage is low, proving the existence of enterprise idle funds, which means the capital utilization level is low, thus the income of the enterprise decreased. Therefore, enterprises should maintain adequate operating leverage, make full use of idle funds, make adequate investment in fixed assets, scale, promote modernization, and improve the utilization of funds [4].

4 COMPARATIVE ANALYSES BETWEEN CHINA'S DOMESTIC CHAIN RETAIL ENTERPRISES AND NON-LOCAL CHAIN RETAIL ENTERPRISES

The extent of the impact of financial leverage is usually measured with Degree of Financial Leverage (DFL), which is the ratio of the rate of change in earnings per share and interest rate changes in pre-tax profit, thus we have:

DFL = △ EPS / EPS / △ EBIT / EBIT, the above derivation can be drawn as DFL = EBIT / (EBIT-I).

(In the formula, △ EPS: earnings per share of common stock amount variation; EPS: ordinary shares before change in earnings per share; △ EBIT: EBIT amount of variation; EBIT: EBIT before changes.)

The extent of the impact of operating leverage is usually measured with Degree of Operating Leverage (DOL), which is the ratio of change in interest rates and pre-tax profit rate of sales change, whereby we can get:

DOL = △ EBIT / EBIT / △ S / S, are usually easy to calculate the change in formula: DOL = (EBIT + F) / EBIT(Where, △ S: amount variation turnover; S: turnover; F: fixed costs.)

Due to the special nature of retail chains industry, this paper follows a targeted manner in the way of data processing. The so-called earnings before interest and tax is namely the profit which has not deducted the interest and tax. Since the operating income gains do not belong to the daily business activities of enterprises, the paper uses income statement in operating profit instead of the total profit, it is EBIT = Operating profit + interest expenses, which is conducive to obtaining more accurate data for analysis. In the degree of operating leverage, the fixed costs are usually represented by operating expenses and management fees, which includes staff costs, equipment and property expenses, such as depreciation, rent, property maintenance costs, management fees, utilities, amortization and so on. Although staff costs are usually considered to be variable costs, with a fixed cost characteristic, it generally does not fluctuate with changes in operational scale. Therefore, it is included in the fixed costs. Meanwhile, considering that some companies are comprehensive enterprise, its amortization costs are amortized investment in real estate projects, which is not related to what is studied in this paper, therefore, it is excluded.

Table 2. Data collection of 24 selected domestic retail chains companies (financial leverage and operating leverage)

Stock code	Company	Year	Financial leverage	Operating leverage	Stock code	Company	Year	Financial leverage	Operating leverage
000417	Hefei Department Store Group Co., Ltd.	2014	1.0394	4.3027	600682	Nanjing Xinjiekou Department Store Co., Ltd.	2014	1.3107	2.0558
		2013	1.0224	3.9994			2013	1.3831	2.9529
		2012	1.0041	4.4787			2012	1.2773	2.0992
000560	Kunming Department Store Group Co., Ltd.	2014	2.1234	2.0386	600694	Dashang Co., Ltd.	2014	1.0297	2.7543
		2013	1.8426	2.0488			2013	1.0458	2.9426
		2012	1.4188	1.8124			2012	1.0626	3.1554
000679	Dalian Friendship(Group) Co., Ltd.	2014	1.6777	2.1352	600712	Nanning Deparment Store Co., Ltd.	2014	1.2736	8.4006
		2013	1.2702	1.8883			2013	1.1084	9.3265
		2012	1.3900	1.7866			2012	1.0261	3.5116
000715	Zhongxing-Shenyang Commercial Building (Group) Co., Ltd	2014	1.0000	5.3526	600723	Beijing Capital Retailing Group Co., Ltd.	2014	1.0089	2.5130
		2013	1.0000	3.9184			2013	1.0053	2.6131
		2012	1.0000	4.0205			2012	1.0046	2.2951
000759	Zhongbai Holdings Group Co., Ltd.	2014	1.2022	3.6252	600729	Chongqing Department Store Co., Ltd.	2014	1.0354	2.5117
		2013	1.1001	4.1759			2013	1.0150	1.8506
		2012	1.1357	3.4855			2012	1.0172	1.9059
000785	Wuhan Zhongnan Commercaial Group Co., Ltd.	2014	1.6362	6.3396	600738	Lanzhou Minbai Share Holding(Group) Co., Ltd.	2014	1.0362	1.4814
		2013	1.6188	5.3205			2013	1.0034	1.7465
		2012	1.5659	4.9851			2012	1.0259	1.9998
000987	Guangzhou Friendship Group Co., Ltd.	2014	1.0000	1.5047	600785	Yinchuan Xinhua Deparement Store Co., Ltd.	2014	1.7299	1.5317
		2013	1.0000	1.1611			2013	1.5805	1.4486
		2012	1.0000	1.1353			2012	1.0166	1.4933
002251	Better Life Commercial Chain Share Co., Ltd.	2014	1.1369	2.3512	600814	Hangzhou Jiebai Group Co., Ltd.	2014	1.0000	1.7403
		2013	1.0434	1.6785			2013	1.0209	2.9573
		2012	1.0732	1.7075			2012	1.0152	2.7850
600280	Nanjing Central Emporium (Group) Stocks Co., Ltd.	2014	1.2308	1.9519	600824	Shanghai Yimin Commercial Group Co., Ltd.	2014	1.1253	1.6776
		2013	1.1782	1.5700			2013	1.1095	1.7651
		2012	2.7074	3.4052			2012	1.1565	1.8535
600361	Beijing Hualian Hypermarket Co., Ltd.	2014	2.7398	1.9325	600827	Bailian Group Co., Ltd.	2014	1.0896	2.4399
		2013	6.8837	2.3251			2013	1.0615	2.2993
		2012	3.3328	2.3539			2012	1.0509	2.1625
600628	New World Department Store China Limited	2014	1.3408	1.9801	600838	Shanghai Join Buy Co., Ltd.	2014	1.2972	1.6221
		2013	1.3537	1.9805			2013	1.3392	1.8079
		2012	1.4774	1.8912			2012	1.6568	2.3266
600655	Shanghai Yuyuan Tourist Mart Co., Ltd.	2014	1.1703	1.3909	601933	Yonghui Superstores Co., Ltd.	2014	1.0555	2.0531
		2013	1.1576	1.3811			2013	1.0615	2.0245
		2012	1.1826	1.4010			2012	1.2034	2.1346

Because the retail chain industry now is in a diversifying, integrating development trend, this paper, in order to make the research more relevant and comparable, selected 24 similar operations from more than 200 domestic main-board-listed retail chains companies to do the data analysis.

As it can be seen from Table 2, the degree of financial leverage of our local retail chains is generally maintained in the range of 1-1.5, while the degree of operating leverage is generally maintained within 1.5-2.5. Most samples of local retail chains degree of financial leverage presents an upward trend in the last three years, the majority's degree of operating leverage fluctuated within a certain range, while some improved.

However, it is partial to carry out the discussion only on the basis of samples of local retail chains, which will make it difficult to find out and solve the problem. In this paper, we also selected seven retail chains enterprises invested by HK, Macau, Taiwan and foreign countries. We calculate the average value of their degrees of financial leverage and degrees of operating leverage, as measurement to comment on conditions of the debt capital controlling, operating and risks of our local retail chains.

From Table 3, we can see that the 3-year average value of non-local retail chains' degrees of operating leverage is 1.5, significantly higher than China's domestic retail chains, but some companies' degrees were too high, such as Hualian, whose loan balance at the end of 2013 was up to 10 billion, largely increasing the business risk. This shows that most of our local chain retail businesses do not make full use of financial leverage, borrowing by way of rational use of external resources to expand the business scale, cost of capital, improve the utilization of funds, thereby enhancing their operating margins; another part of the business excessive borrowing, irrational expansion, resulting in significantly increased business risks, the need to pay high borrowing costs may lead to the dilemma of funding strand breaks, and even make businesses go bankrupt.

From the perspective of operating leverage analysis, China's domestic retail chains degrees of operating leverage is generally low, maintained between 1.5-2.5, indicating the low value of the fixed costs of retail chains. This shows that our local retail chains' investment on fixed capital is insufficient. The development of enterprise lacks sustainable power. The modernization of enterprises is still developing. The labor-intensive production model is still the dominant. From a long-term perspective, this will increase the costs and reduce the operating efficiency. The enterprises lack the high standards of quality control system, making companies incapable of providing high-quality products to consumers. Thus, the lack of product quality assurance will bring business disputes, increasing their costs, which is a vicious circle. In addition, some enterprises' degrees of operating leverage is too high, such as Nanning Department Store, whose payroll, rental costs are too high, This is not conducive to optimizing the capital structure of enterprises and improving the operational efficiency.

5 REVELATION AND COUNTERMEASURES

We can draw some inspiration from the above data management and analysis: financial leverage and operating leverage determine the business conditions and they are important indicators of business risk, which is a double-edged sword. Financial leverage and operating leverage, whether too high or too low, will have a huge impact on the financial performance of the enterprise level. The financial leverage and operating leverage should maintain a relatively stable level in one industry which could help reduce the financial risk, improve the operational efficiency, and make accurate decisions. It also helps to make a reasonable forecast of the development prospects of the enterprise and the development of effective strategic planning. Accordingly, this paper on China's domestic retail chains made the following recommendations:

5.1 *Proper increase in liability to increase the value of enterprises*

China's domestic retail chains should give full play to the positive effects of financial leverage, strive for favorable borrowing conditions, and reduce the financial burden on businesses. Companies should optimize the capital structure, to enable enterprises to choose the lowest overall cost of capital financing mix, and reduce financial risk to achieve business value. People

Table 3. Data collection of 7 selected non-local retail chains companies (financial leverage and operating leverage)

Target	Year	Park Son Retail Group Limited	Sun Art Retail Group Limited	Carrefour	LOTTE	Family Mart	Wal-Mart Stores, Inc.	Average
Financial Leverage	2014	2.8569	1.0028	2.4095	1.2307	1.3646	1.0968	1.6602
	2013	1.2927	1.0031	3.0523	1.1885	1.2980	1.0901	1.4874
	2012	1.0901	1.0034	2.1192	1.1264	1.5349	1.0982	1.3287
Operating Leverage	2014	3.8972	3.8972	2.2636	4.0893	5.4040	6.7488	4.3833
	2013	3.5182	3.5182	1.8552	3.4352	4.9423	6.2809	3.9250
	2012	3.6168	3.6168	1.9170	2.7225	7.1328	6.1513	4.1929

also need to increase their operating capacity, strengthen research and development, establish a good incentive, development and marketing mechanisms, and adopt diversification to improve the EBIT margin. However, individual companies need to combine the company's capital structure to forecast future business, avoid excessive borrowing and financial risks.

5.2 *Rational investment plan of the fixed cost*

Enterprises should take the actual situation of the enterprise into consideration and carry out industrial restructuring according to the local conditions. When the enterprise products are in a stable growth period, companies should maintain high operating leverage to achieve high returns. Enterprises should also seize the opportunity to increase profits, have an appropriate increase in fixed assets investment, expand business scale, and achieve economies of scale and improve efficiency of operations. They should increase investment in research and development, improve technology level, and reduce variable costs. Moreover, they need to promote the industrial modernization, improve the product quality, strengthen the inspection, and improve the operational efficiency [5]. If the enterprise is in a recession and the product is in downturn, the acts of deleveraging degrees, compressing fixed fees and costs, increasing marketing efforts to expand the market share should be taken to maintain the existing margin business.

5.3 *Promotion of the balance of financial leverage and operating leverage*

China's domestic retail chains should take the interaction and the impact of operating leverage and financial leverage into consideration when making policies and financial policies. When the rate of the enterprise sales is low, the cost is high and being in debt for a long time, companies should reduce the costs and improve the efficiency, increase the sales and cash flow, adjust the capital structure to reduce debt and weaken the role of financial leverage. When business and finance are in good conditions, enterprises should use the operating leverage and financial leverage properly to bring economic benefits while be aware of the potential risks. Effective internal control and management are needed for prevention from the potential risks. Companies should establish a sound financial management rules and regulations, setting up a financial warning system to improve the risk awareness of management and financial personnel, therefore forming a bottom-up, all-aspect and multi-angle financial risk control system, which can effectively prevent and defuse the financial risks, ensure the healthy operation of the business, improve the ability to resist risks, and maximize enterprise value and long-term development [6].

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