EFFECT OF INTERNATIONAL OPERATION ON BUSINESS PERFORMANCE AND COUNTERMEASURES - TAKES BYD COMPANY AS AN EXAMPLE [*]

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Abstract

This paper takes BYD's international operation as the research object. The main content and conclusions are as follows: (1) Byd's international operation has a significant positive impact on business performance. (2) BYD's international management positioning, brand, service network, and comparative advantage, on the basis of the above analysis conclusion, this paper puts forward BYD's international operation to improve business performance strategy, including scientific international war, strengthen the international brand building, improve the overseas sales network and build comparative advantage.

Keywords: International Operation, Performance, SWOT Analysis

Introduction

The global flow of production factors is an inevitable way to improve the efficiency of resource allocation. From the development stage of a single enterprise, the international operation is also a process of continuous optimization of its division of labour. At present, although this trend of international operation still has many restrictive factors, such as trade imbalance and tariff protection, it is undeniable that globalization can expand enterprises' geographical scope and provide support for enterprises to increase revenue and profits. Whether international operation is really relevant to the business performance of enterprises and how relevant it is still needs to be analysed in combination with specific enterprises. In recent years, BYD has expanded its territory in the international market. The core of this paper is the current situation of BYD's international operation and its relationship with business performance.

Objectives of the Study

The study typically examines the impact of BYD's international operation on its business performance.

Literature Review

The degree of internationalisation of enterprises is positively related to business performance: from the perspective of organizational learning. Zhou (2005) believes that after entering the international platform, enterprises will face more complex competition situations. Still, there are more choices to mobilize resources across regions, thus forming a good positive feedback effect and promoting the improvement of enterprise performance. Lu (2000) takes 164 small and medium-sized enterprises in Japan as an example. She analyses the foreign direct investment activities that the transnational investment of enterprises positively impacts performance. Liu (2011) empirically found that the degree of internationalisation promoted improving enterprise performance based on data from China's automobile manufacturing

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industry from 2005 to 2007. Yin Lu's (2017) empirical results show that the degree of internationalisation is significantly positively correlated with corporate profitability.

The degree of internationalisation of enterprises is negatively correlated with business performance. Fang (2016) believes that global diversification leads to a significant discount in average valuation, which is consistent with the results caused by industrial diversification, and reveals the relationship between global diversification and the reverse change of excess value when analysing the relationship between the change of excess value and diversification. Shi et al. (2016) believe that the financial industry with a state-owned or monopoly nature is more convenient to obtain international resources. According to reason, the degree of internationalisation should help to increase enterprise performance, but the empirical result is just the opposite. Huang (2009) took 71 small and medium-sized listed enterprises in China as the research object. Through empirical analysis, it is concluded that the deepening of internationalisation has a negative impact on enterprise performance.

There is an inverted U-shaped relationship between the degree of internationalisation and business performance of enterprises. Chen et al. (2015) analysed the dynamic relationship between the "degree of internationalisation and business performance" of Spanish hotel enterprises from 2000 to 2013 and reached an inverted U-shaped conclusion. Chen et al. (2014) considered the role of enterprise diversification strategy and resource base in the relationship between the two, found the complex action form of these two situational factors on the relationship between the two, and concluded that the two showed the ability of product differentiation, which had a positive impact on the enterprise performance of manufacturing enterprises in Taiwan.

There is a U-shaped relationship between the degree of internationalisation and business performance. Cai (2016) also analysed that there is a U-shaped relationship between the two. Based on the data of China's electronic industry, Zhang & Wang (2017) empirically found that the degree of internationalisation and business performance are U-shaped. Liu (2011) also analysed the data of Chinese manufacturing listed companies and found that their degree of internationalisation is a U-shaped curve.

Some scholars take multinational corporations in the Indian pharmaceutical industry as a sample and divides the international expansion of the Indian pharmaceutical industry into three stages: initial stage, growth stage and mature stage. The relationship between the degree of international operation and enterprise performance is empirically found to be an S-shaped curve. Fang (2016) also introduces meta method to get the S-shaped relationship between internationalisation level and enterprise performance. Chen et al. (2014) also found that the internationalisation level and enterprise performance have stage characteristics, that is, the impact of different internationalisation depths is different, and the proportion of overseas revenue is different to different degrees, resulting in performance differences.

The research conclusions of foreign scholars on the impact of internationalisation on enterprise performance have not been unified, which is due to the differences in the development level of different economic entities. Different samples and specific conditions of samples affect this conclusion value. Domestic research is mostly data, and the research

conclusion is positive, that is, internationalisation improves enterprise performance. This is because China is in the upward period of economic development and has the advantages of capital, labor force and industrial chain, so internationalisation generally plays a positive role. In the research of international automobile enterprises, most of the research is focused on the enterprise strategy and path, and there is no unified method to evaluate the effect of internationalisation. Taking BYD internationalisation as an example, this paper analyses the performance of international operation, so as to supplement the research in this field. Based on the above analysis, this paper puts forward the following assumptions:

H: BYD's international operation has a significant positive impact on its business performance.

Research Methodology

This study uses a quantitative research approach to investigate the phenomenon. Quantitative research involves collecting and analysing numerical data to expose the big picture. There are two primary data collection and analysis methods in this paper:

(1) Literature search method: on the basis of combing the relevant research literature of scholars at home and abroad, understand the relationship between management characteristics and development strategy.

(2) Empirical research method: apply scientific and rigorous statistical measurement methods and combine charts to analyse the financial indicators under the enterprise diversification strategy.

Findings and analysis

Corporate performance is affected by many factors. This paper takes BYD's internationalisation level as the explanatory variable, and also considers that BYD's corporate performance is affected by many factors:

(1) Enterprise scale. Generally speaking, the enterprise scale will have a particular impact on the business risk of the enterprise. When the enterprise asset scale is large enough, the corresponding business scale is also significant. Therefore, before the enterprise asset scale grows from small to large and does not reach the critical value, an inevitable asset scale expansion will strengthen the enterprise's strength, but if the asset scale is expanded blindly, it will increase the experience risk. This paper introduces the natural pairs of total assets to control the size of enterprises (lnsize).

(2) Capital structure. Under normal circumstances, the use of financial leverage needs to be maintained at a certain proportion level. An appropriate proportion level of financial leverage can promote the development of the company. If the level of financial leverage is too high, there will be financial risks, and if the level of financial leverage is too low, there will be insufficient use and lose a specific development potential

According to the above analysis, the multiple linear regression analysis model is set according to the research purpose in this paper as follows:

ROEi= C+ β 1inter i+ β 2levi + β 3lnsizei+ e

Including roei - return on net assets of BYD in phase I; Interi - the internationalisation level of BYD phase I, that is, the proportion of current overseas income in BYD's total revenue; Levi – asset-liability ratio of BYD in phase I; Lnsizei - logarithm of total assets of BYD phase

I. β 1、 β 2、 β 3 is the parameters to be estimated of the model; E is the error term of the model.

This paper chooses BYD's proportion of overseas revenue to measure the internationalisation level of its business. According to the above indicators, the index data obtained from BYD's annual report are as follows:

Table 1 Index Situation Data

Year, part	earnings per share eps	Main business profit margin of (%)	Return on equity: (%)	The proportion of overseas revenue	asset-liability ratio (%)	Total assets (RMB 100 million)
2008	0.5	4.6	9.05	0.1340	59	325.32
2009	1.17	9.92	27.13	0.1385	52.96	404.46
2010	1.11	6.02	14.36	0.1449	60.06	529.63
2011	0.6	3.27	7	0.1416	63.46	656.24
2012	0.03	0.45	0.38	0.1740	64.86	687.1
2013	0.23	1.47	2.58	0.1698	67.46	763.93
2014	0.18	1.27	1.84	0.1610	69.26	940.09
2015	1.12	3.92	9.79	0.0955	68.8	1154.86
2016	1.88	5.3	12.09	0.0745	61.81	1450.71
2017	1.4	4.64	7.65	0.1266	66.33	1780.99
2018	0.93	2.73	5.05	0.1179	68.81	1945.71

Before regression analysis, firstly, the correlation between variables is observed to investigate whether the correlation between dependent variables and independent variables is significant and how independent they are. At the 95% confidence level, the correlation between BYD roe is substantial, in which inter and LEV are positively correlated, and size is negatively correlated. The specific results are shown in the table below:

Table 2 correlation analysis of the impact of BYD's international operation on business performance

Correlation t-Statistic Probability	ROE	INTER	LEV	SIZE
ROE	1.0000			

INTER	0.3475	1.0000		

	4.1117	-----		
	0.0051	-----		
LEV	-.8249	0.0356	1.0000	
	-.3778	0.1069	-----	
	0.0018	0.9172	-----	
SIZE	3.7152	-0.4642	0.7030	1.0000
	5.2606	-1.5722	2.9651	-----
	0.0032	0.1503	0.0158	-----

In this paper, the goodness of fit of the model is measured by adjusting the R-square value, and the sequence correlation is tested by Dubin Watson test (D.W.). Goodness of fit describes the fit of the extracted function line to the data points, that is, most of these data points can fall on the line or not far from the line. At this time, the function line can fit the data points to the greatest extent. In regression analysis, the decisive coefficient (R) is usually used $^{2)}$ To measure the fit between data points and function lines, R^2 The closer the value is to 1, the better the fitting effect is. If R^2 If it is 1, it means that the data points fall on the function line to achieve complete fitting, but this situation generally does not exist. In practice, a more reliable R is determined according to different research situations ^{2} Value standard, take typically 0.5 as the critical value, and some complex term autocorrelation problems are used to determine whether there is a first-order autocorrelation problem in the index sequence, while the high-order autocorrelation test is not applicable. Generally speaking, according to the critical value Du < D.W. < 4-du interval, the D.W. value close to 2 indicates that the test effect is good.

Table 3 Return parameter table of BYD's international operation impact on business performance.

It can be seen from the table that the adjusted R-square value of the model is 0.7857

Variable	Coefficient	Std.Error	t-Statistic	Prob.
INTER	0.3515	0.3878	4.9064	0.0012
LEV	-1.5390	0.2950	-5.2172	0.0008
SIZE	4.4487	0.7491	5.9383	0.0003
R-squared	0.7857	Mean dependent var		8.8109
Adjusted R-squared	0.7321	S.D.dependent var		7.4526
S.E.of regression	3.8571	Akaike info criterion		5.7647
Sum squared resid	119.0179	Schwarz criterion		5.8732
Log likelihood	-28.7059	Hannan-Quinn criter.		5.6963
Durbin-Watson stat	2.1771			

and the corresponding D.W. value is 2.1771. The fitting effect of the model is good. At the 95% confidence level, all variable indicators have passed the significance test. Further check the function relationship of the variables and BYD's international operation level（β= 0.3515, P = 0.0012) has a significant positive impact on BYD's operating performance, and BYD's asset liability ratio lev（β=- 1.5390, P = 0.0008) has a significant negative impact on BYD's

operating performance, and BYD's asset size is （ β= 4.4487, P = 0.0003) has a significant positive impact on BYD's business performance.

BYD's international operation level （ β= 0.3515, P = 0.0012), which is beneficial to the improvement of business performance. BYD asset liability ratio lev （ β=- 1.5390, P = 0.0008) has a significant negative impact on BYD's business performance. BYD asset size （ β= 4.4487, P = 0.0003) has a significant positive impact on BYD's business performance. Enterprise performance should be the ability of an enterprise to use existing assets to create benefits, reflecting the enterprise's ability to obtain profits through the use of resources driven by the enterprise's operating level and operating ability. The stage of enterprise development scale has a certain impact on the operation level and profitability of the enterprise. After the enterprise reaches a certain scale, it will produce a scale effect, which will have an impact on both cost and operation. BYD is a relatively large enterprise in terms of scale, and the development space and speed may be relatively small compared with start-ups, but the internal management cost and work cost will produce a scale effect, especially in the production and manufacturing process; there will be a certain scale effect, and the operation efficiency will be improved relatively. Therefore, this paper believes that the enterprise scale is positively related to the absolute value of enterprise performance.

Conclusion and Recommendations

The significance of this paper is that it enables BYD's international operations to improve its business performance, including scientific international warfare, strengthening international brand building, improving overseas sales network and building comparative advantages.

Through combining quantitative and qualitative analysis, the main recommendation are as follows:

1) The proportion of BYD's overseas revenue is quite volatile, and its international operation mode includes external export, overseas factory construction and strategic alliance.

2) BYD operating swot condition analysis: advantage (S) including battery technology advantages, whole industry chain production, cost control ability; disadvantage (W) including product quality to be improved; relatively weak capital strength; new energy vehicles are still insufficient; opportunity (O) including new energy vehicle subsidies, huge market demand; threat (T) including increasing market competition, new energy subsidy decline, inherent risks of transnational operation.

3) Byd's international operation has a significant positive impact on business performance.

4) Byd has problems such as unclear international strategic positioning, low international brand awareness, imperfect overseas sales and service network, and not obvious international comparative advantages.

5) BYD international operation strategy to improve business performance strategy: formulate scientific internationalisation strategy, strengthen international brand building, improve overseas sales network, build comparative advantages, etc.

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