

Consumer Empowerment, Market Competition and Sustainable Growth of Enterprises

Huanhui Chen¹, Chan Lyu^{2,*}, Yao Pan³, Zenan Yu⁴

¹*School of business, Macau University of Science and Technology, Macau 519020, China*

²*School of business, Macau University of Science and Technology, Macau 519020, China*

³*School of business, Macau University of Science and Technology, Macau 519020, China*

⁴*School of business, Macau University of Science and Technology, Macau 519020, China*

**Corresponding author. Email: chlyu@must.edu.mo*

ABSTRACT

This paper examines the effect of market competition on growth of enterprises. Using a sample of 18 EU listed companies from 2001 to 2018, we find enterprises which have higher market share and more monopoly can develop more stably. They have more efficient management and more ability of sustainable growth. Further, under the influence of consumer empowerment, the higher market share they reach, the more ability they have to meet consumer empowerment. The contributions of this paper are: Firstly, combining external factors with sustainable growth of enterprises to study the sustainable growth ability of enterprises. Secondly, this study combines consumer empowerment with market competition and sustainable corporate growth, which makes the enterprise pay more attention on consumers and make more targeted marketing strategies.

Keywords: *Consumer empowerment, market competition, sustainable growth, strategic management*

1. INTRODUCTION

The concept of consumer empowerment mostly appeared in law and marketing before, but with the arrival of the era of big data, consumers can easily receive all kinds of product information through the Internet, consumers gradually have a greater say in the market economy, and have the more impact on enterprises. However, the research on consumer empowerment and enterprise development is limited (Avi, Helene, Cherrier, & Wilkinson, 2006). Doing research on enterprise development has to pay attention to its industry. Nowadays, the global economic market competition is becoming increasingly fierce. With the continuous improvement of consumer power, products need to meet the needs and preferences of consumers, the exercise of this power will directly affect the sales of products in the market. For enterprises, no matter what kind of industry they join in, profit is the main goal. Compared with other growth models, sustainable growth model is the most conducive to the long-term and stable development of enterprises. Therefore, the study of sustainable growth of enterprises is particularly important for global economic integration.

The contributions of this paper are: Firstly, combining external factors with sustainable growth of enterprises to study the sustainable growth ability of enterprises. Secondly, the past research on consumer empowerment did not combined consumer empowerment with business management. The research results will help enterprises to correctly understand the influence of consumers on business development in the future, set up more

appropriate market competition goals, more targeted marketing strategies, and make rational use of external governance mechanism.

2. LITERATURE REVIEW AND HYPOTHESIS

According to Nickell (1996)'s research, market competition, as an important external governance mechanism, represents the external business environment. The degree of competition can urge enterprises to adjust their management strategies in order to deal with different environments. Through the continuous change of market share in market competition, internal governance can be tested, which affects the internal management results and business performance.

The larger value of Hufindal index, the higher concentration in the market, which reflects the higher market share of the selected enterprises and the more monopolistic the enterprises. However, under the theory of competitive market, when there is monopoly in the industry, it shows that the enterprises with monopoly nature have absolute competitive advantage or master core technology. These enterprises generally have efficient internal governance model, stable operating cash flow, have more ability to improve product value, service quality, make enterprises have more sustainable growth ability (Drucker, 2007). The lower the Huffindar index, the lower the industry concentration and the lower the market share. If the enterprises have low market share, there will be a large number of enterprises similar to their development in the market, in other words, it is

substitutability (Manuel, David, & Markus, 2011). Because of the limited market resources and the average distribution of resources between enterprises, enterprises do not have the ability to cope with the fierce market competition, which has caused great pressure on internal management and cash flow of enterprises. It is not conducive to the sustainable growth of enterprises. Therefore, the first hypothesis of this paper is proposed.

H1: market competition is positively related to sustainable growth of enterprises

Kucuk (2009) put forward that, consumers, as the final payer of business and sales, not only determine the business performance of enterprises, but also determine the market competitive position of enterprises. Guo and Li (2010) believe that, with the increase of consumer power, the word-of-mouth effect has been able to directly determine the production and marketing of enterprises and have a direct impact on market competition. This effect will be transmitted to the business performance of the enterprise, affecting the sustainable growth of the enterprise.

By contrast, enterprises with high industry concentration and large market share, usually develop more mature and have a wider consumer base. They not only focus on maintaining consumer empowerment, but also have more ability to support consumer empowerment. They ensure that there are no effect on the reputation of the enterprises or the products, further more, they can increase the market share and create an environment for sustainable growth (Hunter, 2008). If the enterprises have low market share, the market resources would be limited and the development pressure would be greater for them. They have the worse ability to maintain and satisfy consumer empowerment, which make the negative influence on market competition and the sustainable growth of enterprises.

H2: consumer empowerment promotes the positive correlation between market competition and sustainable growth of enterprises

3. RESEARCH DESIGN

3.1. Sample Selection and Data Sources

This study uses the data of listed companies in 18 EU countries from 2011 to 2018 as the sample source. The financial data of all enterprises are from the Thomson Reuters database, the data of national economic development are from the website of Eurostat, and the data of consumer empowerment are from the Special Europe barometer 342Report.

We exclude financial and insurance companies, metal companies and database basic information. The final sample includes 19568 firm-year observations. To rule out

outlier effects, we winsorize the values of all continuous variables at 1% and 99% levels.

3.2. Variant Selection

First of all, in the measurement model of sustainable growth, Higgins' growth model is widely used to develop more effective sales growth rate for enterprises. At the same time, it has been widely used by Boston Information Company, Hewlett-Packard Company and other large enterprises for many years. The specific models are:

$$SGR = b \left(\frac{NP}{S} \right) \left(\frac{S}{A} \right) \left(1 + \frac{D}{E} \right)$$

$\frac{NP}{S}$ means net profit on sales, $\frac{S}{A}$ means a turnover of total assets, $\frac{D}{E}$ means Equity multiplier

In the indicators to measure market competition, the Huffindar index has both absolute and relative concentration, which can be independent of the number of enterprises in the industry and the distribution of the market, reflecting the scale gap and market structure between enterprises in the industry. Therefore, this paper uses Hufendal index of 18 European Union industries as a measure of market competition. The formula

$$is: HHI = \sum_{i=1}^N (X_i / X)^2 = \sum_{i=1}^N S_i^2$$

X represents the total size of the industry; X_i represents the size of the i enterprise in the industry; S_i represents the market share of the i enterprise; N represent the total number of enterprises in the industry.

Nardo, Loi, Rosati, & Manca (2011) work for Eurostat and the Directorate General of Health and Consumer Affairs, designed a questionnaire and show the result in Special Europe barometer 342Report. There are 57 questions about consumer empowerment and socioeconomic characteristics of interviewees. In the form of face-to-face interviews, it was distributed to 56471 respondents. The research centre has combined data processing to rate consumer feedback in each country, formed the consumer ability index. Three main dimensions of consumer empowerment are measured by the consumer competency index: consumer skills, consumer legislative awareness, and consumer participation. Consumer empowerment is written by EMP in the model.

The control variables are drawn from Liu B, Liu X & Huang (2003), using profitability (ROA), asset-liability ratio (LEV), enterprise size (SIZE), and measuring the number of listed companies (LIST), per capita GDP (PER) and economic growth rate (RGDP).

3.3. Model Design

We construct the following model 1 to investigate the impact of market competition on sustainable growth of

$$SGR = \beta_0 + \beta_1 HHI + \beta_2 ROA + \beta_3 LEV + \beta_4 SIZE + \beta_5 LIST + \beta_6 PER + \beta_7 RGDP + \beta_8 INDUSTRY + \beta_9 YEAR + \varepsilon_i \tag{1}$$

$$SGR = \beta_0 + \beta_1 HHI + \beta_2 EMP + \beta_3 HHI \times EMP + \beta_4 ROA + \beta_5 LEV + \beta_6 SIZE + \beta_7 LIST + \beta_8 PER + \beta_9 RGDP + \beta_{10} INDUSTRY + \beta_{11} YEAR + \varepsilon_i \tag{2}$$

4. EMPIRICAL RESULTS AND ANALYSIS

4.1. Descriptive Statistics

This paper selects 18 European Union listed enterprises from 2001 to 2018 as data samples. Table 1 presents descriptive statistical results of key variables: The average sustainable growth of the enterprise is -3.3233, the

enterprises, Model 2 for moderate effect of consumer empowerment
Model 1

maximum is 30.082, the minimum is -37.7365, respectively, and the variance is 7.904. Reflecting the large differences in sustainable growth rates among enterprises, the sustainable growth of more than half of the observations is negative. The Huffindar index has a maximum of 96.8652, Minimum 1.1294, the average is 8.2703. It shows that in different industries, Industry concentration have huge differences, according to the maximum value, we can see that there is a high degree of industry concentration. It means that some industries are monopolistic, but most industries have low market concentration. There is little difference between firms in the market. The maximum consumer empowerment was 17.89, the minimum is 11.05, the variance is 1.3056, It shows that consumer empowerment have little fluctuation in 18 countries.

Table 1 Descriptive statistics

	Obs	mean	Std.Dev	min	max
SGR	19,568	-3.323	7.904	-37.736	30.082
HHI	19,568	8.27	10.236	1.129	96.865
EMP	19,568	14.904	1.306	11.05	17.89
LEV	19,568	24.773	17.128	0.277	68.462
ROA	19,568	-1.032	6.694	-71.148	21.079
SIZE	19,568	12.428	2.087	5.591	17.535
RGDP	19,568	3.01	2.788	-14.269	25.878
PER	19,568	10.431	0.456	8.134	11.667
LIST	19,568	8.616	0.949	6.176	9.693

coefficient exists between ROA and SGR but is not big enough to be a problem.

4.2. Pearson Test

The table reports the correlation coefficient for the variables used in the study. We find that SGR is significantly positively correlated with HHI, EMPOWERMENT and SIZE but negatively correlated with LEV LIST PER. Surprisingly, the magnitudes of these correlations are fairly low. The highest correlation

4.3. Regression Analysis

Regression analysis will study the relationship between consumer empowerment, market competition and sustainable growth of enterprises based on the results of the constructed empirical regression model. From the first column in Table 3, it can be seen that the Huffindar index is positively correlated with sustainable growth at a level of 5%, with a coefficient of 0.00817. The smaller the

value, the more enterprises of the same size in the industry, the more alternative enterprises, the more limited resources the enterprise has, which will seriously affect the ability of sustainable growth. According to the second column, it was found that the Hufendal index was positively correlated with sustainable growth at the level of 5%, but compared with the results in the first column, the coefficient of the Hufendal index increased from

0.0082 to 0.409. The interaction between Huffindar index and consumer empowerment is positively correlated with sustainable growth at the level of 5%, with a coefficient of 0.519. It can be inferred that after adding consumer empowerment, the positive correlation between market competition and sustainable growth of enterprises has been strengthened. Hypothesis two is verified.

Table 2 Pearson test

	SGR	HHI	EMPOWE R M E N T	SIZE	ROA	LEV	LIST	RGDP	PE R
SGR	1								
HHI	0.0019*	1							
EMP	0.1683**	0.0093*	1						
SIZE	0.3075***	0.0060	-0.0278***	1					
ROA	0.6653***	0.0110*	-0.1507***	0.4145***	1				
LEV	-0.1244***	0.0122*	0.0010	0.2487***	0.1329***	1			
LIST	-0.0904***	-0.0371***	0.3206***	-0.1443***	-0.1482***	-0.1324***	1		
RGDP	0.0303***	-0.0384***	-0.1129***	-0.0850***	0.0099	-0.0871***	0.0785***	1	
PER	-0.0928***	-0.0119*	0.6026***	0.0168**	-0.0999***	0.0317***	0.4303***	-0.2097***	1

*** p<0.01, **p<0.05, *p<0.1

Table 3 Regression results

	model 1	Model 2
	SGR	SGR
Constant	-8.194	-50.96***
	(-1.52)	(-8.53)
HHI	0.0082**	0.409**
	(2.09)	(2.03)
EMP		3.412***
		(13.51)
EMP*HHI		0.519**
		(2.55)
SIZE	1.838***	1.802***
	(16.14)	(16.59)

ROA	1.94*** (114.68)	1.911*** (114.91)
LEV	-0.54*** (-43.74)	-0.54*** (-44.42)
RGDP	0.068 (0.64)	0.119 (1.58)
PER	-1.976*** (-3.57)	2.676*** (4.48)
LIST	0.217 (0.85)	0.116 (0.48)
Year	control	control
Industry	control	control
R-squared%	50.1	49.9
N	19,568	19,568

*** p<0.01, **p<0.05, *p<0.1, t-statistics in parentheses

4.4. Robustness Test

As shown in table 4, robustness tests are carried out to further verify the reliability of the regression results in this paper. The three results were consistent with the regression results. At the first test, we choose to use market concentration CRn instead of Hufindal index to redefine

market competition. In the second test, the industry with the largest proportion of the sample is eliminated, and the multiple regression is carried out again to avoid the effect of the regression result on the industry with the largest proportion. In the third test, the year 2008 data sample was eliminated to avoid the impact of the financial crisis. The results of control variables are not reported due to character restrictions

Table 4 Robustness test results

	Test1		Test2		Test3	
	model3.1	model3.2	model 1	Model 2	model 1	Model 2
	SGR	SGR	SGR	SGR	SGR	SGR
Constant	-12 (-1.48)	-15.82 (-2.10)	-9.248 (-1.56)	-53.313*** -7.98	-7.747 (-1.43)	-54.244*** -8.95
HHI (CRn)	1.24** (2.53)	1.423 (0.91)	0.0078** (2.02)	0.674** (3.12)	0.0077** (2.00)	0.421** (2.06)
EMP		4.53*** (8.07)		0.743*** (3.46)		0.63*** (2.68)
EMP*HHI		0.0028		3.747**		4.002***

(0.88)

(13.15)

(13.54)

 *** p<0.01, **p<0.05, *p<0.1, t-statistics in parentheses

5. CONCLUSION

This paper studies the relationship between consumer empowerment, market competition and sustainable growth of enterprises through 19658 data samples from 18 European Union countries from 2011 to 2018. According to the research hypothesis one, it is determined that market competition is positively related to the sustainable growth of enterprises. According to hypothesis two, it is determined that consumer empowerment can positively moderate the correlation between market competition and sustainable growth.

If the Huffindar index is larger, the concentration of industry in the market is higher, correspondingly, the market share of the selected enterprises is higher, and there is a phenomenon of monopoly. At the same time, if the enterprises have larger market share, they tend to be more mature and have better qualifications, such as accurate marketing, high production efficiency and new technologies. Thus the enterprises will have the ability to promote sustainable growth. The increase of consumer power represents that consumers can choose products to meet their own needs and preferences. Enterprises need to have the ability to satisfy and protect consumer empowerment in order to win more consumers' favor.

If the enterprises have higher market share, they will have more market resources, and receive better consumer feedback. They can design and produce which meet the needs of consumers, and meet the increase of consumer power. At the same time, the enterprises with high market share already have certain market influence, and they will pay more attention to the protection of enterprise reputation and word of mouth, the influence of consumer empowerment on enterprise market competition, and the protection of consumer empowerment. When enterprises have the ability to satisfy and protect consumer empowerment, it is helpful for enterprises to enhance the market concentration of enterprises, thus improving the sustainable growth ability of enterprises. Therefore, consumer empowerment will promote the positive correlation between market competition and sustainable growth of enterprises.

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