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AN EMPIRICAL STUDY OF THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND MARKET COMPETITIVENESS

In the paper, an empirical study is conducted to verify the existence of a causal relationship between product competitiveness in the market and a firm's capital structure.

Cluster analysis was used to investigate the competitive state of the market in each industry in Russia according to the principles of the BCG Matrix model. Empirical analysis was conducted by establishing a joint equation model between product market competitiveness and firm capital structure using the ordinary least squares method.

In the course of the study, it was obtained that State-owned companies have higher product competitiveness in the market than private companies; although there is a positive correlation between the capital structure of the firm and product competitiveness in the market, but the degree of mutual influence is different, increasing product competitiveness in the market has a clear impact on increasing the level of indebtedness.

Keywords: capital structure of the firm; product competitiveness in the market; correlation; joint equation model.

[1, .758].

[2].

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[3, .1643].

[4, .174].

[5,

.29].

[6, .769];

[7, .915].

[8, .75].

165

Excel EViews. conomy.ru,

45 %

[9].

95

www.investing.com.

[10, .126].

(
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[11].

1.

30

2.

[12, .345].

()—
()—

(MS)

(SG)

(MCI)

X_{ij}

j

n

i

m

($i = 1, 2, 3, \dots, n; j = 1, 2,$

$3, \dots, m$).

$$MCI = 0,379p_{iMS} + 0,621p_{iSG},$$

MCI — ; p_{iMS} — MS (i) ; p_{iSG} — SG (i))

(. 1).

I. *

	(MCI)	—	—
	(DAR)	—	—
	(INVE)	—	MCI
	(ROE)	—	MCI
	(UNIQ)	—	MCI
	(ITR)	—	MCI
	(SIZE)	ln	DAR
	(TANG)	—	DAR
	(NDTS)	—	DAR

* [13, c. 5-135]

$$\begin{cases} MCI_t = \alpha_0 + \alpha_1 DAR_t + \alpha_2 INVE_t + \alpha_3 ROE_t + \alpha_4 UNIQ_t + \alpha_5 ITR_t + \varepsilon_1 & (1) \\ DAR_t = \beta_0 + \beta_1 MCI_t + \beta_2 SIZE_t + \beta_3 ROE_t + \beta_4 TANG_t + \beta_5 NDTS_t + \varepsilon_2 & (2) \end{cases}$$

$$\alpha_0, \beta_0 — ; \alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 — ; \varepsilon_1, \varepsilon_2 —$$

$$(1) \quad R(0,0) < G - 1, \quad i$$

$$(2) \quad R(0,0) = G - 1, \quad i$$

$$(1) \quad K - k_i \geq g_i - 1, \quad i$$

2.

*

G		2
K		7
g_i	i	2/2
k_i	i	4/4
m_i	i	3/3

*

$$(2) \quad K + G - k_i - g_i = m_i \geq G - 1, \quad i$$

$$\begin{bmatrix} 1 & -\alpha_1 & -\alpha_0 & -\alpha_2 & -\alpha_3 & -\alpha_4 & -\alpha_5 & 0 & 0 & 0 \\ -\beta_1 & 1 & -\beta_0 & 0 & -\beta_3 & 0 & 0 & -\beta_2 & -\beta_4 & -\beta_5 \end{bmatrix}$$

(1)

$$[\quad 0 \quad 0] = [-\beta_2 \quad -\beta_4 \quad -\beta_5], \quad R(\quad 0 \quad 0) = 1 = G - 1.$$

$$K - k_i = > g_i - 1 = 1 \quad m_i = > G - 1 = 1.$$

(2)

$$[\quad 0 \quad 0] = [-\alpha_2 \quad -\alpha_4 \quad -\alpha_5], \quad R(\quad 0 \quad 0) = 1 = G - 1.$$

$$m_i = > G - 1 = 1. \quad : K - k_i = > g_i - 1 = 1$$

(OLS) [14, .345].

0,8

(.3).

3

0,8,

3.

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	MCI	DAR	INVE	ROA	UNIQ	ITR	SIZE	TANG	NDTS
MCI	1,000								
DAR	0,071	1,000							
INVE	0,948	0,062	1,000						
ROA	0,009	-0,356	0,004	1,000					
UNIQ	-0,016	-0,061	-0,006	-0,321	1,000				
ITR	-0,046	0,149	-0,027	-0,064	-0,014	1,000			
SIZE	0,159	-0,104	0,079	0,199	-0,144	-0,297	1,000		
TANG	0,006	-0,189	0,027	0,188	-0,042	0,054	0,106	1,000	
NDTS	0,014	0,008	-0,019	-0,007	-0,057	-0,248	0,202	0,098	1,000

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MCI; UNIQ, ITR
 DAR; ROA, SIZE, TANG

. DAR

MCI.
 : INVE, ROA
 MCI; NDTS
 MCI.

(. 4).

4.

*

	R-	R-	DW
-	0,899	0,896	1.780
	0,150	0,122	1.989

*

165

4,

$R^2 = 0,896,$

$R^2 = 0,122,$

DW

1,5 2,5,

(. 5).

5.

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			-	P-
α_0	0,003	0,001	3,291	0,001
DAR	0,001	0,001	0,649	0,517
INVE	0,005	0,000	3,651	0,000 ³
ROE	0,001	0,004	0,298	0,766
UNIQ	-9,06E-06	3,89E-05	-0,233	0,815
ITR	-7.86E-06	8,63E-06	-0,911	0,363
β_0	1.577	0,497	3,175	0,002
MCI	1.981	1,838	1,078	0,282
SIZE	-0.009	0,0158	-0,559	0,576
ROA	-1,208	0,291	-4,153	0,000 ³
TANG	-0,819	0,499	-1,639	0,102
DNTS	0,035	0,103	0,343	0,732

:¹

10 %

,²

5 %

³

1 %

*

165

5

0,001,

1,981,

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