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"Ownership Concentration and Dividend Policy: Evidence from Greek Panel Data"

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Ownership Concentration and Dividend Policy …

STRUCTURE

- PURPOSE
- METHODOLOGY :
  - CAUSALITIES OF DIVIDEND POLICY & OWNERSHIP STRUCTURE
  - PANEL DATA ECONOMETRICS
- FINDINGS
- POLICY IMPLICATIONS / FUTURE RESEARCH
- CONCLUSIONS / VALUE

Ownership Concentration and Dividend Policy …

PURPOSE

To point out the empirical factors, focusing on ownership structure, that determine dividend policy of listed firms in Greece.

Ownership Concentration and Dividend Policy …

Methodology: theoretical determinants of dividend policy

- "Bird-in-the-hand-theory" (Gordon,1962 ; Miller & Modigliani,1961 ; Bhattacharya,1979)
- "Signaling Theory" (Miller & Rock, 1985 ; Amidu, 2007)
- "Agency Theory" (Jensen & Meckling, 1976 ; Rozeff, 1982; Easterbrook,1984)
- "The Residual Theory"
- "The Dividend Stability Theory"

Ownership Concentration and Dividend Policy …

Methodology: theoretical determinants of dividend policy

- "The Full Information Models"
- "The Pecking Order Theory"
- "The Free Cash Flow Hypothesis" (Berle &Means, 1932)
- "Behavioral Models" (Arbel, Carvel & Postnieks, 1988 ; Shiller, 1989)

LITERATURE REVIEW

Dependent var.: *Dividends payout*

	Firm Size	Leverage	Liquidity	Investment Opportunities	Profitability	Cash Holding
Jang et al (2013)						POSITIVE
Kalchva and **Lins** (2007)						POSITIVE
Carter et al (2006)						POSITIVE
Amidu and **Abor** (2006)			POSITIVE			
Ghosh and **Sirmans** (2006)		POSITIVE (debt ratio)				
Mancinelli and **Ozkan** (2006)	POSITIVE (Total assets)	NEGATIVE (long term debt to total assets ratio)		NEGATIVE		

LITERATURE REVIEW

Dependent var.: *Dividends payout*

	Firm Size	Leverage	Liquidity	Investment Opportunities	Profitability	Cash Holding
Omran and **Pointon** (2004)	POSITIVE		No significant relationship			
Zeng (2003)	POSITIVE					
Dickens et al (2003)	POSITIVE (total sales)			NEGATIVE (high proportion of market value)	POSITIVE	
Ooi (2001)	POSITIVE	NEGATIVE		NEGATIVE (market-to-book value ratio)	No significant relationship	
Fama and **Franch** (2001)	POSITIVE (total assets)					

LITERATURE REVIEW

Dependent var.: *Dividends payout*

	Firm Size	Leverage	Liquidity	Investment Opportunities	Profitability	Cash Holding
Chen and **Steiner** (1999)		NEGATIVE			No significant relationship	
Bradley et al (1998)		NEGATIVE				
Holder et al (1998)	POSITIVE (total sales)		POSITIVE			
Barclay et al (1995)				NEGATIVE		
Espen, **Eckbo** and **Verma** (1994)						POSITIVE

LITERATURE REVIEW

Dependent var.: *Dividends payout*

	Firm Size	Leverage	Liquidity	Investment Opportunities	Profitability	Cash Holding
Wang et al (1993)		POSITIVE			POSITIVE	
Jensen et al (1992)		NEGATIVE (long term debt to total assets ratio)			POSITIVE	
Pruitt & Gitman (1991)					POSITIVE	
Jensen (1986)						POSITIVE
Myers & Majluf (1984)				NEGATIVE	POSITIVE	
Rozeff (1982)				NEGATIVE		

LITERATURE REVIEW ownership structure & dividend policy

- **High insider owner ⟶ Lower levels of dividends**

(Leland and Pyle,1977; Rozeff,1982; Friend&Hasbrouck,1987; Friend&Lang,1988; Gerald R. Jensen, 1992; Shleifer &Vishny, 1997)

- **The Identity of the largest shareholder and the dividend payments :**

	Individual	Family	Institutions	Financial Institutions	Insurance Company	State
Yordying Thanatawee (2012			POSITIVE			
Xi Wang, David Manry& Scott Wandler (2011)						POSITIVE

LITERATURE REVIEW ownership structure & dividend policy

	Individual	Family	Institutions	Financial Institutions	Insurance Company	State
Scott Wandler (2011)				NEGATIVE		POSITIVE
Ramli (2010)	NEGATIVE					
Lucina Mancinelli &Audin Ozkan (2010)	NEGATIVE					
Tehmina Khan (2006)	NEGATIVE				POSITIVE	
Renneboog & Troyanowski (2005)	NEGATIVE			POSITIVE		

LITERATURE REVIEW ownership structure & dividend policy

	Individual	Family	Institutions	Financial Institutions	Insurance Company	State
Zhilan Chen, Yah Leung, Aris Stouraitis & AnitaWong (2005)		POSITIVE (although little relationship can be found)				
Helan Short,Hao Zhang & Kevin Keasey (2001)			POSITIVE	NEGATIVE		
Shleifer& Vishny (1997)	NEGATIVE					

Methodology: The Data

- Source: **Datastream** Databank
- Observations **206** enterprises (**1,746 firms-year** obs.), quoted on the Athens Stock Exchange; without financial sector's firms.
- Sample period: **2000-2015**: a) Pre-crisis **2000-'08**; b) During-crisis **2009-'15.**
- Detecting **Outliers** using BACON algorithm we cut-off 15% (Billor, N., A. S. Hadi, and P. F. Velleman, 2000).

Economic Sectors	Frequencies	Percent	Cumulative frequencies
Basic Materials	538	17,73	17,73
Consumer Cyclicals	791	26,07	43,8
Consumer Non-Cyclicals	430	14,17	57,98
Energy	73	2,41	60,38
Healthcare	162	5,34	65,72
Industrials	666	21,95	87,67
Technology	304	10,02	97,69
Telecommunications Services	70	2,31	100
Total	**3.044**	**100**	

Definition of variables

Own = The 5 largest shareholders; Size =Ln(sales); Leverage = Total debt / Net assets ; Current ratio = Current assets / Current liabilities ; Capex = Investment = Capital expenditures / Net assets ; Cash = (Cash & short – term investment) / Total assets ; Roa = Net income / Total assets ; Market–to-book = growth opportunities = Market capitalization / Total shareholders' equity

Descriptive Statistics

Stats	D/TA	Size	Leverage	Current ratio	Capex	Cash	Roa	Market-to-Book
Mean	0.011	18.382	0.594	1.619	0.036	0.091	0.007	1.641
Sd	0.023	1.573	0.200	1.022	0.054	0.101	0.089	2.348
Min	0.000	12.245	0.040	0.070	0.000	0.000	-1.030	0.001
Max	0.312	23.072	1.123	9.108	0.481	0.725	0.699	32.197
P10	0.000	16.456	0.318	0.710	0.000	0.011	-0.071	0.266
P25	0.000	17.395	0.459	1.011	0.003	0.024	-0.024	0.464
P50	0.001	18.368	0.613	1.387	0.018	0.054	0.015	0.970
P75	0.014	19.339	0.735	1.880	0.048	0.123	0.046	1.941
P90	0.033	20.349	0.844	2.742	0.094	0.214	0.081	3.488
N	**1746**	**1746**	**1746**	**1746**	**1746**	**1746**	**1746**	**1746**

Variable	VIF	1/VIF
Current ratio	1.92	0.52009
Leverage	1.84	0.544474
Cash	1.47	0.677985
Roa	1.33	0.751608
Size	1.25	0.801292
Market-to-Book	1.14	0.873881
Own5	1.05	0.950253
Capex	1.04	0.965298
Mean VIF	1.38	

Correlation matrix (Pearson)

	D/TA	Own5	Size	Leverage	Current ratio	Capex	Cash	Roa	Market -to - Book
D/TA	1								
Own5	-0.0602*	1							
Size	0.2261*	-0.0749*	1						
Leverage	-0.1613*	0.0302	0.2400*	1					
Current ratio	0.1852*	-0.0223	-0.1375	-0.6121	1				
Capex	0.0991*	-0.0815*	0.1334*	0.0133	-0.0726*	1			
Cash	0.3442*	0.0117	0.0646*	-0.3618*	0.5065	-0.0229*	1		
Roa	0.4083*	-0.1353*	0.2367*	-0.2657*	0.2837*	0.0909*	0.2996*	1	
Market-to-Book	0.2650*	-0.1480*	-0.0049	0.1460*	-0.0425	0.0074	0.1249*	0.1646*	1

Econometric model

- To estimate the model below we used Tobit regression analysis with two-way clustered Standards errors (by firms and years)

$$(D/TA) = \beta_0 + \beta_1 Own + \beta_2 Own^2 + \beta_3 Size +$$

$$+ \beta_4 Leverage + \beta_5 Currentratio + \beta_6 Capex +$$

$$+ \beta_7 Cash + \beta_8 Roa + \beta_9 MarkettoBook + e$$

Estimations …

Tobit regression. Dependent variable is dividends to total assets (D/TA)

VARIABLES	(1) Whole sample	(2) Whole sample	(3) Pre-Crisis	(4) During-Crisis
Own	**-0.00687****	-0.00982	**0.0431****	-0.00248
	(-2.545)	(-1.042)	(2.253)	(-0.185)
Own^2		0.00391	**-0.0461***	0.000359
		(0.326)	(-1.868)	(0.0232)
Size	**0.00590*****	**0.00592*****	**0.00403*****	**0.00676*****
	(11.60)	(11.52)	(4.898)	(9.185)
Leverage	**-0.0198*****	**-0.0197*****	**-0.0158****	**-0.0196*****
	(-4.110)	(-4.077)	(-2.320)	(-2.814)
Current ratio	0.000928	0.000938	**-0.00352*****	**0.00496*****
	(1.029)	(1.040)	(-2.726)	(3.937)
Capex	**0.0554*****	**0.0556*****	**0.0449*****	0.0383
	(4.554)	(4.564)	(3.242)	(1.599)
Cash	**0.0403*****	**0.0404*****	**0.0487*****	**0.0447*****
	(5.135)	(5.142)	(4.789)	(3.603)
Roa	**0.146*****	**0.146*****	**0.180*****	**0.0769*****
	(12.81)	(12.77)	(10.99)	(4.673)
Market-to-Book	**0.00238*****	**0.00238*****	**0.00147*****	**0.00287*****
	(7.900)	(7.865)	(4.263)	(4.135)
Constant	-0.107***	-0.107***	-0.0667***	-0.135***
	(-11.35)	(-11.31)	(-4.617)	(-9.435)
Observations	1,746	1,746	891	855

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

Findings …

- **Own5** : mixed results: a) stat. sign. negative (-) linear effect, 2000-’15; b) stat. sign. positive (+) convex relation, 2000-’08.
- **Size**:, strong stat. sign. positive (+) effect, 3 per.
- **Leverage**:, strong stat. sign. negative (-) effect, 3 periods (2000-’15; 2000-’08; 2009-’15).
- **Current Ratio**: mixed results: a) stat. sign. Small negative (-) effect, 2000-’08; b) stat. sign. Small positive (+) effect, 2009-’15.

Findings …

- **Capex** : strong stat. sign. positive (+) effect, 2000-’15; 2000-’08; but NO significant during the crisis 2009-’15.
- **Cash** : strong stat. sign. positive (+) effect in all periods.
- **ROA** : strong stat. sign. positive (+) effect in all periods, but the estimated coeff. in 2009-’15 crisis period is less than 1/3 than the respective of 2000-’08.

Findings …

- **MarketoBook** : strong stat. sign. positive (+) effect in all periods, but the estimated coeff. in 2009-’15 crisis period is almost the double than the respective of 2000-’08.

Conclusions

- Our results are mainly in line with the literature review already mentioned.

- Almost all the variables we used (own5, size, leverage, capex etc) are statistically significant for the period pro-crisis as well as the during the crisis period.

- Some differences existing among the periods of time we tested, could be attributed on the different priorities and different resources of the firms in every period.

Findings implications

- ***Price Implications***

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- Kalay's (1982) is consistent with a tax effect and a tax induced clientele effect
- Litzenberger &Ramaswamy(1980) argue that the ex-date effect is best explained by differential taxation of dividends and capital gains
- Elton & Gruber (1970) showed that the price relative to dividends depends on marginal stockholders tax rates

- ***Implications for Companies***

- According to Modigliani &Miller (1959) dividend payments can convey information for the future prospects of the company which can be good or bad so as to influence investors decisions

Findings implications

- ***Implications for Investors***

➢ Many investors see dividends as "money for nothing," but the implications surrounding paying and receiving dividends can mean a lot of work for both the company and the investors.

Future Research

- It would be interesting to examine the consequences of the dividend policy to the not-listed (small /medium & large) firms of Greece.
- Also, a dynamic panel data analysis would be very interesting.
- Additionally, a comparative analysis with other countries such as countries of the south (Portugal, Spain) or north could be conducted.
- Furthermore, it would be also of particular interest to examine the consequences of the monetary policy as far as specific branches of the Greek economy are concerned.

Ownership Concentration and Dividend Policy …

VALUE of the paper

- *We provide additional evidence for the ownership concentration and the dividend policy of listed firms in Greece and especially for the during the crisis period which some differentiates with both the pro-crisis period and the literature review mentioned in our research*

THANK YOU FOR YOUR ATTENTION