13th ICESAL 2016

MAY 30-31, 2016, ATHENS, GREECE

"Capital and Ownership Structure over Corporate Growth: Evidence from Greek Panel Data."

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Capital and Ownership Structure …

- Purpose –
- Methodology –
- Findings –
- Value -
- Research Limitations –
- Policy/Strategy/Practical Implications -
- Social Implications -

Capital and Ownership Structure …

- Purpose

We study the relationships among Capital or Ownership Structure over Greek listed companies' performance, during the period 2000-2015.

Capital and Ownership Structure …

- Methodology –

We review recent relevant literature, so as to identify Empirical Panel Data Models (FE, RE), for 217 Greek listed companies, drawn from Thomson-Reuters Databank, over the period 2000-2015.

Capital and Ownership Structure …

- Main Findings

We have confirmed literature's evidence on the association among Ownership Structure or Leverage and Firm Value by our estimations on Greek firms' data, 2000-'15.

Major shareholder no matter 1st, or top 10 or 20, with the expected sign, has been found economically and statistically significant on both relations, as well as firm-specific characteristics they did.

Capital and Ownership Structure …

- Value/Contribution

We provide additional confirmation on the firm's theory for time (2010-'15) and space (peripheral Eurozone's member country-Greece).

Capital and Ownership Structure …

- Research Limitations

We have used simple Static Panel Data Econometrics, such as Fixed Effects or Random Effects models.

Further research is needed with both Dynamic Panel Data Econometric Models (such as Arellano-Bond type-methods) and multi-country datasets.

Capital and Ownership Structure …

- Policy/Strategy/Practical Implications –

Even though major shareholder could support the "efficiency" of Greek firms, it would be better in terms of "competitiveness", the regulation to favor many shareholders.

CAPITAL STUCTURE

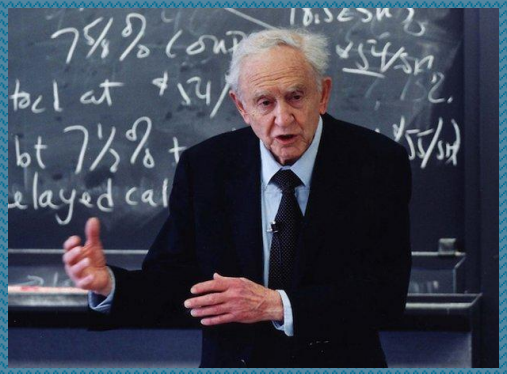
CAPITAL STRUCTURE THEORIES

BASIC THEORIES ON CAPITAL STRUCTURE

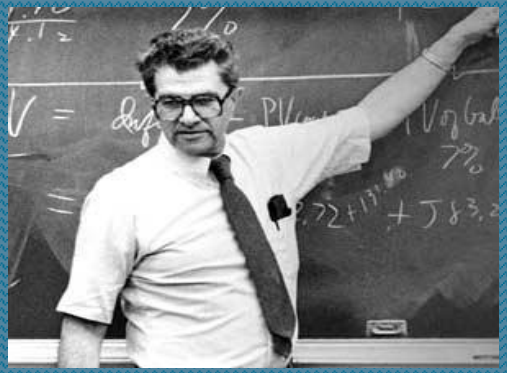
- MODIGLIANI-MILLER THEOREM
- PEACKING ORDER THEORY
- TRADE OF F THEORY
- THEORY OF TARGET ADJUSTMENT SPEED

MODIGLIANI- MILLER THEOREM

FRANCO MODIGLIANI
1918-2003



MERTON MILLER
1923-2000



MODIGLIANI- MILLER THEOREM PROPOSITION I

THE MARKET VALUE OF A COMPANY IS NOT AFFECTED BY THE CAPITAL STRUCTURE

Based on the assumption that there are not

- Taxes
- Costs of financial distress
- Agency costs

THUS

A company is considered of equal value to another if produces the same cash flow irrespective of the means of funding.

MODIGLIANI- MILLER THEOREM PROPOSITION I I

THE WACC OF A FIRM REMAINS CONSTANT REGARDLESS OF CAPITAL STRUCTURE

WHY ???

The cost of equity is a linear function of debt to equity of the company

As the company uses more debt in capital structure the equity costs increases because now involve more risk

MODIGLIANI- MILLER THEOREM PROPOSITIONS I & II WITH TAXES

When introducing the existence of taxes, the company's value increased in accordance lending because of the Tax shield provided by the deduction of interest.

- Reduces the cost of debt
- Reduces the weighted average cost of capital as used more debt
- Increases the value of the company at tD (marginal tax rate on the debt)

	WITHOUT TAXES	WITH TAXES
Firm Value	$V_L = V_U$	$V_L = V_U + tD$
Wacc	$r_{WACC} = \left[\frac{D}{V} r_d\right] + \left[\frac{E}{V} r_e\right]$	$r_{WACC} = \left[\frac{D}{V} r_d (1-t)\right] + \left[\frac{E}{V} r_e\right]$
Cost of Equity	$r_e = r_0 + (r_0 - r_d)\left(\frac{D}{E}\right)$	$r_e = r_0 + (r_0 - r_d)(1-t)\left(\frac{D}{E}\right)$

PEACKING ORDER THEORY

- Suggested by Myers & Majluf (1984)
- Based on the concept of asymmetric information that exists between company managers and investors and creditors outside company and subsequent problem opposing preferences and choices on each side.
- The most profitable firms use debt less .....

PEACKING ORDER THEORY

- The announcement of issuing shares by the company leading to a fall of their price because investors believe that company's managers issuing shares when it is overvalued
- The companies prefer financing by internal capital as they can be derived without sending an unwanted signal to the market
- If there are insufficient internal funds as the first resort choice in borrowing and as the last issue of new shares

TRADE OFF THEORY

Originally formulated by Kraus and Litzenberger (1973)

Firms outweigh the benefits arising from the use of debt to the cost of use.

The use of debt creates benefits arising from tax shield from the deduction of interest

The use of debt includes except interest costs and costs due financial distress and agency costs

The optimal capital structure occurs at the point that where balance benefits with the costs from the use of debt.

TARGET ADJUSTMENT SPEED THEORY

Businesses compare the cost of outside optimal debt, positioned above or below the target adjustment costs and objective approach.

If the latter is burdensome then choose:

1) to leave the adjustment towards the target or
2) reduce the adjustment speed.

TARGET ADJUSTMENT SPEED THEORY

DETERMINANTS OF SPEED ADJUSTMENT

1) Distance between optimal debt and debt observed
2) Degree of financial flexibility
3) Growth opportunities
4) Size

Literature Review …

A/A	AUTHORS	TITLE	DEPENDED VAR.	Sample Data	INDEPENDED VARS. (Significance: + pos., - neg., ± fuzzy, Not Signif.)
1	Su (2010)	Ownership structure, corporate diversification and capital structure. Evidence from China's publicly listed firms	• Leverage	N= 789 firms, T=7 years (2000-'07) K= 13 ind. vars. • Source:China Stock market and Accounting Research datatbase Financial statement publicly available on web	1. State (+) 2. ROA (-) 3. ROA over three years (Not Signif.) 4. Tangibility (Not Signif.) 5. Non debt tax shield (-) 6. Market Value of Ass./Total V. of Ass. (-) 7. Tradable Shares/Total Shares outstand. (Not Signif.) 8. Largest Shareholders' Shares Fraction (+) 9. Number of Board's Directors (-) 10. Number of Board's *Independent* Direct. (Not Signif.) 11. CEO and Board Chair (Not Signif.) 12. Log of Total Assets (+) 13. AGE (+)
2	Mc Cumper (2015)	Ownership Matters : The capital structure of private firms	• Leverage L1= Debt to assets L2= Debt to revenue L3= Debt to cash flow	N=4.537 firms, T=10 years (2004-'13) K= 8 ind. vars. • Source: Standards and Poor's Capital IQ database, (Compustat Execucomp database)	According to three different types of Leverage ratios (L1, L2, L3). 1. Size (-/-/+) 2. Revenue (+/-/-) 3. Liquidity (-/-/-) 4. Tangibility (+/+/-) 5. Rated (+/+/+) 6. Diversified (-/-/+) 7. International (-/-/-) 8. Subsidiary (+/+/+)

Literature Review …

3	Wellalage & Locke (2014)	Impact of ownership structure on capital structure of New Zealand unlisted firms	DEBT (Total debt to total asset)	N= 5027 firms, T=11 years (1996-2006) K= 7 ind. vars. • Source: Taiwan Economic Journal (TEJ) Data Bank	Insider ownership (-) Firm size (-) Industry type (+) Growth (-) Profitability (+) Tangibility (+) Risk (+)
4	Farooq (2014)	Effect of ownership concentration on capital structure : evidence from MENA region	Capital structure (Total debt to total asset, Total debt to total equity, Total debt to total value)	• N= ….. firms, T=19 years (1985-2008) K= 7 ind. vars. • Source: CDA/Spectrum institutional ownership database Center of research in Security Prices database Compustat database	Ownership concentration (-) Size (+) Earnings per share (-) Tangibility (+) Growth (+) Earnings paid as dividends (-) Complexity (+) Legal (-)

Literature Review …

5	Shyu (2012)	Ownership structure, capital structure, and performance of group affiliation. Evidence from Taiwanese group affiliated firms	Performance Capital structure Ownership structure	• Obs=1.926 • N= ….. firms, T=9 years (1999-2007) K= 7 ind. vars. • Source: Taiwan Economic journal (TEJ) database	Firm size (-/+/-) Profitability (+/-/0) Growth opportunity (+/0/0) Dividend payout ratio (+/+/-) R & D (-/-/+) Operating risk (0/-/+)
6	Ganguli (2013)	Capital structure- does ownership structure matter? Theory and Indian evidence	Leverage	N= 81 firms, T= 6 years (1985-2008) K= 7 ind. vars. • Source: database Center for Monitoring Indian Economy (CMIE)	Profitability (-) Risk (-) Tangibility (-) Growth (+) Size (-) Promoters shareholding to total shareholding (+) Non promoters shareholding to total shareholding (-)
7	Sun et al (2015)	Ownership, capital structure and financing decision : Evidence from the UK	Leverage	N= 383 firms, T= 15 years (1998-2012) K= 9 ind. vars. • Source: Datastream Thomson One Banker	MSO (managerial share ownership) (+/0) Institutional ownership (+) Tangibility (+) Profitability (+) Market to book ratio (-) Sales growth (-) Dividends (+/-) Non debt tax shield (+) Credit rating (+)

Literature Review …

8	Chung & Wang (2014)	Do institutional investors monitor management? Evidence from the relation between institutional ownership and capital structure	Leverage (total leverage, leverage deviation)	N= ……? firms, T= 24 years (1985-2008) K= 9 ind. vars. • Source: a) CDA/Spectrum institutional ownership database b) Centerof research in Security Prices (CRSP) database c) COMPUSTAT database	ΔOwnership (-) Asset beta (-) Profitability (-) Market value of assets to book value of assets (-) R&D (-) R&D D Selling expenses to sale (-) Size (-) Institutional ownership
9	Lee & Kuo (2013)	Effects of ultimate ownership structure and corporate tax on capital structures : Evidence from Taiwan	Debt (Long term debt to total assets) Managerial ownership	• Obs=5027 N= ? firms, T= 11 years (1996-2006) K=13 ind. vars. • Source: Taiwan Economic Journal (TEJ) Data Bank	Managerial ownership (-) Dividend per share (+) Outstanding institution ownership (+) Growth (+) Beta (-) Size (-) ROA (+) Fixed asset (+) Tax status (+) Control (-) Deviation (-) Depreciation (+) TLC (-)

Literature Review …

10	Pirzada et al (2015)	Firm performance, institutional ownership and capital structure : A case of Malaysia	Institutional ownership	• Obs=…? N= 30 firms, T= 5 years (2001-2005) K= 5 ind. vars. • Source: database Center for Monitoring Indian Economy (CMIE)	ROA (insignificant) ROE (insignificant) Earnings per share (+) Price earnings (+) Long term debt (+)
11	Brailsfrord et al (2002)	On the relation between ownership structure and capital structure	Leverage (Book value of debt to market value of equity)	• Obs=? N= 49 firms, T= 6 years (1989-1995) K=10 ind. vars. • Source: Australian Stock Exchange	Ownership to 5 larger shareholders (+) Managerial share ownership (+) Size (+) Volatility (-) Growth (-) Operating income before tax plus depreciation and amortization less taxes and dividends paid (-) operating income before interest and taxes (-) Intangibles (+) annual depreciation expenses (+) weighted average percentage of franked dividends paid in the year as a fraction of total dividends paid (+)

Data and Model Specification

- Sample:

217 companies listed on the Athens Stock Exchange over the period 2000-'15, on an *unbalanced* panel dataset gives up to 3,034 obs. to be used in estimating theoretical models.

Data and Model Specification

- Empirical Model 1 : to test for a non-linear relation between shareholder ownership and capital structure (Leverage):

$$Leverage_{it} = a_0 + \beta_0 OwnX_{it} + \beta_1 OwnX_{it}^2 + \sum_k Z_{kit}\gamma_\kappa + \varepsilon_{it} \qquad (1)$$

Leverage = (tot. debt/tot. assets) or (tot. liab./tot. assets) or (tot. debt/mark.capital.)

OwnX = ownership X share, X=[1, 10, 20] largest shareholders

Z(k) = control variables : size, volty, growth, fcf, profit., intangibl., ndts, divid. ε_{it} = the disturbance term.

Data and Model Specification

Z(k) control variables' categories: 1. Risk , 2. Agency costs, 3. Asset specificity, 4. Effect of taxes:

1a. **size**=ln(assets). 1b. **volty** = the std. of the past 3 years, of the annual % change in operating income before interest, taxes and depreciation.

2a. **growth** = the annual % change in total assets. 2b. **fcf** = free cash flow = OYBT + DEP + AMO – TAXPAID - DIVPAID. 2c. **profit** = profitability = (operating income before interest and taxes / tot. assets).

3a. **intangibl** = (intangible assets / tot. assets).

4a. **ndts** = non-debt tax shield = (deprec./tot. assets). 4b. **divid** = dividends paid in a year. 4c. **divyield** = (annual dividends per share / price per share).

Data and Model Specification

- Empirical Model 2 : to test for a non-linear relation between shareholder ownership or capital structure and performance (Tobin's Q):

$$Tobinq_{it} = a_0 + \beta_0 OwnX_{it} + \beta_1 OwnX_{it}^2 + \beta_2 Leverage_{it} \sum_k Z_{kit}\gamma_\kappa + \varepsilon_{it} \quad (2)$$

Tobinq = (market capitalization / total asset value) or [(market capitalization + total debt) / total asset value].

$\mathbf{Z_k}$ = k control variables as already defined.

Econometric Estimations

- The general form of the *Fixed Effects (FE)* Model chosen to provide LS consistent estimators is of the form

$$y_{it} = \sum_{k}^{2} X_{kit}\beta_k + u_i + \varepsilon_{it} \qquad \text{(FE)}$$

For k=1, X stands for the constant term, common for all units (i) firms.

Econometric Estimations

- **Two-way fixed effect (FE) modeling**,

[where effects are attached to each unit (i=firms) and time (t=years)],

because it provides the appropriate LS estimators to deal with

1. Firm-specific unobserved heterogeneity (u_i –FE-), such as cultural characteristics of managers-shareholders owners or financial development of the Greek banking system, that we have no reason to not believe that will be present in our dataset of 217 firms, in 32 different Greek industries, during 16 years (2000-15) of business.

Econometric Estimations

- **Two-way fixed effect modeling, because** it deals with

2. Correlation of FE with some of the regressors in the model, e.g., size, volty, growth, profit, ndts etc.

3. Errors (ε_{it}) should not be contemporaneously correlated across firms (i)

Econometric Model 1-Leverage

VARIABLES	(1) FE_Lev-M1a	(2) FE_Lev-M1b	(3) FE_Lev-M1c
own1	0.380*** (3.670)		
own1sq	-0.330** (-2.395)		
own10		0.215** (2.184)	
own10sq		-0.109 (-0.923)	
own20			0.235** (2.373)
own20sq			-0.132 (-1.120)
d11	0.0276 (1.404)	0.0298 (1.502)	0.0294 (1.482)
d12	0.0742*** (4.016)	0.0771*** (4.068)	0.0766*** (4.045)
d13	0.0678*** (3.012)	0.0706*** (3.156)	0.0709*** (3.171)
size	-0.0444** (-2.276)	-0.0418** (-2.144)	-0.0418** (-2.149)
...	...	...	...

Econometric Model 1-Leverage

VARIABLES	(1) FE_Lev-M1a	(2) FE_Lev-M1b	(3) FE_Lev-M1c
…	…	…	…
volty	-6.07e-05	-6.41e-05*	-6.52e-05*
	(-1.616)	(-1.700)	(-1.731)
profit	-0.466***	-0.469***	-0.468***
	(-4.416)	(-4.440)	(-4.438)
intangibl	0.635***	0.640***	0.641***
	(4.958)	(4.995)	(5.007)
ndts	1.709***	1.690***	1.710***
	(2.695)	(2.663)	(2.695)
divid	9.34e-10***	9.68e-10***	9.56e-10***
	(3.606)	(3.714)	(3.663)
Constant	1.068***	1.014***	1.011***
	(2.818)	(2.675)	(2.671)
Observations	711	711	711
Number of id	156	156	156
R-squared	0.214	0.212	0.213

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

Econometric Model 1-Leverage

- **Hausman's Test** p-value=0,0001 or lower, for all 3 above models rejecting the null (Ho) of "difference in coefficients not systematic, OR that the appropriate model is that of Random-Effects".

Econometric Model 1-Leverage

- All 3 variations of the Capital Structure Model 1 (LEVERAGE) provide approximately the *same* estimations, supporting the hypo. of "***positive relation between capital concentration and financial Leverage***".
- However, only in the ***first largest shareholder (OWN1, OWN1²)*** model 1 has been proved a convex (with max. point in Leverage) relation Leverage-Ownership(1st)

Econometric Model 1-Leverage

- Time-dummies proved statistically significant confirming both the selected model to be ***Two-Way*** **(firms and years) FE** and the ***adverse role of the Greek public sector's default of 2010*** and the ensuing crisis.

Econometric Model 1-Leverage

- SIZE : stat. signif., but with negative (-) sign, in favor of the Hypo. "Self-Financing".
- VOLTY & PROFIT: marginally significant, correct negative sign (-), estimations tending to zero, supporting the Hypo. "it isn't the growth rate of the *operating income (VOLTY) but the levels (PROFIT) that it matters for Greek banking system to provide loans…* ".

Econometric Model 1-Leverage

- INTANGIBL.: strong stat. signif. but with positive (+) sign suggesting that in Greek case it includes "*reputational or firm's discretionary investments while NO-R&D…".*
- *NDTS*: strong stat. signif. but with positive (+) sign suggesting … ?
- *DIVID*.: strong stat. signif. but with positive (+) sign suggesting positive (but → 0) effects for firm's borrowing.

Econometric Model 2-Tobin's Q

VARIABLES	(4) FE_TQ-M2a	(5) FE_TQ-M2b	(6) FE_TQ-M2c
leverage	-0.241** (-2.290)	-0.239** (-2.282)	-0.243** (-2.313)
own1	-0.636** (-2.467)		
own1sq	0.455 (1.338)		
own10		-0.225 (-0.930)	
own10sq		-0.0720 (-0.250)	
own20			-0.151 (-0.616)
own20sq			-0.154 (-0.534)
d11	-0.222*** (-4.599)	-0.232*** (-4.783)	-0.233*** (-4.800)
d12	-0.170*** (-3.699)	-0.185*** (-3.936)	-0.188*** (-3.998)
d13	-0.0926* (-1.662)	-0.0955* (-1.728)	-0.0957* (-1.730)
...	...	...	...

Econometric Model 2-Tobin's Q

VARIABLES	(4) FE_TQ-M2a	(5) FE_TQ-M2b	(6) FE_TQ-M2c
...	...	...	...
size	-0.454***	-0.459***	-0.458***
	(-9.438)	(-9.585)	(-9.567)
volty	0.000128	0.000125	0.000124
	(1.385)	(1.347)	(1.340)
profit	2.306***	2.318***	2.324***
	(8.752)	(8.806)	(8.831)
intangibl	-1.663***	-1.670***	-1.673***
	(-5.175)	(-5.209)	(-5.216)
ndts	0.173	0.207	0.246
	(0.110)	(0.132)	(0.157)
divid	6.76e-10	5.52e-10	5.35e-10
	(1.051)	(0.856)	(0.828)
Constant	9.602***	9.694***	9.675***
	(10.25)	(10.39)	(10.36)
Observations	711	711	711
Number of id	156	156	156
R-squared	0.458	0.460	0.459

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

Econometric Model 1-Leverage

- **Hausman's Test** p-value=0,0001 or lower, for all 3 above models rejecting the null (Ho) of "difference in coefficients not systematic, OR that the appropriate model is that of Random-Effects".

Econometric Model 2-Tobin's Q

- All 3 variations of Firms' Performance Model 2 (Tobin's Q) provide approximately the *same* estimations, supporting the hypo. of "*strong negative effect from **capital concentration** (largest 1st) or **Leverage** over **Tobin's Q***".
- However, only *linearity* and for the *largest (1st) shareholder* have been proved statistically significant.

Econometric Model 2-Tobin's Q

- Time-dummies proved statistically significant confirming the selected model to be ***Two-Way*** **(firms and years)** **FE** and the ***adverse role of the Greek public sector's default of 2010*** and the ensuing crisis.

Econometric Model 2-Tobin's Q

- Leverage : stat. signif., with negative (-) sign, declare that, as firm's leverage increases, its performance falls.
- SIZE : stat. signif., but with negative (-) sign, demonstrating that as firm's size rises its performance decreases.
- VOLTY : Not significant
- PROFIT: stat. significant, positive sign (+), declaring that more profitable firms have higher Tobin's Q .
- *INTAGIBL: stat. significant with negative* (-) *sign*

Describing the Dataset

sicname	Freq.	Percent	Cum.
Automobiles & Auto Parts	43	1.42	1.42
Beverages	32	1.05	2.47
Chemicals	80	2.64	5.11
Communications & Networking	22	0.73	5.83
Computers, Phones & Household Electroni	32	1.05	6.89
Construction & Engineering	203	6.69	13.58
Construction Materials	89	2.93	16.51
Containers & Packaging	96	3.16	19.68
Diversified Trading & Distributing	15	0.49	20.17
Food & Drug Retailing	45	1.48	21.65
Food & Tobacco	310	10.22	31.87
Freight & Logistics Services	77	2.54	34.41
Healthcare Equipment & Supplies	40	1.32	35.73
Healthcare Providers & Services	93	3.07	38.79
Hotels & Entertainment Services	116	3.82	42.62
Household Goods	94	3.10	45.72
Industrial Conglomerates	32	1.05	46.77
Leisure Products	15	0.49	47.26
Machinery, Equipment & Components	183	6.03	53.30
Media & Publishing	125	4.12	57.42
Metals & Mining	225	7.42	64.83
Oil & Gas	73	2.41	67.24
Paper & Forest Products	48	1.58	68.82
Passenger Transportation Services	45	1.48	70.30
Personal & Household Products & Service	43	1.42	71.72
Pharmaceuticals	29	0.96	72.68
Professional & Commercial Services	64	2.11	74.79
Software & IT Services	250	8.24	83.03
Specialty Retailers	163	5.37	88.40
Telecommunications Services	70	2.31	90.71
Textiles & Apparel	235	7.75	98.45
Transport Infrastructure	47	1.55	100.00
Total	3,034	100.00	

Describing the Dataset (panel stats.)

Variable		Mean	Std. Dev.	Min	Max	Observations
tobinql	overall	.5853932	1.005852	.0005557	26.03936	N = 2937
	between		.5088107	.027667	4.224222	n = 213
	within		.8743714	-2.641959	24.25493	T-bar = 13.7887
leverage	overall	.3407851	.2774467	0	5.094954	N = 3022
	between		.1904352	0	1.261877	n = 217
	within		.2064319	-.6883523	4.476293	T-bar = 13.9263
ownl	overall	.1513528	.202306	.0001064	.9727	N = 1971
	between		.1208527	.0033676	.8024883	n = 214
	within		.1823744	-.3873332	.971424	T-bar = 9.21028
size	overall	18.3501	1.429641	13.87554	23.24267	N = 3034
	between		1.408516	14.13649	22.94454	n = 217
	within		.4285573	14.97206	20.66847	T-bar = 13.9816
volty	overall	8.083603	98.05426	.0009066	2564.353	N = 2384
	between		44.80303	.093023	593.4907	n = 206
	within		86.00891	-584.9107	1978.945	T-bar = 11.5728

Describing the Dataset (panel stats.)

Variable		Mean	Std. Dev.	Min	Max	Observations
growth	overall	.0710073	.8036065	-.7546259	33.55538	N = 2817
	between		.3630626	-.1867805	4.836746	n = 216
	within		.7538675	-4.908817	28.78964	T-bar = 13.0417
fcf	overall	-405301.3	9.55e+07	-1.36e+09	1.86e+09	N = 2408
	between		5.01e+07	-2.24e+08	6.20e+08	n = 217
	within		7.67e+07	-1.52e+09	1.24e+09	T-bar = 11.0968
profit	overall	.0107968	.1982373	-9.307973	.8325488	N = 3027
	between		.0765425	-.5451926	.5106327	n = 217
	within		.1826036	-8.751983	.6594902	T-bar = 13.9493
intang~l	overall	.0499409	.1049744	0	.8227297	N = 2987
	between		.1017661	0	.7106158	n = 217
	within		.050116	-.4277149	.4942815	T-bar = 13.765
ndts	overall	.0290122	.0231983	.0000789	.2463838	N = 920
	between		.0221938	.0016632	.1699432	n = 178
	within		.010911	-.0404302	.1427758	T-bar = 5.16854
divyield	overall	1.514217	4.906359	0	219.3668	N = 2780
	between		1.899391	0	16.83833	n = 216
	within		4.536167	-15.32411	204.0427	T-bar = 12.8704

Describing the Dataset (units' stats.)

stats	tobinql	leverage	own1	own10	own20	size	volty	growth	fcf
N	2937	3022	1971	1971	1971	3034	2384	2817	2408
min	.0005557	0	.0001064	.0001064	.0001064	13.87554	.0009066	-.7546259	-1.36e+09
max	26.03936	5.094954	.9727	.9946858	.9946858	23.24267	2564.353	33.55538	1.86e+09
mean	.5853932	.3407851	.1513528	.2513023	.2547341	18.3501	8.083603	.0710073	-405301.3
p50	.3221854	.3194049	.0553506	.1091883	.1176316	18.24818	.9105261	.0008216	-589830
sd	1.005852	.2774467	.202306	.2810309	.2817929	1.429641	98.05426	.8036065	9.55e+07
range	26.03881	5.094954	.9725936	.9945795	.9945795	9.367133	2564.352	34.31	3.22e+09

stats	profit	intang~l	ndts	divid
N	3027	2987	920	3034
min	-9.307973	0	.0000789	0
max	.8325488	.8227297	.2463838	8.02e+08
mean	.0107968	.0499409	.0290122	5583599
p50	.0201882	.0052877	.0250136	447.26
sd	.1982373	.1049744	.0231983	3.60e+07
range	10.14052	.8227297	.2463049	8.02e+08

Describing the Dataset (units' pwcorr.)

	tobinql	leverage	own1	own10	own20	size	volty
tobinql	1.0000						
leverage	-0.2317*	1.0000					
own1	-0.1398*	0.1711*	1.0000				
own10	-0.1332*	0.2094*	0.8900*	1.0000			
own20	-0.1288*	0.2064*	0.8862*	0.9994*	1.0000		
size	-0.1042*	0.1101*	-0.0679*	-0.0911*	-0.0750*	1.0000	
volty	-0.0008	0.0058	-0.0314	-0.0343	-0.0331	0.0389	1.0000
growth	0.0407*	-0.0492*	-0.0955*	-0.1005*	-0.0961*	0.0565*	0.0656*
fcf	0.0574*	-0.0552*	-0.0078	0.0018	0.0086	0.0950*	-0.0167
profit	0.1669*	-0.1576*	-0.0616*	-0.0658*	-0.0608*	0.0916*	-0.0183
intangibl	0.0568*	0.0169	0.0213	0.0280	0.0327	0.0425*	0.0997*
ndts	-0.0581	0.2229*	0.0121	-0.0466	-0.0510	0.0995*	0.0322
divid	0.2296*	-0.0628*	0.0301	0.0243	0.0365	0.2780*	-0.0087

Describing the Dataset (units' pwcorr.)

	growth	fcf	profit	intangibl	ndts	divid
growth	1.0000					
fcf	0.0048	1.0000				
profit	0.0309	0.0661*	1.0000			
intangibl	0.0724*	0.0273	0.0215	1.0000		
ndts	-0.0253	0.1464*	-0.1547*	-0.0248	1.0000	
divid	0.0049	0.1573*	0.1788*	0.1522*	-0.0503	1.0000

Conclusions…

Capital and Ownership Structure over Corporate Growth: Evidence from Greek Panel Data.

THANK YOU

FOR YOUR ATTENTION