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ΑΘΗΝΑΙ - ATHENS, 2002

ARE THERE PERFORMANCE DIFFERENCES
DUE TO THE MANAGERIAL AND ENTREPRENEURIAL
STATUS OF FIRMS?

EMPIRICAL EVIDENCE FROM GREECE

DIMITRIOS G. MAVRIDIS

SAVAS CHR. MAVRIDIS

T.E.I. of West Macedonia

Department of Financial Applications

T.E.I. of Thessaloniki

Marketing Department

1. Introduction

The life in the last decade (1992-2002) whether within or outside of the “walls” of Athens Stock Exchange Market (ASE) was very turbulent. The local newspapers have been—and are still—full with controversial “myths and stories” about the financial situation of the listed firms, their management, capital basis, their speculato-lucrative dividends (“dream papers”)!¹ In this context respective discussions have taken place concerning the various aspects of owner ship (“privatization” of state-owned firms, “familiarization”, “strategic” firm control) in general, but also the question of the “inner structure” (“family-firm”, professional or corporate manager, “founder-manager”, entrepreneur) of management in particular.

In order to bring “owls to Athens” a respective survey was necessary and as the appropriate data source the interim reports were “discovered”. In those reports a special group of listed—on Athens Stock Exchange Market (ASE)—corporates discloses very useful information. The issue of interim

reports in Greece is mandatory, when firms want to raise capital through admission of shares in The Athens Stock Exchange Market (ASE). The respective legal regulations describing the minimum mandatory parts and the information to be disclosed are encoded mainly in the Presidential Decrees 348 and 350 from the year 1985 (P.D. 348/1985, P.D. 350/1985).

As a part of this research the present study offers a two-folded contribution: enrichment of the research for the general aspect of “*managers and entrepreneurs*” (Georgellis, et al., 2000; Jarvis, et al., 2000; Ramamunga, J. & Romano, C., 1997; Smallbone, et al., 1995; Glancey, 1998; Gray, 1999; Castellanos, 2001; Holden, 2002; Hisrich & Drnovsek, 2002) or its feminine dimension (Orhan & Scott, 2001; 1999; Phizacklea & Ram, 1995; Grondin & Grondin, 1994; Scott, 1986; Hisrich & Bush, 1984) and continuation of the already started *reporting research efforts* (Mavridis, 2002a; Mavridis, 2002b; Mavridis, 2002c; Mavridis, 2003a; Mavridis, 2003b; Mavridis & Mavridou, 2002).

The objective of this article is to present the findings of the survey with the particular objective to highlight the various discriminative financial performance (absolute and relative) aspects due mainly to the business status (bs=0: *managerial*² and bs=1: *entrepreneurial*) of firms.

2. Survey description

From the total sum of 200 collected³ interim reports –for the years 1994 to 2001– only 113 have been used. The rest (37 ones) wasn't appropriate for the purposes of present survey. Figure 1 shows the distribution of the remaining interim reports (IR) for every business status (bs).

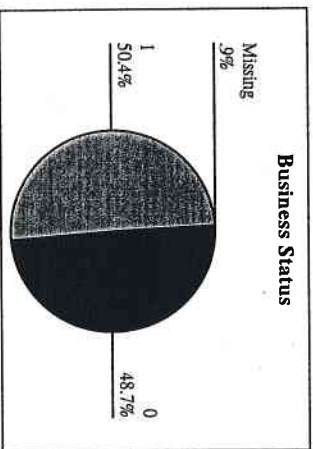


Figure 1: Business Status Allocation (1994-2001).

The constitution of those reports according to business status (fss) as it is shown in the Figure 1 confirms that almost forty nine percent (48,7%) of the total cases of the set are *corporate or managerial* enterprises (CE) and more than fifty percent (50,4%) of the total set are *entrepreneurial* (EE) enterprises. Only one case or 0,9% of the set is not analyzed (missing values, Table 1).

Table 1: Business Status (BS, 1994-2001).

Business Status	Frequency	Percent
Valid	0	48,7
	1	50,4
Total	112	99,1
Missing	System	1
Total	113	100,0

As mentioned the interim reports are sources of valuable information, because they include three (mandatory) categories or types of information. The mainly disclosed information concerns *narrative data* (about various topics in form of text), *administrative or organizational data* (text and figures) and usual *financial data* (Mavridis, 2002b)⁴.

3. Survey results

The final sample of the 113 interim reports and according to the eight compiled branches or sectors shows respectively 44 cases of firms or 38,9 % for the first branch “Production”, 11 cases or 9,7 % for the second branch Construction, 5 case for Communication, 18 cases or 15,9 % for Information, 12 ones for Trade, 13 cases or 11,5% for branch Services, 6 cases for the Investment branch and 4 cases or 3,5% for the last one (Insurance). The experience of the enterprises –shown in the Table 2– states that *entrepreneurial* firms are more experienced (almost 30 years of business activity) as managerial firms does (27 years of business activity).

Table 2: Experience Status (1994-2001).

Business Status	Experience
0	27,31
1	29,96
Mean	28,63

Mean wise 2073 persons are working in the managerial group of firms (ME) and the whole ME-group is employing 114002 (85,8%) persons. The entrepreneurial firms (EE) employ 330 persons each and together 18811 (14,2%) persons. In other words more than fifty percent (50,9%) of the enterprises of the whole set are employing only 14,2% of the total manpower of the set (Table 3), while the data analysis is significant within the 5% range ($\alpha=0,031$).

Table 3: Manpower Distribution (1994-2001).

Business Status	Mean	Sum	% Total Sum	% Total N
0	2072,76	114002	85,8%	49,1%
1	330,02	18811	14,2%	50,9%
Total	1185,83	132813	100,0%	100,0%

As mentioned in the beginning the main intention is still to detect discriminative aspects within the independent variables *business status* (bs=0, firms with corporative managers and bs=1, firms with *entrepreneurial managers*⁵). While the whole set is divided in nearby two equal halves (55 and 57 cases), the most *entrepreneurial* cases of managers are clearly located in the “family firms” (43 out of 57 cases) and the most *corporative* manager cases are located in the “non-family” (ms: 0=“non-family”, 1=“family firms”) group of firms (42 out of 55 cases, Table 4). The respective value for Cramer’s V is strong (0,518) and the relationship significant ($\alpha=0,000$).

Table 4: Marital & Business Status (1994-2001).

	Business Status	Total
	0	1
MS	13	43
	42	14
Total	55	57

Apart of the cross-relational aspects with the other pseudo variables (Mavridis, 2002f) the same relation between *business status* and *firm size status* (fs*fs) shows (Table 5) that the S- and M-firms together have in 38 (out of 57) cases *entrepreneurial* managers. Also the most cases (27) of *corporative* managers are located in these two mentioned firm size categories (1/2) too.

Table 5: Firm Size & Business Status (1994-2001).

Firm Size Status (fs)	Business Status (bs)	Total
	0	1
1 S (up to 100 persons)	12	13
2 M (up to 250 persons)	15	25
3 L (up to 500 persons)	9	7
4 V (up to 1000 persons)	10	8
5 X (more than 1000 persons)	9	4
Total	55	57

Also the most cases (27) of corporative managers are located in these two mentioned firm size categories (1/2) too. Another interesting point for analysis –the distributions of the employed academicians are presented in the Table 6. The *managerial* firms (49,1%) employ 72,8% or 1 856 persons with AEI degrees and 70,5% or 962 persons with TEI degrees. The *entrepreneurial* firms (50,9%) employ less than one third (27,2%) or 695 persons with AEI degrees and 29,5% or 403 persons with TEI degrees. The declared percentage of both types of academicians (3 916 persons or 2551 AEI and 1365 TEI) is 2,95% of the total of the set’s manpower (132 813). The *managerial* share of the above percentage is 2,12% while the *entrepreneurial* one only 0,83%. The total sum of employed academicians (TEI & AEI) counts 9238 persons⁶.

Table 6: Qualitative Manpower Distribution (1994-2001).

Business Status	TEI	AEI	AEI&TEI
0	Mean	17,49	34,37
	Sum	962	1856
	% Sum	70,5%	72,8%
	% Total N	49,5%	49,1%
1	Mean	7,20	12,41
	Sum	403	695
	% Sum	29,5%	27,2%
	% Total N	50,5%	50,9%
Total	Mean	12,30	23,19
	Sum	1365	2551
			9238

In the present sample (Table 7) 852 persons belongs to the Board of Directors BOD (Corporate Directors), while 276 or 32,39% of them are relatives. The Managing Board of Directors (MBD – Managing Board of Directors) consisting of the main functional managers (Corporate Managers) counts 1.265 persons (1.089 males and 176 females). The average size of the BOD counts 7,6 members, while the respective number of the relatives in the BOD counts 2,46 persons.

The MBD has a mean value of 11,29 persons, while 9,72 (86%) members are male and 1,57 (14%) of them female persons (Mavridis, 2002c). In particular the *entrepreneurial* group representing 50,9% of the cases has the highest values for all variables, except the size of BOD:

- BOD relatives (61,2% or 169 persons),
- Managing directors (54% or 683 persons),
- Male managers (52,2% or 568 persons),
- Female managers (65,3% or 115 persons),
- Male (82,8% or 96 persons),
- Female relatives (80% or 36 persons)

Table 7: Top Management Analysis (1994-2001).

Business Status	Board Directors	Board Relatives	Managing Directors	Men Directors	Women Directors	Men Relatives	Women Relatives
0	Mean 8,36	1,95	10,58	9,47	1,11	,38	,17
	Sum 460	107	582	521	61	20	9
	% Sum 54,0%	38,8%	46,0%	47,8%	34,7%	17,2%	20,0%
*	% Total N 49,1%	49,1%	49,1%	49,1%	49,1%	48,6%	48,6%
1	Mean 6,88	2,96	11,98	9,96	2,02	1,75	,65
	Sum 392	169	683	568	115	96	36
	% Sum 46,0%	61,2%	54,0%	52,2%	65,3%	82,8%	80,0%
	% Total N 50,9%	50,9%	50,9%	50,9%	50,9%	51,4%	51,4%
Total	Mean 7,61	2,46	11,29	9,72	1,57	1,08	,42
	Sum 852	276	1265	1089	176	116	45
Sign.	0,04	0,01	0,293	0,668	0,005	0,000	0,000

The disclosure “behavior” (Mavridis, 2002a) of the same firms as above is presented in the Table 8. Accordingly the *entrepreneurial* firms are disclosing more (166 pages) and mainly

- Company information (34 pages),
- Past financial plans (25,61 pages),
- Narrative data (132 pages) and
- Photos (17)

The *managerial* firms disclose more *financial* data (39 pages) and graphs (3,44).

Table 8: Business Status Disclosures (1994-2001).

	Bs=0	Bs=1	Total
Report Size	154,38	166,42	160,51
Executive Summary	17,62	20,68	19,18
Company Information	30,29	34,07	32,21
Branch Information	6,49	6,68	6,59
Past Financial Plans	21,71	25,61	23,70
Present Financial Plans	2,98	3,74	3,37
Future Financial Plans	7,36	8,00	7,69
Narrative Data	115,51	131,89	123,85
Financial Data	38,87	34,53	36,66
Photos	12,36	16,67	14,55
Graphs	3,44	3,12	3,28

In the following Tables 9 and 10 the business status is analyzed using financial values or indicators, which are disclosed in the interim reports. The *absolute* financial values (mean and sum) are always higher for the corporate *managerial* group (Table 9) and in the most variables significant too. According to the Table 10 the corporate managers group (bs=0) has better *relative* performance values in the following variables: ALTRATIO, ROS, FINSTREN, GROSMMARG, FINSTAB, FIXRATIO, CREDWORT, FINLEV, DEBRATIO, UTILSFA, QUAPLANT, CURATIO, WCTOTAS, SALPERF. The *entrepreneurial* group (bs=1) has distinguished *relative* performance values in the variables: ROE, PROFITAB, FIXLONG, UTILWC, CURASSAL, WCSALES and ADMPPERF⁷.

Table 9: Absolute Performance (1994-2001, in euro).

	Bs=0	Bs=1	Total
Past Investment	125.976.772	11.088.791	67.506.996
Future Investment	300.935.795	20.921.491	158.428.515
Total Sales	228.017.622	68.949.740	147.063.432
Local Sales	180.546.849	64.301.404	121.900.498
Global Sales	47.470.773	3.648.651	25.362.315
Gross Profit	97.818.510	13.648.482	54.981.978
Admin Salaries	5.357.157	1.962.119	3.613.759
Sales Force Salaries	5.630.035	3.750.664	4.664.953
Net Earnings BT	64.541.948	5.810.635	34.651.905
Total Assets	412.188.164	51.560.164	228.654.271
Fixed Assets	282.081.988	26.533.227	152.025.922
Current Assets	130.106.177	25.026.937	76.628.349
Total Capital	381.338.767	57.934.664	216.749.179
Own Capital	227.673.785	13.424.601	118.636.254
Total Debt	153.664.982	44.510.063	98.112.925
Long termed Debt	34.557.385	10.556.809	22.342.806
Short Liabilities	119.107.597	33.953.254	75.770.119

The above-performed descriptive statistics show general performance “trends” differences. The usage of multivariate methods allows not only “mean” contrasts but also mutual or multidirectional relational aspects. The used multiple discriminant analysis (MDA) has been applied for both -absolute and relative- data blocks of performance variables. The discriminant analysis for the absolute financial variables explains with only one function 100% of the variance, with a canonical correlation of 0,43. The respective Wilks’ Lambda has a value of 0,82, while the discriminant function lies within the 10% percent acceptability ($\alpha=0,086$, $\chi^2=20,4$, $df=13$). The Standardized Canonical Discriminant Function and its Coefficients (SCDFC) are as follow:

$$D_{A,BS} = 8,52 \text{ EBTNET} + 8,50 \text{ TOTSALES} + 4,69 \text{ FIXASSET} + 1,87 \text{ TOTCAPIT} \\ + 1,17 \text{ INVPAST} + 0,75 \text{ SALESSAL} - 8,45 \text{ GROSPROF} - 7,24 \text{ LOCSALES} - \\ 4,97 \text{ TOTASSET} - 2,16 \text{ INVFFUTUR} - 1,00 \text{ ADMINSAL} - 0,35 \text{ LONGLIAB} \quad (1)$$

The calculated importance matrix (Table 11) shows -apart of the contribution (structure) and influence (coefficient) of every variable to the discriminant function⁸- the relative explanative position of every item and all ways in context with the respective discriminant function (1). The two groups have significant different group centroid values (0,476 and -0,459) while 67,3% of the original grouped cases has been correctly classified.

Table 10: Relative Performance (1994-2001).

FR Description	0	1	Total	Business Status	Remarks
Altmann's Ratio	,1617	,1443	,1528		
Return On Equity	,8842	2,7639	1,8408		
Return On Sales	,2503	,1782	,2136		Profitability
Financial Strength TA	,4872	,4276	,4569		
Gross Margin	,3665	,3180	,3418		Transformation
Gross Profitability	,3019	,3157	,3089		
Financial Stability	4,5124	1,0008	2,7253		
Financial Strength FA	39,5276	1,7381	20,2955		
Credit Worthiness	1,9041	5,1317	3,5467		Liquidity
Financial Leverage	,4614	,6137	,5389		&
Fixed Asset Debt Ratio	6,7634	2,3250	4,5046		Leverage
Fixed Asset Debt Structure	79,7071	217,0628	161,7389		
Sales Capital Return	1,1132	1,1255	1,1195		
Fix Asset Utilization	9,2797	5,4616	7,3365		Sales
Current Asset Utilization	12,7197	13,3398	13,0353		
CA Sales Utilization	1,1586	,7054	,9280		Transformation
WC Sales Utilization	,6294	,1512	,3860		
Asset Structure	,4411	,3666	,4032		
Current Ratio	4,8525	1,3321	3,0608		Structure
WC Asset Structure	,1663	,0810	,1229		
Sales Force Performance	,0654	,0873	,0767		Staff
Admin Staff Performance	,0514	,0496	,0505		Performance

According to the above weighted values (Tables 11) the following variables are the most powerful absolute discriminators: EBTNET, TOTAL SALES, FIXASSET (positive) and GROSSPROF, TOTASSET, INVFUTUR (negative).

Table 11: Absolute Importance Matrix (1994-2001).

	Structure (1)	Coefficients (2)	Weighted Importance (3=1*2)
Past Investment	.558	1,17	.653
Admin Salaries	.480	-1,00	-.480
Future Investment	.477	-2,16	-1,03
Total Assets	.473	-4,97	-2,35
Net Earnings BT	.461	8,52	3,93
Fixed Assets	.460	4,69	2,16
Total Capital	.455	1,87	.851
Gross Profit	.449	-8,45	-3,79
Total Sales	.412	8,50	3,50

The multiple discriminant analysis for the *relative* financial variables (financial ratios) explains with only one function 100% of the variance (eigenvalue=0,71) and with a high canonical correlation of 0,65. The respective Wilks' Lambda has a value of 0,58, while the discriminant function is within the 6% percent acceptability ($\alpha=0,059$, $\chi^2=32,0$, $df=21$). Below the respective Discriminant Function D_R :

$$\begin{aligned}
 DR, BS = & 2,96 \text{ CREDWORT} + 2,32 \text{ WCTOTAS} + 1,46 \text{ DEBRATIO} + 1,60 \\
 & \text{QUAPLANT} + 1,22 \text{ FINLEV} + 0,81 \text{ GROSSMARG} + 0,66 \text{ PROFCAP1} + 0,45 \\
 & \text{FIXRATIO} + 0,25 \text{ ROS} - 3,54 \text{ ROE} - 1,69 \text{ CURRATIO} - 0,99 \text{ PROFITAB} - 0,55 \\
 & \text{WCSALES} - 0,38 \text{ FINSTREN} - 0,33 \text{ CURASSAL} - 0,19 \text{ UTILSFA} - 0,15 \\
 & \text{FIXLONG} - 0,12 \text{ SALPERF} - 0,11 \text{ UTILWC} - 0,03 \text{ FINSTAB} (2)
 \end{aligned}$$

Table 12: Relative Importance Matrix (1994-2001).

	Structure (1)	Coefficients (2)	Relative Importance (3=1*2)
Financial Stability	0,367	-0,03	-0,011
Gross Profitability	-0,356	-0,99	-0,352
Financial Leverage	-0,338	1,22	0,412
Asset Structure	0,328	1,60	0,525
Sales Force Performance	-0,323	-0,12	-0,039
Financial Strength TA	0,312	-0,38	-0,119
Fix Asset Utilization	-0,251	-0,19	-0,048
Fixed Asset Debt Ratio	0,249	1,46	0,364
WC Asset Structure	0,219	2,32	0,508
Gross Margin	0,194	0,81	0,157
Current Ratio	0,190	-1,69	-0,321
Credit Worthiness	-0,157	2,96	0,465
Return On Sales	0,147	0,25	0,038
Return On Equity	-0,118	-3,54	-0,418
WC Sales Utilization	0,116	-0,55	0,064
Sales Capital Return	-0,108	0,66	0,071
Fixed Asset Debt Structure	-0,890	-0,15	-0,134
Financial Strength FA	-0,009	0,45	0,004

The respective importance matrix (Table 12) shows again the importance of the relative variables in context with the discriminant function (2). The group centroids have the values: 1,013 and -0,683. The MDA system recognizes 70,5% of the original grouped cases as correctly classified. The most powerful relative discriminators are: QUAPLANT, WCTOTAS, CREDWORT, FINLEV, DEBRATIO, (positive) and ROE, PROFITAB (negative). Finally an attempt was made to highlight the relationships (Table 13) between the business status (bs) and the other qualitative variables, like gender (gs: 1=men and 2=men and women), experience status of the firm itself (es: 0="young" and 1="old"), marital status (ms: 0=non-family firm, 1=family-controlled firm), academic status (as: 0=not academic, 1=academic), globalization status (gs: 0=local operating firm, 1=global operating firm).

The significant MDA results –according to the above Table 13– were confirmed only for the case of the “only men” group of firms (ss=1), of the experienced firms (es=1), of the “unmarried” firms (ms=0) and finally for the “non-academics”. The same MDA for the years 1997-2001 and the branch (brno: 1-8) delivers the following strongest discriminative variables:

- 1997 – ALTRATIO (EBIT/TA: 4,2),
- 1998 – ALTRATIO (10,1),
- 1999 – FINSTREN (NW/TA: 17,6),
- 2000 – FINSTREN (8,3),
- 2001 – ROE (NP/NW: 4,02)
- Production – WCSALES (W/C/S: 6,98)
- Construction – ALTRATIO (1,0),
- Communication – Not calculated by MDA system (SPSS 10.0)
- Information – ROS (NP/S: 5,7)
- Trade – CREDWORT (CL/NW: -11,8)
- Services – FINSTREN (9,6)
- Investment – Not calculated by MDA system (SPSS 10.0)
- Insurance – Not calculated by MDA system (SPSS 10.0)

Table 13: Summaries of Most Discriminant Items⁹ (1994-2001).

Item	Eigen Value	Canon Corr%	X ²	Sign.	Most Important Discriminative Variables
SS=1	4,73	0,91	27,05	0,03	ROE (-11), CREDWORT (8,7), QUAPLANT (2,69)
SS=2	0,77	0,66	19,76	0,54	FINLEV (2,57), WCTOTAS (2,2), ROS (1,2)
ES=0	3,46	0,88	2,99	0,56	ROS (3,28), FINLEV (2,48), ALRATIO (-2,78)
ES=1	0,79	0,66	31,03	0,07	CREDWORT (2,6), WCTOTAS (2,2), ROE (-3,09)
MS=0	3,9	0,89	31,02	0,07	ROS (3,5), ALTRATIO (-2,9), CREDWORT (-2,5)
MS=1	0,8	0,65	15,35	0,81	CREDWORT (-3,8), DEBRATIO (3,6), FINSTAB (-3,6)
AS=0	43,3	0,99	18,96	0,02	ROE (-21,1), CREDWORT (16,8), ROS (10,6)
AS=1	0,75	0,66	27,15	0,17	WCTOTAS (2,1), FINLEV (1,3), ROS (1,1)
GS=0	2,05	0,82	24,55	0,32	DEBRATIO (4,9), FINSTAB (-3,9), CURASSAL (3,3)
GS=1	0,89	0,69	16,86	0,46	CREDWORT (6,3), ROE (4,3), FINSTREN (3,1)

4. Conclusions

Due to the survey results there are 55 managerial and 57 entrepreneurial firms with 27 years and 30 years experience or years of business activity. Managerial or corporative enterprises employ 2073 persons each and together 114002 persons or 85,8% of the total sum of the working population of the present set. The entrepreneurial establishments are comparatively small firms with 330 working persons per each and are responsible for 14,2% (18811 persons) of the employed manpower.

The most managerial firms (42) are located in the “non-family” group, while the most entrepreneurial enterprises (43) are “family” firms. Firms with 101 to 250 employed persons (40 M-sized firms) are at a rate of 62,5% (25/40) entrepreneurial ones. S-sized firms (up to 100 working persons) have at a rate of 52% (13/25) entrepreneurial character. In the group of firms up to 250 (more than 250) employed persons exist 27 (28) managerial and 38 (19) entrepreneurial firms. Therefore the most managerial firms are located in the same size categories S and M as entrepreneurial ones do, but they are stronger represented in the big firm size categories L (251 to 500 persons), V (501 to 1000 persons) and X (more than 1000 persons). More than two thirds (71,3%) of the tertiary educated staff is employed in managerial firm, while entrepreneurial corporates tendentious avoid the hiring of academic staff.

Concerning the leadership constitution of firms the entrepreneurial corporates manifest preferences for higher numbers of top management members and relatives, whether male or female, as the managerial firms do. Only their BOD members are fewer. The behavior of information disclosure for entrepreneurial firms manifests the preference for a broader communication as the managerial firms do. While entrepreneurial firms seem to communicate on the verbal narrative level the managerial firms prefer the “dry” financial figures. In absolute financial indicators the entrepreneurial firm is in all categories a smaller one compared with its managerial counterpart. Therefore all absolute structural and procedural indicators, like assets, capital, expenses, sales and profits have smaller values.

If we regard the relative financial indicators, then the corporative firm group (bs=0) has better relative performance values in the following variables: ALTRATIO, ROS, FINSTREN, GROS MARG, FINSTAB, FIXRA-

TIO, CREDWORT, FINLEY, DEBRATIO, UTILSFA, QUAPLANT, CURATIO, WCTOTAS, SALPERF. The *entrepreneurial* group (Bs=1) has best *relative* performance values in the variables: ROE, PROFITAB, FIXLONG, UTILWC, CURASSAL, WCSALES and ADMPERF. The general trends for every type of business control –managerial or entrepreneurial– are shown in the Table 14. Both types put their efforts on better asset utilization, while the entrepreneurial type has more “net” profit value orientation as the managerial counterpart does. The managerial type is more *long-range* and *sales force* based, while the entrepreneurial one more *short-range* and *administrative* organized.

Table 14: Relative Performance Trends.

Financial Ratio (FR)	Bs=0 trends	Bs=1 trends	Remarks
ALTRATIO	Asset utilization	Asset utilization	EBIT/TA
ROE		Equity utilization	NP/NW
ROS	Strategic asset management		NP/S
FINLEV	Strategic asset management		CL+D/TA
CURATIO	Strategic asset management		CA/CL
CREDWORT	Strategic asset management		CL/NW
QUAPLANT	Strategic asset management		FA/TA
FINSTREN	Strategic asset management		NW/TA
UTILSFA	Strategic asset management		S/FA
UTILWC			S/WC
SALPERF	Sales management orientation		S/S
GROSMARG	Sales management orientation		GP/S
PROFITAB		Profitability orientation	GP/TA
PROFCAPI		Profitability orientation	S/CE
WCTOTAS	Tactical assets management		W/CTA
WCSALES	Tactical assets management		W/C/S
CURASSAL	Tactical assets management		C/A/S
CURASTAS		Tactical assets management	CA/TA
EBITEQU		Equity utilization	EBIT/NW
EBITSAI	Sales risk management		EBIT/S
FIXLONG		Safety orientation	FA/D
FINSTAB	Long range debt orientation		NW/CL+D
FIXRATIO	Long range debt orientation		NW/FA
DEBRATIO	Long range debt orientation		TA/CL+D
ADMPERF		Administration management	AF/S

The most (positive directed) explanative power for the different management types (manager vs. entrepreneur) possesses the variables dealing with *net earnings* (investors return), *sales* (structural and procedural utilization), *fix assets* (size or scale effects – FA/TA), *working capital* (tactical management – (CA – CL)/TA) and *liabilities* (tactical and strategic financial position). The most negative directed explanative variables are dealing with gross earnings (firm’s return – GP/TA), future investment plans (futural structures and procedures), total assets (scale and stock effects) and profitability (equity utilization – NP/NW).

Finally the controversial “key-variables” confirm that firms (whether managerial or entrepreneurial) are fighting to stay in the market by using all available scale effects, like Altman’s ratio (EBIT/TA) and financial strength (NW/TA), but also using all short liability advantages expressed either as credit worthiness (CL/NW) or as working capitals sales effectivity (CA – CL/S).

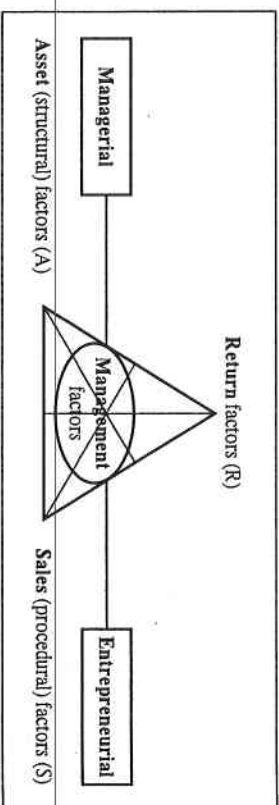


Figure 2: Discriminating Management Forces (DMF).

In other words for the ASE listed firms the crucial discriminative forces or factors which latently shape the “managerial or entrepreneurial” management type are the *asset* (structure), the *sales* (procedure) and the *return* (result) factors (Figure 2). It is not said that the factors (A, S, R) itself are the predominant and influential dimensions, but much more that the subjective (personal) factor-perceptual behavior patterns of each manager determine the above management types.

This expresses more or less the philosophy of how persons evaluate the different factors (Lusch et al., 1998) and how do they relate them to each other. It is more a question of perceiving life in its short or long termed dimensionality, it is the managerial or entrepreneurial philosophy of being and doing in the tactical and strategical time continuum.

Annex

Below short explanations of the used financial ratios so far they didn't explained in the text itself.

- FR1 – Altratio – EBIT/TA - expresses the profitability of the strategic or “holistic corporate”
- FR2 – Castas – CS/TA - firm's ability to convert expenses and revenues to monetary streams.
- FR3 – Credwort – CL/NW - creditworthiness of the firm possessing a strategic dimension
- FR4 – Curassal – CA/S- tactical ratio with ambiguous meaning
- FR5 – Curastas – CA/TA- tactical ratio for manufacturing firms and more strategic one for trade companies.
- FR6 – Curatio – CA/CL- ability to cover current liabilities through current assets (increasing curatio)
- FR7 – Debratio – TA/CL+D- ability (tending to n) to cover all liabilities through the total assets.
- FR8 – Ebitequ – EBIT/NW- relates EBIT to the NW.
- FR9 – Ebital – EBIT/S- relates the EBIT to the sales (S).
- FR10 – Finlev – CL+D/TA- relates the total liabilities to the total assets (increasing leverage)
- FR11 – Finstab – NW/D+CL- relating NW and total debt (CL, D).
- FR12 – Finstren – NW/TA- firm's ability to finance its assets with own or borrowed capital.
- FR13 – Fixlong – FA/D- demonstrates the application of the mentioned “golden rule”.
- FR14 – Fixratio – NW/FA- like FR12 but including only the fixed assets (FA).
- FR15 – Gros marg – GP/S- overall indicator of the firm's tactical performance.
- FR16 – Salperf – SF/S- tactical performance of the sales force (SF)
- FR17 – Admperf – AF/S- tactical performance of general administration (AF) personnel.
- FR18 – Profcap – S/CE- ability of the company to “produce” sales with the given invested capital.
- FR19 – Profitab – GP/TA (gross) profitability in relation to TA

- FR20 – Quaplant – FA/TA- structure of the assets.
- FR21 – Roa – NP/TA- measures the net profitability (ROA).
- FR22 – Roe – NP/NW- measures the profitability of the own capital or shareholder's equity (ROE)
- FR23 – Ros – NP/S- the same profitability for the sales (ROS).
- FR24 – Utilsta – S/FA- utilization of the asset structure (FA)
- FR25 – Utilwc – S/WC- utilization of the current net asset surplus (WC)
- FR26 – Wcsales – WC/S- relates the net surplus of WC (CA – CL) to sales (S)
- FR27 – Wctotas – WC/TA- relates the net surplus of WC (CA – CL) to TA
- TA – Total asset, CA – Current asset, CL – Current liabilities, D – Debt, NW – Equity,
- NP – Net profit, GP – Gros profit, WC – Working Capital, CE – Capital Employed

Abstract

Dimitrios G. Mavridis – Savas Chr. Mavridis: *Are there performance differences due to the managerial and entrepreneurial status of firms? – Empirical evidence from Greece.*

There has been (and is still going on) discussion about the “real” performance of the listed Greek firms. The present research is an attempt to reveal the status quo of the “managerial” and “entrepreneurial” firm performance situation according to disclosed information in Greek interim reports. Focus is put on those contrasting financial aspects and variables, which help to explain the actual status of the business or management orientation. The results of the survey confirm discriminating abilities of the absolute and relative financial variables – due to the “managerial or entrepreneurial” involvement status – but also indicate their limitations to draw sharp borderlines between the two categories or groups of firms.

JEL classification: G3 – Other (Corporate Finance and Governance).

KEY WORDS: Interim reports, Performance, Managers & Entrepreneurs, ASE.

NOTES

1. There is often reported from “life-wins”, where peoples won the “big” money overnight, but in some cases lives have been also lost (“life-runs”).
2. Managerial firms are those ones where the members of the management are not shareholders too. In the contrary case we speak from entrepreneurial firms.
3. These reports are available—during the subscription time—at all commercial banks in the country.
4. Figures are offered as absolute ones (like assets) or as relative ones (like ROA).
5. For the purposes of this survey as entrepreneurs are defined individuals, members of BOD or/and MBD, holding at least 15% of the share capital.
6. Some firms didn’t exactly disclose the number of employed academicians in TEI and AEI separately, but only together as one figure (TEI & AEI).
7. See Annex for explanations and Remarks (Table 10).
8. Variables with values below 0,4 and such ones not used in the analysis have been eliminated.
9. For bs (o and l).

REFERENCES

- Burke, R. (1994), “Women on Corporate Boards of Directors. View of Canadian Chief Executive Officers”, *Women in Management Review*, Vol. 9, No. 5, pp. 3-10
- Castellanos, R. (2001), “Small and medium young enterprises’ strengths and weaknesses: empirical study of a sample of industrial firms”, *Journal of Small Business and Enterprise Development*, Vol. 8, No. 1, pp. 28-36
- Cromie, S. & O’Sullivan, S. (1999), “Women as managers in family firms”, *Women in Management Review*, Vol. 141, No. 3, pp. 76-88
- Donckels, R. and Froehlich, E. (1991), “Are family businesses really different? European experiences from STRATOS”, *Family Business Review*, Vol. 7, pp. 149-160.
- Georgellis, Y. (2000), “Entrepreneurial action, innovation and business performance: the small independent business”, *International Journal of Entrepreneurial Behaviour and Research*, Vol. 7, No. 1, pp. 7-17
- Glancey, K. (1998), “Determinants of growth and profitability in small entrepreneurial firms”, *International Journal of Entrepreneurial Behaviour and Research*, Vol. 4, No. 1, pp. 18-27
- Grondin, D. & Grondin, C. (1994), “The Export Orientation of Canadian Female Entrepreneurs in New Brunswick”, *Women in Management Review*, Vol. 9, No. 5, pp. 20-30
- Hirsch, R. & Bush, C. (1984), “The Woman Entrepreneur: Management Skills and Business Problems”, *Journal of Small Business Management*, Vol. 22, No. 1, pp. 30-37
- Hirsch, R. & Drnovsek, M. (2002), “Entrepreneurship and small business research – a European perspective”, *Journal of Small Business and Enterprise Development*, Vol. 9, No. 2, pp. 172-222
- Holden, R. & Jameson, S. (2002), “Employing graduates in SMEs: towards

- a research agenda", *Journal of Small Business and Enterprise Development*, Vol. 9, No. 3, pp. 271-284
- Jarvis, R., Curran, J., Kitching, J. & Lightfoot, G. (2000), "The use of quantitative and qualitative criteria in the measurement of performance in small firms", *Journal of Small Business and Enterprise Development*, Vol. 7, No. 2, pp. 123-134
- Kiochos, A. & Kyritsis, C. (2001), "A Least risk portfolio of shares of the index FTSE/XAA20, for the years 1997-1998", *Archives of Economic History*, Volume XIII, No1-2, Athens, Greece
- Linehan, M. (2001), "Women International Managers: The European Experience", *Cross Cultural Management*, Vol 8, No. 3/4, pp. 68-84
- Lusch, R., Harvey, M. & Speier, C. (1998), "ROI3: the Building Blocks for Successful Global Organizations in the 21st Century", *European Management Journal*, Vol 16, No. 6, pp. 714-72
- Mavridis, D. G. & Mavridou, M. (2002), "Structural HRM Aspects and Information Disclosures of Listed Corporates on Athens Stock Exchange Market (ASE)", Paper presented at The 8th International Conference of the Economic Society of Thessaloniki, Economic Growth and Competitiveness in Europe, 3-5 October, 2002
- Mavridis, D. G. (2002a), "Disclosed Information Aspects in Greek Interim Reports", *Management Research News*, Vol. 25, No. 11, pp. 1-22
- Mavridis, D. G. (2002b), "Performance Characteristics of Listed Corporates on Athens Stock Exchange Market - ASE", *Archives of Economic History*, Vol XIV, No 1, pp. 137-158
- Mavridis, D. G. (2002c), "Cherchez la Femme – Women as Managers in Greek Corporates: An Empirical Investigation", *Equal Opportunities International*, Vol 21, No 4, pp. 21-37
- Mavridis, D. G. (2003a), "Characteristics of Exporting Corporates Listed on Athens Stock Exchange Market (ASE)", Under publication in *Archives of Economic History*
- Mavridis, D. G. (2003b), "Marital Status Aspects Disclosed in Greek Interims Reports", Under publication
- Orhan, M. & Scott, D. (2001), "Why women enter into entrepreneurship: an explanatory model", *Women in Management Review*, Vol. 16, No. 5, pp. 232-243

- Papalexandris, N. and Bourandas, D., (1991) "Attitudes towards women as managers: the case of Greece", *The International Journal of Human Resource Management*, Vol. 2, No. 2, pp. 133-148
- Phizacklea, A. & Rann, M. (1995), "Ethnic entrepreneurship in comparative perspective", *International Journal of Entrepreneurial Behavior & Research*, Vol. 1, No. 1, pp. 48-58
- Ratnalinga, J. & Romano, C. (1997), "A citation classics analysis of articles in contemporary small enterprise research", *Journal of Business Venturing* 12, pp. 197-212.
- Scott, C. (1996), "Why More Women Are Becoming Entrepreneurs", *Journal of Small Business Management*, Vol. 24, No. 4, pp. 37-44
- Smallbone, D. (1995), "The characteristics and strategies of high growth SMEs", *International Journal of Entrepreneurial Behaviour and Research*, Vol. 1, No. 3, pp. 44-62
- Thornberry, N. (2001), "Corporate Entrepreneurship: Antidote or Oxymoron", *European Management Journal*, Vol. 19, No. 5, pp. 526-533
- Westhead, P. & Cowling, M. (1997), "Performance contrasts between family and non-family unquoted companies in the UK", *International Journal of Entrepreneurial Behavior & Research*, 3 (1), 30-52
- Wright, M., Robbie, K. & Ennew, C. (1997), "Venture Capitalists and Serial Entrepreneurs", *Journal of Business Venturing*, 12, 227-249