



CEOs Characteristics and Company Performance in Retail Industry in Western Europe

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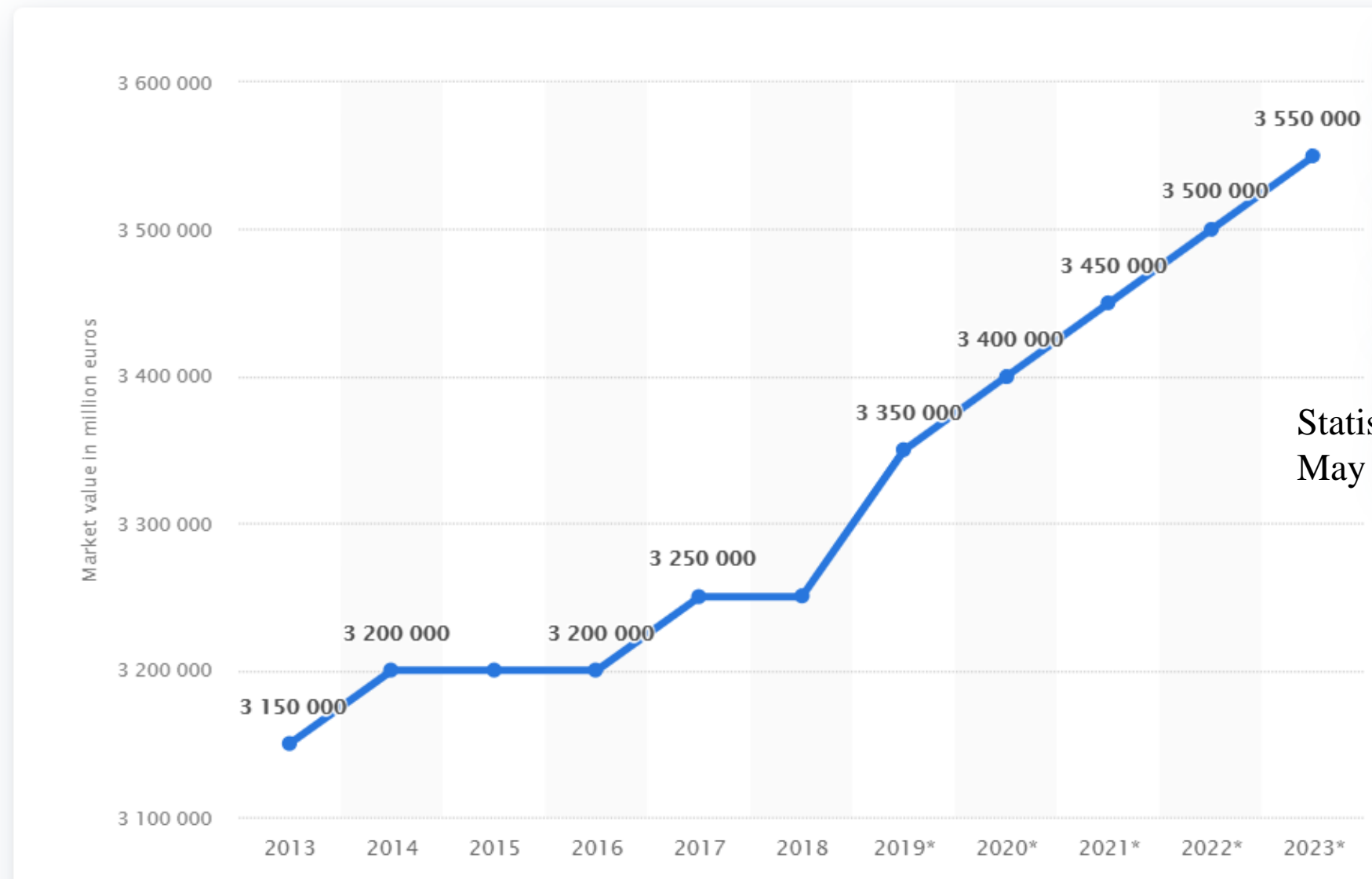
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Retail sales in Europe from 2013 to 2023

(in million euros)



Statista Research Department,
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Purpose: to identify a group of characteristics that may have a larger effect on financial results of retail companies in Western Europe

Theoretical contribution:

Theory of OLC tries to describe why CEO's characteristics can be changed through different stages of OLC. We can approve this idea in the research because there are different significant variables at different stages of OLC in retail industry in Western Europe.

Practice contribution:

The research will allow obtaining additional evidence related to the factors affecting the financial performance of organizations in retail industry in Western Europe. The research might be useful for investors, shareholders, board of directors who appoint CEOs in such companies.



Variable	Authors	Measure of Company Performance	Regression Method	Result
Duality	1. Pascal Nguyen, Nahid Rahman and Ruoyun Zhao 2. Caiyun Liu and Hui Jiang (2020).	1. Tobin's Q 2. Tobin's Q	1. Quantile regression 2. Quantile regression	1. Negative effect for growth stocks 2. Negative effect for growth firms
CEO Compensation	1. Rupinder Kaur and Balwinder Singh (2018)	1. ROA	1. FE model	1. Positive effect
	2. Rachel Merhebia, Kerry Pattendena, Peter L. Swanb, Xianming Zhouc (2006)	2. Potential problem: reverse causality		2. Strong and positive relationship
Tenure	1. Pascal Nguyen, Nahid Rahman and Ruoyun Zhao (2020) 2. Calyun Liu and Hui Jiang (2020) 3. Josep GARCIA-BLONDON, Josep M. ARGILES-BOSCH and Diego RAVENDA (2019) 4. Mohammed W.A. Saleh, Rabee Shurafa, Siti Norwahida Shukeri, Abdulnasr Ibrahim Nour and Zaharaddeen Salisu Maigosh (2020)	1. Tobin's Q 2. Tobin's Q 3. HBR rank 4. ROA, ROE	1. Quantile regression 2. Quantile regression 3. Pairwise correlation 4. RE regression	1. Negative effect for growth stocks 2. Negative effect 3. Positive effect (sample of "best performing CEO") 4. Positive effect
Government Ties	1. Caiyun Liu and Hui Jiang (2020) 2. Mohammed W.A. Saleh, Rabee Shurafa, Siti Norwahida Shukeri, Abdulnasr Ibrahim Nour and Zaharaddeen Salisu Maigosh (2020)	1. Tobin's Q 2. ROA, ROE	1. Quantile regression 2. RE regression	1. Positive effect for value firms and negative effect for growth firms 2. Positive effect
Education level	1. Basmah Maziad ALTUWAIJRI, Lakshmi KALYANARAMAN (2020) 2. Salim Darmadi (2013)	1. ROA, ROE 2. ROA, Tobin's Q	1. OLS regression 2. OLS regression	1. Being high graduate and being graduated from domestic university positively effects financial performance 2. Positive effect of postgraduation degree and degree of top domestic university on firm's performance.
CEO (outsider) former position	1. Eahab Elsaid, Xiaoxin Wang and Wallace N. Davidson III (2011) 2. M. Hamori and B. Koyuncu (2015)	1. Tobin's Q, ROA, Z-score 2. ROA and industry adj-ROS	1. Probit, OLS 2. OLS regression	1. Higher Tobin's Q, but lower industry adj-ROA for Ex CEO 2. Firms with ExCEO tend to have lower post-sucsession performance



Variable	Author	Measure of company performance	Measure of emotional characteristic	Result
CEO Narcissism	Nishant Uppal (2020)	Industry-adj. company performance variance	NPI-16 (Questionnaire)	Positive and statistically significant relationship b/n CEO narcissism and FPV. Moreover, curvilinear relationship. Also, CEO duality and TMT agreements even strengthen this relationship
	Keun-Hyo Yook and Su-Youl Lee (2020)	<ol style="list-style-type: none">ROA&Tobin's Q – CSR-NarcissismCSR is proxied by ESG rating and ratio of So.Inv/Sales	3-item index, initially proposed by Chatterjee and Hambrick (2007)	When using CSR as mediating variable, there is mixed evidence on effect of CEO narcissism and firm value
	Kari Joseph Olsen, Kelsey Kay Dworkis and S. Mark Young (2014)		Chatterjee and Hambrick (2007)	<ol style="list-style-type: none">Narcissism is time invariant and is not influenced by company tendenciesCEO narcissism is positively significant for firm financial performance, even after controlling for structural changes
CEO Overconfidence	<ol style="list-style-type: none">Hong Soon Kim and Soo Cheong Jang (2020)Jiang Luo, Avaniidhar Subranmanyuam and Sheridan Titman (2020)		<ol style="list-style-type: none">Positively effects growth, but negatively affects profitabilityOverconfident CEO behavior can be decreased by high debt, thus leverage is important control variableImportant to measure CEO overconfidence with respect to business cycle	
Humility	V. Petrenko, Federico Aime, Tessa Recendes and Jeffrey A. Chandler (2020)		<ol style="list-style-type: none">Estimation of personal traits based on public video only, can lead to misinterpretation due to third party “way of visionCEO Humility is positively significant for firm performance, but this is rather due to market underestimation of humble CEO=> better to measure firm performance with accounting measures to exclude sucj effect”	

Sample structure

CEO data is collected manually and its availability depends on publicity of CEOs.

The sample consists of listed companies which operate mostly in Apparel, Accessories & Luxury Goods and Food retail, while also including Electronic Equipment & Instruments, Home furnishing Retail and Leisure Products.

Financial data was taken from Bloomberg database, CPI was taken from Eurostat and data on CEO, as already mentioned, was collected from Bloomberg news website, Market Screener, Companies' corporate websites, Wikipedia and more rarely on LinkedIn.

121 listed firms in retail industry in Western Europe for the years 2011-2020

The sample was divided with respect to Life Cycles of the organizations

CEO characteristics are measured by

- Tenure,
- Duality,
- Founder,
- Experience in the industry,
- CEO Business,
- CEO's First year
- Education



Organizational Life Cycle

Stage	Operating CF	Investing CF	Financing CF
Introduction	<0	>0	<0
Growth	>0	<0	>0
Mature	>0	<0	<0
Decline	<0	>0	>0

1. Growth stage: Financing CF > Operating CF and Operating CF > Investing CF
2. Mature stage: Operating CF > Financing CF and Financing CF > Investing CF
3. Mature stage: Operating CF > Investing CF and Investing CF > Financing CF
4. Decline stage: Investing CF > Operating CF and Operating CF > Financing CF

LCO stage	Introductory	Growth	Mature	Decline
Number of firms	101	242	718	28

Dependent variables

- **ROA** –return on assets is taken for years 2012-2020. It follows normality assumption thus there is no need for logarithmic transformation, and it is taken in percentage points.
- **Market Capitalization** – is calculated as $Ln\left(\frac{Market\ Cap_t}{Market\ Cap_{t-1}}\right)$ and are also taken for 2012-2020. This transformation is done for several reasons. Firstly, it fails to follow normality assumption. Secondly, to offset weight of Market Capitalization for larger companies with respect to CEO appointment.



CEOs Characteristics Variables Description

- **Insider employee**- is a dummy variable, being 1 if current CEO was previously employed in this company on other position.
- **Founder**- is a dummy variable equal to 1 if current CEO is its founder.
- **Education** – is dummy variable, equal to 0 if CEO has zero or undergraduate degree, 1 if he has received master's degree and 2 is when CEO has PhD or MBA degree.
- **Past experience** – is a dummy variable, measuring CEO past experience. Dummy is equal to 1 if he was employed in retail but in other subindustry, it is equal to 2 when current CEO was previously employed either in retail in same subindustry or has started his career in this company on a junior position many years ago, automatically meaning that he is experienced in this industry.
- **CEO Business** – reflects number of companies where current CEO is employed as either Chairman or CEO except in sampled companies.
- **CEO tenure** – reflects number of months current CEO is in his position. **CEO switch** – is a dummy variable which reflects the CEO appointment year. Intuitively, the first year of appointment is turbulence year and thus should be reflected in financial performance of the company. This is more applicable for market-based model as it should reflect the way market has incorporated the following news.
- **CEO Duality** – is dummy variable, which is equal to 1 if CEO is also Board Chairman.

Control Variables Description

- **Size** – is taken as $\ln(TA_{t-1})$, as initially distribution exhibited non-normality and in order to offset big differences in companies' size. Total Assets are commonly used as a proxy for size, for example in works of Rupinder Kaur and Balwinder Singh (2018), Caiyun Liu & Hui Jiang (2020)
- **Leverage** – is measured as the ratio of total debt to total equity, indicating the level of risk company experience with respect to capital structure. Leverage is referred as control variable in many of works analyzed in Literature review (Rupinder Kaur, Balwinder Singh (2018),
- **Sales** – is calculated as $\ln\left(\frac{Sales_t}{Sales_{t-1}}\right)$ in order to represent growth of revenue. Sales growth as a control variable is also commonly used, namely in the articles of Maretno A. Harjoto, Hoje Jo (2009), Rupinder Kaur and Balwinder Singh (2018), Mohammed W.A. Saleh (2020).
- **Current Ratio** – is a liquidity ratio, which is calculated as Current Assets to Current Liabilities. Lower Current Ratio than industry average implies higher risk of default, which might also be worse treated by the market. Thus, this paper will include it as a control variable for market-based model.
- **Capital Intensity** – capital intensity, calculated as Capital Expenditures divided by Total Assets, is used as control variable following Maretno A. Harjoto, Hoje Jo (2009). Moreover, according to Ester Taipi and Valbona Ballkoci (2017) capital expenditures are statistically significant and positive for explaining financial performance of the firm, as well as size and leverage.
- **CPI** – consumer price index, macro indicator with respect to firm's Western Europe country. The intuition behind this variable is that country price level is especially important for firms in retail industry as it reflects purchasing power of population. Moreover, it controls for possible country specific effects.

Hypothesis

H1: Nonlinear dependence between CEO tenure and financial performance

H2: CEO switch is negatively correlated with financial performance measured by market indicator

H3: CEO busyness has negative effect for firm's financial performance

H4: CEO experience in the industry positively influence firm's financial performance

H5: CEO Duality negatively influence firm's performance

H6: CEO being an insider is positively correlated with firm's financial performance

H7: On the whole, Education has positive impact on financial performance

H7.1: Master's degree has no effect on financial performance

H7.2: MBA degree has positive effect on financial performance

Methodology

The analysis of panel data will be done via Fixed effect or Random Effect regression.

Moreover, we provide GMM estimation which will take into account possible endogeneity issues and dynamic nature of dependent variable.

- The first step of the analysis, after correcting for normality assumption is checking stationarity assumptions otherwise regression might be spurious and give misleading results. After conducting Augmented Dicker Fuller test and proving stationarity we have distributed variables for accounting-based model and market based.
- We have used lags of dependent control variables for several reasons. Taking lag eliminates multicollinearity as, for example, ROA includes TA as well as proxy for size. Further, it is reasonable to assume that return of current year is earned on the basis of size at the beginning of the year. Moreover taking all independent and dependent variables of the same year might cause reverse causality.

Methodology

- **Accounting-based model**

- $ROA_t = \alpha + \beta_1 Leverage_{t-1} + \beta_2 Size_{t-1} + Cap.Intensity_{t-1} + \beta_3 CPI_t + CEO\ tenure_t + CEO\ tenure^2_t + CEO\ Education_t + CEO\ Experience_t + CEO\ Business_t + CEO\ Insider_t + CEO\ Duality_t + u_i + \varepsilon_{it}$,

- **Market-based mode**

- $MC\ growth_t = \alpha + \beta_1 Leverage_{t-1} + \beta_2 Size_{t-1} + Current\ Ratio_{t-1} + \beta_3 Sales\ Growth_t + CEO\ Switch_t + CEO\ Insider_t + CEO\ Business_t + CEO\ Founder_t + CEO\ Duality_t + u_i + \varepsilon_{it}$,



Random effect panel model

RE for total sample with robust errors		
	Robust	
ROA	Coef.	P>z
CPI***	-1,634	0.000
CapexIntensity	1,853	0.914
Leverage***	-0,091	0.003
Size***	1,482	0.006
CEO Tenure	4,388	0.178
CEOTenure^2	-0,444	0.301
CEO Duality	-0,326	0.855
CEO Experience	-0,934	0.513
CEO Insider	0,8698	0.501
CEO Busyness	-0,621	0.153
CEO Education*	-1,759	0.098
Constant	137,712	0.000



Random Effect model for different LCO stages

	Introductory stage		Growth stage		Mature stage	
ROA	Coef.	P-value	Coef.	P-value	Coef.	P-value
CPI	0,006	0.443	-0,005	0.089	-0,006	0.000
Cap_Intensity	0,293	0.542	0,033	0.814	-0,158	0.129
Leverage	-0,002	0.705	-5.47e-06	0.990	-0,0002	0.063
Size	0,032	0.032	-0,004	0.514	0,002	0.496
CEO Tenure^2	-0,003	0.841	-0,009	0.033	-0,0004	0.881
CEO Tenure	0,031	0.810	0,063	0.032	0,014	0.444
CEO Duality	0,102	0.130	-0,028	0.186	-0,013	0.234
CEO Experience	-0,019	0.561	-0,002	0.895	0,008	0.556
CEO Insider	-0,029	0.306	0,022	0.079	0,0051	0.606
CEO Education	0,027	0.362	-0,003	0.816	-0,019	0.090
CEO Busyness	0,001	0.938	0,004	0.411	-0,001	0.797
Constant	-1,401	0.140	0,465	0.147	0,52	0.000



Also, we have introduced cross product of *Duality and Insider*, named Dual*Ins. This was done as some nonlinear dependence was suspected. The logic behind this variable is that CEO insider is already for some time with a company, and thus he has certain view for company's strategy and will not be eager to account for outside opinions, which might prevent growth of the company. Being Founder, CEO and Chairman leads to concentration of control in one hand, thus is likely to have negative effect on company.

Random Effect model with cross-product of Duality and Insider:

	Mature stage	
Variable	Coefficient	p-value
CPI	-0,562	0.000
CapexIntensity	-0,162	0.122
Leverage	-0,0003	0.008
Dual*Ins	-0,011	0.090
Size	0,0014	0.627
Tenure^2	0,0001	0.949
Tenure	0,0112	0.523
EXPERIENCE	0,008	0.554
Education	-0,019	0.091
Busyness	-0,001	0.855
Constant	0,545	0.000



Random Effect model for Market capitalization as dependent variable

Growth Stage			Mature Stage		
MC growth	Coef.	P-value	MC growth	Coef.	P-value
Sales growth	0,367	0.040	Sales growth	0,406	0.136
CurrRatio	-0,033	0.086	CurrRatio	-0,009	0.458
Leverage	0,002	0.452	Leverage	-0,001	0.014
Size	-0,037	0.209	Size	-0,017	0.042
CEO switch	0,105	0.641	CEO switch	-0,169	0.001
DUALITY	0,039	0.704	DUALITY	0,021	0.534
Insider_employee	-0,026	0.799	Insider_employee	-0,069	0.120
Founder	0,053	0.613	Founder	-0,096	0.039
EXPERIENCE	-0,173	0.025	EXPERIENCE	-0,024	0.263
Education	-0,063	0.234	Education	0,006	0.770
Busyness	-0,043	0.048	Busyness	-0,003	0.676
Constant	1,111	0.064	Constant	0,512	0.008



After suspecting endogeneity issues, we have applied GMM methods. Lag of Market Cap growth happened to be insignificant and thus there is no reason to use GMM. However, in Accounting-based model lag of dependent variable happened to be significant at 1% significance level.

Difference-GMM model Blundell-Bond

Mature stage companies			Growth stage companies		
	coefficient	p-value		coefficient	p-value
ROA			ROA		
L1.	0,578	0.000	L1.	0,62	0.000
CPI	-0,312	0.000	CPI	0,037	0.855
CapexIntensity	-0,036	0.595	CapexIntensity	0,115	0.253
Leverage	-0,0001	0.037	Leverage	-0,0003	0.375
Size	0,0013	0.368	Size	-0,0014	0.692
Tenure^2	-0,002	0.218	Tenure^2	-0,0056	0.054
Tenure	0,018	0.219	Tenure	0,0415	0.049
Duality	-0,006	0.385	Duality	0,0035	0.802
Insider	0,002	0.637	Insider	0,0015	0.818
Experience	-0,002	0.587	Experience	-0,004	0.630
Education	-0,007	0.085	Education	0,003	0.731
Busyness	-0,001	0.353	Busyness	0,001	0.731
Constant	0,287	0.000	Constant	-0,061	0.783



Results for ROA

Variable	Introduction	Growth	Mature
CPI			negative
Leverage			negative
Size	positive		
CEO Tenure ²		negative	
CEO Tenure		positive	
CEO Insider		positive	
CEO Education			negative
Constant			positive



Results for MC growth

Variable	Growth	Mature
Sales growth	positive	
CurrRatio	negative	
Leverage		negative
Size		negative
CEO switch		negative
Founder		negative
Experience	negative	
Business	negative	
Constant	positive	positive

Conclusion

H1: Nonlinear dependence between CEO tenure and financial performance

H2: CEO switch is negatively correlated with financial performance measured by market indicator

H3: CEO business has negative effect for firm's financial performance

H4: CEO experience in the industry positively influence firm's financial performance

H5: CEO Duality negatively influence firm's performance

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H7: On the whole, Education has positive impact on financial performance

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- If CEO tenure exceeds 7,5 years, probability of getting high ROA starts to decrease.
- Negative significance of education could be explained due to industry specific issues. Retail is not very innovative industry and is rather oriented on personal skills, which are highly important for managers.
- CEO insider has positive effect on Firms financial performance for growth stage companies explained by the fact that at growth stage company needs a person as head who knows the company, weaknesses and strengths which will help to gain market share, while for mature stage there is also a need for outside knowledge and practices which might benefit the company.



Thank you for your attention!

Agency Theory Vs Stewardship Theory

Behavioral Differences

Agency Theory

- Manager acts as agents
- Governance approach is materialistic
- Behavior pattern is individualistic, opportunistic & self-serving
- Managers are motivated by their own objectives
- Interests of the managers and principals differ
- The role of the management is to monitor and control
- Owners' attitude is to avoid risks
- Principal-Manager relationship is based on control

Stewardship Theory

- Managers act as stewards
- Governance approach is sociological & psychological
- Behavior pattern is collectivistic, pro-organizational & trustworthy
- Managers are motivated by the principal's objectives
- Interests of the managers and principals converge
- The role of the management is to facilitate and empower
- Owners' attitude is to take risks
- Principal-Manager relationship is based on trust

Correlation matrix

	ROA	MULTIPLECEO	MCgrowth	MASTERS	INSIDER	FinlLev	EXPERIENCE	DUALITY	CurrRatio	CapexInten~y	CPI	CEOswitch	Salesgrowth	Size	CEOtenure
ROA	1	-0,0325	-0,0362	-0,0556	0,024	-0,0418	0,0079	0,0251	0,0806	-0,1401	-0,0827	-0,0699	0,1538	0,1471	0,0383
MULTIPLECEO	-0,0325	1	-0,0176	0,0378	0,1336	0,1932	-0,1333	0,3812	-0,0338	0,0676	-0,0069	-0,0864	-0,0484	0,0464	0,1641
MCgrowth	-0,0362	-0,0176	1	0,0133	0,0425	-0,0092	-0,0474	-0,0233	-0,0034	-0,256	-0,0515	-0,0159	0,193	-0,028	-0,0173
MASTERS	-0,0556	0,0378	0,0133	1	0,0174	-0,0232	-0,0905	-0,0497	-0,0826	0,1421	-0,1177	-0,001	0,0044	0,1241	-0,0472
INSIDER	0,024	0,1336	0,0425	0,0174	1	-0,137	-0,1373	0,2725	-0,0751	-0,0715	-0,0515	-0,111	0,0519	-0,1431	0,3093
FinlLev	-0,0418	0,1932	-0,0092	-0,0232	-0,137	1	0,0006	0,1686	-0,1139	0,04	0,0096	-0,0345	-0,0325	0,2928	-0,0015
EXPERIENCE	0,0079	-0,1333	-0,0474	-0,0905	-0,1373	0,0006	1	-0,0185	-0,0157	-0,0058	0,0348	0,0939	0,0228	0,1815	-0,2731
DUALITY	0,0251	0,3812	-0,0233	-0,0497	0,2725	0,1686	-0,0185	1	0,0117	0,0343	-0,0163	-0,1073	-0,0597	0,0632	0,2795
CurrRatio	0,0806	-0,0338	-0,0034	-0,0826	-0,0751	-0,1139	-0,0157	0,0117	1	0,1188	-0,0189	-0,0242	0,0635	-0,2257	0,0595
CapexInten~y	-0,1401	0,0676	-0,256	0,1421	-0,0715	0,04	-0,0058	0,0343	0,1188	1	0,015	0,0126	-0,0306	-0,1042	0,0468
CPI	-0,0827	-0,0069	-0,0515	-0,1177	-0,0515	0,0096	0,0348	-0,0163	-0,0189	0,015	1	0,0076	-0,1278	0,0502	-0,0079
CEOswitch	-0,0699	-0,0864	-0,0159	-0,001	-0,111	-0,0345	0,0939	-0,1073	-0,0242	0,0126	0,0076	1	0,0347	0,0184	-0,2891
Salesgrowth	0,1538	-0,0484	0,193	0,0044	0,0519	-0,0325	0,0228	-0,0597	0,0635	-0,0306	-0,1278	0,0347	1	-0,0235	-0,0476
Size	0,1471	0,0464	-0,028	0,1241	-0,1431	0,2928	0,1815	0,0632	-0,2257	-0,1042	0,0502	0,0184	-0,0235	1	-0,1032
CEOtenure	0,0383	0,1641	-0,0173	-0,0472	0,3093	-0,0015	-0,2731	0,2795	0,0595	0,0468	-0,0079	-0,2891	-0,0476	-0,1032	1