

A Work Project, presented as part of the requirements for the Award of a Master Degree in Management from the NOVA – School of Business and Economics.

Leader's and CEO's background and its impact on performance:

Evidence from the world of Football

TOMÁS MELO DE CARVALO AMARO MONTEIRO - 26285

A Project carried out on the Master in Management Program, under the supervision of:

Professor Francisco Queiró

January 2020

Abstract

This paper tries to measure to what extent does CEO/Presidents' background and characteristics in Football affect the performance of their Clubs. To do so, a sample covering the last 50 years' presidents of 28 clubs from the 5 best leagues in Europe was gathered, in a total of 203 presidents and 1428 observations. Through four time/club fixed effects regressions, the impact of variables such as Tenure, Sports Industry Experience, Academic Degrees and Functional Backgrounds, on both Clubs' Titles and Classifications, was measured and the results discussed.

Keywords

Leaders, Background, Performance, Football

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences

Introduction

The origin of contemporary Football goes back to a mid-19th century England, when the often disorganised, violent, raw and first versions of the game were redecorated and smoothed down to create the modern day association of football, culminating in the first set of rules being established by the year of 1863. Little did these first movers know that their game would eventually become the world's biggest and most popular sport.

More than one and a half century later, football is now a 25,5-Billion-euro business only in Europe (Deloitte), a similar value to the sum of the four biggest American sports - Basketball, American Football, Baseball and Hockey – combined with the other major global sports - Tennis, Golf and Formula 1 (Zygband, Collignon, Sultan, Santander, & Valensi 2011). Football has become a huge business, not only for what happens inside the pitch, but also for everything that surrounds the game. From sponsorships, commercial agreements, merchandising, world tours to broadcast revenues, everything is a source of money, and it is growing at an impressive non-stopping pace. According with 2019 Deloitte's Football Money League Report - an annual report on the financials of football's elite – the top three clubs with the most revenues accounted for a combined 2.1 Bn euros, just 5% short of the total earned by all the top-20 clubs of 1999/2000 (the same report tells us that 43% of revenues come from broadcasting, 40% from commercial and 13% from matchday earnings).

Furthermore, clubs keep spending more and more on players. Reuters quoted the Financial Analyst of Deloitte's Sports Business Group saying the total amount spent this summer on transfers by Europe's Big Five Leagues (England, Spain, Germany, Italy, Russia) “has totalled a record 5.5 Bn Euros”, surpassing by 817 Million Euros the previous year's value, which was already a record.

In addition, the technological advance and the emergence of a completely digital era and generation, brought a different challenge and opportunity to clubs. According to Business Insider, top clubs have started to act as digital media companies, creating content and monetising it, which according to Craig Howe, founder and CEO of Rebel Ventures, is a fitting strategy: “Sports lends itself perfectly to content creation — it’s a genre that people are passionate about watching, about expressing their opinions, and most importantly, about sharing.”. One example of this is Manchester City, one of the five most valuable clubs in the world. Forbes’ study on City’s digital strategy acknowledge this digital effort, saying the club recognises its “national and global armchair of followers” and makes a strong effort to connect with every fan regardless of their location, through a digital membership platform, where every fan have access to a “personalised City-centric content, like videos, images and games.”

Also, these structural changes in Football Industry have changed the way investors see this world on investing terms. In a recent past, as Financial Times argues, football clubs were known to be “notoriously poor investments”, where one would eventually spend its fortune, without any reliable source of profits. However, in the past few years, many are the clubs whose shares have outperformed the wider stock market (see Graph 1), helped by the enormous growth of broadcast revenues. As an example, Juventus’ shares, Italy’s most decorated club controlled by the Agnelli Family, rose almost “fourfold over the past five years” and Arsenal’s value has doubled when analysing the same period.

All things considered, football clubs are being seen ever more as businesses / companies, considering the way they operate. This means that, as in companies, management is always under scrutiny, and if this means augmented pressure on top management members, this means an even bigger responsibility for their leader (on companies’ case, the CEO), which ultimately makes the crucial decisions on companies’ future. (Calori et al., 1994). In a football club, this main leader can come in the form of clubs’ president, chairman or even CEO, and as in

companies, many studies argue that its background influences the firm, in this case, the club, performance.

This thesis tries to understand **to which measure does the background of a football club's Leader influence the club's performance** (titles and classification). The background was analysed in three different ways: Leaders' experience on sports industry (Sports Related), its main activity before getting to a leadership position (Working/Functional Background), and its academic degree if existent (Educational Background). Other than that, Leader's Tenure was also subject to analysis. To fulfil the purpose of study, a statistical test - with data from the past 50 years regarding 28 European clubs and its Presidents - was performed.

Literature Review

Leader's Importance

This thesis on Football Clubs' leaders relies on the basis that Leaders, do, in fact, have an impact on company's overall performance. Before getting deeper on Leaders' background, it must exist some evidence that the Leader itself, as a job position, does have a significant impact on firm's performance. Mackey (2008) measured the contribution of the CEO to overall performance, having in account a sample of 92 CEOs at 51 companies, from 1992-2002. This study found that CEOs account for 29.2% of the variance in company profitability and 12.7% on business-segment profitability, therefore concluding that CEOs have a significant impact on overall performance. On a same note, a deeper analysis was made by Hambrick and Quigley (2014). The sample was of 830 CEOs at 315 companies between 1992 and 2011, with Industry and Firm-Specific controls and the result was that CEOs are responsible for 35.5% of firm outcomes. On the other hand, Thomas (1988) measured 12 British retail companies' data from 1965 to 1984 on CEOs impact over unexplained variance in profit and sales, controlling for

economic, industry and firm-specific factors. It was found that CEOs are responsible for 3.9% to 7.0% of firm performance, thus, stating that the Leader's impact on firm's performance was not significant.

Educational and Functional Background

According to Certo (2003), one key aspect to a better and more effective management, is the attainment of some level of education. Education is considered a vital tool on enabling managers to reach for optimum decisions. For Sitthipongpanich and Polsiri (2015), top management with higher levels of education show greater cognitive complexity, allowing for an easier learning and acceptance of new ideas. It also suggests that higher-educated managers are skilled enough to process and deliver information in a way that impacts positively firms' operations. There is also some research stating that the education of one firm's CEO can positively affect corporate decision process and eliminate some adverse effects of "managerial optimism" (Ben Mohamed et al., 2012). Moreover, it is also stated in this 2012 study that irrationality among corporate decision-making process can be smoothed by having a managerial education. Likewise, Kokeno and Muturi (2016) examined companies listed in the Nairobi Securities Exchange in order to test the impact of CEO's characteristics on firm performance. The result showed us that there is a significant positive effect of CEOs age and education on firm performance, just as Rajagopalan and Datta (1996), who analysed data from US manufacturing sector to examine the relationships between CEO characteristics and industry conditions, concluding that CEO's educational level is positively correlated with company's performance.

Lindorff and Jonson (2013) found, as well, that CEO business education does not influence firm performance, stating that business education "is only over-emphasized". The study used, however, the Master of Business Administration (MBA) as the only measure of CEO education.

Also, using data from listed firms in the Stockholm stock exchange (mainly from manufacturing and IT sectors), Ayaba (2012) studied this impact of education on firm performance. The findings showed that educational level and background have a small impact in firm performance, showing us that there was no evidence that companies whose CEOs have a higher level of education had a better firm performance over companies led by CEOs with undergraduate degrees.

Another detailed study on Educational background was made by Koyuncu et al. (2010), where the effects on firm performance were examined, from a sample of 437 CEOs of firms from S&P 500 from 1992 to 2005. It was found that firms led by CEO with a background in operation related issues, as engineering, had better performances than companies led by CEOs with other backgrounds. Furthermore, it was also found that companies having lower performance levels had a higher chance to hire a CEO with an operational background instead of one with a finance, law or marketing background. Koyuncu (2010) also stated that that trends of preference for CEO's background "have tremendously varied throughout the years", saying that these changes occur influenced by the environment in which the firm operates. Previously, March et al. (1962) had said that firms tackle their problems under direct influence of the environment in which they operate, arguing they are "political coalitions", that eventually at some point get obsolete to answer the new and different business challenges they are facing. This goes in the same way as Burkart et al. (2003) and Bhattacharya et al. (2004) argument that there is a strong relationship between CEOs educational background and firms' characteristics and moment. This was a relation that had been discussed by Fligstein (1987), who stated that a CEO's background was an indicator of firm's strategy and path to take, and that firms' strategies are always changing and have indeed changed along the years. Firms now act much more as a group of networks when compared to the single units they were some years ago, and therefore their leadership needs to be adaptive and ready to change according with different strategies.

Since the beginning of the last century, answers on what the most effective background for a Firm's leader must be have changed over the years. According with Priest et al (1985), in the first half of the last century, CEOs with an operations background were preferred to business or law. However, starting in 1955, CEOs with a legal background started to rise. This preference for a CEO with a legal background can be, according to Priest at al. (1985) and Perrow (1970), explained by the organizational theory. This is, given the growing problems for companies regarding legal issues, organizations can be said to be "entangled in a complex web of law", that many believe it can only be properly managed by people with experience and knowledge in the area.

Later on, in the mid-60s and 70s, backgrounds in business, more specifically, in finance, started to gain some popularity, and this would become a period marked by the emergence of large mergers and acquisitions (Flagstein, 1987, 1990). Ocasio (1999) refers to this this dominance period as the one when CEOs started to use their financial skills and tools not only for the already mentioned mergers and acquisitions but also for the enhancement of their companies' short-term profitability. Ocasio also states that CEOs with educational background in finance later lost some ground to CEOs with technical and operations background, such as engineering, precisely by failing to change as the environment changed.

Other than the Education a firm's CEO has, what has also caught the eye of many researches when analysing a firm's performance is the CEO's functional background, meaning the previous working experiences a CEO has. According with studies as the ones from Dearborn and Simon (1958), Walsh (1988), Westphal and Fredrickson (2001), top management functional background has a direct influence on how problems are defined, how strategies are thought and put into practice and how the information is processed. CEO's functional background is, therefore, a mirror of companies' objectives and direction, reflecting companies' culture and values (Smith and White, 1987; Koyuncu et al., 2010).

Dearborn and Simon (1958) suggest that leaders with work experience on a particular area tend to share similar views on their firms' problems and on their poor performances' causes, showing, therefore, a dependence relating their functional backgrounds to the way they perceive and face firms' problems. Having the same opinion, Waller et al. (1995) demonstrates that top managers with an operations functional background are more sensitive to changes and issues on company's operational effectiveness and efficiency, showing us that CEOs tend to pay more attention to problems and changes in anyway related to their own background.

This also fits into the discussion on how the similarity of the experience context affects performance. This is, how does a CEO benefits from coming from the same or similar industry or coming from a similar company. (Finkelstein & Haleblian, 2002) states that if the CEO's experience was obtained in similar contexts it can be helpful since it allows the leader to speed up its decision process. This same research from 2002 divides the similarity of contexts in two: similarity in size, which is helpful as it implies it exists a similar degree of managerial complexity in the new organization; and similarity of industry. Schnatterly & Johnson (2008) and Zhang & Rajagopalan (2003) state that by having a larger knowledge on the competitive environment and by possessing industry-specific skills, these CEOs have a less steep learning curve in their new job, showing us that leaders from homogeneous industries have useful transferable skills (Parrino, 1997; Custodio et al., 2013).

Tenure

Another commonly discussed variable, that is said to influence firm's performance is a Leader's tenure. Some defend that tenure has a negative impact on firm's performance, and this is commonly justified with two main arguments. The first is that, as their tenure in leadership increases, CEOs start to think more on their legacy and on what they have already achieved, which, according to Matta & Beamish (2008), leads to a smaller willingness to pursue risky and new initiatives that can threaten what they already achieved. Other than that, as time goes by,

CEOs get more power of choice regarding their subordinates (Miller, 1991), which normally ends up with CEOs choosing people with similar views to their own (Acharya & Pollock, 2013). This eventually leads to an increased autonomy and decreased pressure, as there less and less voices of opposition which Miller (1991) believes declines the willingness to take new strategic actions. On the other hand, Alutto and Hrebiniak (1975) stated a positive relationship between longer-tenured CEOs and commitment towards their results, with this commitment leading to higher incentives to perform well. Accordingly, Adams, Almeida and Ferreira (2005) stated that CEOs with higher tenure normally have an increasing power in the company, and that this power these CEOs prefer higher returns instead of more certain projects with lower returns. Additionally, Wang, Holmes, Oh, and Zhu (2016) conducted a comprehensive review of the research literature on CEO attributes and firm performance, analysing 308 studies, as of 2015, where tenure was one of the analysed variables, among others, and it was found a positive relation with firm performance.

Data & Methodology

Hypothesis

After going through the related literature, in order to continue this research, the following three hypotheses were elaborated:

H1: Having an academic degree influences both titles and classification positively

H2: Having been Sports Related influences both titles and classification positively

H3: As Tenure increases, so does the performance on both titles and classification

Furthermore, regarding the analysis of both Academic and Functional background, as it was not found any relevant literature combining the two, instead of having a specific hypothesis concerning one type of Profile (combination of Academic Degree and Functional Background), a discussion of different profiles, its results and interpretations will also be performed.

Data Collection

In this study, in order to follow a complete analysis with the most reliable data possible while maintaining some heterogeneity, the sample consisted on 28 clubs, from 6 different countries, accounting for 203 presidents, in a total of 1428 observations. The data collected comprised information on presidents' background (Tenure, Academic Degree if any, Functional Experience, and Sports Background) and clubs' performance (both Classification and Titles) in the period from 1969 to 2019. The clubs chosen were the five with the best overall points performance in an all-time league table from the best five leagues according to UEFA's League Coefficient in the beginning of the 2019-2020 season – this meant by order, Real Madrid CF, FC Barcelona, Atletico de Madrid, Athletic Bilbao and Valencia CF in La Liga (Spain); Manchester United, Arsenal, Chelsea, Liverpool and Tottenham in the Premier League (England); Juventus, AC Milan, Inter Milan, AS Roma and Napoli in Serie A (Italy); Bayern Munich, Borussia Dortmund, Hamburger SV, Stuttgart and Werder Bremen in Bundesliga (Germany); Olympique Marseille, AS Monaco, Olympique Lyonnais, Bordeaux and Saint-Étienne in Ligue 1 (France). Additionally, were also analysed the three biggest Portuguese clubs with the best performance in the league – SL Benfica, FC Porto and Sporting CP. The data was retrieved from the most various sources including Clubs' websites and historical books, Football Associations' public information and LinkedIn.

Variable Description

In terms of variables, the dependent variables must be a measure of football clubs' performance, sport-wise, as this study aims to see if there is any change in these clubs' performance having in account different types of background. On the other hand, as independent variables, we have different measures and characteristics of a president's background, that are thought to have a possible effect on the above-mentioned performance.

Dependent Variables

As dependent variables, in order to assess a club's performance on the pitch, it was decided to measure each year's classification on the domestic (club's country) league competition and each year's official titles.

Classification: Quantitative variable, meaning a club's ranking on the domestic league competition. This variable has the minimum value of 1, being the best performance result, and a maximum result subject to the number of teams present in the league, being this number the worst performance result.

Titles: Quantitative variable that presents the number of official (UEFA recognised) titles won by that team in that specific year. It has a minimum value of 0 and no theoretical maximum value, being usually under the value of 6, which is normally the maximum number of official competitions a European club can participate in.

Independent Variables

Concerning independent variables, based on the analysis of the already stated literature and on the fact that it is very difficult to characterize a CEO's or President's background in only one variable (as many other aspects matter to shape one's capabilities and influence), it was decided

to divide the background into different categories to be analysed. Firstly, relative to a president's education and prior job, one binary variable (ADNone) and three qualitative were created. Additionally, a binary variable of sports experience and presidents' tenure in clubs' leadership was also analysed.

ADNone: Binary variable (0 or 1) that aims to analyse differences between presidents with and without an academic degree. If the value presented is 0 it means that the leader does or did not have any kind of academic degree, as if the value is 1, they have at least taken one academic degree.

AD: Qualitative variable, describing the area of each presidents' first academic degree. The degrees were allocated to 10 different areas: Business (which includes relatable areas such as Finance, Economics, Marketing, Accounting), Law, Engineering, Medicine, Journalism, Politics, Cinema, Winegrowing, Science and Culinary. In order to statistically study this variable, there were created Dummy variables for each group with the name, for example ADBusiness, in which, following this same example, having an academic degree in Business corresponds to the value 1 while having any other academic degree corresponds to 0 (This applies to all respective academic degrees' dummies).

Background: As the previous one, this is also a qualitative variable, and therefore, in this case, Dummy variables for each background were created and the same logic was used. However, in this case what is being analysed is the prior area of work before reaching the club's leadership. This variable divided itself in 12 dummy variables, for each background: Business, Law, Sports, Medicine, Engineering, Journalism, Politics, Cinema, Culinary, Military, Diplomacy and Painting.

AD & Background (Profiles): In order to get a more truthful analysis of the background, it was decided to create a variable merging the AD and Background from each president in pairs.

This is, if one had an Academic Degree in Law and its prior job was in Business, it would be attributed a value of 1 in a Dummy variable called Business&Law (this applies for other combinations of AD and Backgrounds). This pairing was made since by analysing both ADs and Backgrounds separately, unclear results could be obtained in Backgrounds in which an AD in the same area is needed. For example, one could get positive correlations for a Background in Law but a negative correlation for having an AD in Law, however, one can only have a background in Law if holding a Law degree. This means, every combination, every profile, have their own effect and own influence on Clubs' performance (the positive effect of a certain degree is dependent of what their functional background is). Therefore, by analysing them as pairs we can measure this effect, that we couldn't when analysing them separately.

Sports Related: Binary variable, of 1 or 0 (yes or no) that gives us if Club leaders had already any previous experience in the Sports world before getting into their current position. This goes from having played professionally any kind of sports to having been a participant part in any previous board or management team of a Sports club.

Tenure: Quantitative variable that reflects the number of years a President had been in charge of the same football club, this is, the number of years one has been in the same job position, in this case, the position of President/CEO of a football club.

Methodology

In order to analyse all the obtained data in the best way, the type of regressions used in this study were Time and Club Fixed Effects regressions. By including fixed effects (group dummies), there is a control for the average differences across Clubs in any observable or unobservable predictors, such as differences in quality of the players, investment, club size, etc. This is, fixing by club, we are controlling the fact that different clubs have different expectations and that a good classification in one club may be a bad classification in another club. The fixed

effect coefficients soak up all the across-group action. What is left over is the within-group action, which is what one wants, reducing the threat of omitted variable bias. Other than that, to control for variables that are constant across entities but vary over time, time was also fixed. The remaining variation can then be used to 'identify' the causal relationships we are interested in to study our hypothesis. Therefore, fixed variables were Club (each club was given a code from 1 to 28) and Years (from 1969 to 2019, for each club). The regressions were developed in Stata 13 and so the data had to be organized in a Panel Data, also known as longitudinal or cross-sectional time-series data, which is a dataset in which the behaviour of entities are observed across (See Table 1 for an example). Regarding the profiles, the combinations of AD's and Functional Background, the eight with the biggest number of observations were selected. These eight profiles account for 1180 of the total number of observations, 1428, meaning 83% of the total sample, and stand by the following order: BusinessBusiness (413 observations); BusinessNone (314), LawLaw (137), SportsNone (127), PoliticsLaw (55), MedicineMedicine (53), BusinessEngineering (43), Business Law (38).

Assumptions

In a fixed effect regression

$$Y_{it} = \alpha + \beta_1 X_{it} + \varepsilon_{it} \quad i = 1, \dots, n \quad t = 1, \dots, T$$

it is assumed that:

1. The error term ε_{it} has conditional mean zero, that is, $E(\varepsilon_{it} | X_{i1}, X_{i2}, \dots, X_{iT})$
2. $(X_{i1}, X_{i2}, \dots, X_{iT}, \varepsilon_{i1}, \dots, \varepsilon_{iT})$, $i = 1, \dots, n$ are i.i.d draws from their joint distribution
3. Large outliers are unlikely, i.e., $(X_{it}, \varepsilon_{it})$ have nonzero finite fourth moments
4. There is no perfect multicollinearity

Regression Analysis

Bearing in mind our hypothesis, the first two regressions (one for each different dependent variables explaining Clubs' Performance) analysed if there is any influence in Performance by not having an Academic Degree. Other than that Tenure and Industry relation was also intended to be measured. The other two regressions aimed to understand the impact of a President's profile as a whole (both academic degree and functional background) in both titles and classification, and by doing that, understanding if there is a more suitable Background a president should have.

The estimated model in this paper follows the following regressions:

Regression 1:

$$Titles_{it} = \alpha + \beta_1 Tenure_{it} + \beta_2 SportsRelated_{it} + \beta_3 ADNone_{it} + \varepsilon_i$$

Regression 2:

$$Classification_{it} = \alpha + \beta_1 Tenure_{it} + \beta_2 SportsRelated_{it} + \beta_3 ADNone_{it} + \varepsilon_i$$

where $Titles_{it}$ is the dependant variable in the first regression while $Classification_{it}$ is the dependant variable in the second one. Regarding the explanatory variables, we will consider both Presidents' experience and if they held or not an academic degree by the time they were Presidents. Considering experience, $Tenure_{it}$ is the number of years the President is in that job position and $SportsRelated_{it}$ is to determine whether a President had already been related to the Sports Industry or not. Moreover, $ADNone_{it}$ indicates if one has or does not have an academic degree, while ε_i is the error term.

Regression 3:

$$\begin{aligned}
 Titles_{it} = & \alpha + \beta_1 Tenure_{it} + \beta_2 SportsRelated_{it} + \beta_3 BusinessNone_{it} \\
 & + \beta_4 BusinessBusiness_{it} + \beta_5 BusinessLaw_{it} + \beta_6 SportsNone_{it} \\
 & + \beta_7 PoliticsLaw_{it} + \beta_8 LawLaw_{it} + \beta_9 MedicineMedicine_{it} \\
 & + \beta_{10} BusinessEngineering_{it} + \varepsilon_i
 \end{aligned}$$

Regression 4:

$$\begin{aligned}
 Classification_{it} \\
 = & \alpha + \beta_1 Tenure_{it} + \beta_2 SportsRelated_{it} + \beta_3 BusinessNone_{it} \\
 & + \beta_4 BusinessBusiness_{it} + \beta_5 BusinessLaw_{it} + \beta_6 SportsNone_{it} \\
 & + \beta_7 PoliticsLaw_{it} + \beta_8 LawLaw_{it} + \beta_9 MedicineMedicine_{it} \\
 & + \beta_{10} BusinessEngineering_{it} + \varepsilon_i
 \end{aligned}$$

where $Titles_{it}$ is the dependant variable in the first regression while $Classification_{it}$ is the dependant variable in the second one. Concerning the explanatory variables, we will now consider the eight more common Pairs of Functional Background and Academic Degree and also Tenure and SportsRelated as controls. Having in mind the Pairs, $BusinessNone_{it}$ is for Presidents with no Academic Degree but with a Business Background. The same logic applies to $\beta_4 BusinessBusiness_{it}$, $\beta_5 BusinessLaw_{it}$, $\beta_6 SportsNone_{it}$, $\beta_7 PoliticsLaw_{it}$, $\beta_8 LawLaw_{it}$, $\beta_9 MedicineMedicine_{it}$, $\beta_{10} BusinessEngineering_{it}$ where, for example, $BusinessLaw$ means an Academic Degree in Law and a Prior Job Experience in Business.

Discussion

In this section, the four above-mentioned regressions are run to analyse the different types of effects that different types of profiles have on performance. The coefficients that arise for each variable give us the type of relations with the dependent variable in study, in comparative terms to the omitted variable. Besides the coefficient analysis, t-tests are also taken into account in order to measure each correlation's significance. The level of significance can be divided in

three types: the 10-percent level (p-value under 0.1); 5-percent level (p-value under 0.05) and 1-percent level (p-value under 0.01), the most significant level.

Table 1: Regression 1

Titles	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Tenure	.0211318	.0033696	6.27	0.000	.0145218	.0277418
SportsRela~d	.1652463	.051296	3.22	0.001	.0646208	.2658718
ADNone	-.0930788	.0501117	-1.86	0.063	-.1913811	.0052234
_cons	.3555366	.0380682	9.34	0.000	.2808596	.4302137

After running the regressions on Stata, some interesting results could be seen. In the first regression, the effect of Tenure, of Sports industry relation and of not having an Academic Degree on Clubs' Titles was analysed. Tenure had a positive coefficient of 0.021 with a p-value of 0.000. This means that, with a 99% confidence interval, there is a significant relation between these variables. The bigger the number of years a president is his job position, the bigger the number of Titles the club wins. Another interesting result can be found when looking at SportsRelated variable. With a p-value of 0.001, we can say that there is a positive and significant relation of 0.165 between the two variables, which tells us that, if one president had already had any kind of experience in Sports Industry, he most likely wins more Titles than the ones without any industry experience. Finally, with a 90% confidence interval, we can acknowledge that a president without any academic degree wins less titles than the ones holding an academic degree, given the negative coefficient between titles and ADNone (- 0.093 with a p-value of 0.063).

Table 2: Regression 2

Classifica~n	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Tenure	-.1130968	.0174323	-6.49	0.000	-.1472932	-.0789004
SportsRela~d	-.6551624	.2653776	-2.47	0.014	-1.175744	-.1345807
ADNone	.8270461	.2592506	3.19	0.001	.3184837	1.335609
_cons	6.03355	.1969443	30.64	0.000	5.647211	6.419888

Concerning our second regression, in which the variable of performance studied is the Classification, the results were in line with the ones from regression 1. In this case, both Tenure and SportsRelated had a negative coefficient with Classification (-0.113 and -0.655 respectively), despite having different levels of significance, Tenure was significant at a 1-percent level (p-value of 0.000) and SportsRelated at a 5-percent level (p-value of 0.014), meaning that having a higher level of Tenure is significantly correlated to better results in terms of classification, which in terms of data means lower values of classification. The same applies to SportsRelated, Presidents with a previous experience in Sports Industry showed better results in their national league competition. Additionally, ADNone results were also consonant with the ones presented in regression 1. With a positive a positive correlation of 0.827 and 1-percent level of significance, we can see that clubs whose President does not hold an Academic Degree show higher values in Classification, therefore, worst performances in this parameter.

Table 3: Regression 3

Titles	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Tenure	.0193754	.0034405	5.63	0.000	.0126262	.0261245
SportsRela~d	.1760022	.0550217	3.20	0.001	.0680677	.2839367
BusinessNone	-.1020249	.0728684	-1.40	0.162	-.2449688	.040919
BusinessBu~s	-.0825321	.068913	-1.20	0.231	-.2177168	.0526525
BusinessLaw	-.060282	.1416347	-0.43	0.670	-.3381228	.2175589
SportsNone	-.1247782	.099036	-1.26	0.208	-.3190545	.069498
PoliticsLaw	.2401579	.1332437	1.80	0.072	-.0212226	.5015384
LawLaw	.0060807	.0928469	0.07	0.948	-.1760545	.1882159
MedicineMe~e	-.0890034	.142327	-0.63	0.532	-.3682023	.1901955
BusinessEn~g	.2360684	.1376764	1.71	0.087	-.0340076	.5061444
_cons	.3777318	.0614586	6.15	0.000	.2571702	.4982934

This third regression aims to understand which profile (pair of academic degree and background), from the eight most common in our sample, is linked to better club performance in terms of titles, having Tenure and SportsRelated as additional controls. Only three of the eight had a positive coefficient (PoliticsLaw: 0.240; LawLaw: 0.006; BusinessEngineering: 0.2360) although only PoliticsLaw (p-value = 0.072) and BusinessEngineering (p-value =

0.087) were statistically significant with the first one being the one with the most positive and significant relation. Hence, this regression showed that Presidents with a profile of Academic Degree in Law and Background in Politics present better results in terms of titles than any other profile. On the other hand, the other five profiles showed a negative coefficient, with SportsNone being the one with the lower value, however, none of these correlations were found to be significant.

Table 4: Regression 4

Classifica~n	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
Tenure	-.1120332	.0177556	-6.31	0.000	-.1468639 -.0772025
SportsRela~d	-.6378378	.283953	-2.25	0.025	-1.194861 -.0808151
BusinessNone	.4865706	.3760554	1.29	0.196	-.2511269 1.224268
BusinessBu~s	.0962306	.3556425	0.27	0.787	-.6014233 .7938845
BusinessLaw	-1.107744	.730941	-1.52	0.130	-2.541611 .3261222
SportsNone	.2833246	.5111	0.55	0.579	-.7192861 1.285935
PoliticsLaw	-1.150896	.6876372	-1.67	0.094	-2.499814 .198023
LawLaw	-1.125469	.4791595	-2.35	0.019	-2.065423 -.1855151
MedicineMe~e	1.68946	.7345137	2.30	0.022	.2485846 3.130335
BusinessEn~g	-1.177002	.7105134	-1.66	0.098	-2.570797 .2167919
_cons	6.289281	.3171723	19.83	0.000	5.667093 6.911469

On regression four, the same eight profiles of regression 3 were used, maintaining Tenure and SportsRelated as additional controls. In this case, measuring performance as the Classification, four of the profiles showed highly negative coefficients, all under the value of -1, meaning by having one of these profiles, the club would have a better performance in classification of at least one place. Of these profiles, three were significant, two on a 10-percent level (PoliticsLaw: p-value = 0.094; BusinessEngineering: p-value = 0.098) and one on a 5-percent level (LawLaw: p-value = 0.019). The other profile, although not significant, that had a negative coefficient was BusinessLaw (p-value = 0.130). This meant that PoliticsLaw and BusinessEngineering showed again significant correlations with a better performance (in this case, negative correlation) while LawLaw that had also a positive correlation with performance in regression 3 (but not significant), turned up to be the variable with most significance on this regression. On the

contrary, the other four profiles had a positive correlation with classification, meaning a worse performance. The one with the biggest coefficient value, MedicineMedicine (1.689) was the only significant value of the four (p -value = 0.022), showing that this profile is the one with worst results in Classification terms of performance.

Hypothesis Analysis

H1: Having an academic degree influences both titles and classification positively

As it was demonstrated in both Regression 1 and Regression 2 (Table 1 & 2), this study found a significant and negative relation between ADNone and club performance (positive coefficient with Classification and negative coefficient with Titles) meaning that for a President, the fact of not holding an Academic Degree, results in a worse Club performance. Being ADNone a binary variable, it can be said that its contrary, having an academic degree, influences both Club titles and classification in a positive way. This goes in line with the findings of Certo (2003), Sitthipongpanich and Polsiri (2015) and (Ben Mohamed et al., 2012) that the higher the level of education, the higher are Leaders' capabilities. Also, this also coincides with the results from Rajagopalan and Datta (1996) and Kokeno and Muturi (2016) that found a positive relation between the level of a CEO's education and its firm performance.

H2: Having been Sports Related influences both titles and classification positively

Previous experience in Sports Industry influence was also measured, not only in Regression 1 and 2 (Table 1 & 2), but also in the last where profiles were tested (Table 3 & 4). In all these regressions, it was found that having had a previous experience in this industry is a Presidents'

characteristic that affects positively the Club performance, both in Titles and Classifications. This adds up to previous research that stated having previous experience in the same industry was an important factor on CEO's and company performance. (Finkelstein & Halebian, 2002) defend that it can ease and clarify one's decision process. Additionally, Schnatterly & Johnson (2008) and Zhang & Rajagopalan (2003) are of the opinion that this previous experience gives a CEO knowledge on the environment the company is inserted, as well as industry specific skills, going in line also with (Parrino, 1997; Custodio et al., 2013) that believe that are transferable skills between job positions in the same industry.

H3: As Tenure increases, so does the performance on both titles and classification

After running all four regressions, in which Tenure was always analysed, our study showed that Tenure, the number of years of a Club Leader in its position, has a positive effect on the Club performance, whether it is Classification or Titles that are being analysed. This means that as years go by, with the same President in power, Clubs tend to have better performances on the pitch. This goes in the same way as Wang, Holmes, Oh, and Zhu (2016) that after analysing 308 studies on CEO's attributes found a positive relation between tenure and firm performance. Also, Alutto and Hrebiniak (1975) defend that higher values of tenure lead to more commitment to results and more incentives to perform well, resulting in a better performance. More recently, Adams, Almeida and Ferreira (2005) are also of the opinion that better firm performances can be partly explained by higher tenure in leadership positions, as a result of increased power and a consequent thrive for higher returns.

Significant Profiles

Of the eight most common profiles analysed by this study, in Regressions 3 and 4 (Table 3 & 4), only three showed to have a significant correlation with better Club performances. Of these three, two (BusinessEngineering and PoliticsLaw) showed a positive and significant correlation with both measures of performance, while the other (LawLaw) only exhibited this strong relation having Classification as the dependent variable.

The success of the first profile, a president with an academic degree in Engineering and a functional background in Business. This study results are in line with Koyuncu et al. (2010) work, that from a sampling of 437 CEOs of S&P 500 firms, found that companies led by a CEO with an operational background, such as engineering, performed better than others. Other possible explanation is that engineers, according to Yasser Al-Saleh, Senior Research Fellow at INSEAD Innovation & Policy Initiative, tend to be better at paying attention to details, problem solving and risk management, which are some important features to a Club leader, as the game is getting more and more complex. On the other hand, the same source tells us that engineers may lack the emotional intelligence, communication abilities and other soft skills required. However, in this case, by having a Functional Background in Business, where these soft skills are a key factor for every CEO, these Presidents already acquired these skills and can, alongside their analytical skills, apply them all in their management.

Concerning the second (and most surprising) profile, of an academic degree in Law and a functional background in Politics, there is some logic behind that might explain these results. Firstly, the impact of a leader's legal formation on its firm or club performance is important to us as, besides PoliticsLaw, the profile LawLaw also showed significant results when talking about classification. According to Conrad Liveris, corporate adviser on workplaces and risk, besides the inherent analytical and reasoning skills, the engagement with clients, critical thinking, the understanding of legal structures and paths as well as project management skills

are some competences that score higher among lawyers and can be determinant to a CEO's success. Other than that, legal training focuses on the downside of particular actions, while business training may emphasize the upsides for shareholder value from risk taking, which can explain the less litigation associated to firms led by CEO's with legal expertise (Henderson, M. et al., 2017) As for a Political background, one can justify its success on performance by arguing there is a great similitude between Politics and the Football world. In both "worlds", whether you are a politician or president of a football club, your actions result in a set of emotions among a big slice of the general public, ranging from ecstasy to hate, happening every day. Both professions' work is scrutinized to the greatest detail and under a huge media coverage. On a more practical side, clubs depend more and more of investment and sponsorship as well as good players. That said, connections and networking are a determinant factor to get all these, whether to attract investors, to achieve better sponsors or to get the best players through the best agents. Therefore, the existent network or networking capabilities hold by former politicians, job in which these kind of relationships with others have a significant impact, can be a key characteristic to improve a President's influence on improving its football club conditions and consequently, performance. If we take a more negativist approach, we can also assert that corruption has a word to say in this success of the political class in football. Football, as Politics, has always been surrounded by corruption cases, and some twisted modus operandi from the political classes can be transferred to the Football world. Politics create powerful people in many ways, and most of football presidents tend to be powerful people. One example is Silvio Berlusconi, former AC Milan and Italy's president, that has this profile and has been linked over the years to many scandals, not only in politics but also regarding its football presidency.

Limitations & Future Work

One important limitation in this study is that not all CEO characteristics are measured. Despite studying Tenure, their previous experiences in Sports industry, Academic Degree and

Functional Background, there are still a lot more features that could be study such as Age, working years before getting to the leadership position, clubs' revenues and investment, etc. The study does not evaluate Presidents' reactions in certain contexts or tasks, nor their own personality which are very hard characteristics to measure but still very important to one's performance. Other than that, despite the importance of the CEO itself on firm's performance, as seen in previous literature, it is common sense that a leader depends strongly on the work of their subordinates, namely its advisors and other top management jobs. This study analysed only the effect of a leader background by itself, not measuring its peers and subordinates background, that may also be of huge importance (namely in football, where many times, footballing decisions, which are directly linked to performance are delegated to people with a broader knowledge on the matter). For future research, not only should other variables and characteristics of a CEO be studied, but also an examination of top management teams as a whole should be made, as this would give us a much more detailed insight into the decision-making process in each club.

Conclusive Remarks

The objective of this study was to measure the impact of President's background in Clubs performance through the study of some background related variables (Tenure, SportsRelated, ADNone and Profiles). After running the regressions, results showed that all the first three variables had a significant impact in performance (both in Titles and Classification) as our hypothesis and literature stated. We concluded that, to our sample, being in the same leadership position the longer, having a previous experience in sports or holding an academic degree are factors that influence positively Club's performance. Other than that, having in account regressions 3 and 4, having an academic degree in Engineering with a functional background in Business or a Law degree with a Political background were the combinations that granted clubs the best performances (Titles and Classification) in relation to other Profiles.

References

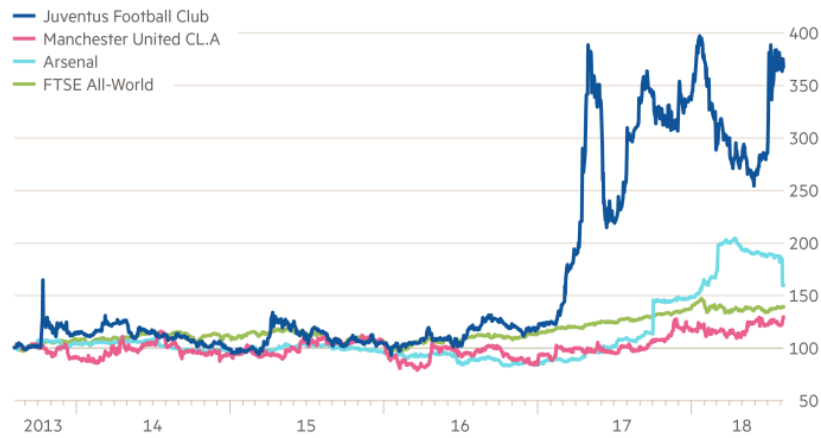
- Acharya AG, Pollock TG. 2013. "Shoot for the stars? Predicting the recruitment of prestigious directors at newly public firms." *Academy of Management Journal*
- Adams, R. B., Almeida, H., & Ferreira, D. 2005. Powerful CEOs and their impact on corporate performance. *Review of financial studies*
- Alan B. Thomas. 2008. "Does Leadership Make a Difference to Organizational Performance?" *Administrative Science Quarterly*.
- Alutto, J. A., & Hrebiniak, L. G. 1975. "Research on commitment to employing organizations". In annual meeting of the *Academy of Management*
- Bhattacharya, U., & Ravikumar, B. 2004. "Capital Formation, Governance and Banking, Financial Institutions and Services." Hauppauge, NY: *Nova Science Publishers*
- Burkart, M., Panunzi, F., & Shleifer, A. 2003. "Family Firm", *Journal of Finance*
- Calori, R., Johnson, G. and Sarnin, P. 1994. "Ceos' cognitive maps and the scope of the organization." *Strategic Management Journal*
- Certo, S. T. 2003. "Influencing initial public offering investors with prestige: signaling with board structures". *The Academy of Management Journal*
- Custódio, Cláudia, Miguel A. Ferreira, and Pedro Matos. 2013. "Generalists versus specialists: Lifetime work experience and chief executive officer pay." *Journal of Financial Economics*
- Datta, D. K., & Guthrie, J. P. 1994. Executive succession: Organizational antecedents of CEO characteristics. *Strategic Management Journal*
- Dearborn, D. & Simon, H. 1958. "Selective perceptions: a note on the departmental identification of executives". *Sociometry*
- Deloitte. 2019. Deloitte Football Money League 2019.
- Financial Times. 2019. Football clubs become a big draw for investors | Financial Times.
- Finkelstein, S., & Halebian, J. 2002. "Understanding acquisition performance: The role of transfer effects." *Organization Science*
- Fligstein, N. 1987. "The intra-organizational power struggle: Rise of power of Finance Personnel to top Leadership In Large Corporations, 1919-1979". *American Sociological Review*
- Gang Wang, R. Michael Holmes Jr., In-Sue Oh, and Weeichun Zhu. 2016. "Do CEOs Matter to Firm Strategic Actions and Firm Performance". *Personnel Psychology*.
- Gottesman, A. and M.R. Morey, 2006, "Manager Education and Mutual Fund Performance," *Journal of Empirical Finance*
- Gottesman, Aron and M.R. Morey, Matthew. 2010. "CEO Educational Background and Firm Financial Performance" *Journal of Applied Finance*
- Henderson, M. Todd and Hutton, Irena and Jiang, Danling and Pierson, Matthew. 2017. Lawyer CEOs. *Harvard Business Review*
- Koyuncu, B. and Hamori, M. 2014. "Experience Matters? The impact of prior CEO Experience on firm performance". Wiley Periodicals
- Mackey, A. 2008. "The effect of CEOs on firm performance." *Strategic Management Journal*.
- March, J.G. 1962. "The Business Firm as a Political Coalition." *The Journal of Politics*

- Matta E, McGuire J. 2008. "Too risky to hold? The effect of downside risk, accumulated equity wealth, and firm performance on CEO equity reduction". *Organization Science*
- Miller, D., 1991. "Stale in the saddle: CEO tenure and the match between organization and environment." *Management Science*
- Mohamed, E.B., Jarboui, S., Baccar, A. and Bouri, A. 2015. "On the effect of CEOs' personal characteristics in transport firm value? A stochastic frontier model." *Case Studies on Transport Policy*
- Ocasio, W. & Kim, H. 1999. "The circulation of corporate control: selection of functional backgrounds of new CEOs in large U.S. manufacturing firms 1982-1992." *Administrative Science Quarterly*
- Parrino, Robert. "CEO turnover and outside succession: A cross-sectional analysis". 1997. *Journal of Financial Economics*
- Patrice, J., Ogburn, T., Recruiting, K., Law, A. and Network, L. 2019. Lawyers Make Better Business Leaders Than MBAs.
- Perrow, R.L. 1970. "Organizational Analysis." Belmont, CA: Wadsworth.
- Priest, T.B., & Rothman, A.R. 1985. "Lawyers in corporate Chief Executive Positions: A Historical Analysis of Careers. Work and Occupations"
- Quigley, T. J., & Hambrick, D. C. 2014. "Has the "CEO effect" increased in recent decades? A new explanation for the great rise in America's attention to corporate leaders." *Strategic Management Journal*
- Rajagopalan, Nandini, and D.K. Datta. 1996. "CEO Characteristics: Does Industry Matter?" *Academy of Management Journal*
- Reuters. 2019. Teams from Europe's Big Five leagues spend 5.5 billion euros in transfer window
- Schnatterly, K., & Johnson, S. G. 2008. "Competing to be CEO in high-tech firms". *Journal of High Technology Management Research*
- Sitthipongpanich, T. and Polsiri, P. 2015. "Do CEO and board characteristics matter? A study of Thai family firms". *Journal of Family Business Strategy*
- Smith, M. & White, M. 1987. "Strategy, CEO specialization, and succession" *Administrative Science Quarterly*
- Thomas, H. and Venkatraman, N. 1988. "RESEARCH ON STRATEGIC GROUPS: PROGRESS AND PROGNOSIS". *Journal of Management Studies*
- Waller, M., Huber, G., & Glick, W. 1995." Functional background as a determinant of executives' selective perception." *Academy of Management Journal*
- Walsh, J. 1988. "Selectivity and selective perceptions: an investigation of managers' belief structures and information processing." *Academy of Management Journal*
- Westphal, J. & Fredrickson, J. 2001. "Who directs strategic change? Director experience, the selection of new CEOs, and change in corporate strategy". *Strategic Management Journal*,
- Zhang, Y., & Rajagopalan, N. 2003. "Explaining new CEO origin: Firm vs. industry antecedents." *Academy of Management Journal*
- Zygband, P., Collignon, H., Sultan, N., Santander, C. & Valensi, U. 2011. "The sports markets. Major trends and challenges in an industry full of passion." *AT. Kearney*.
- Zygband, Patrice and Collignon, Hervé and Sultan, Nicolas and Santander, Clément and Valensi, Ugo. 2011. "The sports market: major trends and challenges in an industry full of passion"

Appendixes

Football clubs v FTSE All-World index

Share prices (rebased)



Source: Thomson Reuters Datastream
© FT

Graph 1 Football Clubs' shares vs FTSE All-World index

person	year	income	age	sex
1	2001	1300	27	1
1	2002	1600	28	1
1	2003	2000	29	1
2	2001	2000	38	2
2	2002	2300	39	2
2	2003	2400	40	2

Table 1 Example of a Panel Data

Leader's and CEO's background and its impact on performance

Countries	Spain	England	Germany	Italy	France	Portugal
Clubs	Real Madrid CF	Manchester United	Bayern Munchen	Juventus	Marseille	SL Benfica
	FC Barcelona	Arsenal	Werder Bremen	Inter	Bordeaux	Sporting CP
	Atletico Madrid	Chelsea	Borussia Dortmund	AC Milan	Saint-Etienne	FC Porto
	Valencia CF	Liverpool	Hamburger	AS Roma	AS Monaco	
	Athletic Bilbao	Tottenham	Stuttgart	Fiorentina	Lyon	25
Presidents for each country	46	22	38	43	38	
Total Number of Presidents	203					

Backgrounds		Academic Degrees	
Business	124	Business	71
Law	24	None	62
Sports	19	Law	38
Medicine	8	Engineering	12
Engineering	7	Medicine	8
Journalism	7	Journalism	8
Politics	6	Politics	1
Cinema	4	Cinema	1
Culinary	1	Culinary	1
Diplomacy	1	Winegrower	1
Military	1		
Painting	1		

Table 2 Informative data on Presidents

Count of President	Column Labels	Business	Cinema	Culinary	Diplomacy	Engineering	Journalism	Journalism	Law	Medicine	Military	Painter	Politics	Sports	Grand Total
Sports Related (All)		5													
		121													
Business		413	4			2								10	429
Cinema			16												16
Culinary				1											1
Engineering		43				34						2			79
Interdisciplinary Studies		14													14
Journalism		2					20	4							26
Law		38							137		1		55	10	241
Medicine		8								53					61
No		314	10	15									11	127	477
Politics		16													16
Science		18								29					47
Winegrower		21													21
Grand Total		887	14	31	1	2	34	20	4	137	82	1	2	66	1428
BusinessBusiness		413													
BusinessNone		314													
LawLaw		137													
SportsNo		127													
PoliticsLaw		55													
MedicineMedicine		53													
BusinessEngineering		43													
BusinessLaw		38													
		1180													
		83%													

Table 3 Distribution of observations by Backgrounds and Ads

Leader's and CEO's background and its impact on performance

Year	President Code	Tenure	Club	Previous Year	President	Background	Sports Related	Academic Degree	Classification	Titles	Business/None	Business/Business	Business/Law	Sports/None	Politics/Law	Law/Law	Medicine/Medicine	Business/Engineering	B Sports	B Engineering	B Bus
1965	1	1	0		Santiago Bernabeu	Sports	1	Law	5	1	0	0	0	0	0	0	0	0	1	0	
1970	1	2	1	1	Santiago Bernabeu	Sports	1	Law	4	0	0	0	0	0	0	0	0	0	1	0	
1971	1	3	1	1	Santiago Bernabeu	Sports	1	Law	4	0	0	0	0	0	0	0	0	0	1	0	
1972	1	4	1	0	Santiago Bernabeu	Sports	1	Law	1	1	0	0	0	0	0	0	0	0	1	0	
1973	1	5	1	1	Santiago Bernabeu	Sports	1	Law	4	0	0	0	0	0	0	0	0	0	1	0	
1974	1	6	1	0	Santiago Bernabeu	Sports	1	Law	8	1	0	0	0	0	0	0	0	0	1	0	
1975	1	7	1	1	Santiago Bernabeu	Sports	1	Law	1	2	0	0	0	0	0	0	0	0	1	0	
1976	1	8	1	2	Santiago Bernabeu	Sports	1	Law	1	1	0	0	0	0	0	0	0	0	1	0	
1977	1	9	1	1	Santiago Bernabeu	Sports	1	Law	9	0	0	0	0	0	0	0	0	0	1	0	
1978	1	10	1	0	Santiago Bernabeu	Sports	1	Law	1	1	0	0	0	0	0	0	0	0	1	0	
1979	2	1	1	1	Luis de Carlos	Business	0	Law	1	1	0	0	1	0	0	0	0	0	0	0	
1980	2	2	1	1	Luis de Carlos	Business	0	Law	1	2	0	0	1	0	0	0	0	0	0	0	
1981	2	3	1	2	Luis de Carlos	Business	0	Law	2	0	0	0	1	0	0	0	0	0	0	0	
1982	2	4	1	0	Luis de Carlos	Business	0	Law	3	1	0	0	1	0	0	0	0	0	0	0	
1983	2	5	1	1	Luis de Carlos	Business	0	Law	2	0	0	0	1	0	0	0	0	0	0	0	
1984	2	6	1	0	Luis de Carlos	Business	0	Law	2	0	0	0	1	0	0	0	0	0	0	0	
1985	2	7	1	0	Luis de Carlos	Business	0	Law	5	2	0	0	1	0	0	0	0	0	0	0	
1986	3	1	1	2	Ramon Mendoza	Business	0	Law	1	2	0	0	1	0	0	0	0	0	0	0	
1987	3	2	1	2	Ramon Mendoza	Business	0	Law	1	1	0	0	1	0	0	0	0	0	0	0	
1988	3	3	1	1	Ramon Mendoza	Business	0	Law	1	1	0	0	1	0	0	0	0	0	0	0	
1989	3	4	1	1	Ramon Mendoza	Business	0	Law	1	3	0	0	1	0	0	0	0	0	0	0	
1990	3	5	1	3	Ramon Mendoza	Business	0	Law	1	2	0	0	1	0	0	0	0	0	0	0	
1991	3	6	1	2	Ramon Mendoza	Business	0	Law	3	1	0	0	1	0	0	0	0	0	0	0	
1992	3	7	1	1	Ramon Mendoza	Business	0	Law	2	0	0	0	1	0	0	0	0	0	0	0	
1993	3	8	1	0	Ramon Mendoza	Business	0	Law	2	1	0	0	1	0	0	0	0	0	0	0	
1994	3	9	1	1	Ramon Mendoza	Business	0	Law	4	1	0	0	1	0	0	0	0	0	0	0	
1995	3	10	1	1	Ramon Mendoza	Business	0	Law	1	1	0	0	1	0	0	0	0	0	0	0	
1996	4	1	1	1	Lorenzo Sanz	Business	1	No	6	0	1	0	0	0	0	0	0	0	0	0	
1997	4	2	1	0	Lorenzo Sanz	Business	1	No	1	1	1	0	0	0	0	0	0	0	0	0	
1998	4	3	1	1	Lorenzo Sanz	Business	1	No	4	2	1	0	0	0	0	0	0	0	0	0	
1999	4	4	1	2	Lorenzo Sanz	Business	1	No	2	1	0	0	0	0	0	0	0	0	0	0	
2000	4	5	1	1	Lorenzo Sanz	Business	1	No	2	1	1	0	0	0	0	0	0	0	0	0	
2001	5	1	1	1	Florentino Perez	Business	0	Engineering	1	1	0	0	0	0	0	0	0	1	0	0	
2002	5	2	1	1	Florentino Perez	Business	0	Engineering	3	2	0	0	0	0	0	0	0	1	0	0	
2003	5	3	1	2	Florentino Perez	Business	0	Engineering	1	3	0	0	0	0	0	0	0	1	0	0	
2004	5	4	1	3	Florentino Perez	Business	0	Engineering	4	1	0	0	0	0	0	0	0	1	0	0	
2005	5	5	1	1	Florentino Perez	Business	0	Engineering	2	0	0	0	0	0	0	0	0	1	0	0	
2006	5	6	1	0	Florentino Perez	Business	0	Engineering	2	0	0	0	0	0	0	0	0	1	0	0	
2007	6	1	0	0	Ramon Calderon	Law	0	Law	1	1	0	0	0	0	0	1	0	0	0	0	
2008	6	2	1	1	Ramon Calderon	Law	0	Law	1	1	0	0	0	0	0	1	0	0	0	0	
2009	6	3	1	1	Ramon Calderon	Law	0	Law	2	1	0	0	0	0	0	1	0	0	0	0	
2010	6	7	1	1	Florentino Perez	Business	0	Engineering	2	0	0	0	0	0	0	0	0	1	0	0	
2011	6	8	1	1	Florentino Perez	Business	0	Engineering	2	1	0	0	0	0	0	0	0	1	0	0	
2012	6	9	1	1	Florentino Perez	Business	0	Engineering	1	1	0	0	0	0	0	0	0	1	0	0	
2013	6	10	1	1	Florentino Perez	Business	0	Engineering	2	1	0	0	0	0	0	0	0	1	0	0	
2014	6	11	1	1	Florentino Perez	Business	0	Engineering	3	2	0	0	0	0	0	0	0	1	0	0	
2015	6	12	1	2	Florentino Perez	Business	0	Engineering	2	2	0	0	0	0	0	0	0	1	0	0	
2016	6	13	1	2	Florentino Perez	Business	0	Engineering	2	1	0	0	0	0	0	0	0	1	0	0	

Table 4 Incomplete example of the panel data used in regressions

```
. xtreg Titles Tenure SportsRelated ADNone, fe

Fixed-effects (within) regression           Number of obs   =    1428
Group variable: Club                       Number of groups =     28

R-sq:  within = 0.0356                     Obs per group:  min =    51
                between = 0.0399              avg           =   51.0
                overall = 0.0360              max           =    51

                                           F(3,1397)      =    17.18
corr(u_i, Xb) = -0.0322                    Prob > F       =    0.0000
```

Titles	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Tenure	.0211318	.0033696	6.27	0.000	.0145218	.0277418
SportsRela~d	-.1652463	.051296	3.22	0.001	-.0646208	-.2658718
ADNone	-.0930788	.0501117	-1.86	0.063	-.1913811	.0052234
_cons	.3555366	.0380682	9.34	0.000	.2808596	.4302137
sigma_u	.36549524					
sigma_e	.72955465					
rho	.20062991	(fraction of variance due to u_i)				

F test that all u_i=0: F(27, 1397) = 11.96 Prob > F = 0.0000

Table 5 Full Regression 1 on Stata

Leader's and CEO's background and its impact on performance

```
. xtreg Classification Tenure SportsRelated ADNone, fe

Fixed-effects (within) regression      Number of obs      =      1428
Group variable: Club                  Number of groups   =        28

R-sq:  within = 0.0374                Obs per group: min =        51
      between = 0.0010                avg =              51.0
      overall = 0.0179                max =              51

                                          F(3,1397)         =      18.10
corr(u_i, Xb) = -0.1413              Prob > F          =      0.0000
```

Classifica~n	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Tenure	-.1130968	.0174323	-6.49	0.000	-.1472932	-.0789004
SportsRela~d	-.6551624	.2653776	-2.47	0.014	-1.175744	-.1345807
ADNone	.8270461	.2592506	3.19	0.001	.3184837	1.335609
_cons	6.03355	.1969443	30.64	0.000	5.647211	6.419888
sigma_u	2.1736555					
sigma_e	3.7743198					
rho	.24906227	(fraction of variance due to u_i)				

F test that all u_i=0: F(27, 1397) = 15.92 Prob > F = 0.0000

Table 6 Full Regression 2 on Stata

```
. xtreg Titles Tenure SportsRelated BusinessNone BusinessBusiness BusinessLaw S
> portsNone PoliticsLaw LawLaw MedicineMedicine BusinessEngineering, fe

Fixed-effects (within) regression      Number of obs      =      1428
Group variable: Club                  Number of groups   =        28

R-sq:  within = 0.0428                Obs per group: min =        51
      between = 0.0529                avg =              51.0
      overall = 0.0448                max =              51

                                          F(10,1390)       =        6.21
corr(u_i, Xb) = -0.0012              Prob > F          =      0.0000
```

Titles	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Tenure	.0193754	.0034405	5.63	0.000	.0126262	.0261245
SportsRela~d	.1760022	.0550217	3.20	0.001	.0680677	.2839367
BusinessNone	-.1020249	.0728684	-1.40	0.162	-.2449688	.040919
BusinessBu~s	-.0825321	.068913	-1.20	0.231	-.2177168	.0526525
BusinessLaw	-.060282	.1416347	-0.43	0.670	-.3381228	.2175589
SportsNone	-.1247782	.099036	-1.26	0.208	-.3190545	.069498
PoliticsLaw	.2401579	.1332437	1.80	0.072	-.0212226	.5015384
LawLaw	.0060807	.0928469	0.07	0.948	-.1760545	.1882159
MedicineMe~e	-.0890034	.142327	-0.63	0.532	-.3682023	.1901955
BusinessEn~g	.2360684	.1376764	1.71	0.087	-.0340076	.5061444
_cons	.3777318	.0614586	6.15	0.000	.2571702	.4982934
sigma_u	.36242402					
sigma_e	.72865577					
rho	.19832867	(fraction of variance due to u_i)				

F test that all u_i=0: F(27, 1390) = 10.69 Prob > F = 0.0000

Table 7 Full Regression 3 on Stata

Leader's and CEO's background and its impact on performance

```
. xtreg Classification Tenure SportsRelated BusinessNone BusinessBusiness Busin
> essLaw SportsNone PoliticsLaw LawLaw MedicineMedicine BusinessEngineering, fe
```

```
Fixed-effects (within) regression      Number of obs   =    1428
Group variable: Club                   Number of groups =     28

R-sq:  within = 0.0493                  Obs per group: min =    51
      between = 0.0262                  avg =             51.0
      overall = 0.0432                  max =             51

corr(u_i, Xb) = -0.0340                  F(10,1390)      =     7.21
                                          Prob > F        =    0.0000
```

Classifica-n	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Tenure	-.1120332	.0177556	-6.31	0.000	-.1468639	-.0772025
SportsRela-d	-.6378378	.283953	-2.25	0.025	-1.194861	-.0808151
BusinessNone	.4865706	.3760554	1.29	0.196	-.2511269	1.224268
BusinessBu-s	.0962306	.3556425	0.27	0.787	-.6014233	.7938845
BusinessLaw	-1.107744	.730941	-1.52	0.130	-2.541611	.3261222
SportsNone	.2833246	.5111	0.55	0.579	-.7192861	1.285935
PoliticsLaw	-1.150896	.6876372	-1.67	0.094	-2.499814	.198023
LawLaw	-1.125469	.4791595	-2.35	0.019	-2.065423	-.1855151
MedicineMe-e	1.68946	.7345137	2.30	0.022	.2485846	3.130335
BusinessEn-g	-1.177002	.7105134	-1.66	0.098	-2.570797	.2167919
_cons	6.289281	.3171723	19.83	0.000	5.667093	6.911469
sigma_u	2.0788345					
sigma_e	3.7604085					
rho	.23407542	(fraction of variance due to u_i)				

```
F test that all u_i=0:      F(27, 1390) =    13.63      Prob > F = 0.0000
```

Table 8 Full Regression 4 on Stata