

REPeC, Brasília, v. 11, Special Edition, art. 2, p. 21-40, 2017 Available online at *www.repec.org.br* D0I: http://dx.doi.org/10.17524/repec.v11i0.1622

Revista de Educação e Pesquisa em Contabilidade

Journal of Education and Research in Accounting

Quarterly journal, digital and free published by Brazilian Academy of Science in Accounting



ISSN 1981-8610

Thirty Years of Research on Executive Compensation and Return to Shareholders

Abstract

Objective: In this paper, we investigate the bibliographic production on executive compensation and return to shareholders in the Brazilian and international scenarios, aiming to constitute a theoretical basis for the development of empirical research involving the theme. We chose the research by Jensen and Murphy (1990) as the starting point of the discussions on the subject. Method: Descriptive study with a bibliometric design. The elaboration of the research was was based on keyword searches through EndNote[™] and SPELL - Scientific Electronic Library Periodicals, maintained in Brazil by ANPAD ("Associação Nacional de Pós-Graduação e Pesquisa em Administração"), as follows: i) Executive Compensation; ii) CEO Compensation; iii) Company performance, combined with the word Compensation and the corresponding terms in Portuguese in the Brazilian database. **Results:** The main studies published focus on the North American and British scenarios, especially professors Michael C. Jensen (Harvard University), Kevin M. Murphy (University of Southern California) and Martin J. Conyon (University of Pennsylvania). Professor Jensen participated in the study that marked the discussion on the agency problem (Jensen & Meckling, 1976). Murphy conducts research on the theme beginning in the 1980s, on the North American scenario, a period that also marks the beginning of Professor Conyon's studies, who focused on the British scenario. The three authors are a reference on the subject and, based on this highlight, studies were developed in other economic scenarios, such as Canada, Germany and most recently China. **Contributions:** We believe that the findings presented contribute to the development of new empirical studies, especially in countries where the issue is in full development or in areas where the interest in the subject emerges, adding these variables to contribute to a further understanding of the agency problem. Keywords: executive compensation; shareholder return; bibliometrics.

Juliano Augusto Orsi de Araujo

Master in Accounting from University of São Paulo (FEARP/USP). Contact: Rua Manoel de Toledo, 263, Center, Atibaia (SP), CEP 12940-213. *E-mail:* julianoorsi@usp.br

Maísa de Souza Ribeiro Ph.D. in Accounting and Controllership from University of São Paulo (USP) and Full Professor at University of São Paulo (FEARP/USP). Contact: Av. Bandeirantes 3900, 14C, Monte Alegre, Ribeirão Preto (SP), CEP 14040-900. *E-mail:* maisorib@usp.br

Published in Portuguese and English. Original Version in Portuguese.

Received in 6/11/2017. Ask to Revise on 8/1/2017. Resubmitted on 10/15/2017. Accepted on 10/18/2017 by Dr. Orleans Silva Martins (Editor). Published on 12/7/2017. Organization responsible for the journal: Abracicon

1. Introduction

In this paper, we investigate the bibliographic production on executive compensation and shareholder return in the Brazilian and international scenarios, aiming to constitute a theoretical basis for the development of empirical research involving the theme. Research on executive compensation and its practical implications is always questioned at times of crises and/or problems concentrated in the business environment. An illustration is the episode of millionaire bonuses and more recently in 2009, when the United States was still ensnared by the global crisis, their Congress turned its attention to identify the responsible, culminating in the election of the "Wall Street bonus culture". Other illustrations are the cases of Enron / WorldCom and the 2007 subprime crisis (Krauter, 2013).

Jensen and Meckling (1976) perceive the relationship between executives and shareholders in the disclosure of the Agency Theory, in that the principal (shareholder), capital owner, hires the agent (executive) who has the expertise to manage and take decisions about a business, in its favor. Nevertheless, if the personal utility of each is maximized, there are reasons to believe that the agent will not always act as the principal expects, which is the fact that generates the agency conflict. Araujo, Parisi, Silva and Nakamura (2014) argue that the distinction between the owner and the manager is a natural trend of the globalized economy. To the authors, the market competitiveness makes companies seek the best professionals for the exercise of the company's management function and decision taking.

The initial studies were developed in the North American scenario in the works by Murphy (1985), Jensen and Murphy (1990), Leonard (1990), Garen (1994), Miller (1995), Murphy (1998), Abowd and Kaplan (1999), Pukthuanthong, Talmor and Wallace (2004) and in the British scenario with the research of McKnight (1996), Conyon (1997) and Conyon and Sadler (2001). There is an extension of studies in other European countries such as Germany (Conyon & Schwalbach, 2000; Elston & Goldberg, 2003), France (Alcouffe & Alcouffe, 2000; El Akremi, Roussel & Trepo, 2001), Italy (Brunello, Graziani & Parigi, 2001) and in China (Firth, Tam & Tang, 1999).

Baker, Jensen and Murphy (1988) state that the theory and practice concerning compensation contracts seem particularly distant and that what the theory predicts is not used when these contracts are designed. Barkema and Gomez-Mejia (1998), Kato, Kim and Lee (2005) and Krauter (2013) argue that further studies are needed beyond the North American scenario. As noted by Kato, Kim and Lee (2005), there was a massive growth in studies on the American scenario and few studies in other markets, such as Asia, Africa and Central and South America.

The main studies published focus on the North American and British scenarios, especially professors Michael C. Jensen, Harvard University, Kevin M. Murphy, University of Southern California and Martin J. Conyon, University of Pennsylvania. Professor Jensen participated in the study that marked the discussion of the agency problem (Jensen & Meckling, 1976). Murphy conducts research on the theme beginning in 1980s, in the North American scenario, a period that also marks the beginning of the studies by professor Conyon, although in the British scenario. The three authors are references on the subject and, departing from this highlight, they develop studies in other economic scenarios, such as Canada, Germany and most recently China. They also develop the expertise to develop research in which the scenarios are mutually compared.

In Brazil, the interest in the research on this topic has grown in the last decade and has attracted the interest of researchers in accounting, business administration, economics and finance, to understand how the executive compensation and shareholder return phenomenon behave in the Brazilian environment. Beuren and Silva (2015) understand that greater transparency in the disclosure of this information contributes to the strengthening of the capital market in which they are disclosed. The results found in national and international research are contradictory and inconclusive though.

To Quevedo-Silva, Santos, Brandão and Vils (2016), the use of bibliometric techniques is a common practice in applied social research, helping to understand new themes and trends regarding future research. Araujo (2006) contributes by stating that this is the technique that measures the production and dissemination of scientific knowledge.

2. Literature Review

The studies aiming to investigate the relationship between executive compensation and shareholder returns derive from the research by Jensen and Meckling (1976) who, based on the elements of the Agency Theory, Theory of property rights and Finance Theory, developed the Theory of the ownership structure of the firm. The authors defined the agency cost concepts and their nature. Over time, many studies have sought to present the state of the art on the subject, which has been ongoing for decades and still inspires researchers to focus on the studies in search of conclusive results.

2.1 Initial studies – United States and United Kingdom

Some classical works, including Copeland, Weston and Shastri (2007), point to the work of Jensen and Murphy (1990) as the seminal work on empirical studies that tested the relationship between compensation and return.

Murphy (1985) already showed concern with the issue though because, until then, the studies that sought to identify the relationship between compensation and performance had not been able to obtain significant results through statistical tools. Murphy (1985) states that the studies developed until then omitted some important variables and suggests the use of information about the return to the shareholder and sales growth. In his work, Murphy (1985) found a strong positive relationship between performance and executive compensation and increased sales and compensation.

The above findings are aligned with what Jensen and Murphy (1990) found five years later. They researched on the compensation published in Forbes between 1974 and 1986 and estimated that the relationship between executive compensation and performance indicated a growth in compensation of US\$3.25 for each US\$1,000.00 increase in shareholder wealth. The authors believe that this relationship, although statistically significant and positive, is small given the importance of the positions in companies. They also suggested that the factor "dismissal" should not be relevant because it is a situation that is not an incentive.

Rosen (1990) elaborated a first review of the empirical findings on executive compensation. The author suggests that the control should be distributed among the executives and that the most talented executives should be allocated to the most relevant positions and decision making and in large companies, as this effect is noticed in large trading volumes. The author also states that contracts should provide incentives to managers so as to encourage them to achieve the interests of shareholders.

Gibbons and Murphy (1992), provoked by the studies developed thus far, which argued that executives only worked to build a career, developed a study to confirm that contracts with incentives would make a difference in the performance of the CEO and consequently the company. Therefore, they applied incentive variables observed in the contracts to the models developed by Fama (1980) and Holmström (1982). Thus, they improved the study by investigating the relationship between executive compensation and performance of company shares in the stock market. The authors identified that, with a 10% increase in shareholder wealth, the executive compensation increases by 1.7%. Conyon and Gregg (1994) also found a relationship between compensation and sales. The authors estimated a model relating the director's compensation and shareholder return also during the 1980s. In a sample of about 170 British companies between 1985 and 1990, the authors found a significant relationship between compensation and shareholder return, but with little elasticity. In another study in which the authors felt provoked by the controversial benefit package offered to CEOs, inconsistent with the economic performance presented by companies, Conyon and Leech (1994) collected data from 294 British companies listed between 1983 and 1986. The authors tested the relationship between the major payments to directors and the performance of their companies, with size control variables and corporate governance measures. The authors identified a positive relationship with a very small estimated elasticity, which they consider to be a weak relationship. They reaffirmed the evidence found previously and found relevance in the amount of sales, a variable the authors took as explanatory of the increase in the board compensation.

Conyon, Gregg and Machin (1995) perform a literature review and a discussion of research on executive compensation and performance of companies in the United Kingdom. They point to the studies by Jensen and Murphy (1990), Gregg, Machin and Szymanski (1993), Main (1992), Main and Johnston (1993), Conyon and Leech (1994), Conyon and Gregg (1994) and Conyon (1994), in which the authors found little correlation between compensation and performance. They understand that the compensation is inadequate and show concern with the discrepancy between the compensation of employees in general and leading executives of British companies. They suggest reforms that permeate the disclosure of appropriate information and incentive systems, reorganization of governance practices and a reform in the rules that regulate these payments.

Dial and Murphy (1995), in a case study, investigated the use of incentives to executive compensation to create shareholder value. Strategies permeated the size reduction and restructuring of companies. In contrast, there was the bonus payment to executives. For the authors, the mechanism worked, as approximately \$4.5 billion profit was achieved, representing an increase of approximately 553% for the shareholder. The authors conclude that the alignment of incentives for executives is a key factor in generating value for the shareholder.

2.2 Expansion to other European countries

Another branch examined executive compensation considering executive governance practices, local legal and regulatory aspects and accounting practices adopted. As an example, Conyon and Schwalbach (1997) examined the level and structure of executive compensation policies in 2846 European companies in the 1990s, comparing Austrian, Belgian, Danish, German, Irish, Italian, Dutch, Spanish, Swiss and British companies. They found that there are significant differences among the countries, which are explained by characteristics of the positions and size of companies. By isolating these factors, they found that specific characteristics of the countries, such as corporate governance structures, local legislation and accounting standards and different ways of measuring executive compensation, are relevant in determining the company's compensation policy.

Conyon and Peck (1998) examined the relationship between executive board of directors, compensation committees and senior executives' compensation of British companies between 1991 and 1994. They found little relationship between the compensation committee member working in the company and executive compensation, that is, when the members of the compensation committee also act in the company, they tend to offer higher compensation than when the member is external to the company. The authors believe that when there is a distance between *board* and company, there is a trend towards greater alignment between goals for executives and shareholders' interests Through a survey, Clarke, Conyon and Peck (1998) summarized the data from 342 British companies, focused on their corporate governance and executive compensation values. It differs from other studies though because it focused on the executives' point of view. The authors investigated items such as accountability, business prosperity, executive compensation disclosure and relationship with the shareholders. The authors found evidence that the companies' presidents are in line with the rules and principles established by legislation, acting with caution in matters of accounting disclosure. Thus, decision makers believe that great effort is made on regulatory issues, instead of the strategic matters that contribute to the prosperity of the business. They also report that most executives point to an increase in compensation disclosure requirements, which, for them, comes to information replication, as the specialized media disclosures such information.

Conyon and Schwalbach (2000) also investigated the determinants of executive compensation in the United Kingdom and Germany during the year 1994. They identified differences in corporate governance rules and macroeconomic characteristics between the countries. They found higher pay in the United Kingdom. Differences were observedbetween compensation policies, to the extent that stock options were paid in the United Kingdom but not in Germany, a factor that contributed to a higher pay in that country. In both scenarios, the authors identified a strong relationship between executive compensation and company performance. Thus, we find a rapid increase in research, also in the European context, in the late 1990s and early 2000s.

Murphy (1999) compiled empirical and theoretical work in his research on executive compensation published until 1998. The author found studies that used a variety of statistical approaches, in which he found that variables such as company size, sector and country, influence the tests. He found works that explored the reasons for the executive turnover which according to him, increased after the adoption of compensation though shares or stock options. He suggests that studies should be expanded to assess the effects in the afteryears of share-based payment.

2.3 Comparisons among scenarios

With the fast development of research in Europe and in the United States, Conyon and Murphy (2000) partnered and documented differences between executive compensation in the United States and the United Kingdom in the year 1997. The authors controlled variables such as size, industry, and other characteristics of companies and executives. They found that North American CEOs perceive cash compensation 45% higher than the British and 190% when it comes to total compensation. The authors also found that, in the United States, the CEOs perceive a 1.48% increase in their compensation for each unit increase in shareholder wealth, while this increase for the same reason amounts to only 0.25% in the United Kingdom. The authors conclude that this difference is mainly due to the higher pay through stock options in the United States, and dwell on institutional and cultural issues existing between the two countries.

Conyon and Sadler (2001) examined the relationship between compensation and performance in British companies. The authors developed the study in the light of Game Theory, which predicts that the career plan creates incentives for executives and may explain the variations in management compensation. The sample of 532 executives in 100 British companies revealed a statistically positive relationship between performance and executive compensation through stock options.

Hall and Murphy (2003) present the problem of stock option payments. These equity instruments are offered to many people and are presented as a very common way of executive compensation in order to reduce the agency problem. For the authors, this form of compensation is not efficient to attract, retain and motivate executives. In addition, the authors believe that the issuing costs of stock options outweigh the agency costs identified in the studies.

In view of the discussions, there are still works that suggest changes in the way compensation policies should be adopted. Jensen, Murphy and Wruck (2004) developed a study that traced an overview of the studies on executive compensation and its practical implications in the North American scenario. The study comprises a review of issues involving the agency problem between managers and shareholders, between board members and shareholders and a discussion on the design of a compensation package aligned with corporate governance practices. The authors suggest that there was a need for change, focusing on the alignment of executive compensation packages, making them clear to the market and, as the authors define, how executives practice the *earnings-management game* to achieve their goals.

Conyon and He (2004) develop a partnership that begins with the research in which they focused on a sample of companies in IPO processes to investigate the relationship among compensation committees, executive compensation and incentives in that sense. They found a relationship between the presence of large shareholders in the compensation committee and the low fixed compensation and high variable compensation based on results. In companies where greater compensation was paid to members of the committees, there was an association with major fixed compensation and lower variable compensation. They found no evidence of the participation of CEOs from other companies in compensation committees and determining compensation policies.

2.4 Studies spread throughout the world

In the mid-2000s, researchers show interest in replicating the tests in other economic environments. For instance, Kato, Kim and Lee (2005) show what they describe as the first econometric estimation about executive compensation and performance among Korean companies with or without consolidated financial statements. They developed the study using panel data containing compensation and performance data and if the company participates in an economic conglomerate or not. The evaluation considered 246 companies between 1998 and 2001. Contrary to what the previous studies appointed for Eastern companies, the authors found statistical significance between executive compensation and performance of stock-prices in the market, compared to the American and Japanese markets.

Also, Funchal and Terra (2006), considered a seminal work in the Brazilian scenario, examined the determinants of executive compensation in Latin American listed companies, based on performance indicators and corporate governance characteristics, including board of directors and executive board characteristics and ownership structure. The authors suggest that new studies should not only focus on high-ranking officers of the companies, but expand to executives who are not at the top. They measured the compensation only as the direct financial benefits, ignoring other forms of compensation such as retirement benefits, stock option plans, health care, among others. These items, however, often result in a significant annual increase in executive wealth.

In the following year, Camargos, Helal and Boas (2007) analyzed the relationship between financial performance and executive compensation of Brazilian publicly traded companies with ADRs listed on North American stock exchanges. They concluded that there is a positive and significant relationship between compensation and financial performance. They suggest developing research with larger samples and in other countries, and the use of panel data, analyzing the interaction of the variables used in this research over time.

Also in Brazil, Krauter and Souza (2008) investigated the existence of a relationship between executive compensation and corporate financial performance. They analyzed data for the year 2006 from 31 companies listed in the magazine "Best Companies to Work For" by Exame magazine. The results revealed, through the non-parametric Mann-Whitney test, that companies with high scores in the benefit ratio obtain higher financial indicators of return on equity and sales margins. The Pearson correlation test did not identify a significant linear relationship between executive compensation and financial performance. In the late 2000s and early 2010, some studies focus on the relationship between compensation and result, but with a different control variable until then: the participation of consulting firms in the preparation of the compensation policy in companies. Conyon Peck and Sadler (2009) and Conyon (2011) investigated the relationship between the existence of consulting companies specialized in executive compensation and this compensation. These companies provide services in order to advise on a compensation package for senior management. The first focused on the United States and British scenarios, and the second only on the United States. The findings are very similar, in that they found a higher compensation in companies that hire consultants. They also identified the presence of a results-based compensation package for companies that maintain relations with consultancies and finally found that there is a limited relationship between the hiring of consultants and the emergence of conflicts of interest, such as a relationship with other companies and/or customers, leads to a small increase in executive compensation or there is a very specific compensation agreement.

In the same sense, Murphy and Sandino (2009) also found a positive relationship between the payments of consulting firms and the levels of executive compensation. The authors developed a study in the North American and Canadian scenarios, affirming that executive compensation is higher in companies that hire consulting services to support the recruitment and preparation of compensation packages for executives. The findings are in line with Conyon, Peck and Sadler (2009) and Conyon (2011).

Murphy and Sandino (2012) also investigated the relationship between hiring consulting firms and executive compensation. According to the authors, whenever a consulting firm is hired, there is influence in the salary payment of the top 5 executives in the companies. The authors found a positive relationship in the analysis they made in 1,074 companies. In companies that maintain these consultants, executives perceive higher compensation when compared to companies that do not hire them.

Studies understand that there is no independence to ensure reliable services though. The findings coincide with the theory that there is a relationship between executive compensation and payments made to consulting firms. There is a strong relationship between hiring other services provided by the consultants and increased compensation. A weak relationship exist between replacement of consultants and increase in executive compensation. They suggest exploring the determinants of this relationship, as companies crave for top professionals, which are expensive and are hired by equally expensive consultants.

Conyon, Core and Guay (2009) developed a study in which they compared the American and British executive compensation, as previous studies could not understand high wages with low profitability in the American scenario. They chose to compare the two markets because the United Kingdom does not have this feature. The authors found a much higher compensation in the United States when compared to the United Kingdom. Then, they sought to investigate whether there would be an adjusted premium for risk and nevertheless, based on this premise, the authors also found a much higher compensation. Thus, they made room to investigate the determinants that lead the North American compensation to be far greater than the British.

Conyon and Sadler (2010) investigated the voting determinants of shareholders and their relationship with the executive compensation. This research was motivated by the openness foreseen by legislation in the United Kingdom, so that shareholders could opine on executive compensation. The authors found that less than ten percent of shareholders failed to participate in this session. They understood that shareholders are concerned with deciding and participating in definitions about compensation policies. They also point out that, when there are high salaries in companies, there is a great conflict about the decision on compensation. There is evidence that, in companies where the compensation is smaller, in the past, there were discussions among shareholders about executive compensation. They also found evidence that, in these companies there was an alignment between managers and shareholders regarding compensation, and indicate that this leads to a reduction in the agency problem. As future studies, they suggest analyzing crisis and post-crisis scenarios and evaluate the voting behavior of shareholders and the compensation. They also recommend checking the market reaction when there are great voting dissidences, if this situation increases the turnover of executives, if there is a performance drop of the company when there is direct intervention from shareholders in determining executive compensation policies. Jensen and Murphy (2010) discussed about the way American companies compensate their executives, not focusing on the amount, but on the form. According to the authors, the compensation policy is one of the key success factors in an organization. The authors criticize the statements conveyed about the high compensation of executives: they believe that compensation is adequate. Through the proposed compensation, however, there is no reflection on changes in the performance of organizations: they claim that performance-based compensation has not reached the pre-established goal. For the authors, a form of compensation that reduces the distance of interests between executive and shareholder is to offer the company's own shares as compensation. They also argue that, to achieve great results, executives should receive high amounts and vice-versa: poor performance should result in penalties.

Murphy (2011) also explored legal and regulatory issues about executive compensation in the United States. In a qualitative study, the author goes through the 1980's, which were marked by the adoption of tax rules, accounting standards, establishment of disclosure and specific legislation on the subject. Murphy (2011) states that the regulation did not significantly affect the relationship company versus agent. Against the regulation, the market sets the episode of the *Golden Parachutes Plan* in the 1980s, stock options in the 1990s and restricted stock in the 2000s. The author concluded that the regulation on the theme only attended to the legislator interests and set aside shareholder interests, not contributing to the agency problem.

Murphy and Jensen (2011) investigated the causes of the problems associated with executive compensation plans. They focused on the choice of the right performance measures, with performance thresholds, goals and *benchmarks* and the relationship with compensation. In the same study, they investigated the bonus payment behavior in financial companies a midst of the global crisis. Murphy and Jensen (2011) state that the plans should not be measured by the performance in only one period. There should be a strengthening of the board in relation to research on earnings management, tracking of cash flow volatility, not offering the payment at once, but paying alongside cash flows and an improvement in financial evaluation indicators such as ROA, EPS and ROE.

Jensen and Murphy (2012) investigated the practice of earnings management in the relationship between managers, board members and capital market analysts. According to the authors, this practice is characterized by executive decision making that aligns with certain markets agents to "produce" previously agreed results. They also claim that this practice culminates in losses for the company itself, as well as losses for shareholders, customers, employees and the community as a whole, besides significantly damaging the market functioning and leading to long-term value destruction. The authors suggest ways to curb such acts, which consist of: i) executives should not be rewarded for the rapid growth in the share price; ii) companies need to end the earnings management and the game of profit orientation that has become common among publicly traded companies and analysts and; iii) senior executives need to communicate with the capital markets. They need to understand the value drivers in their organization and align internal goals with these drivers, instead of analysts' expectations.

Murphy (2012a) investigated the bonuses paid to the United States financial sector executives. The author found little evidence that compensation policies encourage risk taking among senior executives. The author presented two regulations imposed by the North American legislative power, which limited the payment to the senior executives who, according to the author, did not serve risk mitigation, payment improvement or creditor protection purposes. The author concludes that the corporate governance policies have greater functionality in companies and contribute to the mitigation of agency problems when compared to regulations imposed by the legislative power.

Murphy (2012b) summarized the state of the art about executive compensation in the United States and in multinational companies, evaluating the evolution of the theme in the last century. The author points to the latest findings, in that there is a strengthening in efficient contracts and management skills and a weakening in disclosure rules, tax policies, accounting standards and legislation in general. The author criticizes government intervention and claims it has been both a response and a great temporal trend factor in executive compensation at the end of last century. Murphy (2012b) also concluded that any explanation for the payments that ignore political factors is critically incomplete. Murphy (2013) investigated the limitation imposed by the European Union on the variable executive compensation of banks in that region. The author found increased incentive to risky decision making, a reverse effect to that expected by regulators. He also found a significant increase in fixed compensation, reduction in incentives for value generation, competitiveness reduction among banks in Europe, events that culminated in the reduction of investments in banks and consequent reduced access to capital and increased borrowing costs.

Conyon (2014) also presents in his study executive compensation and corporate governance practices in North American companies. He found a correlation between the average executive compensation and corporate performance and their size. Identified in performance incentive contracts, especially sharebased payments. Compensation committees are independent and present little evidence of maximizing executive compensation. The author also showed that companies that hire consulting firms are influenced by the committee and not by their own board.

2.5 Compulsory disclosure: China and Brazil explore the theme

Characterized as emerging contries with compulsory executive remuneration disclosure, as from 2010, research on the theme take form in China and Brazil.

As a result of companies going public in China and the disclosure of information on executive remuneration, studies advance to investigate the phenomenon in the Chinese scenario. For example, Conyon and He (2012) investigated executive compensation and corporate governance in Chinese listed companies. The authors aimed to compare Chinese and American market behavior. According to the authors, the results were consistent with the prerogatives addressed in the Agency Theory, which found a positive correlation between executive compensation and companies' performance. There is a higher compensation with the company's own shares as compared to a fixed salary. They also observed that the companies controlled by the state or with concentrated ownership structures have a smaller compensation and incentives packages. In line with corporate governance, the boards play an important role. In accordance with these results, they also found that, in companies where there is greater independence of the executive, the ratio payment *vs* performance is more significant. They found that, in the United States, the payment to executives is seventeen times higher than in China and concluded that a significant difference between the two scenarios is the state control over companies.

Conyon and He (2012b), also in the Chinese environment, investigated the CEO turnover in relation to the performance of companies with branches focused on the capital market and accounting profit. The study covered about 98% of listed China companies in the period from 1999 to 2006. The turnover of high-ranking professionals in companies is negatively correlated with the accounting profit, while the market performance did not show consistent results. According to the authors, the accounting figures have greater strength compared to the market information, regarding the choice to replace the executive team. Another finding in the study is that the companies controlled by the state appreciate the financial information more than the market information, a fact that may have contributed to the findings.

Conyon and He (2012c) investigated the relationship between executive compensation and performance of Chinese companies and the corporate governance practices' impact on compensation and incentives paid to executives. The authors identified a positive correlation between executive compensation and economic performance. They also found a positive correlation between compensation policies and performance and that the share-based payments are influenced by governance and capital structures.

In the following year, Conyon and He (2013) continued the partnership and studied the relationship between executive compensation and corporate fraud in China. They found a significant negative correlation between pay and corporate fraud in the sample, which covered the period from 2005 to 2010. The findings corroborate the hypothesis that the CEOs receive penalties in fraud identification cases, resulting in a reduction of their salaries. They found that, in companies where there is evidence of fraud, the compensation is lower. This occurs primarily in companies without state control and expanding companies. According to the findings, the adopted governance mechanisms contribute to mitigate fraud. Also, Cordeiro, He, Canyon and Shaw (2013a) investigated the behavior of compensation contracts of Chinese executives between the years 2000 and 2010. The authors began their studies assuming premises such as i) that performance would be a determining factor in compensation contracts; ii-) management strength and influence would result in a segregation between compensation and performance and; iii-) there would be a reward for a positive performance, but no penalty due to inefficient management. They found different results between executive compensation and accounting profit achieved: when there is a significant profit, for example, surpassing the industry average or the competitors, the managers receive greater recognition and awards. When the opposite occurs, there is penalty for managers, some cases resulting in their dismissal. They found no relationship between this scenario and the ownership structure, nor internal corporate governance practices.

The same researchers developed a study in the Chinese scenario comparing the accounting performance with the stock market performance as measures of executive compensation between the years 2001 and 2007. The authors found that the accounting profit presents a greater value than the market performance as a determinant of executive compensation contracts. They also found evidence that, in the companies controlled by the state, there is greater confidence in the accounting data rather than the market information. Finally, they concluded that in companies where there is a better governance structure, market information is presented as crucial to the executive compensation contract design (Cordeiro, He, Canyon & Shaw, 2013b).

In the Brazilian scenario, the studies restart in 2010, with the mandatory disclosure of executive compensation starting in 2009. Especially Silva and Chien (2013) analyze whether Brazilian companies that better remunerate executives present higher market value and improved operational performance. They found no significant relationship between executive compensation, company value and performance. They used multiple linear regression estimated by the Generalized Method of Moments to control for endogeneity.

Beuren, Silva and Mazzioni (2014) examined whether executive compensation is correlated with the size and performance of Brazilian listed companies. The results show that executive compensation is significant negatively related with company size and positively related with market indicators. Contrary to expectations, the statistical tests revealed no correlation between executive compensation and financial performance indicators. They used descriptive statistics, normality test, canonical correlation, nonparametric Mann-Whitney test and Spearman correlation. They concluded that there is a negative relationship between company size and executive compensation and that executive compensation is only linked to the companies' market performance.

Beuren and Silva (2015) developed a study to verify the evolution of the disclosure of executive compensation variable in the financial statements of the largest publicly traded companies in Brazil. They used a qualitative descriptive study and concluded that, with the obligation to disclose the compensations imposed by the Brazilian Securities Commission, there was an increase in the disclosure of such information as from 2009, when the standard came into force.

Tinoco, Rossi and Portugal (2015) analyzed the breakdown of executive compensation from the four state and private electricity sector companies with the highest total assets traded on BM&FBOVESPA, totaling a sample of eight entities. The differences found are the higher proportion of compensation to executives through fixed compensation in state-controlled companies, while a greater balance is observed in privately held companies. Moreover, privately held companies pay higher values than state-controlled companies. Although, in theory, the objectives of private companies and state enterprises are different, these characteristics do not manifest themselves significantly in the composition of compensations, which largely consists of fixed salary, benefits and bonuses (PLR), while only one private company offers compensation through company shares. Machado and Beuren (2015) verified how the executive compensation policy, at the level and structure perspectives, in line with Murphy's proposition (1999), has been practiced in Brazilian, American and English industrial companies from 2007 to 2010. The compensation of American executives is almost three times higher than the Brazilian and British executives. Regarding the compensation structure, no similarities were found. They concluded that the executive compensation policy adopted in the three scenarios shows no similarities in the level and structure perspectives highlighted.

Fernandes and Mazzioni (2015) investigated the existence of correlation between the performance measures in Brazilian listed financial companies and the compensation of their executives. The analysis of several canonical correlations showed mixed results, which do not permit a consistent indication of a significant correlation between the total compensation of executives and the investigated companies' performance. Samples involving companies that use the compensation variable, however, tend to present significant positively correlations with the performance variables used.

Kaveski, Vogt, Degenhart, Hein and Scarpin (2015) analyzed the factors that determine the sharebased compensation of the directors of companies listed on BM&FBovespa. The results showed that, the greater the company's efficiency in generating profits from its assets and the higher its total income, the lower are the share-based compensations to directors. On the other hand, the higher the market value of the company, the greater are the share-based compensations to directors.

3. Research Method

We understand that the study's ontology is classified under the philosophical position of realism and its epistemological position under objectivism, within a functionalist paradigm. It is a descriptive study with a bibliometric design.

The research was elaborated with key-word searches through *EndNote* [™] and SPELL - Scientific Electronic Library Periodicals, maintained in Brazil by ANPAD ("Associação Nacional de Pós-Graduação e Pesquisa em Administração"), as follows: i) Executive Compensation; ii) CEO Compensation; iii) Company performance, combined with the word Compensation and the corresponding terms in Portuguese in the Brazilian database.

In a second step, the researchers profiles were examined through the website *researchgate.net*. The papers were obtained through libraries offered by the "Universidade de São Paulo" - USP (University of São Paulo), *Scopus* and *Web of Science*. We searched papers without time limit, considering the research of Jensen and Murphy (1990) as the starting point. The cut-off date was August 31, 2016.

With the papers in hand, we proceeded to the reading of abstracts and elected the papers that addressed the issue. This review constituted the base for the composition of the reference above. We also composed the theoretical reference list and submitted it to descriptive statistical analysis, using the free software *BibExcel*. The data were obtained by accessing each of the papers, and simultaneously arranged in a table, with the following fields: authors 1 to 5, title, publication medium and year.

4. Results and Discussion

We identified 154 papers based on the selected keywords and, after reading the abstract, 21 studies were excluded, which led us to a sample of 133 papers for analysis. We found 10 studies that preceded the research of Jensen and Murphy (1990). During the 1990s, 25 studies were published, 39 in 2000s and a significant increase in the last decade started in 2010, with 59 publications, as described in Chart 1:



Chart 1. Annual Publications

Source: The authors.

The publication media of the studies were ranked under: meetings, book, journal or thesis. Thirteen papers were found that were published in congress proceedings; 55 books, including six published before Jensen and Murphy's research (1990) and 53 journal papers and 12 theses, as shown in Chart 2 below:





Source: The authors.

Most studies were developed in pairs (55) or individually (51), while studies written in trio corresponded to 23. We found 163 different authors, among which Professor Kevin Murphy with 23 publications and Professor Martin Conyon with 22 studies. Their main partners are the Professors Michael Jensen (7) and He (8), respectively. Professor He stands out for research in the Chinese scenario and, in Brazil, Professor Beuren stands out, who participated as a co-author in four works:



Chart 3. Authors

Source: The authors.

We also found that the largest number of works investigated the North American scenario (27), followed by the United Kingdom (25), Brazilian (11) and Chinese (10) scenarios. Publications as from the year 2000 stand out, with rapid growth of investigations in China and Brazil. In this classification, we excluded the books because of their theoretical and limited empirical characteristics.



Chart 4. Scenario

Source: The authors.

When we aligned the main authors and scenarios, we noted the concentration of Murphy's studies in North American companies, while Conyon permeates the British and North American companies and heads towards the Chinese scenarios, especially in partnership with Professor He:



Chart 5. Authors and scenarios

Source: The authors.

Conyon demonstrates greater openness to research the theme in different scenarios: he began his studies in the United Kingdom, following a comparison between the North American and British scenarios in partnership with Murphy himself, and also delves into other countries of the European community. In the last decade, he expanded his studies to the Chinese scenario. Murphy, on the other hand, focuses his efforts on the American scenario, strongly criticizing the compensation models imposed by the government through regulations, questioning the practice: he proves to be an icon on the topic. He also executed some research comparing the North American and Canadian scenarios.

In the subject executive compensation, we identified concentration areas of the studies, among which we highlight: i-) executive compensation *vs* return; ii-) compensation, corporate governance and regulatory environments; iii-) literature reviews; iv-) *vs* compensation versus consultants; v-) critics against the methods used; vi-) comparisons and vii-) compensation determinants. Employing this classification, we found the distribution below:



Chart 6. Themes

Source: the authors.

5. Conclusion

In this paper, we achieved the objective of summarizing the state of the art of executive compensation and business performance, thus providing the context of the research in this area. Executive compensation is involved in everyday issues and is always questioned in economic events or even in the political and legislative environment. Discussions surrounding this issue always question the efficient contracts and compensation coefficients and influence of the executive board. Sometimes, issues are left aside, such as disclosure level, tax policies and accounting standards, general legislation and even the political climate.

We found that with the fast growing payments through stock options, starting in the 1990s, many studies have focused their efforts on creating models with cross-sectional methods and time series, aimed at finding a relationship between compensation and return, especially in North American and British scenarios. Most of these studies did not take into account relevant factors such as political and regulatory issues though.

Our findings contribute to draw a timeline of this issue, in which we observed that, in the 1990s, research with a strong quantitative method appeared, in which researchers looked for the relationship between compensation and return. In the 2000s, there have been studies that question the forms of compensation and insert, variables not observed before into the models, such as aspects of corporate governance, local policy, regulation and accounting standards. These findings are in line with Murphy's search results (2013). In the last decade, we note that the studies are no longer concentrated in the North American and British scenarios and started to develop in China and emerging economies, such as Brazil.



Finally, we believe that research on executive compensation become controversial and interesting at the same time, because there are variables that directly impact the empirical results, such as efficient contracts, management capabilities and political and regulatory issues, which interact with each other. Thus, we believe that the findings presented contribute to the development of new empirical research, especially in countries where the issue is in full development or in areas where the interest in the subject is arising, with the addition of these variables to contribute to the understanding of the agency problem.

References

- Abowd, J. M.; Kaplan, D. S. (1999). Executive compensation: six questions that need. DOI: http://dx.doi. org/10.3386/w7124
- Alcouffe, A.; Alcouffe, C. (2000). Executive compensation: setting practices in France. *Long Range Planning* 33, pp. 527-543. DOI: http://dx.doi.org/10.1016/S0024-6301(00)00053-4
- Araújo, C. A. (2006). Bibliometria: evolução histórica e questões atuais. Em Questão 12(1); pp. 11-32.
- Araujo, J. A. O.; Parisi, C.; Silva, A. F.; Nakamura, W. T. (2014). Remuneração de executivos e desempenho das companhias abertas brasileiras: uma visão empírica após a publicação da Instrução Normativa CVM 480. *Revista Brasileira de Contabilidade 209*; pp. 69-83.
- Baker, G. P.; Jensen, M. C.; Murphy, K. J. (1988). Compensation and incentives: practive vs theory. *The Journal of Finance* 42(3); pp. 88-102. DOI: http://dx.doi.org/10.1111/j.1540-6261.1988.tb04593.x
- Barkema, H. G.; Gomez-Mejia, L. R. (1998). Managerial compensation and firm performance: A general research framework. Academy of Management Journal, Briarcliff Manor, 41(2), pp. 135-146. DOI: http://dx.doi.org/10.2307/257098
- Beuren, I. M.; Silva, J. O. (2015). Evidenciação da remuneração variável dos executivos nas maiores empresas brasileiras listadas na BM&F Bovespa. *Enfoque Reflexão Contábil 34*(3), pp. 95-124. DOI: http://dx.doi.org/10.4025/enfoque.v34i3.26154
- Beuren, I. M.; Silva, M. Z.; Mazzioni, S. (2014). Remuneração dos executivos versus desempenho das empresas. *Revista de Administração FACES Journal 13*(2), pp. 8-25. DOI: http://sci-hub. cc/10.21714/1984-6975FACES2014V13N2ART1556
- Brunello, G.; Graziami, C.; Parigi, B.M. (2001). Executive compensation and firm performance in Italy. *International Journal of Industrial Organization* 1(1), pp. 133-161. DOI: http://dx.doi.org/10.1016/ S0167-7187(99)00026-0
- Camargos, M. A.; Helal, D. H.; Boas, A. P. (2007). *Análise empírica da relação entre a remuneração de executivos e o desempenho financeiro de empresas brasileiras*. Encontro Nacional De Engenharia De Produção, Rio de Janeiro, RJ, Brasil, 28.
- Clarke, R. N.; Conyon, M. J.; Peck, S. I. (1998). Corporate governance and directors' remuneration: views from the top. *Business Strategy Review 9*(4), pp. 21-30. DOI: http://dx.doi.org/10.1111/1467-8616.00079

- Conyon, M. J. (1994). Corporate governance changes in UK companies between 1988 and 1993. *Corporate Governance: An International Review 2*(2), pp. 87-99. DOI: 10.1111/j.1467-8683.1994.tb00060.x
- Conyon, M. J. (1997). Corporate governance and executive compensation. *International Journal of Industrial Organization 15*(4), pp. 493-509. DOI: https://doi.org/10.1016/S0167-7187(96)01032-6
- Conyon, M. J. (2011). Executive compensation consultants and CEO pay. *Vanderbit Law Review*, 64(2), pp. 399-428.
- Conyon, M. J.; Core, J. E.; Guay, W. R. (2009). Are U.S. CEOs paid more than U.K. CEOs? Inferences from risk-adjusted pay. *Review of Financial Studies* 24, pp. 402-438. DOI: http://dx.doi.org/10.1093/rfs/ hhq112
- Conyon, M. J.; Gregg, P. (1994). Pay at the top: a study of the sensitivity of top director remuneration to company specific shocks. *National Institute Economic Review* 149, pp. 83-92. DOI: https://doi.org/10.1177/002795019414900107
- Conyon, M. J.; Gregg, P.; Machin, S. (1995). Taking care of business: executive compensation in the United Kingdon. *The Economic Journal 105*(430), pp. 704-714. DOI: http://dx.doi. org/10.1080/13619469708581456
- Conyon, M. J.; He, L. (2004). Compensation committees and CEO compensation incentives in US entrepreneurial firms. *Journal of Management Accounting Research 16*(1), pp. 35-56. DOI: http://dx.doi. org/10.2308/jmar.2004.16.1.35
- Conyon, M. J.; He, L. (2012a.) Executive compensation and corporate finance in China. *Journal of Corporate Finance 18* (2), pp. 1-51. DOI: http://dx.doi.org/10.1016/j.jcorpfin.2011.04.006
- Conyon, M. J.; He, L. (2012b). CEO turnover in China: The role of market-based and accounting performance measures. *European Journal of Finance 18*(7), pp. 657-680. DOI: http://dx.doi.org/10.1080 /1351847X.2012.676559
- Conyon, M. J.; He, L. (2012c). CEO compensation and corporate governance in China. *Corporate Governance an International Review 20*(6), pp. 575-592. DOI: http://dx.doi.org/10.1016/j.jcorp-fin.2011.04.006
- Conyon, M. J.; He, L. (2013). Executive compensation and corporate fraud in China. *Journal of Business Ethics 112*(2), pp. 187-201. DOI: http://dx.doi.org/10.1007/s10551-014-2390-6
- Conyon, M. J.; (2014). Executive compensation and board governance in US firms. *The Economic Journal 124*(574), pp. 60-89. doi: 10.1111/ecoj.12120
- Conyon, M. J.; Leech, D. (1994). Top pay, company performance and corporate governance. *Oxford Bulletin of Economics and Statistics 56*(3), pp. 229-247. DOI: http://dx.doi.org/10.1111/j.1468-0084.1994. mp56003001.x
- Conyon, M. J.; Murphy, K. J. (2000). The prince and the pauper? CEO pay in the United States and United Kingdom. *The Economic Journal 110*(467), pp. 640-671. DOI: http://dx.doi.org/10.1111/1468-0297.00577
- Conyon, M. J.; Peck, S. I. (1998). Board control, remuneration committees and top management compensation. *The Academy of Management Journal* 41(2), pp. 146-157. DOI: http://dx.doi. org/10.2307/257099
- Conyon, M. J.; Peck, S. I.; Sadler, G. V. (2009). Compensation consultants and executive pay: Evidence from the United States and the United Kingdom. *Academy Management Perspectives 23*(1), pp 43-55. DOI: http://dx.doi.org/10.5465/AMP.2009.37008002
- Conyon, M. J.; Sadler, G. (2001). Executive pay, tournaments and corporate performance in UK firms. *International Journal of Management Reviews* 3(2); pp. 141-168. doi: 10.1111/1468-2370.00060

- Conyon, M. J.; Sadler, G. (2010). Shareholder voting and directors' remuneration report legislation: say on pay in the UK. *Corporate Governance an Internacional Review 18*(4), pp. 296-312. DOI: http://dx.doi.org/10.1111/j.1467-8683.2010.00802.x
- Conyon, M. J.; Schwalbach, J. (2000). European differences in executive pay and corporate governance. In Gabler Verlag, Wiesbaden. Horst Albach (Ed.). Corporate Governance: *ZfB-Ergänzungshefte* (Vol. 1, pp. 97-114). Wiesbaden: *ZfB-Ergänzungshefte*
- Copeland, T. E.; Weston, J.F.; Shastri, K. (2007). Financial theory and corporate policy. 4th ed. London: Pearson.
- Cordeiro, J.; He, L.; Conyon, M. J.; Shaw, T. (2013a). Chinese executive compensation: the role of asymmetric performance benchmarks. *The European Journal of Finance 19*(6); pp. 484-505. DOI: http://dx.doi.org/10.1080/1351847X.2013.769892
- Cordeiro, J.; He, L.; Conyon, M. J.; Shaw, T. (2013b). Informativeness of performance measures and Chinese executive compensation. Asia Pacific Journal of Management 30 (4), pp. 1031-1058. DOI: http://dx.doi.org/10.1007/s10490-013-9353-9
- Dial, J.; Murphy, K. J. (1995). Incentives, downsizing and value creation at general dynamics. *Journal of Financial Economics* 37(3), pp. 261-314. DOI: http://dx.doi.org/10.1016/0304-405X(94)00803-9
- El Akremi, A.; Roussel, P.; Trepo, G. (2001). CEO compensation strategies: consequences on the structure and management of executive pay. *Working paper, HEC Paris*, nº. 741.
- Elston, J. A.; Goldberg, L. G. (2003). Executive compensation and agency cost in Germany. *Journal of Banking & Finance 27*, pp. 1391-1410. DOI: http://dx.doi.org/10.1016/S0378-4266(02)00274-1
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy* 88(2), pp. 288-307. DOI: https://doi.org/10.1086/260866
- Fernandes, F. C.; Mazzioni, S. (2015). A Correlação entre a Remuneração dos Executivos e o Desempenho de Empresas Brasileiras do Setor Financeiro. *Contabilidade Vista & Revista 26*(2), pp. 41-64.
- Firth M., Tam M., Tang, M (1999). The determinants of top management pay. *The International Journal of Management Science* 3(2), pp. 617-635. DOI: http://dx.doi.org/10.1016/S0305-0483(99)00021-3
- Funchal, J. A.; Terra, P. R. S. (2006). Remuneração de executivos, desempenho econômico e governança corporativa: um estudo empírico em empresas latino-americanas. Encontro Nacional de Pesquisas em Administração. Salvador, BA, Brasil, 30.
- Garen, J. E. (1994). Executive compensation and principal-agent theory. *Journal of Political Economy 10* (6), pp. 522-541. DOI: http://dx.doi.org/10.1086/261967
- Gibbons, R.; Murphy, K. J. (1992). Optimal incentive contracts in the presence of career concerns: theory and evidence. *Journal of Political Economy 100*(3); pp. 468-505. DOI: http://dx.doi.org/10.3386/w3792
- Gregg, P.; Machin, S.; Szymanski, S. (1993). The disappearing relationship between directors 'pay and corporate performance. *British Journal of Industrial Relation 31*(1). Pp. 1-9. DOI: 10.1111/j.1467-8543.1993.tb00377.x
- Hall, B. J.; Murphy, K. J. (2003). The trouble with stock options. *Journal of Economic Perspectives 17* (3), pp. 49-70. DOI: http://dx.doi.org/10.3386/w9784
- Holmstrom, B. (1982). Moral hazard in teams. *The Bell Journal of Economics* 13(2), pp. 324-340. DOI: 10.2307/3003457
- Jensen, M.; Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, New York 3(4), pp. 305-360. DOI: http://dx.doi. org/10.1016/0304-405X(76)90026-X

- Jensen, M.; Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, Chicago 98(2), pp. 225-264. DOI: http://dx.doi.org/10.1086/261677
- Jensen, M.; Murphy, K. J. (2010). CEO incentives: it's not how much you pay, but how. *Journal of Applied Corporate Fina*nce 22(1), pp. 64-76. DOI: http://dx.doi.org/10.1111/j.1745-6622.2010.00262.x
- Jensen, M.; Murphy, K. J. (2012). The earnings management game: it's time to stop it [Working Paper n. 12-004]. *Harvard Business School NOM Unit, Boston, United States of America*. DOI: http://dx.doi.org/10.2139/ssrn.1894304
- Jensen, M.; Murphy, K. J.; Wruck, E. G. (2004). Where we 've been, how we got to here, what are the problems, and how to fix them [Working Paper n. 44 / WEP. 2-117]. *European Corporate Governance Institute,* Bruxelas, Belgium.
- Kato, T.; Kim, W.; Lee, J. H. (2005). Executive compensation, firm performance, and chaebols in Korea: evidence from new panel data. *Discussion Paper Series*. Bonn, IZA DP, n. 1783. DOI: http://dx.doi. org/10.1016/j.pacfin.2006.03.004
- Kaveski, I. D. S. S.; Vogt, M.; Degenhart, L.; Hein, N.; Scarpin, J. E. (2015). Fatores determinantes da remuneração baseada em ações de empresas brasileiras. *Revista de Administração da Unimep 13*(2), pp. 100-116. DOI: http://dx.doi.org/10.15600/1679-5350/rau.v13n2p100-116
- Krauter, E; Sousa, A. F. (2013). A Relação entre a Remuneração de Executivos e o Desempenho Financeiro das Empresas. *Revista de Educação e Pesquisa em Contabilidade 7*(3), pp. 259-273. DOI: http://dx..doi.org/10.17524/repec.v7i3.988
- Leonard, J. S. (1990). Executive pay and firm performance. *Industrial & Labor Relations Review*, Cornell, 43 (3), pp. 13-S-29-S. DOI: http://dx.doi.org/10.2307/2523569
- Machado, D. G.; Beuren, I. M. (2015). Política de Remuneração de Executivos: um Estudo em Empresas Industriais Brasileiras, Estadunidenses e Inglesas. *Gestão & Regionalidade 31*(92), pp. 4-24. DOI: http://dx.doi.org/10.13037/gr.vol31n92.2088
- Main, B. (1992). Top executive pay and company performance. Edinburgh, University of Edinburgh.
- Main, B.; Johnston, J. (1993). Remuneration committees and corporate governance. *Accounting and Business Research 23*(1), pp. 35-62. DOI: http://sci-hub.cc/10.1080/00014788.1993.9729903
- McKnight, P. (1996). An explanation of top executive pay: a UK study. *British Journal of Industrial Relations 3*(1), pp. 557-566. DOI: http://dx.doi.org/10.1111/j.1467-8543.1996.tb00490.x
- Miller, D. J. (1995). CEO salary increases may be rational after all: referents and contracts in CEO pay. *Academy of Management Journal 38*(5), pp. 1361-1385. DOI: http://dx.doi.org/10.2307/256861
- Murphy, K. J. (1985). Corporate performance and managerial remuneration: an empirical analysis. *Journal of Accounting and Economics 7*(1), pp. 11-42. DOI: http://dx.doi.org/10.1016/0165-4101(85)90026-6
- Murphy, K. J. (1998). Executive compensation. SSRN Electronic Journal, v. 3b.
- Murphy, K. J. (2011). The politics of pay: a legislative history of executive compensation [Working Paper n. FBE 01.11]. *SSRN Electronic Journal, South Los Angeles*, United States of America. DOI: http://dx.doi.org/10.2139/ssrn
- Murphy, K. J. (2012a). Pay, politics and the financial crisis. In: Blinder, A.; Lo, A.; Solow, R. *Rethinking the Financial Crisis*, New York: Russell Sage Foundation.
- Murphy, K. J. (2012b). Executive compensation: where we are, and how we got there. In: Constantinides, G.; Harris, M.; Stulz, R. *Handbook of the Economics of Finance*, North Holland: Elsevier Science. doi: 10.2139/ssrn.2041679

- Murphy, K. J. (2013). Regulating banking bonuses in the European Union: a case study in unintended consequences. *European Financial Management 19*(4), pp. 631-657. DOI: http://dx.doi.org/10.1111/j.1468-036X.2013.12024.x
- Murphy, K. J.; Jensen, M. C. (2011). CEO bônus plan: and how to fix them [Working Paper n. 12-022 / FBE 02-11]. SSRN Electronic Journal, South Los Angeles, United States of America. DOI: http://dx-.doi.org/10.2139/ssrn
- Murphy, K. J.; Sandino, T. (2009). Executive pay and "independet" compensation consultants. *Journal of Accounting and Economics* 49(3), pp. 247-262. DOI: http://dx.doi.org/10.1.1.318.1670
- Murphy, K. J.; Sandino, T. (2012). Are consultants to blame for high executive pay? *SSRN Electronic Journal.* DOI: http://dx.doi.org/10.2139/ssrn.2133059
- Pukthuanthong, K.; Talmor, E.; Wallace, J. S. (2004). Corporate governance and theories of executive pay. *Corporate Ownership & Control* 1(2), pp. 41-62. DOI: http://dx.doi.org/10.1007/s10551-015-2962-0
- Quevedo-Silva, F.; Santos, E. B. A.; Brandão, M. M.; Vils, L. (2016). Estudo bibliométrico: orientações sobre sua aplicação. *Revista Brasileira de Marketing 15*(2), pp. 246-262. DOI: http://dx.doi.org/10.5585/ remark.v15i2.3274
- Rosen, S. Contract and the Market for executives. (1990). *Nobel Symposium* (3542): 1-54. DOI: http://dx-.doi.org/10.3386/w3542
- Silva, A. L. C.; Chien, A. C. (2013). Remuneração executiva, valor e desempenho das empresas brasileiras listadas. *Revista Brasileira de Finanças 11*(4), pp. 481-502.
- Tinoco, P. P.; Rossi, G. A. S.; Portugal, G. T. (2015). Remuneração dos Executivos das Companhias Estatais e Privadas de Energia Elétrica com Maiores Ativos Listadas na BM&FBOVESPA. *Contabilidade, Gestão e Governança 18*(3), pp. 142-161.
- Van Essen, M.; Otten, J.; Carberry, E. J. (2012). Determinants of CEO Compensation and Managerial Power Theory: A Meta-Analytic Approach. *Journal of Management* 41(2). pp. 164-202. DOI: 10.1177/0149206311429378