STOCK OPTIONS PLANS: SOLVING AGENCY ISSUES

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How to cite this paper:
Silva, J., & Feiteiro, A. (2019). Stock options plans: Solving agency issues. *Corporate Governance and Sustainability Review, 3(2)*, 34-45.
http://doi.org/10.22495/cgsrv3i2p4

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ISSN Online: 2519-898X
ISSN Print: 2519-8971

Received: 02.07.2019
Accepted: 03.09.2019

JEL Classification: G30, J33
DOI: 10.22495/cgsrv3i2p4

Abstract

Internal decision-making processes of companies are not a truly homogeneous process taking into consideration all parties to a company. On the contrary, it is a reflex of the intention of an entitled few that finds legitimacy in corporate structure. An efficient alignment of interests of all parties is crucial and attainable through remuneration policies, and specifically, through variable and performance-driven compensation. After all, these interests are essentially economic interests. In this paper, the focus is stock options plans as a solution to agency issues. Because options stimulate the acquisition of shares of the company, management tends to have more skin on the game, discouraging excessive risk taking but also entailing long-term commitment with the company. We believe that the best solutions for most companies are not necessarily the best solution for all of them. For that matter, a number of similar instruments are reviewed as well as different categories of stock options. We conclude that corporate governance mechanisms can be adapted to mitigate stock options plans' weaknesses. Solutions may be, for example, balanced strike prices – with great caution in the cases of premium options and performance-vested options and equal caution when using indexes as assessment parameters of the management's performance. The fact that solutions are found in corporate governance to solve issues within stock options plans, leads to the conclusion that criticism regards the design of stock options plan and not stock options plans themselves.

Keywords: Remuneration, Management, Stock, Options

Authors' individual contribution: Conceptualization – J.S.; A.F.; Methodology – J.S.; Resources – J.S., A.F.; Writing – Original Draft – J.S.; Writing – Review and Editing – J.S., A.F.

1. INTRODUCTION

In 1932, Adolf Berle and Gardiner Means introduced the problems arising from the separation the property of a company and its management in The Modern Corporation and Private Property. Along the 20th century, these issues were studied and theorized, creating, as it is commonly known, the agency theory.

The financial crisis of 2008 revealed insufficient care of internal and corporate policies. In numerous reports, these issues were always pointed out as the main reasons for the failure of companies and the economy.

It became evident that companies carried out certain corporate practices that were detrimental to their own self. Within this context, Corporate Governance – and the study of a number of good practices in corporate structuring[1] – grew especially relevant (Oliveira, 2017). There are many examples of this, the cases of Parmalat or Enron, or even the excessive leveraging of certain banking institutions[2] (Minder, 2014).

The remuneration of managers, one of the most discussed topics in the late 20th century, arises,

[1] We follow the definition introduced by Ana Perestrelo de Oliveira and currently in Cadbury Report, which defines Corporate Governance as «the system by which companies are run and controlled».

[2] Banks and their management, specifically, are tied to a whole lot of exogenous constraints, such as regulation and deposit guarantee schemes, to which companies in general are not, as well as bail-out regimes that influence very much the financial decision-making process. Compliance with sufficient tier 1 capital in order to meet the leverage ratios, for example, constraints decisions of directors. In 2014, at the verge of collapse of Banco Espírito Santo, the Bank of Portugal imposed through solvency ratios, which later would partially justify the decision for the resolution of the bank.

once again, as one of the main subjects in Corporate Governance. It is our understanding that the Board of Directors of a company is the cornerstone of a balanced and healthy business, in particular in the case of limited liability companies, notwithstanding the growing relevance of the shareholders in corporate governance.

In limited liability companies, the Board of Directors has preeminence over other agents, as it has several management powers that it may exercise autonomously.

The study of the remuneration of directors is especially relevant. As we will see, the management and administration of a company is now a professional service, which means that companies aim to hire and retain the best professionals available in the market – in theory, individuals who are the most capable of obtaining the best results – even though these do not hold any capital participation in the company.

However, it may happen that the best interests of the company are not cared for by hired professionals, or that mismanagement is willfully practiced or, at least, that general duties of care and loyalty are not complied with.

Executive remuneration policies are not per se an unequivocal solution for misalignment of interests: long-term incentives must objectively recognize positive or negative alterations in the companies' performance, the function of compensation to retain talent tends to skew the function of compensation to award a well-done job, and generally opaque performance goals are all unresolved issues that require flexible and adjustable corporate governance instruments.

Not just that, but a profound transformation in the corporate landscape – as the biggest companies in traditional sectors lose sight of ever-growing Big Tech companies – is greatly transformative also in compensation: the premium asset of the new biggest companies is innovation, which adds to the trend of company-capital-less managers to step up on the train of risk taking. These reasons alone – structural and cultural – add up to the interest in the topic.

1.1. Research question

In this brief outlook over the singularities of compensation schemes, the aim is to address the main question on how some corporate governance instruments are more efficient than others in dealing with a major aspect of corporate dynamics which are agency issues.

The dispersion of equity, as well as size-related inefficiencies cause an intersubjective gap that corporate governance insists in bringing back together by solving the conflicts of economic interests between the parties.

But – as in this paper we identify at least four closely related but distinct corporate governance instruments and at least six different categories of stock options plans – the main question of what is a possible solution to agency issues in the manager-shareholder relationship? Is followed by two sub-questions: why are stock options – and, in particular, which of the distinct categories within – the most efficient corporate governance instrument to close the gap and align the interests of managers and shareholders?

1.2. Outline and approach

In order to better understand the topic, the conclusion for the efficiencies of stock options plans must necessarily be preceded by at least two main points. First, it is relevant to address what the agency issues are in a corporate context, as that is a necessary picture of the problem. Second, the conclusions need a theoretical background on the principles applicable to both the problem and the potential solutions.

Both these introductory topics, which lay down the foundations for conclusions further in the paper, are topics that have an extensive coverage by many reputable authors. For this reason, and also because that is not the main point of the research question, the couple introductory chapters are rather descriptive of the problem.

This theoretical and descriptive approach is justified, in the first place, by the existence of a bigger question: how do you measure the value created by a correct use of stock option plans? As many other Corporate Governance instruments, stock option plans may be considered, if alone, as insufficient and highly dependent of equally beneficial measures used simultaneously, in order to create value. For that reason, the research is mainly focused on identifying (potential or existing) problems concerning executive's remuneration, and, particularly, the use of stock option plans, and trying to identify other mechanisms already studied in order to avoid them and create a "healthy" remuneration scheme.

1.2.1. Limitations and further research

Several of the author's positions in this paper are evident from the beginning of it. Despite, the current discussion and the authors do not engage with pure agency theory discussion in any meaningful depth or the principles in the background for the construction of the ultimate position regarding stock options plans as an efficiency-enabler corporate construct.

Also, the discussion on compensation schemes is rather difficult because of two main reasons: on the one hand, while most of the enterprise with market capitalization disclose their own bodies' structure and mechanisms to attribute compensation, the compensation itself is seemingly private and rarely disclosed, at least to an extent that serves the scientific purpose; on the other, the fact that this paper lacks a survey review conducted by the authors pushes the discussion a few steps out of the practical reality and into an abstract theorization of potential efficiencies.

Finally, the limitations of this research already serve the purpose of alerting for future endeavors into the topic of corporate compensation: first, the analysis of compensation packages and their efficiency will ultimately depend on their actual application and the outcome of it, which implies constant and thorough review of the practices in the analyzed jurisdictions – as the more distant the analysis is from surveying reality, the more distant it is from practical application, which is especially noticeable in this topic; second, the compensation of high-level corporate agents is not a topic of the past but rather a topic of the future, not only in respect

with traditional corporate structures adapting to fast-changing corporate culture, but also in connections with new tech-enabled corporate structures. The main challenge, and for that reason, a matter of special interest for future studies concerns the creation of a variable able to conclude on the value specifically created by the use of a good remuneration package.

2. THE AGENCY THEORY BEHIND THE MANAGER-SHAREHOLDER RELATIONSHIP

The dynamics of big companies – usually limited liability companies – has changed. The decision-making process is not truly homogeneous between all parties to a company. On the contrary, it is a reflex of the intention of an entitled few that is validated by internal corporate structure (Araújo, 2005).

This means that the fact that the company's will is determined by the decision or with the intervention of few, and that decision may bind the company itself, but it does not mean that all agents of the company agree with the decision.

The fact that today management of companies is widely professionalized leads to a minor role of shareholders in the companies' ordinary course of business.

Shareholders, in some cases, own irrelevant percentages of the total share capital of a company[3], the reason why they tend to benefit from appointing a director specialized in the administration and management of the company, sparing themselves from considerable efforts of acquiring the necessary knowledge, on the one side, and actually running the company, on the other (Gomes, 2015).

Following the above, we reason that in public limited liability companies the issue is considerably more serious, because, as it was mentioned before, the administration holds greater autonomy and authority in relation to the shareholders, which is conferred by law.[4]

Following Berle and Means, "as the ownership wealth has become more widely dispersed, ownership of that wealth and control over it have come to lie less and less in the same hands" (Berle & Means, 1932).

The role of the Board of Directors is to pursue the best interest of shareholders, as members of Board are managing something that – most of times – they do not own. As a consequence, such role comprises a fiduciary duty of acting on behalf of the stakeholders and the company. The director must act in the best interest of the company.[5]

The agency theory is pillared onto two to three main theses: the Berle and Means theory of the separation of control initially published in the 1930s that was a first approach the potentially hazardous extraction of benefits by managers of large corporations due to the fact that they had room for it (Berle & Means, 1932); the Jensen and Meckling model of the shareholder and the executive manager as a principal and an agent, which was the ultimate contribution to the topic as it set the theoretical framework of agency issues as a sufficiently general theory (Jensen & Meckling, 1976); and a few authors in between, such as Alchian and Demsetz, who authored works on the necessity to monitor the executive's performance (Alchian & Demsetz, 1972).

The classic agency relationship, as defined by Meckling and Jensen is "a contract under which one or more persons (the principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent" (Jensen & Meckling, 1976). For this matter, shareholders are the principal and managers are the agents.

While in Berle and Means, agency is a consequence of the divorce of ownership and control over the company, in Jensen and Meckling agency issues are reviewed at a behavioral level. Other authors, such as Alchian and Demsetz, preceded the classic and rather general agency theorization demonstrating that management is to be monitored (Alchian & Demsetz, 1972).

One of the most relevant aspects of the manager-shareholder relationship is information asymmetry. Management should have the most accurate and in-depth knowledge of the firm, which is necessarily higher than that of the owners (Aboody & Lev, 2000). It is precisely when the veil is harder to pierce that variable compensation presents the greatest value (Yermack, 1995).

The effort of managing a commercial company – or the lack of it, in the case of shareholders – implies that the level of knowledge acquired is different for managers and shareholders, regardless of the internal or external source of the knowledge, namely facts relative to the company itself or facts in connection with the business sector in which it operates.

It is evident that it is the actual minority participation – almost insignificant – that the large majority of shareholders hold in big companies that boosts information asymmetry regarding relevant facts of its business, which is also called the collective action problem (Bech, Bolton & Röell, 2002).

It is excessively costly for a minority stakeholder to be deeply informed of the business of the company, when compared to a situation in which it chooses not to, discouraging from more active participation.

When there is information asymmetry, it is rather easy for the agent, in this case directors, to develop interests of their own in the business activity of the company (Ciancanelli & Reyes, 2000).[6] Asymmetry, and agency costs associated with it, may be a necessary evil in the balance of costs and efficiency within a company: the more dispersed equity is, the less efficient it becomes to concentrate decision-taking processes and the more necessary it is to deal with agency costs (Fama & Jensen, 1983).

[3] In 2008, 26,6% of shareholding of PSI 20 (stock market index of companies that trade in Euronext Lisbon, in Portugal) listed companies was free float. In the post-crisis period, in 2014, free float had risen to 34,2%.

[4] The Portuguese experience is very revealing. Article 246 of the Commercial Company Act (Código das Sociedades Comerciais) provisions a broader number of matters to which stakeholders at private limited liability companies are entitled compared to those of shareholders in public limited liability companies, as set out in Article 373 of the Commercial Company Act.

[5] Under Portuguese law, it results of Article 64(1)(b) of Commercial Company Act. In this respect, the law highlights a loyalty duty for the safeguard of the best interests of the shareholders.

[6] Ciancanelli and Reyes cover the three main assumptions of agency theory, before comparing them to specific characteristics of banks, and declare that «the nexus of information asymmetry is the principal-agent relationship between owners and managers».

The developing of such interests is that managers may engage in short-termism instead of favoring long-term goals of shareholders, which is obviously an issue of misalignment with the interest of the company, but it is especially problematic in the tech-ruling business game of today's, since R&D, for example, is a decision for the long-term rather than the short-term (O'Connor, Coombs & Gilley, 2006). A few authors have demonstrated that stock options compensation plans have a positive impactful effect on R&D spending (WU & TU, 2007).

Directors may not be encouraged to pursue the best interests of those they act on behalf of, or it may be that directors have little to lose from not doing so, since the degree of information asymmetry hinders a full and adequate assessment of the director's performance (Gomes, 2015).

In general, both parties to a legal relationship will try to maximize their own profit. Just so, the same applies to shareholders and the directors of a company (Gomes, 2015). This is also the fundamental insight of Jensen and Meckling: that both principal and agent seek to maximize their own utility regardless of the interests of the other party (Jensen & Meckling, 1976).

The difference between results of a decision taken by the agent and the decision that would optimally promote the principal's interests is an economic loss that is usually referred to as an agency cost.

We explained above the vertical theory of agency. The fact that shareholders hold little share capital of the company, they are not invested in monitoring the Board of Directors. However, in capital markets such as the Portuguese, and generally those of Continental Europe, shareholders hold considerable percentages of the share capital.

This does not mean that the agency problem is irrelevant in these markets. In the presence of a controlling shareholder, managers tend to favor the interest of the dominant shareholder over the company interest's in the long run and that of the minority. That tendency derives from the fact that a dominant shareholder has a crucial role on appointing the managers and may easily dismiss them.

So, even in these markets, there may be misalignment of interests of the managers and the company's and those of several shareholders. For that reason, agency issues and its solution are equally relevant. [7]

3. THE PIVOTAL ROLE OF REMUNERATION

3.1. Shaping agency issues

A solution to the above mentioned issue is to align the interests of both parties through remuneration policies. After all, these diverging interests are essentially economic interests.

It is not liquid, however, that compensation itself is an unequivocal solution. Agency problems may be present the manager-shareholder relationship level, but also in the interchange between the agency problems of said relationship and the initiative of designing compensation that aligns the parties' interests (Bebchuk & Fried, 2003).

Even the conclusion that compensation is a valuable tool for the alignment of interests may assume many forms, as some authors concluded that slight differences in the financial structure of companies may be rather impactful on managers wealth and that when managers' wealth is especially exposed to stock price volatility, then these managers will prefer debt instead of equity pay (Dong et al., 2010).

Bebchuk and Fried (2003) suggest that management played a key role in reshaping the payment structure of the greatest part of the corporate landscape.

Remuneration is a compensation for the director's activity towards the company. It consists of the set of benefits attributed to directors as an offset for the services provided, which may be fixed or variable[8] (Hill, 2010).

On the one side, in case remuneration is subject to management performance through variable compensation schemes, then scenarios in which the compensation is immune to the actual productivity are cast aside as well as others in which managers lack the incentives to produce.

On the other, those variable compensation schemes may as well have harmful consequences leading to greater losses as a result of managerial behavior. Just so, the anticipation of greater earnings may tempt directors to act in a less prudent manner generating a moral hazard phenomenon[9] (Gião, 2010), which may occur in a number of ways.

From variable compensation, "it may form wicked incentives for managers to adopt short-term business strategies, distort financial results [...] in order to achieve a higher remuneration, at the expense of the sustainability of the company and long-term returns of shareholders" (Frada, 2000).

Variable remuneration may encourage riskier investment criteria, since these are potentially the most rewarding investment decisions as returns are higher and variable remuneration is subject to financial results. This is the basis for a correlation made by most authors between executive compensation and a risk-taking bias (Ju et al., 2014), which is one vortex of the topic among a few others, namely company's performance and the process of determining compensation.

While such risk-taking decisions burden the company with potential losses, directors will only incur in losses equal or lower than their variable remuneration. Even if dicey decisions achieved the company short-term positive results which revealed

[7] OECD Principles of Corporate Governance, in Section E, read that a "dominant shareholder has considerable powers to appoint the board and the management. However, in this case, the board still has a fiduciary responsibility to the company and to all shareholders including minority shareholders".

[8] Again, under Portuguese law here serving an interest of practical visualization of some principles laid down in this paper, it is provisioned the possibility of fixing a variable part of remuneration in Articles 399 and 429 of Company Commercial Act, making room for an alignment of conflicting interests, by means of adequate remuneration mechanisms, depending on the model.

[9] A straightforward definition of moral hazard may be the situation «in which, in the course of a lasting contractual relationship, one of the parties, misusing its informational advantage, does not comply, or only partly complies with its obligations, trusting that the evident information asymmetries prevent or makes it difficult for his lack of compliance to be detected».

harmful in the long-term, directors would promptly earn their performance-driven compensation, regardless of long-term results.

Another relevant issue is the added risk of tampered financial accounts – even if limited to legal criteria – and golden parachute clauses that aim at determining compensation for the termination of contract with an *ad nutum* director.

3.2. Solving agency issues

Remuneration occupies a prominent role as a counterweight (Gião, 2010) the process of solving agency issues, the reason why it deserves the best attention of Corporate Governance studies. We will see that the most used instruments under European law and several soft law instruments have similarities between them and even overlap to some extent.

The design of the board of directors and the ownership structure of a single company are cross rivers to meet the design of compensation. The three vortices have an intrinsic interoperability between them, as the design of compensation is a powerful tool to solve agency issues (Core et al., 1999).

As compensation is a governance mechanism to balance conflicting interests, the rules are laid down in a very simple fashion: companies with weaker governance structures are prone to greater agency issues; managers tend to extract unduly benefits from these companies; and performance is directly impacted by agency issues (Core et al., 1999).

The mechanisms to solve agency issues are many in categories. Those who first identified the issue with the separation of ownership and control promptly suggested that the solution is the concentration of ownership and the decision-making process (Berle & Means, 1932), which in today's markets is virtually impossible, and was also very much criticized because concentration has the potential to disable firm performance and enable the extraction of private benefits (Bebchuck, 1999).

Others suggested that an equity-pay as part of a variable compensation scheme indexed to the company's share value (Haugen & Senbet, 1981) or that reputation and market pressure for successful decision patterns were enough of a corrective mechanism for the alignment of interests of executives and shareholders (Fama, 1980).

Up to this point, the causes for agency theory were presented in Section 2, as well as its theoretical framework through the works of the most prominent scholars on the topic of agency theory and possible solutions for agency issues were outlined with recourse to relevant literature in paragraphs 3.1 and 3.2. By doing so, it is possible to partly answer the first research question addressed in paragraph 1.1 as to what is a possible solution to agency issues in the manager-shareholder relationship. In this paper, the authors focus on managerial compensation as such a solution.

The next chapters will be dedicated to the fully addressing an answer to the first research question and to introduce answers to the two research sub-questions on why are stock options – and which of the distinct categories within – the most efficient corporate governance instrument to close the gap and align the interests of managers and shareholders?

3.2.1. Pay for Performance principle

One of the most relevant principles of compensation structure of managerial positions dictates that remuneration should mirror performance to some extent. Authors have tried to positively demonstrate that the more equity-based compensation is, the better it is the companies' performance (Mehran, 1995). Although debatable – at least in such deterministic terms – it is a cue of the substantial role of variable compensation in business success of companies.

Assessment criteria vary. It includes earnings per share, return on assets, appreciation of stock, results compared with an index, regulatory compliance or approvals, successful events such as initial public offerings, sales results, results in comparison with other companies, etc. (Cantrell, 2010).

The relevant performance for this purpose should be, however, the management's performance rather than the companies'. Section C.3 of OECD Principles of Corporate Governance reads: "it is important for shareholders to know the specific link between remuneration and company performance when they assess the capability of the board".

It is on these grounds and all the above mentioned that special caution is necessary when adopting such compensation schemes, given the inimical incentives that they may constitute.

3.2.2. Deferral of remuneration and clawback provisions

The deferral of the variable part of remuneration is a typical Corporate Governance instrument. It is intimately linked with pay for performance, provided that the goal in deferring the remuneration is to ensure that it is subject not to any performance but to the actual managerial performance, which may only be assessed after a reasonable period of time.

The main objective of compensation deferral clauses is to void excessive leveraging of the company as a result of management decision making in search of personal earnings and remuneration capture, given that actual results that favour the company are not immediate and thus less appealing.

For that matter, Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 binds credit institutions to defer in time part of the variable remuneration (i.e. 40%, or 60% in case the compensation is especially high[10]) for a period of three to five years. [11]

The deferral of compensation, however, does not solve eventual moral hazard phenomena happening in between two time periods: the managerial conduct and the deferred payment of compensation.

[10] Article 94(1)(m) of Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013.

[11] This rule is mandatory in the Portugal for banks and other Credit Institutions.

This means that, in a given year in which results are positive, and even though the payment of the variable part of remuneration is deferred to the third year, the deferring mechanism does not solve the moral hazard that may occur in the second year.

The conclusion is that benefits of deferring remuneration are behavioural, because, in principle, it is less appealing to incur in excessively risky management if compensation for such activity is not immediate. This fact alone – the lack of immediacy of return, however, does not mean that compensation will not be paid off or is already secured.

An adequate solution for the medium-term issue is to widen the period of assessment of performance of management. On the one hand, not only the behavioural pressure on directors is impactful on long-term objectives, but also their managerial conduct is assured to be in line with medium-term goals of the company, as they are assessed for a period of time greater than the short-term.

On the other, such solution balances out the compensation structure as it mirrors a larger period of time and for this reason it is a much more accurate assessment of the management performance.

In case the performance is satisfactory, a greater deferral will not hinder its payment. But if not, it prevents that the director is awarded unjust and inadequate compensation.

A few authors have suggested that the deferral in time presents an "horizon problem" for executives older in age, as these executives may dismiss valuable decisions and opportunities because his term may is expected not to survive the actual return (Yermack, 1995). Others have rejected the "horizon problem" by demonstrating that there is not a palpable correlation between age and compensation deferred in time (Tzioumis, 2008).

Clauses that are based on a global assessment of performance, or which subject it to the success of predetermined events are usually called malus clauses[12] (Santos, 2014).

Another possible solution is the use of clawback provisions. These, contrary to malus clauses, do not imply the deferral of the moment in time in which the compensation is paid off, but rather the reversion of amounts paid as variable compensation.

The reversion of payments may be triggered by a number of events (Santos, 2014). The first category of events is the amendment of financial accounts because of errors and misinformation in the financial statements, which may or may not be attributable to directors. It is discussed whether the events are triggered solely because of misinformation or if it depends on fraudulent conduct. The second category is the event of an alteration in the performance of the company or the failure to meet predetermined thresholds, for example.

In alternative to the abovementioned solutions, authors argued for the application of unjust enrichment regime in similar situations (Frada, 2000).

3.2.3. Competence to decide on remuneration

Compensation packages enable companies to appeal to directors and retain talent, but also to align the parties' interests (Câmara, 2010). The competence to decide the director's remuneration is a topic of the greatest importance, as it is intimately linked with the efficiency of the actual governance mechanisms in respect with compensation.

The act of setting remuneration is a source of conflicts of interest, inasmuch as directors may interfere in their own remuneration policy. OECD's Corporate Governance Factbook for 2019 presents a few interesting points on the board of directors and key executive remuneration. Out of 49 jurisdictions, only one third requires that shareholders approve the remuneration policy. Similarly, out of the same data sample, again, approximately one third excuses companies from mandatorily disclosing their remuneration policies, which leads to the conclusion that pay practices in EU companies, as compared to U.S. data is very limited and opaque for years now (Ferrarini & Maloney, 2005).

If we compare the results of the data gathered by OECD in 2019 with the results of 2014[13], there is a slight improvement in disclosure: in a period of five years, an additional 37.7% of jurisdictions reviewed include legal requirements for some level of mandatory disclosure[14]; however, from the results of 2019 one may observe that 3.5% less jurisdictions in comparison with the data sample reviewed in 2014 require the binding approval of remuneration policies by shareholders.

Transparency and a better alignment of interests presuppose greater participation of shareholders in setting remuneration policies, the reason why the numbers revealed by OECD are rather disappointing.

Because it is relevant that the decision on remuneration of directors is unbiased, soft law corporate governance mechanisms have been developed for that matter. As we have seen, given that in different jurisdictions shareholders are not mandatorily a part of the remuneration policy determination process, the role of the board of directors is immense. Most jurisdictions do include certain requirements, growingly harmonized within legal and political contexts such as the EU, however, much of it still lays in recommendations (OECD, 2019).

The board of directors discretion varies not only between jurisdictions, but also in what jurisdictions require of it: even jurisdictions that establish legal criteria that should be observed when setting remuneration policies, such criteria may vary from maximum limits to compensation, to long-term incentives, severance payment caps, etc.

In alternative, the competence is also attributed to non-executive directors. Their activity is carried out in order for executive directors not to incur in moral hazard, the reason why the intervention of

[12] Malus clauses are different from clawback provisions.

[13] Please note that the data sample is slightly different. In 2014, OECD reviewed 41 jurisdictions and in 2019 OECD reviewed 49 jurisdictions. While it is still useful, the comparison should be treated carefully.

[14] The EU countries that still do not require mandatory disclosure of some sort are Denmark, Lithuania, Portugal, Slovakia, Greece, Latvia, Poland, Austria and Finland.

non-executive directors is highly justifiable in the topic of remuneration.

In Common Law markets, it is usual for remuneration to be decided on by a committee appointed by the Administration for such purpose.[15]

3.2.4. Say on pay

Say on pay refers to any provisions that promote, allow or oblige the General Meeting to issue a declaration on the remuneration policy, provided that it may coexist with any other models for the determination of remuneration previously mentioned, since scopes are different.

The role played by the shareholder in the process of deciding compensation has been gradually improving, in several European countries, especially after the Directive (EU) 2017/828 of the European Parliament and of the Council of 17 May 2017, regarding the encouragement of long-term shareholder engagement.

The intervention of the General Meeting on executive's remuneration has greater relevance, because it actually sets the remuneration itself or approves a generic remuneration policy.

Shareholders shall state their opinion on several matters, such as: the limits on remuneration in comparison with other similar and relevant companies; the removal or the end of term of directors; the utilization of long-term performance assessment models; risk management; and proposals for certain types of variable remuneration as stock options plans and retirement plans that directors may eventually benefit from in the future.

The declaration on the remuneration policy should contain primary information, specific vectors that the policy shall meet, while avoiding detailing in a comprehensive manner the topic, which makes it a declaration of principles rather than an actual remuneration policy.

4. STOCK OPTIONS PLANS

4.1. Concept

After a brief introduction on the issue of the agency relationship and the main aspects of governance solutions in response to such delicate topic, it is relevant to discuss the role of stock options plans.

Stock options plans are subscription plans of shares, in which the subscriber acquires the compulsory right to acquire shares of a company.[16] The offering party is then subject to the compulsory exercise of shares in predetermined conditions. It results that stock options plans are a rather complex instrument.

First, a subscription plan is characterized by the option contract. Because of its structure, the latter deserves some thought (Antunes, 2017).

An option contract includes several relevant aspects, namely the shares which may be object of an exercise, also named underlying asset. Further into our discussion, it will become evident that these are only the shares of the company in which the director exerts its activity.

A different question is the price for which the shares are exercised during the exercise period[17]. The strike price is previously established, allowing the subscriber to choose the best moment to acquire the shares inasmuch as the value of the asset is greater than the strike price, provided that it may also occur the opposite or an exact breakeven.

It should also be drawn a distinction between two time periods: the waiting period, during which the subscriber may not exercise the option, and the exercise period, during which it may acquire the shares at any time.

Given the chance to exercise the right in a specific time period, the subscriber of the plan shall wait for the moment in time that best values its plan: this is the moment when the difference between the asset value and the strike price is positively higher.

The offset of the premium paid to the director in the form a type of subscription plan is its management activity: the act of administration justifies the attribution of the premium.

Beside the option contract, the stock option plan implies the sale and purchase of shares. Of all possible terms, share means a stake of subscribed capital (Cordeiro, 2007). Accordingly, the exercise of the option is sure to reduce the stake of capital held by the remaining shareholders, regardless of how the underlying shares were subscribed.

There are three ways for the company to assign the shares to the subscriber, in this case, the manager: first, the remaining shareholders may assign the relevant number of shares to the subscriber; second, the company may acquire shares to the remaining shareholders and then assign it to the subscriber; and third, the company may undertake a capital increase (Oliveira, 2016).

While expensive, the acquisition of shares to the remaining shareholders is the solution most committed to them, since the assignment of new shares will dilute the stake of the remaining shareholders without any sort of compensation. Indeed, of all aspects stock options "can have financial reporting and political costs, [but] the major cost associated with stock compensation is dilution" (Balsam, 2002). In the second scenario, the shareholders will be compensated for their loss when the option is exercised. However, the setback is evident, and though it is a compromising solution that safeguards the internal cohesion of the company, it is costly (Fialho, 2007).

Also, there may be statutory limitations that prevent companies from holding shares of their own in excess of a certain percentage of capital.[18]

[15] Apple, AT&T and ExxonMobil, three of the largest U.S. companies, have compensation committees of some sort. AT&T, for example, has a Human Resources Committee which responsibilities are precisely that of «discharge the Board's responsibilities relating to compensation of the Company's executives and other compensation matters» and which main purpose is to «review the compensation strategy of the Company in consultation with the Chief Executive Officer and its effect on the achievement of Company goals», according to the charter of such committee (available at https://investors.att.com/~/media/Files/A/ATT-IR/committees-and-charters/human-resources-charter.pdf).

[16] Further, we will see which is the relevant company for that matter.

[17] It should be noted that this instrument is most used in listed companies, the reason why the amount refers to the stock or trading price.

[18] Under Portuguese law, the threshold is 10%, according to Article 317(2) of Commercial Company Act.

4.2. Other similar instruments

Given the large number of instruments similar to option contracts, and because the following mechanisms are also included in compensation packages, it is relevant to lay down some concepts and characteristics of other similar instruments. It is worthy to very briefly sum the concept of phantom shares, vesting rights stock and tracking stock.

Phantom shares, in contrast with stock options, do grant the manager the chance to own a stake of capital in the company. Phantom shares only constitute a promise of payment of dividends. Indeed, compensation is determined based on the appreciation of stock value over time, or the distribution of dividends, whichever agreed, but the fact that it confers the management several benefits inherent to stock ownership does not imply an actual transfer of capital[19] (Welborn, 2008).

Vesting rights stock, in their turn, are not options to acquire shares. In substance, it consists of a compensation rewarding process over a predetermined amount of time. The company gradually grants the shares to management as the object of the contract and part of the compensation package. The deferral in time determines that the longer the performance is aligned with the interests of the company, the great the benefits for the subscriber, not only in terms of the number of shares vested but the importance of the associated benefits (Cantrell, 2010).

It may be provisioned that the company may re-buy the shares for their nominal value if the shares are partially vested, or their market value if fully vested (Fialho, 2007).

Finally, tracking stock is an instrument that grants directors benefits such as to share profits based on a partial assessment of performance or in relation to specific geography.

4.3. Categories

Also, as relevant as drawing the line between different instruments, it is the line between different sorts of stock options, provided it is not a comprehensive list (Iacobucci & Triantis, 2007), namely: traditional options, premium options, performance-vested options, purchase options, repriceable options, reload options and indexed options (Johnson & Tian, 2000). Different categories correspond to different levels of conservatism in granting equity pay and towards the relationship between managers and shareholders.

In traditional options the strike price is set at market value on the date of subscription, irrespective of the utility of it in relation to the performance of the director.

As to premium options the strike price is set at the actual market price, which means that because the strike price exceeds the market price at the date of subscription (Balsam, 2002), in order for the director to achieve any earnings from the plan, the appreciation of stock must be significant. The difference between types of options may be in detail. Some authors agree that lookback call options, which enable managers to subscribe at the widest difference in price since the attribution of the right of option but not necessarily at the price at subscription, induces desirable effects and directly benefits shareholders (Ju et al., 2014).

Similarly, to premium options, performance-vested options require an appreciation of stock. In this case, however, the appreciation is predetermined and contrary to premium options the director may acquire the shares at an inferior strike price.

In case of purchase options, the director must exercise the option by the time of subscription and will not be reimbursed if the option is not duly exercised.

The repriceable options allow for an amendment to the strike price after the subscription of the plan, which is especially relevant in cases when the shares depreciate deeply, in such a way that facing the initial agreed strike price and the unlikely chances of ever achieving it in the relevant period, the incentive would be lost.

Reload options[20] allow the directors to subscribe a new option during the exercise period. These options must be subscribed within the exercise period in identical terms to the previously agreed and the price shall be set at market value at the time the first options were subscribed. The reload feature attributes new shares once the previous shares are exercised (Cantrell, 2010).

The feature of indexed options is that the price is indexed to a stock market index, e.g. S&P 500, or an average at the moment the option is subscribed. It is thus beneficial to exercise the option whenever the market value of shares is higher than the index. Like premiums options, indexed options are a plausible alternative to prevent management from free riding external market forces, as it prevents management from being rewarded for exogenous movements in the stock market (Carpenter & Yermack, 2017).

4.4. Risks associated with stock options plans

The inclusion of stock options plans in remuneration packages is not immune to criticism.

First, the premium is entirely dependent on the market value of shares, meaning that the pay for performance principle is only indirectly applied, since it is the volatility of shares that grants the plan its worth. But because it is so reliant on the market value, it comprises risks. It may create adversarial interests between the parties.

The shareholder's interest is not limited to stock appreciation on the stock market. If the stock appreciation is overly concerned in the director's priorities, the shareholder's interests will be relegated to second place as distribution of dividends will likely be jeopardized, for example.

Notwithstanding the statutory limitations, the acquisition of shares of its own is allowed, and it may generate an artificial demand for shares of the company and consequently the rise of share value,

[19] The legal construct of phantom shares is sometimes depicted in a not as positive way. The attribution of benefits exclusive of shareholders to non-shareholders has potential negative impacts in corporate governance.

[20] These options, that may also be designated as «reset» options, were targeted by the U.S. Securities and Exchange Commission as potentially abusive.

instead of prioritizing the distribution of dividends to shareholders (Cordeiro, 2007).

Another relevant aspect that may cause the misalignment of interests is the relation between the strike price the value of the company. Achieving equilibrium is crucial. In case the price set is way higher than the share value, for the plan to be worthy it is imperative that the share value rises substantially, which is only possible if directors prioritize their interests when managing the company, taking riskier decisions that virtually comprise greater returns. As the value of call options increases with share value, the worth of any equity pay (i.e. as stock options) push for riskier decision taking (Ju et al., 2014).

As previously mentioned, the use of stock options plans should promote the alignment of interests, not enhance its misalignment[21] (Johnson, 2003). The problem is that riskier management implies potential fatal losses for the company, while directors only risk the variable part of their compensation.

In case the price is set excessively low, the plan will not be an incentive of any sort or enable a credible assessment of the performance of the subscriber, since it will always be profitable to exercise the option at any time. Stock appreciation will not entail a premium.

Another potentially harmful consequence of the use of stock options plans is the fact that management is permeable to exogenous and macroeconomic factors.

Finally, the attribution of subscription plan such as these implies costs burdened by the company.

5. THE APPLICATION OF CORPORATE GOVERNANCE INSTRUMENTS IN STOCK OPTIONS PLANS

As stock options plans may be misused, it is valuable to discuss how stock options may efficiently be used to solve agency issues. The key lays in corporate governance mechanisms.

Because options stimulate the acquisition of shares of the company, directors tend to have more skin on the game, discouraging excessive risk taking but also entailing long-term commitment with the company (Oliveira, 2016).

The deferral of remuneration was discussed as a solution. We believe that deferral mechanisms can be adapted to stock options plans. The exercise of the option may be deferred by defining a specific exercise period later in time.

In order to avoid that directors extract personal benefit in an abusive manner, the disposal of shares should be limited, namely a limitation on sale of shares acquired as part of a subscription plan, notwithstanding other shareholding rights.

This is to avoid that directors prioritize their interests over those of the company, since the chance of earnings are blocked for a significant period of time.

On the one side, long-term commitment imposes greater rigor in the appreciation of stock, since it results of a stable evolution of stock value. On the other, it discourages abusive conduct given that such conducts will not earn the directors any benefits in the immediate term.

The period of deferral for free disposal of the shares may be set for a reasonable period of time, or for an indefinite period of time, such as the term of office. The Portuguese experience, for example, is that board members remain in office for great periods of time, which may void the incentives of the plans if the deferral in time is indefinite.

The parties are free to set an adequate time period that safeguards both parties' interests, as it is very difficult to precisely determine the moment in which the risks is eliminated by governance instruments. It should, however, be sufficiently large (of at least one term of office), in accordance with Recommendation V.3.3 of Corporate Governance Code of Corporate Governance Portuguese Institute, in order to discourage abusive practices.

In order for the exercise of an option to be valuable, it is necessary that the share value strike price is higher than the strike price. For that matter, it is especially relevant to set the strike price at the right amount.

Of course, the more prominent the variable part of compensation, the more relevant it is to expand time periods and include clawback provisions, in order to safeguard the company in the event of misconduct (Oliveira, 2016).

The risks are greater whenever the appreciation of stock is key, the cases of premium options and performance-vested options, in which situations setting the right strike price is very important.

On other topic, the advantage of the company buying shares of shareholders instead of diluting their stock with additional shares of the directors is that it prevents shareholders from negotiating extremely adverse conditions to exercise the option – ultimately, encouraging misconduct or even excluding stock options plans, out of fear of losing share capital. This way, the loss of share capital is at least paid for.

Also, the best solutions for most companies may not be the best for all: for companies with highly concentrated capital[22], dilution of shares is not as great of a deal as for other types of companies; these, may rather choose to dilute than to decapitalize abruptly.

Shareholders are expected to participate in the definition of stock option plans for the sake of transparency in the process. What was mentioned in regard of say on pay applies. The participation of shareholders is justified on the entry of a new shareholder and the potential loss of share capital.

It may also be that the best interests of the company or the shareholders are for a residual participation of the director in the share capital of the company. The option must, in certain situations, be limited.

Phantom stocks are called into action whenever shareholders are not interested in sharing their capital in the company with directors. Incentives, however, are not as great for directors that are not granted a few of the most relevant shareholders

[21] The issue is called «suicidal risk».

[22] Note that in most of these cases, it is the stakeholders who manage the company. However, there may be cases in which that is not the case.

rights, such as profit sharing and voting. The same applies to the emotional connection – in this case, the lack of it.

The category that seems to best safeguard the interest of shareholders is purchase options, because it imposes an advance to the strike price. But as it does not secure the interests of directors, it increases risk of misconduct. Plus, stock options plans' function is to compensate directors, rather than being a purely speculative agreement, by which directors may not only lose remuneration but also lose money of their own.

Indexed options seemingly fail to truly assess the directors' performance. A stock market index may be an unjust and deceiving assessment parameter and a trap for the agreeing parties.

Only if the indexed options are tightly set, they will be a fair alternative to assess the management performance in market terms, because generally the worse the sector's results the better the companies' performance.

One may conclude that directors' performance topped that of other companies in the sector, which suggests merits in the management. Inversely, obtaining better results by comparison with other entities may not always be revealing of great management, but instead the influence of exogenous and macroeconomic factors.

6. CONCLUSION

In virtue of the present study, it is feasible to conclude that the relationship of directors and shareholders is troubled. This is because the parties have opposing interests, on the one side, and it is intrinsically human to pursue the interests of oneself, on the other. Besides, the more the sources and volume of information the more troublesome the relationship.

To manage a company, it is necessary sufficient knowledge on management but also the market. Such knowledge is costly to obtain, the reason why managing commercial companies is a professional task.

When the line between ownership and management of a company is drawn, the information levels on both ends differs, exposing directors to moral hazard, to pursue economic interests of their own.

Corporate governance takes on the challenge to mitigate such risks, pushing for greater participation of shareholders in the process of establishing remuneration policies but also in the process of defining just and reasonable compensation. Stock options plans appear as an equative scheme of variable compensation.

The rise of tech-based companies as the most prominent agents in most traditional sectors presents a challenge to variable compensation. David Yermack once demonstrated, on the one hand, that regulation tends to discourage the use of stock options in variable compensation packages but, on the other, that companies facing liquidity issues see equity-pay as an alternative to big cash payments (Yermack, 1995). As new technologies face an increasing level of regulation and Big Tech as well as new players lacking liquidity venture into highly regulated venues, the conclusions of Yermack will be put to the test.

Irrespective of all the criticism, stock options plans are worthy as a governance instrument in a fight against the misalignment of interests within a company. The main reason for that is the fact that it expresses in a perfect way the pay for performance principle.

This principle is seen on most of the "good practices guides" regarding executive's remuneration, however, it is troublesome regarding efficient measures in order to deploy variable remuneration.

Stock option plans are commonly used in order to fulfill that principle, however, an inadequate use of this instrument may fail its primarily goal, by compensating under false premises the executives or not compensate adequately good performances.

This is the reason why issuing the different variant is so important, and finding the balance among the different possibilities is an efficient method of solving the agency issues regarding the managerial role.

The solution is a balanced strike price – with great caution in the cases of premium options and performance-vested options. There is a strong need of creating an achievable goal, which means a realistic balanced price, in order to motivate an Executive to reach it.

However, the most dangerous draft of a stock option plan includes a very high strike price, hardly achievable in order to be profitable. In these cases, there will be no motivation at all, or, in some cases, it may be harmful for the company once it simulates riskier decision making. The agency issues increase instead of decreasing.

Equal caution is required when using indexes as an assessment parameter of the director's performance. Once the effective remuneration is not purely dependent of the merits of the management it does not correspond truly to the pay for performance principle.

Timing the plan also deploys a fundamental role in order to design successfully stock options. A strike period deferred from the year the remuneration corresponds allow two different things, all crucial, according with the best practices:

- develop a long term interest on making the Company grow, instead of short-termism;
- allow the company to retrieve the stock options, if the management later reveals as bad.

Any of the abovementioned instruments may do, if well designed as an efficient instrument capable of putting sufficient pressure on the director's interests while allowing incentives to live.

Despite the advantages of using a stock option plan, it is not enough to demand for specific regulation, at least at this moment. As the stock option plans are just part of a "bigger picture", the remuneration package, It is preferable that shareholders are aware of the risks of its use, and have full liberty to outline it, taking into consideration other aspects of the package, balancing it in terms of risk factors and total remuneration than impose certain instructions on its design.

The conclusion is that criticism in relation to stock options plans regards their design and not the instrument itself. Hopefully, this paper contributes to the better understanding of it and the most efficient ways to use it.

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