

# EXECUTIVE COMPENSATION IN BANKING

Joana Machado Guerra

MSc. Finance

Coordinator:

Prof. Dr. Mohamed Azzim Gulamhussen

April 2010

## **AGRADECIMENTOS**

Uma tese não é só feita da escrita do autor. Os contributos que são dados ao longo do período de escrita são o elemento chave para a “obra” final.

Deste modo, agradeço em primeiro lugar ao meu orientador, Professor Azzim, pelo papel fundamental que desempenhou nesta tese. Pela disponibilidade, pelas críticas que muito me ajudaram, mas sobretudo pela paciência demonstrada ao longo destes meses.

Também não me seria possível acabar esta tese sem a ajuda da minha família.

Agradeço aos meus Avós, Simão e Celeste, pelo apoio incondicional que ao longo dos últimos meses me deram e pela preocupação que sempre demonstraram.

À minha irmã Marina, pelo apoio e por me fazer pensar em maneiras de melhorar a tese (já pensas como uma gestora!).

Ao Vítor, por debater comigo o tema, pelas dicas úteis e pelo apoio.

Ao João, pela ajuda logística na procura de informação, mas também pelo apoio e por não me deixar para ou desistir.

*Last but not least*, agradeço à pessoa que permitiu que isto fosse possível: a minha Mãe. Agradeço-te imenso por me teres dado tantas oportunidades, especialmente o Mestrado e por me teres incentivado a continuar a estudar. Obrigada também pelo apoio, por me incentivares a ser melhor e sobretudo por acreditares em mim. Um grande OBRIGADO.

Muito obrigada a todos.

***ABSTRACT***

Executive compensation has raised, over the years, interest not only in the international community, but also in researchers who try to understand which factors are behind this “phenomenon”.

Is compensation of executives structured to encourage risk taking? Why do CEOs receive higher compensation than other employees and a wide range of benefits?

In this paper, the main goal is to answer these questions, by analysing executive compensation in banking, throughout a sample of the financial industry in the United States of America.

In the end, it will be possible to conclude about a likely relationship between executive compensation and firm characteristics, as well as features of bank executives.

***RESUMO***

A compensação de executivos tem suscitado, ao longo dos anos, muito interesse por parte não só da comunidade internacional mas também por parte de estudiosos, que procuram entender que efeitos estão por detrás deste “fenómeno”.

Será que a compensação dos altos quadros das empresas está estruturada para promover a tomada de risco? Porque razão os CEO recebem valores tão elevados e tantos benefícios?

Ao longo deste trabalho, procura-se responder a estas questões, analisando a compensação de executivos na banca, através de uma amostra do sector financeiro dos Estados Unidos da América.

No final, será possível aferir sobre a eventual relação entre a compensação de executivos e as características da empresa, bem como as características dos executivos dos bancos.

***KEY WORDS:*** Compensation, Executive, Banks, Company performance, Incentives.

***JEL Classification:*** G20, G28

## ***SUMÁRIO EXECUTIVO***

Compensação de executivos. Este é um tema que ao longo das últimas décadas tem suscitado grande interesse, não só por parte da comunidade internacional, mas sobretudo por parte de estudiosos, que melhor procuram entender a mecânica subjacente à atribuição destes “prémios”<sup>1</sup> aos executivos.

Nos últimos cinquenta anos, temos vindo a assistir a um aumento da literatura respeitante à compensação de executivos. Particularmente, a indústria financeira é o principal interesse de investigadores um pouco por todo o mundo. No entanto, é sobre os Estados Unidos da América que os estudos se focam mais, havendo também trabalhos mais recentes sobre o Reino Unido ou outros países desenvolvidos do Ocidente da Europa.

Todo este conjunto de literatura sobre compensação de executivos tem enfoque na relação que a mesma tem com a performance das empresas, mas também no nível e tipo de compensação. Relativamente à banca, temos dois temas principais, nomeadamente o risco e a regulação bancária. Por um lado, os investigadores têm procurado entender a relação (se existe) entre a compensação de executivos e a tendência para os executivos emprenderem em projectos de riscos considerados elevados para a indústria em que se inserem (Houston e James, 1995). Já no que diz respeito à regulação, e visto que nas últimas décadas temos vindo a observar um aumento das regras respeitantes ao mundo dos bancos<sup>2</sup>, alguns estudos procuram perceber a relação existente entre a mudança das leis reguladoras do sector financeiro e o efeito que esta mudança tem na performance das empresas.

Este trabalho enquadra-se exactamente no primeiro tema, ou seja, no binómio risco – compensação, procurando-se fazer uma “ponte” entre os resultados existentes no estudo de Houston e James (1995)<sup>3</sup>. Visto que este trabalho tem dados do ano 2008 (e portanto, respeitantes ao ano de 2007) e como o trabalho dos autores anteriormente referidos diz respeito ao período compreendido entre 1980 e 1990, o objectivo aqui é entender se durante este interregno temporal houve alterações significantes na compensação de executivos e seus determinantes.

---

<sup>1</sup> Ver anexos, ponto B, para melhor entendimento das componentes da compensação de executivos.

<sup>2</sup> De referir que, neste momento, se procura internacionalmente perceber se é ou não necessário aumentar a regulação respeitante aos bancos devido à recente crise no sector (ver ponto A dos anexos).

<sup>3</sup> O estudo intitula-se “CEO Compensation and bank Risk: IS compensation Structured to Promote Risk Taking?”

O estudo começa com uma primeira parte direccionada à literatura existente sobre o tema, procurando-se apenas resumir os trabalhos mais recentes e que mais ajudaram na elaboração desta tese.

Após este pequeno resumo, encontram-se explicadas as hipóteses consideradas para a realização dos testes estatísticos. Na *Hipótese 1*, procura-se entender o uso de incentivos relacionados com o capital próprio da empresa e a sua relação com algumas variáveis. Já no que diz respeito à *Hipótese 2*, o que se pretende é saber se existe alguma relação entre a riqueza do CEO, medida pela variável WEALTH e os componentes da compensação de executivos. Aqui, temos uma separação, ou seja, procuramos entender não só esta relação no total da amostra, mas também apenas no que diz respeito às empresas consideradas como “*too big to fail*”. A *Hipótese 3* procura relacionar a frequência de continuação num determinado cargo de um executivo na empresa, analisada através da variável FCIR, e o prémio da empresa sobre o mercado (NMRET) e o retorno dos activos (ROA). Procura-se, também, entender se a idade é um factor determinante na continuação ou não num determinado cargo, pelo que foi criada uma variável, FCIRSY, relacionando-se esta também com NMRET e ROA, de modo a entender se a idade dos CEO, neste caso, inferior a 60 anos, é um factor determinante e se difere muito do total da amostra. Por fim, temos a *Hipótese 4*, onde procuramos entender se a política de remuneração dos executivos difere entre bancos que enfrentam dificuldades e bancos com boa saúde financeira, estes últimos medidos pela variável RATEA.

Os dados da amostra foram recolhidos nas bases de dados WRDS e Boardex. A amostra compreende 153 empresas do sector bancário dos Estados Unidos da América.

De modo a perceber se existem relações lineares entre as variáveis, recorreu-se ao Método OLS (Ordinary Least Squares) para testar as hipóteses acima referidas, tendo por base o software SPSS, obtendo-se, assim, os testes referentes a cada hipótese testada.

Neste estudo, as variáveis estudadas dizem respeito não só às características das empresas, mas procurámos também ter uma visão de determinadas características dos executivos das empresas estudadas.

A média dos activos (ASSET) das empresas da amostra situa-se nos \$69 milhões, enquanto que o máximo observado é \$2.000 milhões e o mínimo \$1 milhão.

Em relação ao rácio do capital sobre os activos (EQASST), a média ronda os 11%, o mínimo 35 e o máximo 87%.

No que diz respeito às características dos executivos, a média de idades (AGE) é 57 anos, enquanto que o número de anos médio desempenhados no cargo em questão é 7 anos, sendo que o maior valor registado é de 31 anos.

Em relação a cada componente da compensação, o salário médio ronda os \$346.000; já o valor médio das acções é de \$33 e o valor das opções \$1.320.000.

No que concerne aos rácios de atribuição de cada componente da compensação de executivos, OPTCASH e CEOSTOCK, que se referem ao valor das opções sobre a compensação em dinheiro e valor das acções do CEO sobre o total de acções da empresa, há disparidades. No primeiro rácio, a média é 272%, o que indica que na amostra a componente opções vale mais do que o salário atribuído. A média de acções atribuídas é 0%, o que é explicado em parte pela actual conjuntura, visto estarmos perante um cenário de crise financeira.

As conclusões que derivam dos testes têm pontos em comum e pontos divergentes com o trabalho de Houston e James (1995). Assim, o parecer que se pode dar é que em alguns pontos as empresas continuam a ter as mesmas práticas que tinham entre 1980e 1990, mas as situações discordantes podem ser explicadas pelo facto de estarmos a enfrentar uma grave crise financeira que tem levado à contracção dos mercados e empresas.

## Índice

1. INTRODUCTION.....	2
2. REVIEW OF LITERATURE.....	3
3. HYPOTHESES .....	6
4. DATA AND METHOD.....	7
5. RESULTS .....	9
<b>5.1 Characteristics of Compensation .....</b>	<b>9</b>
<b>5.2 The use of equity-based incentives .....</b>	<b>10</b>
<b>5.3 The pay for performance relationship .....</b>	<b>12</b>
<b>5.4 Evidence concerning managerial turnover .....</b>	<b>13</b>
<b>5.5 Compensation policies at troubled banks .....</b>	<b>14</b>
6. CONCLUSIONS .....	16
10. BIBLIOGRAPHY .....	18
ANEXXES .....	20
<b>A. MACROECONOMIC CONTEXT .....</b>	<b>32</b>
<b>B. COMPONENTS OF EXECUTIVE PAY .....</b>	<b>34</b>
<b>C. EXECUTIVE COMPENSATION IN BANKING .....</b>	<b>37</b>
<b>D. MAJOR DETERMINANTS INFLUENCING EXECUTIVE COMPENSATION .....</b>	<b>39</b>

## Índice de Tabelas

<b>Table 1</b> Description of main variables used in the sample.....	21
<b>Table 2</b> Descriptive statistics of main variables in the sample.....	22
<b>Table 3</b> Descriptive statistics regarding variables in Hypothesis 1. ....	23
<b>Table 4</b> Summary of outputs of Hypothesis 1. ....	24
<b>Table 5</b> Descriptive statistics of variables used to test Hypothesis 2. ....	25
<b>Table 6</b> Summary of outputs of Hypothesis 2. ....	26
<b>Table 7</b> Descriptive statistics of variables in Hypothesis 3.....	27
<b>Table 8</b> Summary of outputs of Hypothesis 3.....	28
<b>Table 9</b> Statistics of ratings of companies in the sample. ....	29
<b>Table 10</b> Descriptive statistics of main variables in Hypothesis 4. ....	30
<b>Table 11</b> Summary of outputs of Hypothesis 4.....	31

## Índice de Figuras

Figure 1 Traditional Model vs. Sub-Prime Model .....	32
--	----

## ***1. INTRODUCTION***

Recently, we have witnessed a colossal crisis in the banking industry. No one ever thought that banks considered as “too big to fail” would, in fact, declare bankruptcy. Executives in several banks handed over part of their compensation to help save the banks they work for. This issue brought up the controversy about executive pay. Are executives really overpaid or they are simply rewarded for the job they perform?

Executive compensation is not always a consensual issue to talk about. International community sees executive payment as an insult to the average worker.

Moreover, the level of executive pay is difficult to understand, but the way it is structured is also intriguing. There are factors that influence the level and structure of executive compensation. Whether higher levels of compensation or more equity based incentives are given, the decision to take a certain path when constructing payment packages for executives has “strings” attached.

In the beginning of this year, and regarding the Portuguese case, the Government wants to increase taxes concerning executive compensation. The main question remains: is it fair to overtax executives just because their level of compensation is higher than the average of workers and they are paid for the work they do? Or should we increase taxes because these remuneration packages are exuberant for the amount of work executives do?

In this paper, I examine executive compensation in banking. What I want with this paper is to find out about how and with what executives are paid in financial industry.

In the first section, I make an overview of the world financial scene. Second section is a short review of the existing literature about executive compensation in general. The following section gives a brief gives a explanation about the components of executive pay and next section talks about executive compensation in banking. Next, there is a section that explains the major determinants in executive compensation. After that, two sections describe the sample and results of this study. Last section is a conclusion of this paper.



## ***2. REVIEW OF LITERATURE***

Over the past decades, many studies have been made regarding executive the compensation theme. Especially, over the last 50 years, studies regarding executive compensation have grown considerably. Most studies focus on United States; however, in the last years we have seen studies that centre their research in United Kingdom.

Although there is a significant amount of research, executive compensation is not fully understood, mainly because there is still a discrepancy in the studies that have been published and therefore, not quite accepted internationally. This happens because there are different ways to follow when studying executive compensation.

A considerable number of studies focus its research on the level of executive compensation and the relation to company performance. This kind of studies has two different approaches to study this relation between executive compensation and company performance. One approach is to compare executive compensation and compensation of other workers in the firm. On the other hand, another set of studies focuses the study of the relation between executive pay and firm performance but having agency theory as the background for the study (Farmer, 2008).

In general, literature regarding executive compensation focuses on the themes mentioned before. However, there is a particular industry that has captured researchers' attention: banking industry.

Executive compensation in banking has more variables that have to be introduced in order to have a more accurate vision of this business. Risk and regulation constitute the focus points of the recent literature. The first one is used to investigate if compensation policies are used to promote risk taking in order to increase the value of CEO stock options (Houston and James, 1995). On the other hand, and since we have been witnessing changes in the regulation of banking industry, a number of studies focus on researching the effects that these changes in regulation have in executive compensation related to company performance.

There is another set of studies that have a different view of executive compensation besides the financial analysis, which is above mentioned. From the accounting point of view, we have a different vision that is somehow linked to financial vision: the relationship between executive compensation and accounting performance measures and also the link of executive compensation to earnings manipulation.

Executive compensation is a complex subject. As mentioned before, the path pursued to study this theme is different among existing literature. Another difference that is common among literature regarding executive compensation is the division between the components of

executive pay. We can observe discrepancies in categories as well as the name that is given to each component. However, in the end the principle is the same in each and every study that exists regarding executive compensation.

Farmer (2008), in a brief discussion, pointed out that, even though executives compensation is usually tied to company performance, such measures might not be as accurate as they are supposed to be. As the author mentions, because of this lack of accuracy, the results obtained until now can be somehow inconsistent.

Ang, Lauterbach and Schreiber (2000) study not only compensation of CEOs but also compensation of second line executives. They conclude that executive compensation depends on some factors, namely bank size, executive rank and bank performance. The authors also conclude that there are two types of executive payment: CEOs and non-CEOs and that the discrepancy between these “classes” might have been designed to encourage non-CEOs to work harder. They also conclude that there is evidence concerning the agency theory and it is an indicator of differences in payment in order to align interests.

Hall and Liebman (1997) investigate the relationship between pay and performance. They find that CEOs have responsibility in firm performance. But the main conclusion in this paper is that they discover that the level of CEO compensation and its sensitivity to performance has increased over the last decades.

Murphy (1999) reached a similar conclusion to Hall and Liebman (1997). He documents that there are some trends regarding executive compensation and turnover. Executive payment is sensitive to firm performance and this sensibility has increased over the past decades in the United States. The author believes that there is still no perception by the CEO of the way that their actions affect shareholder value.

Bebchuk and Fried (2003), study other link about executive compensation, namely the agency problem. They argue that executive compensation is designed to mitigate possible agency problems, since their sample is composed of publicly traded companies. However, they conclude that executive compensation is a part of the agency problem itself and that it has major implications in corporate governance. According to the authors, managers have an enormous influence in the design of their compensation scheme and they also argue that this

influence might be harmful to the company leading to inefficiencies. These authors also study components of executive pay, but the most important point in this paper is the relationship between executives' power and pay.

Houston and James (1995), on the other hand, study executive compensation in order to understand if it is structured to promote risk taking. Their study includes a sample of companies that is divided into banks and non-banks. The main result in this paper is that there is no evidence that the structure of compensation is planned to promote risk taking. Regarding reasons influencing executive compensation, they find almost no differences between the bank sample and non-bank sample. However, the structure of compensation is different between the two samples: bank executives receive, on average less than non-bank executives, either cash compensation or equity-based compensation. Nevertheless, executive compensation in banking is more sensitive to firm performance than in the non-bank sample. Even though there is a distinction in compensation, they state that this phenomenon might be explained through differences in the nature of company's assets and investment opportunities because they tend to influence agency problems in firms. Nevertheless, another idea pursues Houston and James primary result: regulation in banking seems to be ineffective. The authors do not exclude the hypothesis that other incentives are being provided to promote risk taking in banks.

In this paper, the main goal is to link executive compensation to banks and executive characteristics. Houston and James (1995) paper is the base for a cross-sectional comparison, since in this paper the sample reports to 2007 while in those authors' study their sample covers the period of 1980-1990.

### **3. HYPOTHESES**

The main problem here is to understand executive compensation, not only executive compensation thought as a whole but the determinants behind the award of each component of executive payment.

In order to comprehend executive compensation in banks, we composed four hypotheses.

#### *Hypothesis 1: Use of equity-based incentives*

In this case, the aim is to test whether there is a relationship between the use of equity-based incentives and some variables of the sample, namely characteristics of the company and characteristics of the executive (ROLE). Here, the goal is to understand the structure of executive payment in the sample and among companies considered as too big to fail.

#### *Hypothesis 2: The pay for performance relationship*

The plan is to understand if there is a connection between the wealth of a CEO, measured by the variable WEALTH and the components of executive compensation, measured by SALARY and TEXEEQU. Also, we test the full sample but we also investigate if there are differences between the whole sample and companies considered as too big to fail (DTWEAL). This test was designed to comprehend whether compensation packages are linked to company performance.

#### *Hypothesis 3: Evidence concerning managerial turnover*

The goal in this hypothesis is to relate the frequency of continuation in role (FCIR) with characteristics of the company, namely NMRET and ROA. In this hypothesis, it is tested if company performance is tied to executive turnover. Also, it is tested whether turnover is linked to risk through compensation. Nevertheless, the aim is to understand changes in companies present in this sample.

#### *Hypothesis 4: Compensation Policies at Troubled banks*

Here, the purpose is to comprehend differences in compensation among banks. Separation is arranged using a dummy for ratings superior to A, i.e., we want to observe if there are different policies of rewarding executives comparing banks somehow troubled and banks with good financial wealth.

#### **4. DATA AND METHOD**

The goal of this study is to replicate the results from Houston and James paper “Executive compensation in banking: is compensation structured to promote risk taking?”, in order to compare the results.

Houston and James studied banks in the period of 1980-1990 while this study uses data from the year 2008. Also, this study focuses only on banks from the United States of America.

The step of gathering information focused, mainly, on obtaining data from executive compensation, which means, salaries, bonuses, among other components. Nevertheless, and because some statistics required further information, it was necessary to obtain data about executives’ wealth, age or years in role. To enrich that information, data about companies itself was important, not only financial ratios but other relevant information for the analysis.

However, and because information needed to be filtered, it was necessary to choose geographical space in order to begin the analysis. As a result, only a country was selected, not only because the step of gathering information was easier, but also because of its dimension and the role it has in world economy. The sector/industry of this analysis was chosen mainly because, at this moment, we are experiencing a financial crisis that was “created” by hid industry, i.e., banks.

The main source of information was Boardex, but WRDS was also used in order to make a cross-sectional comparison between records. Also, the last source of information was company websites, in order to obtain specific information.

Boardex returned information about executives, mainly compensation, wealth and other characteristics. On the other hand, variables such as assets, return on equity or book value per share were obtained in WRDS.

The final database has 153 records. Because some outputs that were in the file did not have information about executive payment, they were eliminated, since they were not useful to this study. The sample began with 1320 records and after this elimination it was reduced to 159 records. Again, in some records information about a few variables was not available; therefore 6 more records were eliminated and then, the final database was complete and 153 records constitute the database for this study.

The final database provides easiness in obtaining a diverse and complete analysis of the financial services industry, especially what a company spends in compensation, key ratios and other information that gives the status of the company.

In order to analyse the hypothesis considered in this study, the statistical method used is OLS<sup>4</sup> (Ordinary Least Squares).

Taking as an example the first hypothesis, we have the formulas of OLS<sup>5</sup>:

$$CEOSTOCK = 0 + EQASST \times 0 + VOLAT \times 0,02 - MBEQUITY \times 0,031 + ROLE \times 0 + DTBTF \times 0 \quad (1)$$

$$OPTCASH = 5 - EQTASST \times 18 - VOLAT \times 4,6 - MBEQUITY \times 132 - ROLE \times 0,057 + DTBTF \times 111 \quad (2)$$

This test was computed using the software SPSS and the outputs are summarised in Tables 1 to 11.

This method was selected because it is the most adequate to test the possible connections that might exist between the chosen variables.

---

<sup>4</sup> This method has the following formula:  $y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \dots + \beta_k x_k + u$

<sup>5</sup> Values are listed in Tables 3 and 4.

## **5. RESULTS**

There are four tests that were made in order to test the hypotheses prepared earlier in this paper. However, to simplify the analysis to the reader, each variable has an acronym and they are all synthesised in Table 1.

[Please insert Table 1]

### **5.1 Characteristics of Compensation**

Table 2 presents a summary about descriptive statistics from main variables in this study.

[Please insert Table 2]

As it can be shown in the table, the mean asset size is \$ 69 millions, approximately. Maximum asset size in this sample is \$2 billion and minimum asset size is nearly \$1 million. On the other hand, the mean of stockholders equity is \$8.5 millions, with a maximum of \$300 millions and a minimum of \$0.8 million.

Besides a few variables that describe companies in the sample, in Table 1 there are some characteristics of executives. ROLE illustrates how long an executive is in a role in the companies of the sample. The mean of this variable is 6.7 years, maximum of almost 31 years and minimum of 0.2 years. Comparing to Houston and James (1995) paper<sup>6</sup>, we can see some differences in the descriptive statistics: in their sample, the mean for years as CEO is 7.44, maximum is 36 and minimum is 1 year. These differences might not seem large but, considering the period each sample was collected (in this case was 2007 and 1980 to 1990 in the sample of Houston and James) and since in 2007 we were assisting to the crisis' peak, and executives turnover was almost a constant in that year, one can conclude that because of this banking crisis, executives' position in banks was far more weak in 2007 than in the period of 1980-1990, leading to several changes in roles of executives.

AGE, on the other hand, is a variable that has no significant differences comparing to Houston and James (1995). Mean is approximately 57 and minimum is 36 in both cases, maximum is 82 in Houston and James sample and 78 in this case.

---

<sup>6</sup> The comparison that is made throughout the section of Results in this paper, between this sample and Houston and James paper is only with their bank sample.

Regarding executive compensation, we can observe discrepancies in both samples, somehow more notorious in some of variables. SALARY presents differences: mean in this sample is \$346.000 and in Houston and James sample is, approximately \$377.000, maximum is, respectively, \$1.062.000 and \$1.296.000, while minimum is \$2000 and \$70.000. Not only salary and bonus compose executive compensation, but the most important components besides this variable are stock and options granted. Houston and James (1995) present a mean for percent of common stock held by CEO (CEOSTOCK) of 1.09%, with a maximum of 425 and a minimum of 0%, while in this sample mean, maximum and minimum are 0%. Comparing with OPTCASH, this sample presents a mean of 272% and a maximum of 6100%<sup>7</sup>, while in Houston and James sample the mean is 14.85% and maximum of 323%.

We can observe a trend looking at these two variables: a fall in the value of equities awarded to executives but at the same time a rise in the value of options granted in detriment of cash compensation.

This phenomenon has a possible explanation. When the board decides to choose between stocks or options it takes into consideration several factors because not only the “message” for the executive is different but the purpose of either financial product has its discrepancies.

Both stocks and options are an important part of executive compensation. Equity-based incentives are designed with one purpose clearly essential to the Board of Directors, that is, to align executives’ interests to their own interests. Since executives have part of their own wealth tied to the value of the company, it seems logical to “do their best” to increase the company value in order to obtain gains with these packages of equities. The problem arises when executives increase artificially results in order to increase the value of the firm, i.e, the value of the firm increases therefore the price rises, but this strategy is only thought in a short period of time.

### **5.2 The use of equity-based incentives**

The purpose of this section is to test whether the use of equity-based incentives is structured to promote risk-taking.

In table 2, it is presented a summary of the relationship between the use of equity-based incentives and bank characteristics, as well as executive characteristics.

---

<sup>7</sup> The mean is higher because in the sample there is a value, the maximum, which “pushes” the mean to this high value.



[Please insert Tables 3 and 4]

As it can be seen in the table, there is no relationship between dependent and independent variables considered (at a 5% level). VOLAT measures the risk of the company and there is not a link between this variable and percentage of stock held by CEO, which means that there is no support for the moral hazard hypothesis i.e, in this case there is no evidence that equity based incentives (in the case of stock) increases the level of risk taken.

Also, there is no evidence relating ROLE and CEOSTOCK, as well as there is not a relationship between DTBTF and the ratio mentioned above. Therefore, one can conclude that the percentage of stock held by CEO is not influenced by the number of years that a person is in that role. Also, the percentage of stock is not higher in big companies than in small companies (in fact, there is a negative relationship between the variables, even if it is close to zero).

Concerning the ratio of options granted to cash compensation, we discover differences when comparing to the other dependent variable (CEOSTOCK). There is a strong relationship between each independent variable and the ratio mentioned above. There is a negative relationship between OPTCASH and VOLAT which indicates that more options granted tend to reduce the level of risk taking. Also, there is a negative relationship between the dependent variable MBEQUITY, which predicts that, in this sample, banks are less likely to use equity-based incentives. Furthermore, there is a positive relationship between the ratio used as independent variable and companies considered as too big to fail<sup>8</sup>, which might indicate that these companies award a considerable amount of options when compared to the level of cash compensation.

Comparing to Houston and James (1995), there are some differences, but the most important is that in their sample there is evidence that, regarding the relationship between market-to-book ratio and the use of equity-based incentives, banks with higher values in this ratio rely more on equity-based incentives.

It is important to refer Murphy (1999). His main conclusion is that differences in compensation depend on company size, type of industry and the country the firm is in. Also, he concludes that the level of payment is higher in larger firms as well as in firms within the United States.

---

<sup>8</sup> In this case, companies are considered as too big to fail if the value of their assets is higher than \$250.000.000, measured by DTBTF.

Ang, Lauterbach and Schreiber (1997) also observe the same: compensation of executives depend on bank size and bank performance, but it also depends on an other indicator: executive rank.

### 5.3 The pay for performance relationship

In this section, it is analysed the relationship between CEO wealth (WEALTH) and components of executive compensation, namely variables SALARY and TEXEEQU.

There is a positive relationship between CEO wealth and both components of executive payment. It is possible to see that there is a relationship between CEO wealth and the amount of salary and bonus received by executives but the relationship between wealth of executives and total equity based incentives is stronger.

As it is possible to observe, in banking industry investment opportunities are more reduced than in other industries. Therefore, the performance of a CEO is easier to “see” since his/her results depend on his/her skills and good management decisions which lead to a possible reduction of equity based incentives in compensation packages. This is consistent with the contracting hypothesis. However, in this case this is not observed. The strong relationship observed between CEO wealth and total equity received by executives tells us that in this sample, executives are given more equity based incentives than the actual salary received.

Among the executives that are in companies considered as too big to fail, we can see that a relationship between CEO wealth and salary plus bonus does not exist but there is a strong relationship between wealth in companies “too big to fail” and total equity linked. We can see that companies considered as too big to fail rely more on equity based incentives. Therefore, we can conclude that executive compensation in banks considered as too big to fail is designed to promote risk-taking.

Regarding Houston and James (1995) sample, their results differ from those obtained here, especially because they do a comparison between several periods of time, while here is just one year, i.e, while I use total wealth of CEOs, they use change in stockholder wealth throughout the years of their sample (1980-1990). Concerning both variables, they find a positive relationship among all companies but regarding companies considered as too big to fail, they find a negative relationship, which indicates that compensation is not structured to promote risk taking.

Even though there are differences when computing these statistical tests, we can see that throughout the years, we witnessed (and still are witnessing) a change in both level and structure of compensation, but more entrenched in structure of compensation.

Murphy (1999) argues an important consideration: pay for performance sensibilities and the level of compensation have increased over the last decades in the United States.

Ang, Lauterbach and Schreiber (1997) make an interesting point, related to Murphy (1999), which tells us that there is evidence of agency theory. Since CEOs have a strong influence on the firm and their actions are measured with a certain difficulty, in order to align his/her interests with those of shareholders, they are provided with large amounts of incentives in their payment contracts.

[Please insert Tables 5 and 6]

#### **5.4 Evidence concerning managerial turnover**

In order to identify if there are changes of executives in this sample, it was created a ratio of frequency of continuation in role, FCIR.

Looking at Table 4, we can see that the mean for the entire sample is 1 and the standard deviation 0,92 while among younger CEOs the mean is 0,47 and standard deviation is 0,85.

There is a positive relationship between net of market returns<sup>9</sup> and frequency of continuation in role, stronger among CEOs whose age is less than 60 years (FCIRSY). There is also a positive relationship between Return on Assets (ROA) and frequency of continuation, again stronger in the sample of younger executives.

Regarding firm performance, measured by the variables net of market returns (NMRET) and Return on Assets (ROA), we can conclude that performance of banks is linked to turnover of executives, statistically significant at 5% level.

In addition, we should remember that even though good performance leads to fewer turnovers, one other reason why CEO turnover is low is that if executives are given with incentives to take risk, turnover is low since consequences of poor performance are not directly observed. This means that if executives are provided with incentives to engage in risky investments and since company results tend to be bad when large investments are made, the Board of Directors do not dismiss executives because of poor performance in times of great investments.

---

<sup>9</sup> Net of market returns is the difference between the stock returns of each company minus the return of the index NYSE/AMEX, i.e., NMRET.

Houston and James (1995) reached the same conclusions, but since they do not have a ratio of continuation but a ratio of departure, in order to obtain the same conclusions, the results should be opposite. That is exactly what happens, since they have a negative relationship between firm performance measures and frequency of departure. This fact means that in both samples there is a negative relationship between firm performance and executive turnover.

Murphy (1999) reaches a conclusion that is very interesting to this section. The author believes that CEOs are less likely to leave the company in normal ages of retirement and there is a strong possibility that they are replaced with outside managers rather than with executives inside the firm. This is interesting because the conclusion in this section is that in this sample we do not observe a high percentage of turnover, it is fascinating to observe the trends in the sample of this author.

[Please insert Tables 7 and 8]

### **5.5 Compensation policies at troubled banks**

In order to study compensation policies at troubled banks, it is necessary to have a ranking of the banks. In this case, it is used S & P Quality Ranking, measured by RATEA.

[Please insert Table 9]

The majority of banks in this sample has a rating of A, A- or B+ (76% approximately) and 18% has a rating of B or B-. Only a small percentage has a rating of A+ (82%), but 5% of banks have a C rating, which means that in this sample they are the worst banks.

[Please insert Tables 10 and 11]

Compensation policies are always a theme that concerns regulators, especially in banks that are struggling to survive. The main concern is that executives are provided with incentives to take more risk. It is common knowledge the fact that banks with lower ratings have more risk than banks with good ratings. Therefore, and returning to the Moral Hazard Hypothesis, if an executive in a troubled bank receives a high level of compensation, he/she is provided with incentives to engage in risky projects.

As it can be seen in Table 7, there is a significant and negative relationship between companies with a rating superior to A and equity based incentives (options and equities

awarded). This negative relationship is stronger when we are talking about stock awarded to CEOs. Regarding Salary and bonus, we have a positive relationship, but it is close to zero.

In this case, we can observe that executives in banks with a good rating are provided with less equity-based incentives. Therefore, if their compensation package includes less equity-based incentives, we can conclude that CEOs in companies with rating superior to A are not provided with incentives to promote risk taking.

In the sample of Houston and James (1995), the same results are reached: companies with good ratings do not structure compensation to promote risk taking.

This is an indication that throughout the years, companies that are considered as good, with good ratings, do not provide their leaders with incentives to promote risk taking. One possible explanation is that these companies have a position in the economy, and consequently in markets, that they do not want to lose.

## **6. CONCLUSIONS**

Executive compensation. Why, how much, how? In this paper, I try to answer these questions. How executives are paid, how much do they receive and why is compensation structured in a certain way.

The main goal was to study executive compensation in banking but structure the research and tests as Houston and James (1995) did in their paper, in order to compare both samples, since they are from different periods of time (1980-1990 vs. data of 2008 related to 2007)

Therefore, I reached some conclusions regarding the sample used, composed by 153 companies, all in banking industry and belonging to the United States of America.

There is no evidence that equity-based incentives increase the level of risk taken by executives, since there is a negative relationship between the risk of the company, measured by volatility, and percentage of stock held by CEO. Furthermore, there is no evidence that the number of years in the role affects the percentage of stock held by CEO. Also, there is a negative relationship between companies considered as too big to fail and percentage of stock held by CEO, which indicates that large companies do not rely more on equity based incentives rather than small and medium companies.

In what concerns to the value of options granted to cash compensation, we can observe strong associations between this ratio and each variable used in this test. There is a negative relationship between the value of options granted and volatility, which indicates that by awarding more options the level of risk taken by executives, tends to diminish. We can also observe a negative relationship between the value of options granted and market-to-book ratio of each company; therefore, we can conclude that banks do not tend to use equity based incentives in executive compensation. However, it is observed a positive relationship between value of options granted and companies considered as too big to fail, which indicates that when structuring executive compensation, this kind of companies rely more on options rather than cash compensation.

It is observed a positive relationship between CEO wealth and salary plus bonus and equity based incentives, but this relationship is stronger when we are talking about equity based incentives. Also, we can notice a strong relationship between companies considered as too big to fail and equity based incentives but that connection does not exist when we look at salary and bonus. This fact indicates that in companies considered as too big to fail, compensation is structured to promote risk taking. When we compare to Houston and James (1995) sample,

we observe differences in structure and level of executive compensation, but these differences are more entrenched in structure of compensation packages.

Executive turnover is also a phenomenon that is worth to study, especially when we try to establish a connection with executive compensation. In this sample, we can see a positive relationship between frequency of continuation in role and return on assets and net of market returns, which shows that performance in banks is linked to turnover of executives. Therefore, we can conclude that bad performance leads to turnover of CEOs and good performance leads to a continuation in role.

Regarding the last test made, it is used an S & P rating for each bank, which can tell us which companies are dealing with problems. There is a negative relationship between companies with a rating superior to A and equity based incentives awarded to executives. This relationship is stronger when we are talking about stocks awarded. Therefore, CEOs in companies with a good rating are awarded less equity based incentives. Consequently, we can conclude that in companies that are not troubled, executives are not provided with incentives to promote risk taking.

## **10. BIBLIOGRAPHY**

Ang, J., Lauterbach, B. & Schreiber, B.(2000), Pay at the Executive Suite: How do U.S. Banks compensate their top management teams?, *Anderson Graduate School of Management, University of California*.

Bebchuk, L. & Fried, J. (2003), Executive Compensation as an Agency Problem, *Centre for Economic Policy Research*.

Farmer, M. (2008), Chief Executive Compensation and Company Performance: a Weak Relationship or Measurement Weaknesses? , *17<sup>th</sup> EDAMBA Summer Academy*, University of Kingston.

Ferrarini, G., Moloney, N. & Vespro, C. (2003), Executive Remuneration in EU: Comparative Law and Practice, *European Corporate Governance Institute*.

Gibbons, Robert & Murphy, Kevin J. (1990), Relative Performance Evaluation for Chief Executive Officers, *Industrial and Labor Relations Review*.

Hall, Brian J. & Liebman, Jeffrey B. (1997), Are CEOs really paid like Bureaucrats?, *Harvard University*.

Houston, J. & James, C. (1995), CEO Compensation and bank Risk: IS compensation Structured to Promote Risk Taking?, *Journal of Monetary Economics, Volume 36 Issue 2*.

International Monetary Fund, *World Economic Outlook*, April 2008.

International Monetary Fund Working Paper, *Systemic Banking Crises: a new database*, Laeven, Luc & Valencia, Fabian, November 2008.

Mullano, Joy S. (2007), Incidence and Accidents: Regulation of Executive Compensation through the Tax Code, *Villanova University School of Law, Public Law and Legal Theory*, Working Paper No. 2009-07.

Murphy, Kevin J.(1989), Executive Compensation, *University of Southern California*.



Vieito, João Paulo (2008), *Essays in Executive Compensation*, Ph.D. Thesis, Faculty of Economics, University of Porto.

**ANEXXES**

## Executive Compensation in Banking

---

**Table 1** Description of main variables used in the sample.

Variables present in the database of this study, which comprises a sample of 154 banks of the United States of America. Variables regard firm characteristics and compensation of executives and personal information.

Variable	Description
<i>Dependent Variable</i>	
CEOSTOCK	Ratio of CEO Stock to Total Stock Outstanding.
OPTCASH	Ratio of Value of Options Granted to Cash Compensation.
SALARY	Salary or fee and bonus received by Executives.
TEXEEQU	Total Equity Awarded to Executives.
FCIR	Frequency of Continuation of an Executive in a certain Role, which is the ratio of number of years an executive is in a role to average of years in role of the sample.
FCIRSY	Frequency of Continuation of an Executive in a certain Role aged less than 60 years.
RATEA	Dummy for companies whose rating is higher than A.
<i>Independent Variable</i>	
EQASST	Ratio of Equity to Assets.
VOLAT	Volatility of a company.
MBEQUITY	Ratio of Market to Book of Equity.
ROLE	Years that an Executive is in a Role.
DTBTF	Dummy Variable that considers companies as too big to fail, i.e. 1 if assets are higher than 250.000.000.
WEALTH	Total Wealth of an Executive.
DTWEAL	Product of DTBTF and WEALTH.
ROA	Return on Assets.
NMRET	Net of Market Returns is the difference between firm stock returns and return of an equally weighted portfolio of NYSE/AMEX.
CEOSTOCK	Ratio of CEO Stock to Total Stock Outstanding.
OPTCASH	Ratio of Value of Options Granted to Cash Compensation.
SALARY	Salary or fee and bonus received by Executives.
<i>Other Variables in the sample</i>	
ASSET	Assets.
EQUITY	Stockholders' Equity.
	Market Capitalisation.
MCAP	
AGE	Age.
EXEEQU	Equities Awarded.
OPTION	Options Awarded.
LTIP	LTIPs Awarded.

**Table 2** Descriptive statistics of main variables in the sample.

This table refers to the sample used in this study, regarding 154 banks in the United States of America. These variables refer to main indicators of the firms present in this sample and characteristics of CEOs as well as compensation statistics.

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
ASSET	153	951.980	2.000.000.000	68.900.000	271.800.000
EQUITY	153	79.327	300.000.000	8.530.000	32.620.000
MCAP	153	10.000.000	90.000.000.000	3.440.000.000	12.490.000.000
EQASST	153	3,3252%	87,3365%	10,7846%	8,1326%
VOLAT	153	14,7000%	50,7200%	28,3165%	8,2557%
ROLE	153	0,2	30,6	6,699	6,1444
AGE	153	36	78	57	7
SALARY	153	2.000	1.062.000	346.000	170.345
EXEEQU	153	0	5.000	33	404
OPTION	153	0	30.000.000	1.320.000	4.609.121
LTIP	153	0	8.253.000	694.000	1.184.497
OPTCASH	153	0,00%	6100,00%	272,00%	875,70%
CEOSTOCK	153	0,00%	0,00%	0,00%	0,20%
N	153				

**Table 3** Descriptive statistics regarding variables in Hypothesis 1.

This table refers to the sample used in this study, regarding 154 banks in the United States of America.

**Descriptive Statistics**

Variable	Mean	Std. Deviation	N
CEOSTOCK	0	0,002	153
OPTCASH	2,72	8,757	153
EQASST	0,1078	0,0813	153
VOLAT	0,2832	0,0826	153
MBEQUITY	0,0035	0,0041	153
ROLE	6,6990	6,1646	153
DTBTF	0,04	0,195	153

**Table 4** Summary of outputs of Hypothesis 1.

This table refers to the sample used in this study, regarding 154 banks in the United States of America.

<b>Dependent variable</b>	<b>CEOSTOCK</b>	<b>OPTCASH</b>
Intercept	0	5,227
EQASST	0	-18,201
VOLAT	0,002	-4,601
MBEQUITY	-0,031	-132,039
ROLE	0,00000478	-0,057
DTBTF	-0,00006498	41,143
R Square	0,007	0,73

**Table 5** Descriptive statistics of variables used to test Hypothesis 2.

This table refers to the sample used in this study, regarding 154 banks in the United States of America.

**Descriptive Statistics**

Variable	Mean	Std. Deviation	N
SALARY	346.000	170.345	153
TEXEEQU	2.080.000	5.329.838	153
WEALTH	9.940.000	25.900.000	153
DTWEAL	3.170.000	21.010.000	153

**Table 6** Summary of outputs of Hypothesis 2.

This table refers to the sample used in this study, regarding 154 banks in the United States of America.

<b>Dependent Variable</b>	<b>SALARY</b>	<b>TEXEEQU</b>
Intercept	326.604	1.265.000
WEALTH	0,002	0,022
DTWEAL	0	0,189
R Square	0,079	0,689



**Table 7** Descriptive statistics of variables in Hypothesis 3.

This table refers to the sample used in this study, regarding 154 banks in the United States of America.

**Descriptive Statistics**

Variable	Mean	Std. Deviation	N
FCIR	1	0,920	153
FCIRSY	0,47	0,847	153
NMRET	-0,0542	0,0196	153
ROA	0,0072	0,0136	153

**Table 8** Summary of outputs of Hypothesis 3.

This table refers to the sample used in this study, regarding 154 banks in the United States of America.

<b>Dependent Variable</b>	<b>FCIR</b>	<b>FCIRSY</b>
Intercept	1,011	0,486
NMRET	0,217	0,916
ROA	0,046	5,111
R Square	0	0,008

**Table 9** Statistics of ratings of companies in the sample.

This table refers to the sample used in this study, regarding 154 banks in the United States of America. These ratings were obtained using the S&P Quality Rating.

	A+	A	A-	B+	B	B-	C	TOTAL
<b>N° of banks</b>	3	37	42	37	22	5	7	<b>153</b>
<b>Total banks</b>	153	153	153	153	153	153	153	
<b>%</b>	1,96%	24,18%	27,45%	24,18%	14,38%	3,27%	4,58%	<b>100%</b>

**Table 10** Descriptive statistics of main variables in Hypothesis 4.

This table refers to the sample used in this study, regarding 154 banks in the United States of America.

**Descriptive Statistics**

Variable	Mean	Std. Deviation	N
RATEA	0,24	0,43	153
OPTCASH	2,72	8,757	153
CEOSTOCK	0	0,002	153
SALARY	346.000	170.345	153

**Table 11** Summary of outputs of Hypothesis 4.

This table refers to the sample used in this study, regarding 154 banks in the United States of America.

<b>Dependent Variable</b>	<b>RATEA</b>
Intercept	0,252
OPTCASH	-0,006
CEOSTOCK	-10,298
SALARY	0,00000001882
R Square	0,015

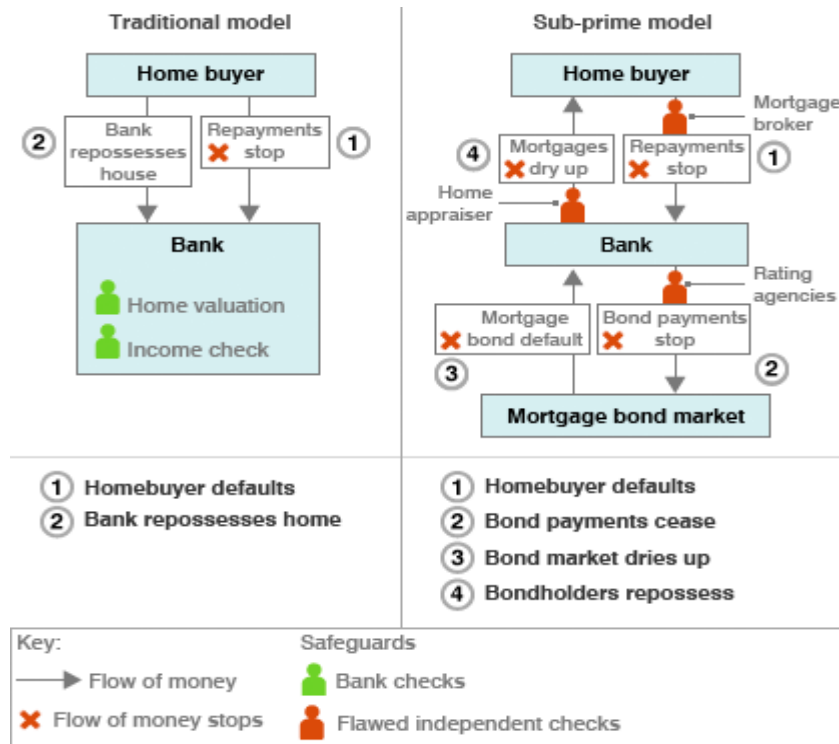
**A. MACROECONOMIC CONTEXT**

*“The financial market crisis that erupted in August 2007 has developed into the largest financial shock since the Great Depression, inflicting heavy damage on markets and institutions at the core of the financial system.”*

International Monetary Fund, World Economic Outlook, April 2008

Traditionally, to obtain a loan, individuals had to pass through a process in which their financial situation was verified, namely their income. Whenever payments were not made, banks had the right to repossess houses. A few years ago, another model to obtain a loan was designed, the so called *Sub-prime Model*. There are some differences between traditional model and sub-prime model, particularly the lack of income check and a new situation, the link to bond markets. Figure 1 shows the difference between these two models.

**Figure 1 Traditional Model vs. Sub-Prime Model**



Because background check did not exist in the sub-prime model people with bad credit histories and low income could borrow from banks at fantastic rates. Banks, on the other

hand, to cover their risk, sold these mortgages to hedge funds. However, the mortgage bond market started to have liquidity problems.

In 2007, sub-prime crisis erupted. In a short period, housing prices fell dramatically and building industry was facing a problem that began by constructing less and ended in cutting millions of jobs. Rapidly United States economy was affected and financial industry began a cycle of problems. Banks failed, not only small banks but banks considered as “too big to fail” as Lehman Brothers, for example. Another event started to happen: banks runs. Clients of important banks ran to banks to withdraw their deposits, leaving banks in a difficult situation, like Northern Rock (nationalised after almost gone bankrupt).

Soon, every country in the world was affected by this crisis, with more or less impact.

Unemployment has been increasing since the beginning of this crisis in 2007.

Inflation and rates of reference to international markets (for example, Euribor), are at historical minimums. World markets crashed, several indexes are still trying to recover.

However, the main problem is that now banks are more severe in granting loans, not only to single individuals but also to companies. This situation led to failure of companies in other industries and poverty is in levels that have never been seen before.

World leaders, almost since the beginning of the crisis, are trying to restructure the financial system to prevent another crisis like this in the future.

At this moment, this crisis has not been solved. Social problems like unemployment or at a financial level, public accounts at high levels, instable markets, deflation, are the main issues to solve as soon as possible.

United States are already recovering from this crisis: markets are slowly reaching the levels they had before the crisis and its economy is growing. Other countries, like Portugal, are recovering more slowly especially because the crisis affected these countries later than the United States.

This whole macroeconomic context puts in perspective the results given by Houston and James (1995) paper regarding the years 1980 to 1990. Their results bring back an era of prosperity and banking growth and payment of executives was different since companies were not in financial distress. Data from this paper regards the year 2008, the more critical year in this whole financial crisis. It is important to understand that the subprime crisis has influence in executive compensation, because it rearranges both level and structure of compensation. The whole process of designing compensation is thought more carefully and in section 5 we can see that are differences between Houston and James data and the data present in this paper.

## **B. COMPONENTS OF EXECUTIVE PAY**

When we see in the newspapers, television or literature about executive compensation, we certainly just think about the salary. Salary is not the only component of executive pay.

According to Murphy (1999), executive pay usually has four components: base salary, annual bonus, stock options and long term incentive plans (also known as LTIPs) and, of course, other benefits such as insurances or retirement plans. In addition, Murphy (1999) and other authors are somehow consistent when dividing into categories components of executive pay.

### *B.1 Base Salary*

Base salary is just the amount of money executives receive each month that is constant (except when there is some kind of raise). This component of executive pay usually is not a random value. When board of directors wants to define executive base salary, it usually seeks for a benchmark, i.e., it looks for the mean base salary in the industry where the company works for. This common practice is used not only to pay the right amount to the executive but also to “catch” the executive so he/she accepts company’s contract instead of a contract in other firm.

Another common practice when defining base salary is that board of directors (the commission that defines every component and, at last, executives contracts’) meets with the candidate to executive and they negotiate base salary. This is the opportunity of executives to earn more, because board of directors re willing to give him/her more so they do not loose him/her.

Usually, executives prefer to earn more in the base salary, that is the fixed salary they receive, rather than to receive more in the variable part. This preference happens because when we are talking about other components of executive pay besides base salary, we know that they are variable. By variable it is understood that they might change value over time, either up or down.

### *B.2 Annual Bonus Plan*



Annual bonus plan (or short term incentive) is a part of executive compensation that is tied to company performance. It is usually based in the performance of a single year and throughout some financial ratios, the value of the bonus is calculated. These financial ratios represent measures of performance, which can be divided into absolute and relative measures of performance. Absolute measures evaluate a company's performance based on financial indicators. Measure performance based on accounting profits is the most common method (Murphy, 1999).

Relative performance is calculated using non-financial indicators, which means that it is based on subjective measures. As examples we have customer satisfaction, accomplishing strategic or operational objectives but the most common measure is based on subjective evaluations of individual performance and another important point is to measure performance regarding pre-established objectives (Murphy, 1999).

### *B.3 Stock Options*

Stock options are financial products, i.e., contracts, which give the holder the right to buy a share of a certain company, in a specified date and at a specified price.

This element, when part of executive compensation, tends to be tied to other elements other than the right itself. For example, exercise prices can be "indexed" to the industry or market the company is in, options might be useless if a determined performance is reached or even the terms of the options can be written in order to match executive's goals for the considered period.

Stock options usually become vested over time, which means that they can be exercised usually three or four years after they were granted. If an executive leaves the company before vesting, options are null. Also, another characteristic is that stock options are non-tradable, i.e., executives cannot sell these options in the market as they could do if it was a normal stock option.

### *B.4 Other forms of compensation*

#### *B.4.1 Restricted Stock*

A restricted stock is a normal stock that is awarded to executives under certain conditions. Usually, these conditions are related to employee longevity, which is a way to prevent modifications in the company. There is an additional benefit in restricted stock: taxes are only paid restrictions no longer exist. Also, in terms of accounting, it has the possibility to amortize the cost throughout the vesting period.

### B.4.2 LTIPs

Long term incentive plans are also tied to company performance as annual bonus plan are. However, there is a difference: while annual bonus plans are structured to rely on a one-year company performance, long term incentive plans are based on a three to five years average of cumulative performance. Therefore, it makes executives act having in mind a longer horizon in order to increase the value of LTIPs.

### B.4.3 Retirement Plans

Retirement plans also can be a component of executive compensation as an extra to average retirement plans. Retirement plans for executives (Supplemental Executive Retirement Plans – SERPs) can be designed based on different types of benefits. These plans are not eligible for tax purposes, which makes it more appealing for executives. They can assume the form of addition of years of service (increase the number of years of service that an executive has, even if it means diverging from the number of years that in fact he/she has) or a number of other benefits that are linked to company performance or even inflation.

### B.4.4 Perquisites/Benefits

Perquisites, also named benefits, are other kind of compensation that executives might receive. This kind of compensation might be a differentiation factor for executives. Usually, they are some benefits that the executive can have, but otherwise would have to pay for them. As examples, we have housing, firm car, payment of school tuition for executives' children, telephone, club memberships or even corporate aircraft, but also credit card or an account for personal expenses.

Other benefits might be periodic office decoration, hotel stays, travel or entertainment, such as tickets for games or shows.

### B.4.5 Other types of compensation

Besides all the other components mentioned above, executives might also receive compensation in other forms.

Companies usually tend to offer life insurance to their executives, as part of their compensation plan. Also, a share save scheme is offered, meaning the possibility to buy company shares at a lower price.

Health insurance, on the other hand, usually tends to be provided to all employees, and not exclusive of executives, but executives might have health insurances with a variety of services and a higher plafond than other employees.

Therefore, cash compensation equals the amount of real cash (salary and bonus) that is granted plus short term incentives. Total cash compensation is the sum of cash compensation and LTIPs.

## C. EXECUTIVE COMPENSATION IN BANKING

The recent crisis in financial services industry raised questions about executive payment. Although they receive far less than executives in other industries, the main question here is if banking executives are provided with certain incentives to promote risk taking.

As recent studies have discovered, executive compensation in banks is lower than in other industries. Houston and James (1995) found that regulation in banking industry is the factor that makes executives in banking receive less than executives in other business segments.

Although this kind of situation might happen frequently, executives in banking also have a drawback: regulation.

Regulation is higher in financial industry than it is in other industries, mainly because banks provide financial support not only to other industries but also to individuals and, in fact, they are the centre of the economy.

Every country has its own rules that banks have to follow. More recently, since 1980s, we have witnessed an attempt to create an international set of rules for banks. These are called Basel Agreements<sup>10</sup>, which were thought to stop banks from getting into more risk than they

---

<sup>10</sup> .Basel I was created in 1988 and only covered credit risk. Later, an amendment was made, namely Basel II to contemplate operational risk. Nowadays, Basel III is being produced to create more rules to regulate banks.

could bear. In order to regulate the risks each financial institution could bear, a minimum of capital for each type of risk was defined and institutions are somehow compelled to achieve those levels.

But regulation itself is not enough to prevent situations similar to those we have witnessed recently. Banks considered as too big to fail really did fail, bank runs became regular, and crisis came to stay. Now it is easy to see why regulation is not sufficient to prevent situations like this banking crisis.

Leverage<sup>11</sup> is somehow an explanation. In high levered companies, it is not complicated to engage in risky projects. This happens because of the easiness in obtaining loans: high levered companies tend to meet in time their financial obligations; therefore, they have the possibility to recur to banks whenever a financial need is required.

There are two hypothesis regarding executive compensation in banking: the moral hazard hypothesis and the contracting hypothesis (Houston and James, 1995)

Under the moral hazard hypothesis, it is predicted that compensation policies in banking are structured to promote risk-taking in order to maximize shareholder value.

The contracting hypothesis states differences in compensation between different industries reflect the distinct investment opportunities.

Either these hypothesis try to study the influences in the structure and level of executive compensation<sup>12</sup>.

In what concerns to the structure of compensation, it is designed regarding certain goals of the board of directors. For example, more equity based incentives can be given in order to encourage risk taking, which is consistent with the moral hazard hypothesis. That is what happens in leveraged firms, since executives are provided with more incentives in order to incur in risky projects that shareholders want. Also, more incentives are included in compensation packages in firms that have high growth opportunities contracting, consistent with the moral hazard hypothesis. However, under the contracting hypothesis, we also see that fewer incentives are awarded even if companies have high growth opportunities because of

---

<sup>11</sup> Leverage is a measure that can explain a company's method of financing and its ability to meet financial obligations. It is usually measured by debt-to equity ratio.

<sup>12</sup> Structure of executive compensation is the type of components that construct an executive's package of payment. On the other hand, the level of executive payment is the amount that is given in each component of the payment package.

regulation in banking, which has increased over the years. It is worth mention that banks have less investment opportunities, not only because the number of companies operating in this industry is high but also because opportunities in this sector are not common since there is no room for growing.

There are some factors that can influence the level of compensation that an executive is awarded with, namely risk aversion or company performance. First, if a CEO is risk averse, he/she will demand a higher level of compensation in order to accept risky projects. Second, higher levels of compensation are awarded to executives that manage to improve performance of a company throughout the years.

### **D. MAJOR DETERMINANTS INFLUENCING EXECUTIVE COMPENSATION**

Executive compensation is thought very carefully, but in each component we can see that there are some factors that influence the structure and level of payment of executives.

The first thought that comes into the minds of the members of the board of directors is aligning the interests of managers to the ones that shareholders have. Aligning interests means two things: on one hand we have shareholders that are willing to pay significantly more to executives so that they maximize their value and on the other hand we have executives that if they are “happy” with their payment scheme, they do not engage in extremely risky projects that could jeopardize their relationship with shareholders and, therefore, they could be dismissed. This is the principal-agent relationship, meaning that there is a relationship of power between owner and manager. However, this relationship is not always pacific. When each part has different ideas/projects for the company and neither wants to give up their plans, an impasse is reached. Agency problem is precisely this: opposite interests between management and shareholder. This separation of ownership and control of companies is good in the sense that decisions are not biased when manager and owner is the same person. But, on the other hand, separation of ownership and control also has a drawback when interests of manager and owner are not aligned.

Risk taking is also a factor that influences executive compensation. Some studies, like Houston and James (1995), try to understand if structure and level of compensation of executives is thought to persuade CEOs to take on more risk. However, if executives engage in risky projects, that will have reflects on the firm performance. And this will raise another problem: what will happen to CEO? Executive turnover or the continuation of CEO in the

company, in order to try to help the company with his/her abilities. Nevertheless, the company is still in bad shape. This can lead to another problem: earnings manipulation. This is a serious problem, since it is a short term solution because not only it will cover the real situation of the company, but also because it can raise legal problems to executives and company.

There is still another problem in executive compensation: golden parachutes (payment to executives of more benefits when leaving the company, typically when there is a change in ownership). Is it good because it releases the pressure in CEOs or is it bad because executives are already well paid?

All these problems encourage to more regulation in what concerns to executive compensation, so that compensation is fair and to company and CEO and does not lead to risky situations.