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REMUNERATION OF FINANCIAL EXECUTIVES

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Content

1.Abstract 3
2. Introduction 3
3. Banks 4
3.1 What is a bank? 4
4. The level and structure of remuneration of general financial executives. 6
4.1 Theories of CEO remuneration 6
4.1.1 Corporate governance 8
5. Executive remuneration in relation to company performance 11
5.1 Executive incentives. 11
5.1.1 Remuneration as an incentive 13
5.1.2 Wealth - performance ratio - what is the right measure? 13
6. Executive remuneration. 14
6.1 Remuneration at the bank sector 17
6.2 Differences between bank executives and executives of non-financial firms. 20
7. Conclusion 21
8. References 22

Table 1. Highest paid executives in the top 50 companies 12
Table 2. Executive compensation 1936-2005 15

REMUNERATION OF FINANCIAL EXECUTIVES

1.Abstract

There are many factors that influence the efficiency of the remuneration system and it is very difficult to reach a consensus on best practice. These difficulties, when dealing with the banking sector, are intensified by the nature of financial intermediaries. Remuneration systems in the banking sector can generate unintended consequences such as systemic risk, which often lead to managers being paid more than in other sectors. In this dissertation we will analyse remuneration both for managers in the banking sector and for managers in the non-financial sector.

Keywords: remuneration, CEO, incentive and agency theory.

2. Introduction

In this dissertation we will look at the different remunerations for managers of financial firms and managers of non-financial firms.

The financial crises of the last decades have raised a growing interest in issues related to corporate governance where it is discussed whether financial managers have contributed to the crisis because they take more risks to obtain better incentives where we will see the example of subprime mortgages.

We will discuss the basic concepts of corporate governance and its legislative framework. We will also focus on the situation where shareholders and managers do not have the same information, therefore, managers can abuse the lack of information of executives which would trigger corporate governance problems.

The evolution of financial managers' pay relative to the growth of firm value from 1936 to 2005 reveals a weak relationship between the two until 1970. It is also suggested that remuneration often contributes to aligning the interests of managers with those of shareholders as we will see in agency theory, which is what we will focus on.

In addition, we will examine the remuneration of bank CEOs where we will see that they are paid less than their non-financial counterparts. During the 2008 crisis, banks cut executive pay, but now they have increased it by a larger proportion. Their pay will

be significantly related to return on investment of assets and return on investment of equity, but not to return on equity.

Finally we will focus on bank managerial pay where we will look empirically at how bankers are paid and how this has evolved over time.

3. Banks

3.1 What is a bank?

Its main function is to collect funds (deposits) from households, aggregate them and lend them to those who need them. A bank is an intermediary between depositors (who lend it money) and borrowers (to whom it lends money). What it pays for deposits, and what it charges for the loans it makes, is both interest. Both depositors and borrowers can be individuals and households, financial and non-financial corporations, or national and local governments. Deposits can be demand deposits (e.g. a current account) or have some restrictions (such as time deposits and savings accounts). (Gobat, 2012).

Banks generate profits in a number of ways, in addition to keeping the difference between the interest they pay on deposits and the money they borrow, and the interest they charge borrowers or earn on the securities held in their portfolios. They can also make money from the income generated by the securities they trade, and the fees they charge customers; for example, from current accounts, commercial and investment banking, loan servicing, and the creation, distribution and sale of other financial products, such as insurance and mutual funds. But banks could not generate all these products efficiently without a good management structure, therefore, we will introduce the concepts of boards of directors and managers.

The main function of the board of directors is to supervise and safeguard the interests of the shareholders and to play an intermediary role between the shareholders and the company's executives. Among the tasks and functions of the board of directors, the most prominent are: Defining and approving the overall strategy of the company. The Board of Directors shall govern the Association as a whole, which is the union of natural or legal persons for the attainment of a common good, for the achievement of its aims, and shall be made up of a minimum of five full members and a maximum of ten. From the aforementioned members, a president, one or more vice-presidents, a treasurer and such other positions as may be deemed appropriate shall be elected. In addition, the term of office shall be four years. For example, the Santander bank has its

chairwoman Ana Botín, two vice-chairmen José Antonio Álvarez and Bruce Carnegie-Brown, a general secretary Jaime Pérez Renovables and the rest would be external directors.

On the other hand, branch managers of financial institutions direct and coordinate the financial activities of the staff of branches, offices or departments of institutions such as bank branches, brokerage houses, risk or insurance departments or credit departments. Bank managers are responsible for all aspects of a bank branch: managing the banking team, increasing sales of financial products such as loans, and attracting new customers.

In conclusion, the owner-shareholder has the legal right to dispose of the company's assets, which is usually delegated to the executive and the management is in charge of managing and administering on behalf of the owner. having clear the global concepts of this work we are going to see the remuneration theories and how they are applied in the current remunerations where we will see that when there are problems of corporate governance the salaries of the financial directors increase (Thomsen, 2012).

We will also see that in the Spanish banking system there are differences between commercial banks and savings banks in their corporate governance. Commercial banks are privately owned with a concentrated ownership structure and are controlled by shareholders. In contrast, Spanish commercial savings banks are non-profit organisations (Hansmann, 1996) that are controlled by different stakeholders[1] such as local governments, employees... as they have neither owners nor shareholders.

(Crespi, 2004) , (Garcia-Marco, 2008) argues that the lack of shareholder control in savings banks gives managers more freedom of action and leaves more room for corruption therefore according to the theory of managerial power the CEOs of Spanish savings banks have more power than the board of directors to negotiate better remuneration for CEOs in commercial banks.

[1] Stakeholders are those people who are affected by the company's policies directly or indirectly, examples of which could be owners, employees, suppliers and customers.

4. The level and structure of remuneration of general financial executives.

Remuneration is a compensation paid in exchange for time and work to an employee, it is one of the key tools in human resources strategies as it allows to recruit, retain and motivate the employee in order to maximise the efficiency of their work, and as a consequence improve the company's results. the remuneration of these managers can be divided into short-term remuneration and long-term remuneration.

Short-term remuneration is based on the results obtained by the company in less than a year, its purpose is to make the employee work in the short term without demotivating him/her. The most common forms of compensation used by companies are performance bonuses, which are linked to the achievement of set targets. Another example could be the sales incentive where those working in the sales department manage to sell the product until the set target is reached (Frydman, 2010).

Long-term remuneration is used to align the interests of both shareholders and managers as the objective is to maximise the value of the shares. financial managers are usually paid in shares and options to make them feel that they are linked to the company's performance and thus motivate them to achieve the target (Frydman, 2010).

4.1 Theories of CEO remuneration

The financial sector is one of the most important sectors within a country's economy, since crises that may affect the financial sector affect the real economy in the same way, and the financial sector's main function in the economy is to encourage the allocation of capital to its most productive uses. It is an intermediary function between those who save and those who invest in productive activities. Recall that the banking sector has the function of raising funds; if banks cannot draw on borrowers, it can mean that those who have deposited money lose their life savings.

The speciality of the financial sector means that quite specific knowledge is required, as the bank manager makes decisions that carry a risk that could destabilise the economy. This specific knowledge refers to the risk management carried out by these entities, but with a peculiarity, entities have appeared that are so large, both in terms of their international expansion and their interconnections, that they will not be allowed to go bankrupt. (Gallego, 2014).

This can be a lifeline, knowing that in case of problems a Deposit Guarantee Fund will cover their bad performance. Hence the importance of a good salary that encourages the banking executive to take risks without greed leading to excessively risky decisions.

Now, we are going to analyse the following theories (Oreland, 2008), which explain what executive remuneration should be like. We will look at one of them: the Agency Theory.

-Agency theory (Mullainathan, 2001): The agency theory assumes that there is a conflict of interest between the owners of the company, who are the shareholders, and those responsible for the management of the company, who are the executives. Shareholders seek to maximise the value of their shares, while managers seek to increase their prestige in order to be recognised by their peers. Between owners and managers there is a problem where the information is asymmetric between them, the shareholder does not receive all the information of the company, therefore the manager has more information. Because of this asymmetry of information, managers can mislead the board of directors about the real performance of the company and can therefore set a higher remuneration for themselves, so the salaries of the executives could be set by them. The owner in many cases will not have the time or resources to control the executive, but through the remuneration, he can make their interests converge, since, if the part of the executive's remuneration is linked to the performance of the executive, he would be committed to maximising the value of the shares, which would give him recognition among the rest of the executives.

The agency relationship is established when rights are delegated to an agent who is contractually obliged to defend the interests of the company and in return will receive remuneration. This type of contract involves clauses that explain the permissible behaviours that can be engaged in by people. Many of the managers of the companies are responsible and have no economic consequences and consume in excess at the expense of the company, for example luxury cars, trips in private jets... failing to comply with the objectives of the principal (owner), which is the maximisation of profit.

There are external forces that control the opportunistic behaviour of general managers, such as:

1. Competition in the capital market, as it has to match in the long run the expected net profit rate on investments, i.e. the share price is a signal of how the CFO is managing the company's resources to maximise profits.

2. Competition in the labour market for managers as there is a tendency to equalise the real wages of all managers of the same skill level.

3. Competition between management teams, where we find in corporate takeovers and managerial inefficiency is eliminated through the takeover mechanism, where the absorbing firm would take over management.

Also, remember that remuneration is a good way to link the objectives of management and shareholders. If managers feel part of the company, they will do what they can to increase value and thus shareholder returns. A good way to link them to the company would be to give them shares in the company.

Finally, the agency theory is the one that focuses on the real problem, when there is a separation between who finances and who manages a company, which leads to a problem of corporate governance, which is a problem that goes beyond the financial sector, since the same thing happens in companies in the non-financial sector (Frydman, 2010). This is a very current problem, so we will now see what it is and what its principles are.

4.1.1 Corporate governance

Corporate governance is the set of rules, principles and procedures that regulate the structure and functioning of a company's governing bodies. Specifically, it establishes a connection between the board of directors, the board of management and the shareholders, the purpose of which is to create value for the company.

As a result of the financial crises that have occurred, it has become clear that the company must be managed in a transparent manner, which is the basis for the functioning of the markets, as it contributes to the stability and growth of the companies.

In the following, we will look at four of the aspects that articulate corporate governance (IEGD, 2019):

- Decision-making that has to do with strategic direction and corporate policies such as investments, mergers and acquisitions, executive appointments and succession planning.

- Control over executive management and the introduction of new strategic plans that have been approved.

- Regulatory compliance, where procedures are established to ensure that the company, management, employees and third parties comply with the rules.

- The rights and duties of the main governing bodies such as the board of directors, board of management and shareholders.

The traditional model of corporate governance in banks is that banks have a more conservative approach to financing, ensuring that loans are repaid without problems. However, the financial crises have led to significant weaknesses in the corporate governance of these institutions, forcing them to short-termism and to take on more risk. Over the past few years, financial institutions have provided more resources dedicated to improving corporate governance, which has been essential in increasing the level of transparency to the market and avoiding potential conflicts, leading to greater value for the firm (OECD, 2016).

The Organisation for Economic Co-operation and Development (OECD, 2016) published the principles of corporate governance in 1999. These were developed to help assess and improve the legislative framework.

According to (OECD, 2016) "The principles clearly identify the foundations of good corporate governance and provide practical guidance for their application at the national level". In 2015 the OECD published an update of these principles, these were changed due to the consequences of the 2008 financial crisis where we have previously discussed. These updates are divided into six sections which I will quote below (OECD, 2016):

"- The basis for a good corporate governance framework: The corporate governance framework should promote fair and transparent markets and an efficient allocation of resources. This should be consistent with the legal framework and supported by effective supervisory enforcement.

- The rights and equitable treatment of shareholders and the core functions of ownership: The corporate governance framework should protect and facilitate the exercise of shareholder rights and ensure equitable treatment of all, including minority and foreign shareholders. All should have the opportunity to obtain effective redress for the violation of their rights.

- Institutional investors, stock market and other intermediaries: The corporate governance framework should provide important incentives along the investment chain and input to the functioning of the securities market in a way that contributes to good corporate governance.

- The role of stakeholders in corporate governance: The corporate governance framework should recognise the rights of stakeholders established by law or through mutual agreements and encourage active co-operation between corporations and stakeholders in the creation of wealth, employment and the sustainability of financially sound companies.

- Information disclosure and transparency: The corporate governance framework should ensure timely and accurate disclosure of information on all material matters with respect to the corporation, including the financial condition, performance, ownership, and governance of the company.

- Governing Body responsibilities: New responsibilities of the board of directors emerge in relation to tax planning, risk management, the role of the various committees of the governing body, the internal audit function, periodic evaluations of the board of directors and the training of its members".

The problems of corporate governance are the poor structuring of power so that the boards of directors know the objective of the companies, how they should be organised administratively to achieve them and what will be the mechanisms to achieve it and all this while complying with the interests of the owners and "stakeholders" .

According to (Melis, 1988) there are two models of corporate governance, on the one hand, we have the Anglo-Saxon model of governance leaving bank financing as short-term financing and using the market as financing. In this model, the owners of the companies have no interest in the governance of the company, which will be taken over by another company thanks to the financial markets. Legally it is legislated by the "Common Law" where legal precedents are created by means of sentences. On the other hand, we have the continental governance model, used by European countries. This model can be divided into the Germanic model, the Latin model and the Scandinavian model.

Firstly, in the Germanic model, the banks have an interest in the governance of the companies, since they have financed them and want to make sure that their investment does not deviate from what they have agreed, secondly, in the Germanic model, the role of the banks, both in the financing and in the control of the company is maintained, but in addition there are block shareholders called blockholders. These blockholders have the time and resources to ensure that the company works in their interests and if their interests are not met, the blockholder will sell its stake. Finally, in the

Scandinavian model, banks have a greater weight in the financing of companies as well as an interest in their governance (Gallego, 2014).

Once these concepts are clear, we are going to determine the relationships that managers have depending on the results of the company, in addition we are also going to see that these executives have a salary bonus called incentive.

5. Executive remuneration in relation to company performance

The problem between shareholders and executives has arisen since the separation of ownership and control of the company, i.e. the owner no longer has the power to manage the company and becomes a shareholder who will receive remuneration in the event that the company makes a profit.

If the interests of shareholders and managers were aligned, this problem could be reduced by basing the manager's remuneration on indicators that maximise the value of the company and therefore maximise the value of the shares, so that the manager would receive extra pay for the achievement of objectives and the shareholder would make a profit from the increase in share price (Holmstrom, 1979).

In addition, if the executive is granted an ownership stake it creates incentives to take actions that benefit shareholders. After the 1990s executive wealth increased due to the massive purchase of stock options, most CEOs still own a part of the equity, which indicates that there could be moral hazard problems. These risks are the possibility that the agent, in this case the company, pursues personal objectives rather than the interests of the principal, in this case the shareholder.

5.1 Executive incentives.

Since the 1950s incentives have been the subject of study, the first studies focusing on firm performance such as sales, profits or market capitalisation (Roberts, 1956). The next decade saw the quantification of CEO incentives depending on share price performance (Murphy, 1985), where we can see that these studies revealed the positive relationship between executive pay and shareholder returns. Many of the executives hold shares in the company so their wealth will depend on the company's performance and share price performance.

To quote (Murphy J. y., 1990) 'a comprehensive measure of incentives should take into account all possible links between firm performance and CEO wealth. These links include the effects of current performance on annual and future pay, on the value of stock and options on changes in non-firm wealth and on the likelihood that the CEO will be fired'. They were the first to add these effects to their studies of US companies listed on the stock exchange between 1974 and 1986.

Unlike Jensen and Murphy (1990), (Liebman, 1998) rejects that executive incentives are insufficient for two reasons, the first reason is that increasing stock option remuneration strengthens the link between managers and performance and that secondly with improving company performance the manager can earn millions as he has shares in the company, but as Liebman's contribution says, this author is in favour that remuneration creates strong incentives to improve company performance.

If we look at the two views above we see that the pay-performance debate leads to very different views on incentives. The differences between these views of incentives in recent decades come mainly from the growth in company value, whereby executives now tend to own smaller percentages in larger companies, but have higher equity incentives. Between the years 2000-2005, the median compensation of executives of large US companies holding stock options was worth $7 million, almost 30 times higher than their options in the years 1970-1979 (Garen, 1994).

Table 1. Highest paid executives in the top 50 companies

	Managerial incentives (from stock & option holdings)		Dollar value of equity held	
	Jensen-Murphy statistic (dollar gain for $1000 increase in firm value) (1)	Value of equity-at-stake (dollar gain for 1% increase in firm value) (2)	Value of stock holdings ($) (3)	Value of option holdings ($) (4)
1936-40	1.350	18,670	1,566,287	0
1941-49	0.399	6,814	679,429	0
1950-59	0.452	13,975	1,169,857	0
1960-69	0.675	38,978	2,333,663	212,150
1970-79	0.470	21,743	1,281,266	244,082
1980-89	0.551	34,679	1,604,861	926,869
1990-99	0.946	120,342	4,068,013	3,622,806
2000-05	1.080	227,881	4,966,035	7,160,898

Fuente: (Murphy J. y., 1990)

This table is based on the 3 highest paid executives of the top 50 companies of the 1940s, 1960s and 1990s. They use the S&P program to be able to extend the data up to 2005 (Frydman, 2010). In each column we can see the average of the executives in each decade, the Jensen Murphy statistic represents the wealth of the executives in dollars. It is calculated as: number of shares owned + number of options held + number

of options held + number of shares outstanding and the result is multiplied by 1000 dollars. The value of equity at State is the product of the Executive's fractional ownership of shares and the market capitalisation. The value of equity is the share price multiplied by the shares held at the beginning of the year. finally, the last column is the value of stock options at the beginning of the year. all values are expressed in dollars.

5.1.1 Remuneration as an incentive

Part of the study of corporate governance has been devoted to the problem between owners and agents arising from asymmetric information and high transaction costs. This problem will be when the principal is specifically defined as the shareholders, as for example would be the Anglo-Saxon approach. In addition, another problem would be when the principal is made up of shareholders and other stakeholders, such as the Germanic approach.

In the literature we observe that agency problems are not limited to the problem between owners and managers, but that these generate conflicts between them, such as when majority shareholders try to take advantage of minority shareholders (Thomsen, 2012).

Information asymmetries between agents and principals can be reduced by using important instruments such as incentives and monitoring of their work and decisions. Supervision of managers is often costly and slows down decision making, so good incentive structures have been established (Gallego, 2014).

In the article (Edmans, 2010) regulating bankers' remuneration, he argues that linking internal doubt to executive remuneration will reduce incentives for risk-taking. He argues that pension plans are a good tool for resolving shareholder conflict, but this cannot apply to banks because they are too big to fail. Bolton, Mehran and Shaphiro (2015) link the idea of executive remuneration to debt, arguing that banks' financial managers should be linked to the bank's credit default swaps. Angelis and Ginstein (2014) show that in the US, companies structure executive remuneration packages to link them to performance.

Another argument is the so-called 'say on pay' (Krause, 2014) which is a term used in corporate law whereby a company's shareholders have the right to be able to vote on executive remuneration, so it is likely that a corporation's managers are overpaid as they are allowed to pay themselves.

5.1.2 Wealth - performance ratio - what is the right measure?

The correct measurement of managerial incentives has been the subject of a long study in the academic literature.

In theory, superior performance will always imply higher returns for the manager, so this reciprocity has been the subject of study, with different arguments and views being compared in many papers, one of which, Baker, G., and B. Hall. in 2004, shows that executive incentives depend on the value provided by the firm, where the unit value of shares varies with the size of the firm.

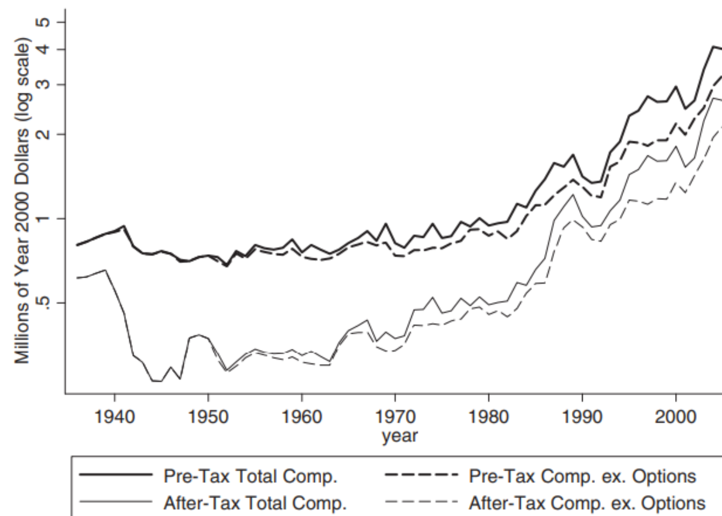
The Jensen-Murphy statistic measures incentives independently of firm size, such as the pursuit of an acquisition. In contrast, the value of equity, which is holding shares in a firm, is the correct measure of incentives for shares that varies with firm size, such as a merger between two firms.

Another measure of incentives is the elasticity of managerial wealth with respect to performance, i.e. the percentage change in wealth for a percentage improvement in the stock market value of the firm. The attractive feature of this statistic is that it is not sensitive to changes in firm size (Murphy, 1995) and that it introduces into the measure the CEO's effort, which increases both the manager's utility and the firm's stock value (Edmans, 2009). Since we cannot observe the CEO's non-entrepreneurial wealth the elasticity (i.e. the percentage change in wealth due to the improvement in the value of the firm's shares) has the disadvantage of being close to one when only stock revaluations and stock options are considered as sources of change the CEO's wealth. When it is zero for an executive who does not own any shares (Edmans, 2009).

6. Executive remuneration.

The remuneration of managers in large companies increased during the 1980s and 1990s, which led to a great debate on which factors are determinants of managerial remuneration (Murphy H. et al., 2003).

Table 2. Executive compensation 1936-2005



Reference: (Frydman, 2010)

Based on the 3 highest paid executives of the 50 largest companies in the 1940s, 1960s and 1990s, remuneration consists of salary, bonuses, long-term bonuses and stock options. the dashed lines show the median pre-tax and after-tax remuneration excluding stock options. after-tax remuneration is calculated assuming no other source of income.

In the 1970s executive pay remained constant since the end of World War II even though companies increased in value considerably.

This data contradicts the argument that total executive pay increased significantly from the 1940s to the 1970s (Lewellen, 1970). This is so far the most comprehensive and most cited study of executive pay, where the large increase in pay over this period is noted. However, the conclusions are overestimated because the value of certain components, such as employee stock options, is exaggerated.

Moreover, pay in that period is contrasted with the period 1980-2005 where executive pay and firm value grow at the same rate. In relation to these results (Smith, 1995) it is observed that from 1948 to 1970 the wage level was relatively flat in a sample of 16 companies where several sectors are observed which are chemical, aerospace and electronics, but the sample is not clear because it is limited to only 3 industries.

Another striking finding (Murphy J. et al., 1990) is that the strength of the correlation between executive wealth and firm performance ("pay for performance") was similar

from the 1930s to the 1980s. We look at the data provided by Jensen and Murphy on executive stock and stock options, and analyse what is consistent evidence on the relationship between performance and pay over the last 70 years.

The sensitivity of wealth changes to performance was the same from 1950 to 1980, but then strengthened from the mid-1980s to 2005, so the view of Jensen and Murphy (1990) that CEOs in the 1970s were paid like bureaucrats was not entirely true. Although the correlations of the incentives provided are difficult to assess, we find that the benefits of CEOs for increasing firm performance were quite large.

In addition, we also find that the correlation with firm characteristics and performance pay, where we see that the larger the size of the firms the higher the executive pay (Rosen, 1981), has not changed over time so that the pay rewards did not generate a strong link between executive wealth and firm value in that early period.

In recent decades, increases in managerial pay and the use of stock options have been linked to managers' ability to earn rents from the firm (Bebchuck, 2004).

Another set of explanations links executive pay to firm size, (Rosen, 1981), predicting that pay should rise with increasing firm size (Gabaix, 2008). Before the mid-1970s, a much lower correlation is found than the strong correlation between executive pay and the aggregate market value of firms documented in recent decades (Gabaix, 2008).

In addition, managers will take more risks in order to achieve objectives, which will result in higher profits due to incentives (Mueller, 2006).

An example in banking could be CFOs taking more risks for higher profits such as subprime mortgages (Blackburn, 2015). During 2006 and 2008 these mortgages fuelled an economic crisis in the United States that had repercussions in the rest of the world. The financial managers needed to increase the performance of the banks so they created subprime mortgages which were a legal figure within their lending and credit system.

There were two types of mortgages, on the one hand, prime mortgages that were given to people who had good solvency, who had a high purchasing power and had a greater possibility of paying back the money, on the other hand, there were subprime mortgages that were given to people in danger of defaulting. These mortgages were also called 'junk' mortgages, but the problem came when a large part of these mortgages started to be defaulted on, which triggered the great crisis.

The problem increased when many people had to give up their homes and try to resell them at a higher price in order to satisfy the debt, but the price was already much higher, they even had to start lowering them, and investors who bought bonds saw that they were not profitable, so they started to sell them, which led to funds and banks starting to have liquidity problems. (Blackburn, 2015).

With this example we can see that the decisions taken by financial managers can lead to a crisis in the economic system. Therefore, the debate over the last decades has been whether CFOs are highly paid or whether this remuneration is commensurate with the risks they take.

In conclusion, pay is unlikely to be explained by one variable alone, so the combination of firm size, risk-taking by financial managers and firm performance has more explanatory power for the study of pay around the 1970s.

Now we can get an idea of what is the basis and the elements used to measure the remuneration of a general manager, then we will see if there is a difference between the salaries of managers and financial managers.

6.1 Remuneration at the bank sector

Agency theory justifies executive remuneration by aligning people's interests with the principal, but in banks, unlike non-financial firms, there are no objectives that unite the interests of different stakeholders and on which to determine executive remuneration (Core, 2010).

Banks are more complex and opaque entities than non-financial firms, they are regulated differently and therefore directors are remunerated differently. The opacity of banks makes it easier for bank executives to set their remuneration according to their own interests. This opacity allows the bank executive's salary to be less transparent, which increases the distance between the manager and the banks' employees. Moreover, as information on executive pay becomes more transparent, the pay inequalities in financial institutions and the need to reduce these differences become evident (Core, 2010).

Since the financial crisis of 2007-2009 systemic risk has come to the fore, although attention has also focused on deposit insurance[2] and how it should be priced, (Thakor, 1992) recognises that banks are influenced by bank executive pay.

In the study by Finance professors Benjamin Bennett, Radhakrishnan Gopalan and Anjar Thakor (Benjamin Bennett, 2021) they analyse prepared, in particular they will focus on CEOs compared to non-bank directors, how bankers' pay has changed during and since the crisis of 2007 - 2009, the cross-sectional properties of bankers' pay, the sensitivity of bankers' pay and the impact of this sensitivity on bank performance.

The authors explain their main results which I will list below (Benjamin Bennett, 2021):

1- The evolution of financial managers compared to non-financial managers: managers of financial firms, on average, are paid less than CEOs of non-financial identities, this is because financial managers of small banks are paid much less because if we compare managers of large financial institutions and large non-financial institutions the salaries do not differ.

2.- Inter-temporal behaviour: during the crisis the remuneration of general financial managers decreased as they were the institutions that suffered the most, although in the following years the salaries of bank executives increased by 24%, higher salaries even than in the pre-crisis period. Banks that performed worse during the crisis had to implement larger reductions in pay linked to short-term performance targets. An example of short-term performance would be ROE.

3.- Cross-cutting properties: on the one hand, they argue that CEOs who have higher remuneration are because the banks are larger, have a lower proportion of non-performing loans and have a higher proportion of non-interest income. On the other hand, banks with a higher entrenchment ratio influence the higher pay of managers, reflecting the fact that poor governance is associated with higher CEO pay.

4.-Sensitivity of remuneration to performance measures: CEO remuneration is not sensitive to stock performance, but it is sensitive to both ROA (return on

[2] Deposit insurance is a fund set up by the state that receives regular contributions from a country's financial institutions with the aim of insuring a certain amount of money that savers have deposited in the Bank.

assets) and ROE (return on equity), which are performance measures derived from accounting. During the crisis the sensitivity of pay to ROE declined, but returned to pre-crisis levels, as did the sensitivity of total pay to return on equity (specifically between 2014 and 2018).

5.-Relationship between pay dependence and performance: Here we find that tail risk (which is a type of risk that assesses the potential positive or negative deviation of an investment portfolio) is higher when bank executives depend on short-term performance measures and lower when they depend more on ROE and ROA ratios. (Thakor, 2020) proposes how this could be based on compensation and short-term performance.

First, the study of bankers' remuneration has a strong relationship with the potential for incentives to influence both the performance of the bank and the risk aversion of the manager, because if incentives depend on performance, managers will take more risk.

Secondly, the result of the analyses used by the authors in this paper concludes that managers who are sensitive to ROE will have a tendency to minimise capital, despite the positive relationships between capital and bank value, e.g. (Benjamin Bennett, 2021), stock market returns and shareholder risk for banks with higher capital (Bouwman, 2018), market share gains in the crisis and the importance of creating funding liquidity (Benjamin Bennett, 2021).

Thirdly, they refer to the issue of the wage premium documented by (Philippon, 2012) who talk about the gap between the salaries of financial executives and those in other sectors, although our authors, as I said above, conclude that this is mainly due to the fact that small banks also pay their managers and therefore the average salary decreases as the remunerations are lower for them.

Finally, we note that the business model of banks affects the remuneration of managers, (Merton, 2019) stresses that bank customers, i.e. depositors, will want to insulate themselves from risk so the business model of the bank will influence risk management, its culture and compensation. A bank's culture is adapted to support its business model and the results are consistent that banks' behaviour is affected by bank culture through the risk elevation channel.

We have previously seen that financial managers are paid less than non-financial managers (Benjamin Bennett, 2021), we will now examine in more detail the differences that exist between these two.

6.2 Differences between bank executives and executives of non-financial firms.

(Mehran, 2003) attaches great importance to considering the differences between non-financial companies and financial companies (banks) when analysing their corporate governance.

The main differences between banks and non-financial firms are summarised in the stakeholders, differences in investment opportunity and risk and the specific regulation of the banking sector (Gande, 2011). Furthermore, with these differences we will see the complexity of the banking sector.

In banks, shareholders cannot set the objectives of the company as they do not have the same freedom as non-financial companies and therefore cannot design a remuneration system that best suits those objectives.

Banks' liabilities (Mehran, 2003) banks' liabilities are 90% debt, so they are more leveraged compared to non-financial companies. This leverage can lead to the insolvency of the bank, investors risk their capital and the stability of the financial system is affected, therefore regulation and supervision by the regulator avoids these situations. Moreover, for non-financial firms, leverage is their source of financing.

We also note (Mehran, 2003) that the financing costs of financial and non-financial firms are different. In banks, debt financing is cheaper than equity financing because investors are less sensitive to the risk of banks due to deposit insurance that allows banks to finance themselves at low costs.

The risk taken by investments in banks is very different from the risk taken by non-financial companies. In recent decades banks have increased their activities AND expanded into unregulated and uninsured activities, as their financial structure allows them to change the composition of their asset portfolio in less time than non-financial firms. In addition, they raise funds at low prices, which fuels a problem of over-investment, as lowering the cost of capital increases the number of projects with positive NPVs[3].

The banking sector is highly regulated, it is a sector in which fear of systemic risk generates liquidity insurance for the largest banks, and deposit insurance has the

[3] Net present value (NPV) is an investment criterion that consists of discounting the receipts and payments of an investment to see how much will be gained or lost from that investment.

potential to develop opportunistic behaviour that does not occur in non-financial companies.

The pooling of managerial and shareholder interests, as we have explained the agency theory above, does not occur in the case of banks. This implies that the remuneration of bank managers has to be adjusted to risk-taking and the reduction of the bank's insolvency risk. However, in the remuneration of bank executives, remuneration is not linked to risk management (Core, 2010).

According to (Core, 2010) there is no evidence that bank executives' remuneration is responsible for financial crises. That executives have disproportionate salaries when compared to the salaries of average workers and that banks' businesses make it difficult to understand their core activities can easily be held primarily responsible for the crises that have hit the global economy. However, if bank managers are highly paid, it is because the financial authorities, who supervise and control the activity of these financial institutions, have approved them.

Ultimately, because of the differences between non-financial companies and financial companies, it means that the same remuneration scheme can lead to different results. For non-financial firms it is a problem of subversion due to the risk aversion of executives, which may be acceptable in financial institutions when controlling the systemic risk of the financial system (Gande, 2011).

7. Conclusion

In the main industrialised countries, scandals related to the massive compensation received by financial executives have called into question the transparency of these institutions. As a result, over the last few decades, laws have been introduced with the aim of making companies more transparent, as can be seen in the transparency law (Law 26/2003 of 17 July), which makes it compulsory to make public any of the remuneration received by directors.

Furthermore, we will add to this the legal differences that explain the inequality in corporate governance and the financial system depending on whether the country's legal tradition is "Common Law" or Civil Law. We have seen how Spain follows the French civil model where blockholders have a strong role in the governance of banks.

The financial sector within an economy is quite important as it channels savings from surplus to deficit. Therefore, special care must be taken in the regularisation of this sector. It should also be added that in the last 20 years the financial sector has

undergone many changes due to globalisation, the progress of telecommunications such as the internet, digitalisation, etc...

We have seen that in theory the agency deals with the problems of communication and lack of information between owners and shareholders as each one fights for their interests, the shareholders for the maximisation of the value of the company and the increase of the value of the shares and the managers for the achievement of recognition and incentives. This leads to problems of corporate governance because as the information is asymmetric the managers could give data to the shareholders that are not real and thus increase their remuneration for meeting the objectives.

We see that incentives are focused on the performance of the company, so in this work we have been able to observe from the analysis in other works such as (Murphy, 1985) where he reveals the positive relationship between the remuneration of managers and the profitability of shareholders in contrast, where he concludes that incentives are an efficient way to connect the interests of managers with shareholders in contrast (Liebman, 1998) says that these incentives are insufficient and should add stock options for the manager to feel part of the company and motivate him to achieve the increase in the value of the shares.

In this work we will also see an example of how financial managers of banks take risks and this could trigger a financial crisis as happened in the United States with subprime mortgages where mortgages were granted to people who were not going to be able to pay them off, How the bank began to lose liquidity shareholders sold bonds so it was the trigger for one of the most powerful banks in the United States as Lehman Brothers went bankrupt. Due to the aforementioned globalisation, this crisis did not take long to reach the rest of the European countries, including Spain, which led to a recession in 2008.

Finally we see that central banks around the world are regulating the way in which they pay financial managers of banks, this policy aims to restrict incentive packages in response to excessive risk taking. These systematic risks can develop into events that trigger the destabilisation of the economy.

8. References

ADAMS, R., y H. MEHRAN (2003), «Is corporate governance different for bank holding companies?», Federal Reserve Bank of New York Economic Policy Review, 9: 123-142.

Andrés Alonso, P. d., & Vallelado González, E. (2011). Las remuneraciones del sector bancario y el gobierno corporativo. *Papeles de economía española*, *130*, 320-333.

Angelis, D.D. and Grinstein, Y. “Relative Performance Evaluation in CEO Compensation: A Non-Agency Explanation.” Working Paper, Rice and Cornell Universities (2014).

Bebchuk LA, Fried JM. 2004. Pay without Performance: The unfulfilled Promise of Executive remuneration. Cambridge, MA: Harvard Univ. Press

Benjamin Bennett, R. G. (2021). *How bankers paid?*

Bertrand, M., and S. Mullainathan. 2001. Are CEOs Rewarded for Luck? The Ones Without Principals Are. Quarterly Journal of Economics 116(3):901–32.

Blackburn, 2015. “La crisis de las hipotecas subprime”.

Bolton, P., Mehran, H., and Shapiro, J. “Executive Compensation and Risk Taking.” Review of Finance, Vol. 19 (2015), pp. 2139–2181.

Boschen, J.F., and K. J. Smith. 1995. You can pay me now and you can pay me later: The Dynamic Response of executive compensation to firm performance. Journal of Business 68 (4): 577-608

Chan, Y., S. Greenbaum, and A. Thakor. 1992. Is fairly priced deposit insurance possible? Journal of Finance 47:227–45.

CORE, J. E., y W. R. GUAY (2010), «Is there a case for regulating executive pay in the financial services industry?», SSRN eLibrary, http://ssrn.com/abstract=1544104

Crespí, R., García-Cestona, M. A., & Salas, V. (2004). Mecanismos de Gobierno los bancos españoles. Does ownership matter? Journal of Banking & Finance, 28(10), 2311-2330.

Edmans A, Gabaix X, Landier A. 2009. A multiplicative modelo f optimal CEO incentives in market equilibirum. Rev. Financ. Stud 22(12):4881--917

Edmans A, Gabaix X. 2010. El efecto del riesgo en el mercado de los directores generales. Trabajo. Pap., New York Univ.

Frydman C, Saks RE. 2010. Executive compensation: A new view from a long-term perspective, 1936-2005

Gabaix, X., and A. Landier. 2008. Why Has CEO Pay Increased So Much? Quarterly Journal of Economics 123(1):49–100.

Gallego, J., 2014. La remuneración de los directivos bancarios. TFG

GANDE, A., y S. L. KALPATHY (2011), «CEO compensation at financial firms», SSRN eLibrary, http://ssrn.com/paper=1865870.

GANDE, A., y S. L. KALPATHY (2011), «CEO compensation at financial firms», SSRN eLibrary, http://ssrn.com/paper=1865870.

García-Marco, T., y Robles-Fernandez, M. D. (2008). Comportsmiento de asunción de riesgos y propiedad en el sector bancario: La evidencia española: Journal of economics business, 60(4), 332-354.

Garen, J. E. 1994. Executive Compensation and Principal–Agent Theory. Journal of Political Economy 102:1175–99.

Gobat, J., 2012. ¿Qué es un banco?

Hall B, Liebman J. 1998. ¿Se paga relamente a los directivos generales como a los burócratas? Q.J. Econ. 113(3): 653--91

Hall B, Murphy KJ.2003. The trouble with stocks options. Econ. Perspect. 17(3):49--70

Hansmann, H. (1996). The ownership of Enterprise. Cambridge, MA: Harvard University Press.

Holmstrom, B. 1979. Moral Hazard and Observability. The Bell Journal of Economics 10(1):74–91.

IEGD, 1999. iegd.org. [En línea] Available at: http://www.iegd.org/spanish800/adjuntos/codigoolivencia.pdf

Inderst, R., and H. M. Mueller. 2006. CEO Compensation and Private Information: An Optimal Contracting Perspective. Working Paper, New York University.

Jensen, M., and K. J. Murphy. 1990. Performance Pay and Top-Management Incentives. Journal of Political Economy 98(2):225–64.

Krause, Ryan; Whitler, Kimberly A.; Semadeni, Mateo (1 de febrero de 2014). "¡Poder para los directores! Una mirada experimental a la votación de los accionistas Say-On-Pay". Revista de la Academia de Administración . 57 (1): 94–115.

Lewellen W, Hunssman B. ¡970. Managerial pay and corporate performance. Am. Econ. Rev. 60(4): 710--20

Melis, A. (1988): “Corporate Governance in Europe: An empirical analysis of the Italian case among no financial companies“, SSRN pp. 6-13

Merton, R., and R. Thakor. 2019. Customers and investors: A framework for understanding financial institutions. Journal of Financial Intermediation 39:4–18.

Murphy, K. J. 1985. Corporate Performance and Managerial Remuneration: An Empirical Analysis. Journal of Accounting and Economics 7:11–42.

OCDE (2016), Principios de Gobierno Corporativo de la OCDE y del G20, Éditions OCDE, Paris.

Oreland, C (2008): "CEO cash compensation and ownership structure: The effect of family control on the pay-performance relation in Sweden", en Oxelheim, L. y Whilborg, C. Markets and Compensations for Executives in Europe pp 315-346

Roberts, D. 1956. A General Theory of Executive Compensation Based on Statistically Tested Propositions. Quarterly Journal of Economics 70:270–94

Rosen, S. 1981. The Economics of Superstars. American Economic Review 71:845–58.

Sundaram, R. K., and D. Yermack. 2007. Pay Me Later: Inside Debt and Its Role in Managerial Compensation. Journal of Finance 62:1551–88.

Thakor, R. 2020. Short-termism, managerial talent and firm value. Review of Corporate Finance Studies. Advance Access published September 3, 2020, 10.1093/rcfs/cfaa017.

Thomsen, S y Conyon, M. 2012. El gobierno corporativo: Mecanismos y sistemas, Nueva York: Mc Graw Hill