European banks’ executive remuneration under the new European Union regulation

Pablo de Andrés Alonso

Dept. de Financiacion, Universidad Autónoma de Madrid

C/ Fco. Tomás y Valiente 5, Campus de Cantoblanco

28049 MADRID (SPAIN)

Email: p.andres@uam.es

Ph: +34 91 497 6527

Fax: +34 91 497 3954

Rodrigo Reig

Dept. de Financiacion, Universidad Autónoma de Madrid

C/ Fco. Tomás y Valiente 5, Campus de Cantoblanco

28049 MADRID (SPAIN)

Email: rodrigo.reig@outlook.com

Ph: +34 91 497 6527

Fax: +34 91 497 3954

Eleuterio Vallelado

Universidad de Valladolid and Comisión Europea

Avda del Valle Esgueva, 6, 47011 Valladolid (SPAIN)

Email: teyo@eco.uva.es

Ph: +34 983 423387

Fax: +34 983 18 6484

European banks’ executive remuneration under the new European Union regulation

Abstract

We review how the new European regulation of bank executive compensation could affect the future of banking in Europe. Although there is no conclusive empirical evidence on the relation between bank executive remuneration and the financial crisis, authorities have intensively regulated the compensation of bank managers to eliminate risk-taking incentives in the financial industry. However, the new regulation could have unintended consequences of creating an adverse selection problem at European banks, reducing the number of best-performing managers available for European banks, and motivating an excessive increase in fixed remuneration over total remuneration, altering the way incentive systems work.

Key words: Corporate governance, Single Supervisory Mechanism (SSM), Banks, Remuneration systems, Identified Staff, Board of Directors.

JEL Classification: G21, G28, M14.

1. Introduction

The recent financial crisis has focused on the well-paid financial actors at financial institutions as being responsible, first, for not foreseeing the crisis, and later, for not avoiding its devastating consequences. Society has questioned how after being rescued through taxpayer money, managers running those financial institutions could be compensated with high bonuses, for instance, at Merrill Lynch and AIG (Murphy, 2013). At first, Sandel (2009) argued that public concern was over the fact that the bonuses were designed to reward greed. Subsequently, Sandel found that the real objection to paying bonuses to the managers responsible for the collapse of financial institutions was that such compensation rewarded failure.

There is no empirical evidence of a relation between financial institution remuneration policy and the financial crisis (Andres and Vallelado, 2011; Murphy and Jensen, 2011; Murphy, 2013, Ferrarini, 2015; Edmans, 2016). However, the incentives in such remuneration practices have played a relevant role in the decision-making of the financial actors (Bebchuk and Spamann, 2010). In order to avoid another financial crisis, the European Union (EU) approved Directive 2013/36/EU (known as CRD IV) that addresses bank compensation (Arts. 74(3), 75(2), and 92 et seq.). Our contribution is to show how the new EU regulation of bank executive compensation could affect the future of banking in Europe with some unintended consequences; the regulations could create an adverse selection problem, reducing the number of best-performing managers, and altering the way incentive systems work. In addition, we demonstrate that Brexit will help avoid the implementation of this regulation for UK bank managers--the group of managers at EU banks most affected by the remuneration cap.

The origins of the EU regulation of bank compensation can be traced back to 2008 and the Financial Stability Board (FSB) which was composed of governments and central bank governors from 20 major world economies (G-20 group). At that time, G-20 authorities and regulators pointed to a relation between the financial crisis and the compensation of the financial intermediaries. The FSB received a mandate to draft sound practice principles for large financial institutions (Murphy, 2013). In 2009, the FSB delivered the Principles for Sound Compensation Practices. These principles were used by the Committee of European Banking Supervisors (CEBS) to propose the CEBS Guidelines on Remuneration Policies and Practices in 2010. On January 1, 2011, the European Banking Authority (EBA) took over the ongoing tasks and responsibilities of the CEBS. The EBA issued the “Guidelines on Sound Remuneration Policies under articles 74(3) and 75(2) of 2013/36/EU Directive (CRD IV) and article 450 of Regulation (EU) No 575/2013” (hereafter the Guidelines). Such Guidelines were applicable as of January 1, 2017 to all institutions under the CRD IV Directive, either consolidated or individually.

The success of the EU regulation of bank compensation practices is contingent on the global adoption of such rules (Ferrarini, 2015). EU regulation needs to be proportionate to address the EU financial challenges and be in line with international regulation. The global nature of the financial industry facilitates arbitrage among countries where managers of the main financial institutions can find the best location for their headquarters in order to avoid jurisdictions with tighter or undesired rules on remuneration (Murphy, 2013). The "raison d'être" for bank compensation regulation worldwide is the shared aim of reducing excessive risk taking by the financial institutions.

Using the data from the EBA (2014a, 2014b, 2015c, 2016, 2017) reports on high earners[1] (data from 2010 to 2015 on top 10 European countries), we found certain trends in banking remuneration since the EU became concerned with remuneration policies. Based on the data, we identified a significant increase (88%) in the fixed remuneration in 2014 compared to 2013. We also noticed that for certain high earners, a significant amount of fixed remuneration was paid in instruments. We also observed some exclusions from those classified as identified staff within the H.E. identification process. In addition, in 2015, 82% of H.E. (of the top 10 European countries by number of H.E.) were from the U.K. The H.E. in the U.K. are paid significantly more variable remuneration than in the other nine countries. Thus, as the regulation of EU bank remuneration has modified bank executive incentives--favoring fixed pay over variable pay it has mainly affected the UK banks at a time when they are leaving the EU.

The remainder of the paper is organized as follows. In Section 2, we review the regulation of EU bank compensation policies. Section 3 explores the consequences of EU bank remuneration regulation. Finally, in Section 4, we present our conclusions.

2. The regulation of European bank remuneration policies

The Guidelines (EBA, 2015a) on bank remuneration aim to ensure a level playing field that takes into account the nature, scale, and complexity of banking activities. Their goal is to map all remuneration components into either variable or fixed pay, as the regulations introduced a bonus cap ratio of 100% (up to 200% with shareholder approval) between the two components[2]. The Guidelines try to limit the number of waivers to its application as well as the discretion of the banks in defining their compensation policies. The aim of the regulation is to align staff incentives with the interests of owners and other stakeholders.

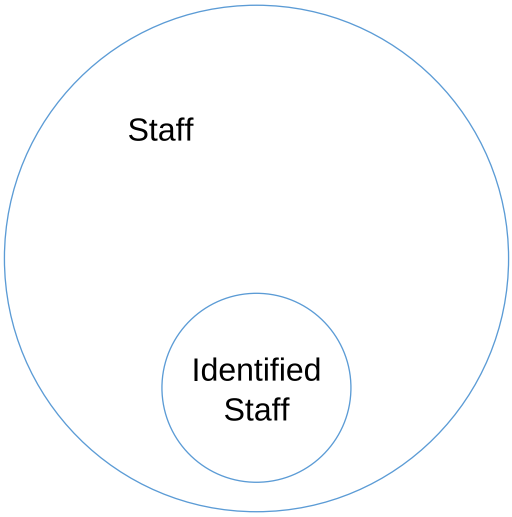
The Guidelines cover all employees of a bank, distinguishing between the remuneration of "Staff" and "Identified Staff"[3] (see figure 1). As of December

[1] High earners (hereafter H.E.) are staff members who earn €1m or more per financial year (regardless of whether or not they are "Identified Staff").
[2] CRDIV (art. 94(1)(g))
[3] The Identified Staff, as defined by the EBA (2015a), is the "*staff whose professional activities have a material impact on the institution's risk profile".* The EU issued the technical standards included in the Commission Delegated Regulation (EU) No 604/2014, supplementing CRD IV

2015, Identified Staff consisted of 4,408 individuals (3,551 were located in the U.K.) (EBA, 2017). The identified staff could be considered similar to those labeled by academia as material risk takers (hereafter MRTs). As Zalewska (2016) states, the concept of MRTs is not clear. According to this author, the MRTs include not only the members of the company's board and its top executives, but also all those individuals whose decisions have a material impact on the bank's risk profile and those employees whose total compensation may be comparable to that of senior management. In our opinion, any bank under the EBA Guidelines should name its MRTs as identified staff, but unfortunately that does not always occur.

The identification process should be documented and is the responsibility of each bank's board. Such an identification process has to be part of the remuneration policy in which the board's remuneration committee must be actively involved, as it should assist the bank's board in remuneration matters.

Figure 1. Bank employees according to EBA guidelines



The Guidelines try to tackle two problems that arose during the financial crisis: the lack of transparency and the inadequate executive remuneration regulation at financial institutions. Thus, the Guidelines include specific requirements on disclosure both to improve transparency and, with respect to institutions under government intervention or program relief, to avoid payment of additional sums to executives and board members who were part of the banks before they were rescued.

One of the pillars of the Guidelines is the proportionality principle,[4] which matches remuneration policies and practices with the specific risk profile, risk appetite, and strategy of an institution in order to avoid excessive risk taking in any bank while taking into account banks' differences in size, geographic location, structure,

where the quantitative and qualitative criteria are set forth in order to identify categories of staff whose professional activities have a material impact on a bank risk profile.

[4] (para. 75 et seq.) encoded in the CRDIV (art. 92(2))

business models, and cycles. The proportionality principle addresses the need for large and complex banks to have a more sophisticated remuneration policy without forcing small and relatively simple banks to implement the same practices. This principle introduces needed flexibility to cope with the specificities and diversity of European banks. It becomes of particular relevance in avoiding an excessive number of waivers (as in the previous CEBS Guidelines) that proclaim “no application of relevant remuneration requirement” (Price Waterhouse Cooper, 2015). The EBA (2015b) reinforces the importance of proportionality to enable a bank’s required flexibility in its remuneration policies such that each bank can apply the remuneration requirements in a proportional manner. However, independent of the proportionally principle, all banks have a minimum requirement for remuneration that should be applied to all corporate governance and risk management areas (Delgado, 2015). Thus, a key issue in the EU (Directive 2013/36/EU, art. 94(1) (g)) is that all banks comply with the cap ratio in which variable pay cannot exceed 100% (200% with shareholder approval) of fixed pay.

Risk and performance are the main inputs in the design and implementation of a remuneration policy. The two relevant board committees in this area are the risk committee which provides the measurement of the risk appetite and the remuneration committee which assists the supervisory body in the design of the compensation policy. A remuneration committee is mandatory at significant banks and advisable at all others (Delgado, 2015). According to the Guidelines (para. 49), the remuneration committee should include only non-executive board members and at least 50% should be independents. The chairman of the committee should also be independent, and there should be at least one member of the risk committee on the remuneration committee.

The EBA recommends (Guidelines, para. 38 et seq.) that the remuneration policy of the bank be approved at the annual general meeting (AGM) and that it specifically include the remuneration of identified staff in accordance with the national laws of European countries. The AGM voting can be non-binding or mandatory. In either case, the AGM is the only method by which to approve the increase in the ratio of variable to fixed pay from 100% to 200%. This introduces the “say-on-pay” issue. Thus, the Guidelines empower shareholders to vote on the remuneration of bank-identified staff under certain circumstances. “Say-on - pay” has become an international policy response to the perceived explosion in rewards to top management.

The EBA Guidelines consider two main types of remuneration: fixed and variable[5]. Remuneration is considered fixed when it is permanent, predetermined, non-discretionary, non-revocable, and independent of performance. All other remuneration that does not comply with these characteristics is automatically classified as variable. The classification becomes crucial since total remuneration is limited by the amount of fixed pay. Under the EBA Guidelines, fixed pay will determine the maximum remuneration of identified staff, as variable pay is limited to 100% or 200% of fixed pay, depending on

[5] (para. 115 et seq.), in accordance with the CRD IV (art. 92(2)(g))

whether shareholders agree to increase the ratio of variable to fixed from one to two.

The EBA appears to be aware that its Guidelines encourage innovation in new fixed-pay compensation practices. For this reason, the Guidelines (para. 116) emphasize that if there is any doubt about the fixed nature of the payment, it will be considered variable. The institutions calculate the effective ratio (Guidelines, para. 189) of variable to fixed pay using the remuneration awarded in the prior year. The effective ratios are the ones that the SSM will analyze to confirm that they are in agreement with the Guidelines, the national law, and specific requirements at each bank.

The EBA Guidelines (para. 192 et seq.) connect remuneration with a risk horizon, performance, and the business cycle in a multi-year scenario. Thus, each institution has to determine the accrued period for the pay, the deferred and retention periods, and the vested dates. EBA Guidelines distinguish between awarded remuneration and vested remuneration. Awarded remuneration is the total variable amount assigned to the identified staff for a specific accrual period, whereas the vested remuneration is the amount of the variable remuneration the identified staff will own in the future. Variable pay is a function of ex-ante risk adjustments and performance of the identified staff. The adjustment for ex-ante risks should include a balance between qualitative and quantitative criteria capable of capturing all relevant risks for the bank and aligning the identified staff's variable pay with bank value creation. Each identified staff member will be awarded pay each year but it will be cashed out at different points in time. The retention of pay takes into account unexpected risks after the identified staff member has left his or her responsibility.

However, the EBA Guidelines go beyond advice on a remuneration policy to find the optimal level of risk. The question is how to evaluate risk in order to align remuneration with risk. The Guidelines (para. 202) do not set a specific process for this as they establish that institutions should use the same risk measurement methods as are used internally. Thus, the alignment process will vary at (and depend on) each bank. Banks also need to pay attention to expected and unexpected stress situations and losses. Furthermore, the banks should define their risk goals by division and risk type. They have to be able to demonstrate how their risk breaks down by business unit (Guidelines, para. 203). Each bank's risk goals will be the sum of these parts.

Each bank should use a combination of quantitative and qualitative criteria in order to align remuneration with performance (Guidelines, para. 204 et seq.). However, regardless of the criteria used for this alignment, it should not create incentives for excessive risk taking. Furthermore, any operating efficiency indicators or market criteria that are used should be adjusted for risk (EBA, 2015a).

To account for ex-post risks, the EU introduced deferred pay such that part of the awarded remuneration will be cash in the future, for a minimum of three years, which can be extended, to enable easier ex-post adjustments and to align the variable remuneration with the business cycle (see figure 2)[6]. Moreover, the CRD IV introduced the restriction that at least 40% of the variable pay should be deferred, a restriction that increases to 60% if the amount awarded to the identified staff is large. Each bank should re-evaluate identified staff performance and risk before the identified staff can cash each deferred payment.

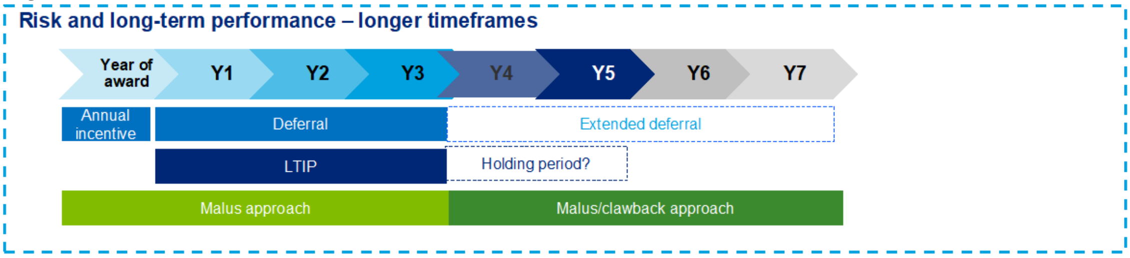
The other way to adjust the identified staff's variable pay for ex-post risk is the variation in the market value of instruments. The Guidelines indicate that at least 50% of the variable pay should be in instruments; this can contribute to the alignment between identified staff remuneration and performance and risk management record[7]. The instruments are those financial assets (shares or share equivalents and share-linked instruments) that fall within one of two categories referred to in Article 94(1) (l) of Directive 2013/36/EU. The instrument's value is based on the market price or, where a market price is not available, the fair value of the stock or equivalent ownership right which tracks with the market price or fair value. All such instruments should have the same effect in terms of loss absorbency as shares or equivalent ownership interests. The instruments are valued at market price on the date of the remuneration award (Guidelines, para. 256). Thus, the value of the instruments in the future, when the identified staff can cash them, will be contingent on bank performance.

Retention (Guidelines, para. 263 et seq.) is available for identified staff to account for the risks assumed that materialize later. Retention is an instrument to align identified staff remuneration with the long-term interest of the bank. The adjustment ex-post takes the form of malus or clawback (Guidelines, para. 268 et seq.) if there are deviations in the bank value or risk after the manager receives his or her remuneration award. Malus or clawback arrangements are explicitly ex-post risk adjustment mechanisms where the bank adjusts remuneration by lowering awarded cash remuneration or by reducing the number or value of the instruments awarded. The malus and/or clawback adjustments can reduce up to 100% of the total variable remuneration regardless of the method used for the payment, including deferral or retention arrangements, without prejudice to the general principles of national contract or labor law[8].

The malus applies to the variable remuneration that was deferred before it has vested, whereas the clawback applies when the remuneration has already being paid or vested. Figure 2 shows that deferral period is at least 3 years, although it could be longer if it provides more certainty about the risks that have arisen (Guidelines, para. 239). For the management body in its management function and senior managers of significant institutions the deferral periods should be at least five years (Guidelines, para. 240). The financial assets assigned under the Long-Term Incentive Plan (LTIP) will vest in at least three years, but it could be longer. The clawback provisions are, normally, restricted to circumstances of fraud or criminality (Guidelines, para. 272).

[6] Directive 2013/36/EU, Art. 94(1)(m)
[7] CRD IV (Art. 94.(1)(l))
[8] Article 94(1)(n) of CRD IV,

Figure 2. Malus and clawback instruments



Source: Deloitte (2015), page 22

Finally, EBA Guidelines (para. 174 et seq.) establish that directors (members of the supervisory body), since they have the duty to supervise, should be remunerated mainly with fixed pay, whereas variable pay should be exceptional and aligned with their supervision and control functions. In the same vein, the control functions must be compensated with fixed pay. If there is variable pay, it should not endanger the objectivity and independence of the employees. Moreover, variable pay should be a function of the internal control goals and it should never relate to the performance of the controlled units.

3. The unintended consequences of EU bank remuneration regulation

EU regulation has generated interaction between regulatory restraints and existing governance arrangements since bank managers and owners have limited interests in the consequences of bank failures and systemic risk (Calomiris and Jerenski, 2016). If improving corporate governance is insufficient to safeguard financial stability, then bank governance, including compensation policy, requires finding an equilibrium between equity governance, debt governance, and risk governance. Thus, bank regulation and supervision interfere in the internal operations of the bank such that the interests of the bank's shareholders are no longer its primary concern as they are in non-financial firms. Moreover, there are special disclosure requirements and balance sheet regimes for banks that differ from those of non-financial firms. Bank auditors have informational duties toward their supervisory authority. The takeover market for banks is especially weak and cannot be trusted to be a major disciplinary force in corporate governance. Regulators become a very active stakeholder in banks. The conclusion is that one size does not fit all.

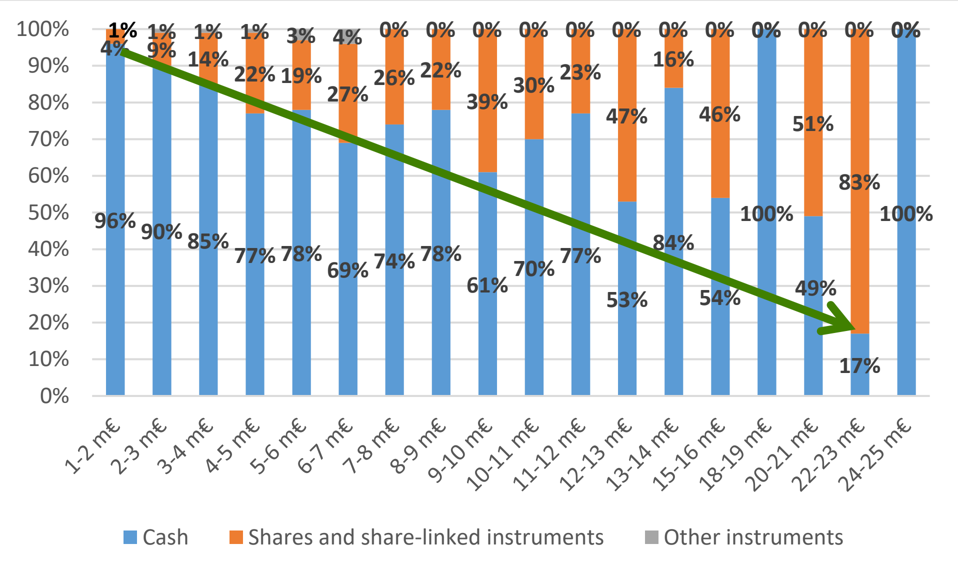
To complicate matters, banks attract the attention of politicians because excessive risk taking can create negative externalities and systemic risk. Thus, the regulator can appear as a social planner focused on the role of banks in a safe and sound financial system, the political approach mentioned in Calomiris and Jerenski (2016). Once banks are on the political agenda (as a consequence of the financial crisis), there is a need to study the interaction between governance and regulation. EU regulation is concerned with bank risk; introducing additional governance at banks is a way to avoid public exposition (risk governance). The political approach is that the lower the bank risk, the better; thus the remuneration policy should be designed as a disincentive to excessive risk taking. However, there is no reason for a bank with efficient risk management to have low risk. Nevertheless, bank regulation modifies managers' perceptions of risk due to the existence of subsidized deposit insurance[9], the implicit government guarantees, and the side effects of prudential regulation on remuneration policy, preventing optimal forms of corporate governance from arising naturally.

The introduction of the recent EU regulation has generated innovative solutions to align regulation compliance and bank managers' preferences. In our analysis, we identify several methods that banks could use (or are currently using) to circumvent the application of the EBA Guidelines on bank remuneration. For example, European bank executives may be able to avoid the Guidelines by making use of staff exclusions in the identification process. The EBA is currently conducting investigations about the limited information provided about such exclusions (EBA, 2017). The EBA (2017) report on H.E. for 2015 shows that 36% of bank asset managers or 10% of the management body in the management function earning more than €1m per year are considered not to have a material impact on bank risk profile. The benefits for a H.E. of not being among the identified staff are well known: they are not required to comply with the bonus cap and they can avoid deferrals to their variable remuneration. In sum, the exclusion avoids having their remuneration tied to the identified staff regulation.

The Guidelines do not completely ban the use of instruments to pay fixed remuneration. At first glance, it appears as though the remuneration is generally paid out in cash. However, a significant portion of the H.E. fixed remuneration is paid out with non-cash instruments. Furthermore, the trend reveals that, although there are noticeable exceptions, the cash component declines with the size of the remuneration (see figure 3). The EBA (2016) attributes the change in the payment structure of fixed remuneration to the implementation of the bonus cap. In fact, we believe that this is another way to circumvent the ratio requirement, as part of the fixed remuneration is paid with instruments that, in the end, relate to performance.

[9] In the EU there is still no unified approach to deposit insurance. European Commission efforts to introduce the European Deposit Insurance Scheme (EDIS) have not been successful thus far.

Figure 3. Composition of the fixed remuneration for H.E. by payment bracket



Source: EBA (2016) Benchmarking Report of Remuneration Practices at the European Union Level and Data on High Earners (as of end of 2014), page 22.

However, the variable pay of each identified staff member should align with the organization's risk profile so that the aggregate remuneration at each bank is in sync with its Risk Appetite Framework (RAF)[10]. The EBA recognizes banks' needs for flexibility in their remuneration policies in order to be able to respond to changes in performance at individual, department, or subsidiary levels, but such flexibility is capped through the introduction of the variable to fixed pay ratio. Murphy and Jensen (2011), Murphy (2013), and Ferrarini (2015) have argued against such a limitation. Moreover, the Guidelines do not address the fact that the worst performers should be penalized by negative variable compensation, as suggested by Murphy and Jensen (2011).

The regulations seek alignment between risk and remuneration. Thus, the variable pay should adjust with the risks, either current or future, such that for each bank there is a balance between risk incentives and risk management. The tendency among banks is to take on (excessive) risk because their "raison d'être" is a combination of leverage and opaqueness that increases the incentive to add risk. Furthermore, the risk is evaluated at each bank by the RAF, which it is not an easy task ex-ante. The EBA Guidelines favor a process of standardizing the RAF at EU banks. As a consequence, all banks will measure the same risks and will develop the same risk management policies, leading to herding behavior. If there is a simultaneous accumulation of risks at several financial institutions , unforeseen in the ex-ante risk analysis (systemic risk), the problems will also arise simultaneously at those institutions, causing a new financial crisis.

[10] The RAF will be a key element in the evaluation of risk management at each bank. An effective RAF provides a common means to understand, evaluate, and communicate the assumed risks (Delgado, 2015). The elaboration of the RAF is no easy task since risk measurement, and the assignment of risk appetite to each division, department or subsidiary, or to each employee, are complex and difficult to accomplish ex ante.

The variable pay usually consists of instruments. The list of instruments included in article 94 (1) of CRD IV is broad, but it concentrates on shares and share equivalents that affect shareholders. However, moral hazard (risk shifting) is always higher in banks than in non-financial firms due to the differences in leverage, which means that very often banks that maximize shareholder wealth do not maximize bank value. In other words, equity governance is valid for most companies but not for banks as their leverage requires equilibrium between equity and debt governance to achieve the goal of maximizing bank value. Banks share a unique combination of liquidity risk (maturity transformation), reputational risk, and systemic risk not present in non-financial companies. Banks require a stakeholder approach more than a shareholder approach. For this reason, Bebchuck and Spamann (2010) advise the use of bank unsecured debt and bank bonds among the instruments to pay the variable remuneration to material risk takers and thereby include bank stakeholders' interests in the compensation policy.

The EBA proposals on bank executives' remuneration compliance is contingent on the capability of each bank to demonstrate how it calculates its risks at different organizational levels and how it accounts for current and future risks, even for those as non-measurable as reputational risk. In the end, the comprehensive Guidelines on remuneration rest on the subjective nature of being able to convince EBA and the Single Supervisory Mechanism (SSM) supervisors. However, due to the social relevance of banks, such subjectivity reduces the supervisory effectiveness in limiting systemic risk, as seen in the empirical evidence of Calomiris and Jaremski (2016). According to these authors, the regulation can be captured by the private interest of some stakeholders at the expense of the public's interest. In the same vein, a Price Waterhouse Cooper report (2015) concludes that the EBA has not prescribed a specific process but trusts the European banks to develop a transparent and robust methodology to measure risk and to align such risks with remuneration. An unintended result could be complex compensation practices at European banks that are impossible to disentangle and understand by economic agents outside the institution, ending up in a less transparent policy, just the opposite of the declared goal of the regulation.

One of the most relevant measures included in the EBA Guidelines is the cap ratio setting variable pay as a function of fixed pay. Murphy (2013) argues against any regulation on remuneration practices as it introduces limits in CEOs' incentives (and by extension, to all MRTs) to do their best. Whereas Bebchuk and Spamann (2010) agree on the need for some compensation regulation but not on introducing quantity limits.

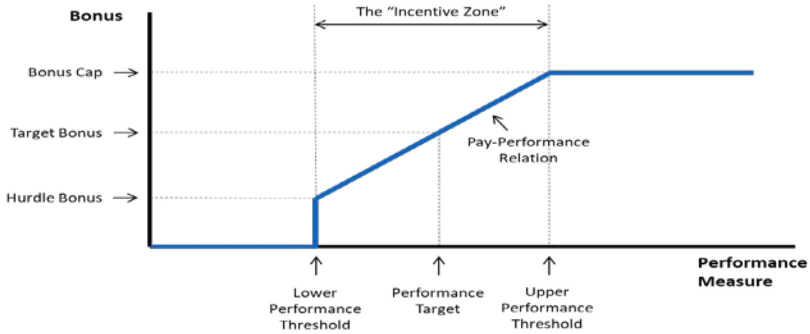
Moreover, the cap ratio includes the say-on-pay feature if the managers want to increase the cap ratio from one to two. However, the empirical evidence generally confirms that has little impact on pay levels (Armstrong, Gow, and Larcker, 2013; Ferri and Maber, 2013; Cuñat, Gine, and Guadalupe, 2016; Iliev and Vitanova, 2017). Certain authors have found some influence of say-on-pay when the firm has questionable compensation practices (Cai and Walkling, 2011) or when there is a need to reduce excessive pay (Ertimur, Ferri, and Muslu, 2011).

Taking the action to reduce risk by introducing pay caps can prove costly for banks when the lower risk is achieved by avoiding valuable investments that include activities with higher risk (Stulz, 2015). The question then is, will capping variable pay and increasing fixed pay help manage bank risk efficiently? Bank management has to find the right balance between helping it take on risk efficiently (good risk) and ensuring that employees avoid risks that destroy value (bad risk).

The EBA Guidelines include two limits in the remuneration policy: a top limit, for the ratio of variable to fixed pay, and a bottom limit for the fixed pay. These two limits can incentivize inefficient behavior by identified staff when either is close to the limit: accept negative NPV projects (bad risks) and delay the adoption of positive NPV projects (good risk). Thus, if the identified staff is close to losing all variable pay, the individual is incentivized to behave opportunistically to ensure the fixed pay. Thus, the identified staff can adopt very risky decisions, for instance, accepting risky negative NPV projects, because of the call option, whose exercise price is the fixed pay. On the other hand, the identified staff with outstanding performance cannot increase their remuneration because the variable pay is limited. In this circumstance, once the identified staff has reached maximum pay, the individual has no incentive to continue to offer their best effort, as any additional improvement in performance is no longer compensated. Consequently, those identified staff who reach their maximum pay before the end of the year will prefer to avoid any risky decisions that could damage their remuneration or that could drive their remuneration below their reference points (Khaneman and Tversky, 1979). The bank could then lose business opportunities because these identified staff reject or delay risky positive NPV projects. In addition, these identified staff members have incentives to manipulate financial statements using earnings management policies (Murphy, 2013).

Figure 4 shows how the existence of upper and lower limits on identified staff remuneration could incentivise bank managers to deviate from efficient risk management. According to EBA Guidelines, identified staff will receive their fixed pay independently of their performance. If the identified staff is facing difficulties in reaching the lower levels of performance, the individual knows that in the worst-case scenario, the fixed pay can be received. In these circumstances, if the identified staff has to make a risk decision that is not going to improve performance enough to achieve variable pay, the individual would prefer to postpone such a decision, even if the move is not in the interest of the bank.

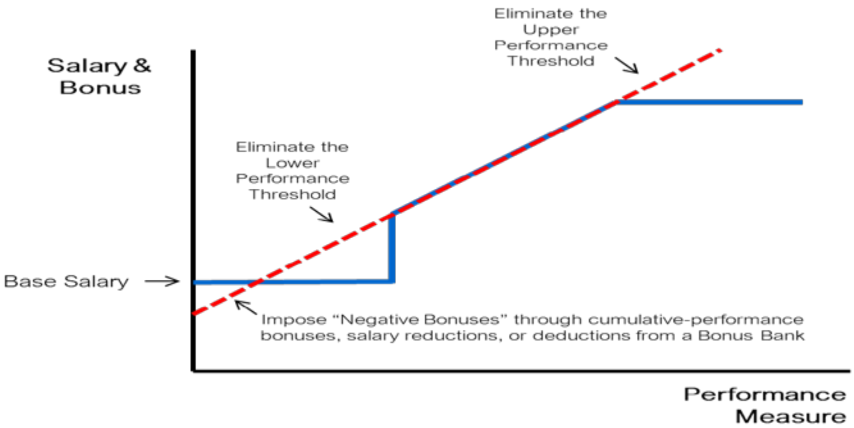
Figure 4. How bonus design could influence MRTs' incentives



Source: Murphy (2012), page 34.

On the other hand, Figure 5 shows that as the identified staff's performance improves, the amount of variable pay adds to the fixed pay, either as a first step up, as in the figure, or following some relation (lineal, convex or concave) between performance and variable pay. Once the manager hits the lower end of the variable pay, the incentive is there to improve performance as the compensation keeps increasing. As Murphy and Jensen (2012) explain, a linear relation favors a constant performance by managers, whereas a convex relation benefits managers able to increase the variability of their performance, and a concave relation incentivizes managers to reduce the variability of their performance. The EBA Guidelines only impose a cap on the variable pay, but do not impose any restriction on the functional relation between performance and variable pay. However, when the identified staff members reach their goals, they get the maximum variable pay. The incentive to efficient risk management ceases when the upper limit is reached. From that point on, the identified staff know there is nothing to gain and that part of the variable pay could be lost if any additional decision on risk fails. The remuneration scheme incentivizes the identified staff to either avoid risk decisions or to postpone such risk decisions into the future. The conclusion is that EBA Guidelines incentivize bank earnings management that could destroy bank value (Murphy, 2012; Murphy and Jensen, 2011).

Figure 5. Limited vs. unlimited remuneration scheme



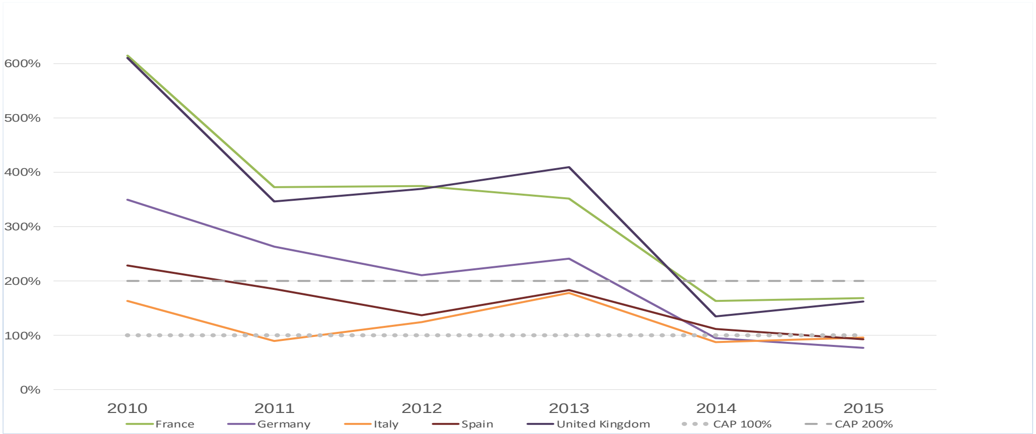
Source: Murphy and Jensen (2011), page 11.

The solution from Murphy and Jensen (2011) to the earnings management problem in the EBA Guidelines is to create a linear relation between remuneration and performance without lower and upper limits. If the identified staff have fixed pay, the remuneration scheme should include negative variable pay (see Figure 5). This solution penalizes the worst performers and the time given to the best performers always incentivizes them to manage the risk efficiently.

Another consequence of the introduction of limits in the variable pay as a function of the fixed pay could be an increase in the fixed pay to identified staff (Murphy, 2013). The author argues that between 2006 and 2011, fixed pay increased as an answer to political pressure on the excessive remuneration of some US bank executives, mainly arising from their variable pay. The same has occurred in the largest countries of the EU. Reviewing the information about the H.E. remuneration published by the EBA, we see that the ratio of variable and fixed remuneration significantly declined in the period 2010-2015. This could imply that the fixed remuneration increased to comply with the bonus cap.

Figure 6 presents the evolution of the average ratio per country from 2010 to 2015. It is clear that in 2014, there was an overall reduction of the variable/fixed pay ratio to comply with the bonus cap, especially in France and the U.K., and previously in Germany. However, in Spain and Italy such movement was not necessary as their ratios were lower than the 200% threshold as of 2011.

Figure 6. Variable vs. fixed remuneration ratio of H.E. by selected countries



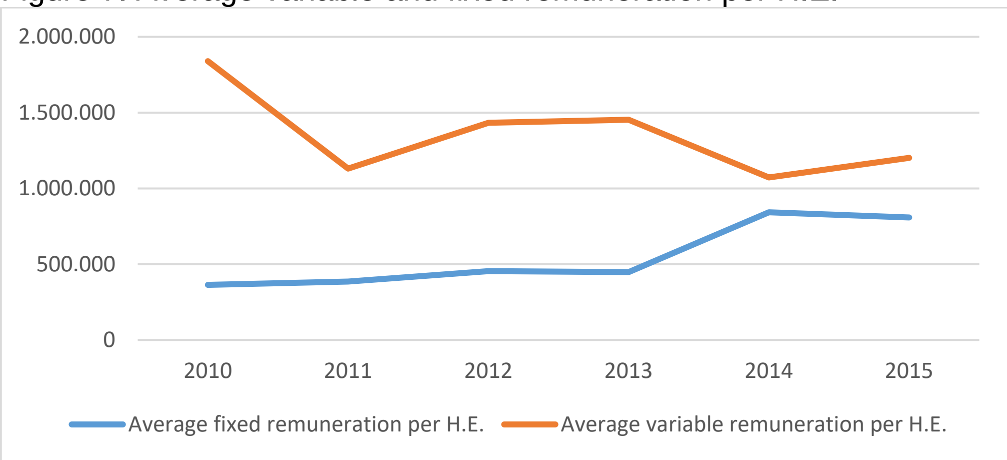
Source: EBA (2014a, 2014b, 2015c, 2016, 2017) High Earners Report from 2010 to 2015 and own analysis

Behavioral finance brings us a second argument for an increase in fixed pay. According to behavioral finance, individuals have a reference point for their remuneration and they compare the amount they receive each year to such reference points. Since the reference point would be in the period before the Guidelines were applied, the identified staff will ask for a remuneration policy that pays them at least the same as before the introduction of the variable-to- fixed pay ratio. Therefore, when the variable pay is capped, the only option to increase pay is to increase fixed pay. Andres and Vallelado (2011) found that US bank CEOs received, on average, in the period 2001-2009, 69% of their total remuneration as variable pay, which was equivalent to a variable over fixed pay ratio of 2.3:1. If the EBA Guidelines had applied to these CEOs, they would have needed to increase their fixed pay to receive the same total amount, and, at the same time, comply with the EBA Guidelines ratio; this confirms Murphy's (2013) arguments. However, the analysis of Andres and Vallelado (2011) of US and European bank CEO remuneration shows that European banks have not exceeded, on average, the limit imposed in the EBA Guidelines --that variable pay represent a maximum of 66% of total pay (variable pay over fixed pay = 2) during the period 2001-2009. Furthermore, only U.K. bank CEOs received variable pay equivalent to 50% of their total pay (variable pay over fixed pay = 1). Thus, the identified staff at UK banks will be the most affected by the EBA Guidelines' pay cap. In all other European countries analyzed by Andres and Vallelado (2011), the CEOs of European banks received compensation where variable pay was between 10% and 34% of their total pay, well below the EBA Guidelines limit.

Today, we observe a significant increase in fixed remuneration, anticipating the enforcement of new European regulation--the cap ratio on variable remuneration and the qualitative and quantitative criteria for the identification of staff (Commission Delegated Regulation (EU) No 604/2014). We do not have enough data about the identified staff remuneration, but we know some statistics about the remuneration of H.E. in Europe (most are also identified staff). Using aggregate information for the top 10 European countries by number of H.E. as of 2015, Figure 7 shows an increase (decrease) of fixed (variable) remuneration in the period 2010-2015.

This trend shows that at the time the bonus cap became applicable, the fixed remuneration increased. This confirms Murphy's (2013) arguments that a cap in variable pay will increase fixed pay. Moreover, a significant part of the fixed remuneration is paid in instruments other than cash (as explained above). Thus, this could indicate that the European banks are trying to circumvent the new regulation. Moreover, this trend is widely followed by banks in every European country.

Figure 7. Average variable and fixed remuneration per H.E.[11]

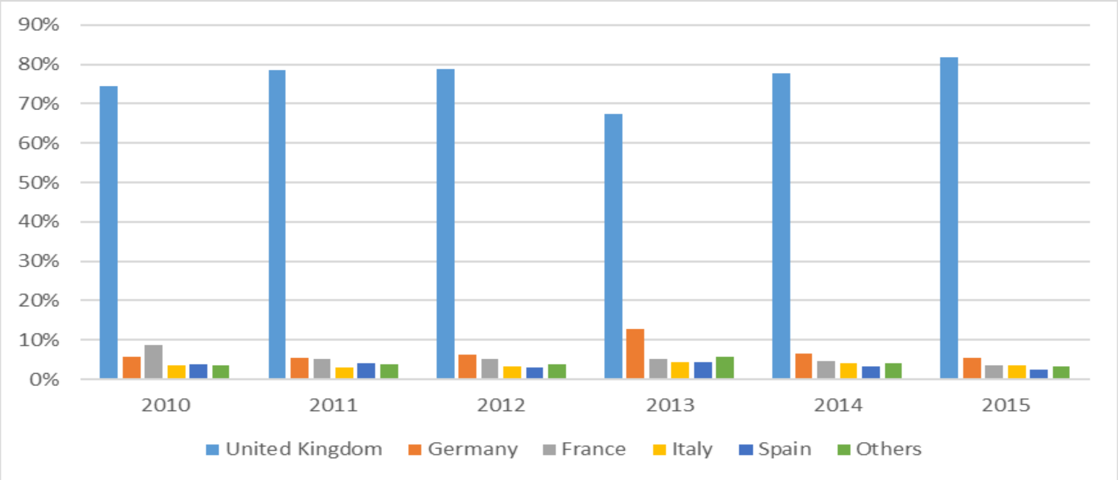


Source: EBA (2014a, 2014b, 2015c, 2016, 2017) Report High Earners and own analysis.

[11] Employing the data of the EBA (2014a, 2014b, 2015c, 2016 and 2017) from the H.E. of the top 10 European countries by number of H.E. as of 2015.

Murphy (2103) also argues that the limit on variable pay as a function of fixed pay will not only increase the fixed pay, but will also produce a divergence between the compensation policies at European banks and the compensation policies at the banks in the rest of the world. Thus, US banks have a relative low fixed pay and a large variable pay that on average represents 69% of total pay (equivalent to a ratio of variable over fixed pay of 2.3). The variable pay is based on performance and there are no limits. Such divergence could favor an exit of the best of the identified staff from European banks to banks in the rest of the world where there is no bonus cap. If the best managers--those able to efficiently manage risk--prefer to have more variable remuneration than fixed, this will affect efficient risk management by the European banks, as they will face difficulties in attracting and retaining talent (Murphy, 2013).

Figure 8. Percentage of H.E. per country

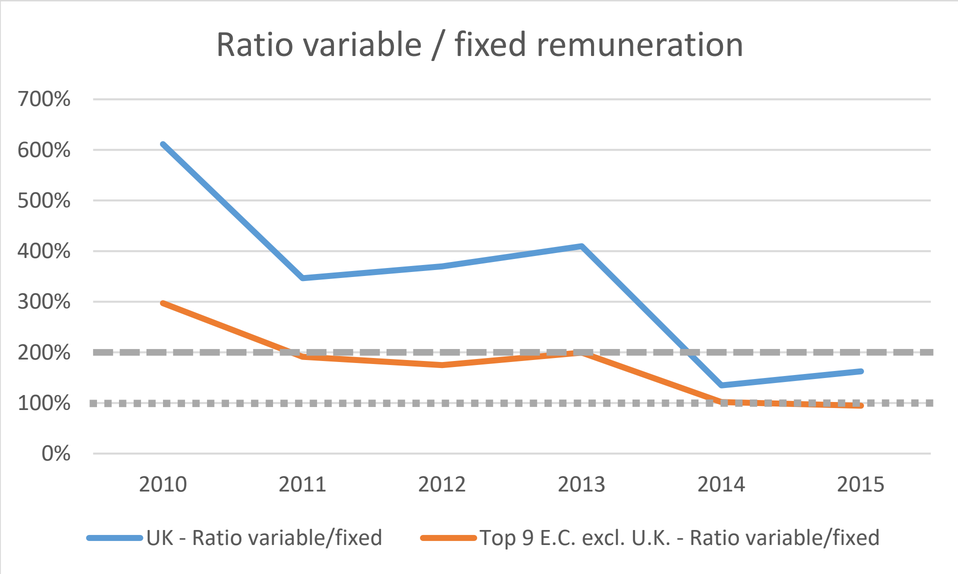


Source: EBA (2014a, 2014b, 2015c, 2016, 2017) Report on High Earners and own analysis.

The new European map defined by Brexit brings this threat closer and makes it realistic. Figure 8 shows that 82% of the H.E. (of the top 10 European countries by number of H.E.) are from the U.K. In a Brexit scenario, the U.K. will not be subject to EU Law; thus, it will not have any obligation to continue with the bonus cap regulation. We posit that the U.K. will no longer apply the bonus cap in order to retain and attract the best performing financial entities and bankers, as the lack of any bonus limitation will be a key bargaining factor. If this happens, many bank managers will have an incentive to move toward a non-cap environment, especially talented ones who prefer more variable remuneration to reward their performance.

Figure 9 shows that the U.K. paid H.E. more variable remuneration than the other top nine European countries. This fact suggests that British bankers will continue to look to keep their level of variable remuneration; this could also mean that they prefer to remain in the U.K. in order to avoid a bonus cap. As Ferrarini states (2015), to be successful, the European regulation on remuneration should definitely be coordinated with the rest of the world.

Figure 9. Total variable remuneration: U.K. vs. Europe



Source: EBA (2014a, 2014b, 2015c, 2016, 2017) Report on High Earners and own analysis.

Finally, as the proportion of variable pay decreases in the total remuneration of bank managers, the flexibility of the bank during crisis times will diminish (Murphy, 2013). If a crisis hits a bank, it will need to cut its costs to recover its competitiveness. Among the bank costs to be cut will be remuneration to identified staff. If they are paid mostly with variable instruments, such reduction will be easier to execute as their variable pay will diminish if the bank performance worsens. However, if most of the identified staff remuneration is fixed, their compensation is not tied to bank performance, making it a more difficult adjustment for the bank to survive. Therefore, the European banks' remuneration could have the unintended consequence of reducing bank flexibility to adapt to a changing environment, which will affect their competitiveness in a global industry at a moment of low interest rates and margins.

4. Conclusions

Although there is no robust empirical evidence of a relation between financial institution remuneration policy and financial crises (Andres and Vallelado, 2011; Murphy and Jensen, 2011; Murphy, 2013, Ferrarini, 2015; Edmans, 2016), the EU decided to regulate bank remuneration policies as an additional measure to avoid future financial crises.

This effort has produced a comprehensive set of rules, contained in the EBA Guidelines on sound remuneration practices, as an attempt to avoid excessive risk taking by bank managers. However, the rules are a mix of quantitative and qualitative criteria that could end up as complex compensation practices that reduce the transparency of remuneration policies, and, at the same time, disincentivize economic agents' involvement in bank discipline.

The European Regulator has employed two mechanisms in order to address excessive risk taking:

- A risk alignment process between variable remuneration with the manager's risk profile. The Guidelines establish many mechanisms in order to make this alignment easier, such as payments in instruments, deferrals, retention periods, malus, and clawbacks.
- A limit in variable remuneration. The bonus cap affects the variable remuneration of the most successful identified staff.

The latter is quite controversial and could produce perverse incentives; underperforming managers could accept risky, negative NPV projects, and high performers could stop their activities before the end of the year, rejecting risky, positive NPV projects or delaying their adoption to the following year. The cap modifies the tradeoff between the cost associated with taking on a new project that increases a bank's total risk and the potential gain in compensation for taking the risk. The bank's identified staff not only have to create value, but they also have to find the optimal level of risk that maximizes bank value subject to the constraints imposed by regulators, laws, and regulations.

Moreover, the limits on remuneration imposed by CRD IV and EBA Guidelines could increase the adverse selection problem. The best managers will want to have their remuneration tied to their performance. They will prefer to work at banks with no limits on variable pay, rather than at banks where part of their efforts are not compensated due to the existence of limits on variable pay. At the opposite end, the worst managers will be delighted to work at banks that guarantee them a high proportion of their remuneration in fixed pay, independent of their performance and risk management capabilities.

Additionally, we should expect to see an increase in fixed pay as an answer to the introduction of limits on variable pay. When the bonus cap and the criteria for the identification process came into force in 2014, we saw a significant increase in the fixed remuneration compared with 2013.

In other words, the limit on variable pay along with high fixed pay will make European banks attractive to the worst performers and will encourage the best performers to move to banks with no variable pay limits and lower fixed pay. The final effect could damage long-run bank performance, just the opposite of the goal sought by the regulation. In a Brexit scenario, the most talented managers will have an incentive to move to the U.K. if that country decides not to apply a bonus cap.

Finally, EBA Guidelines include various instruments to award variable pay, but they concentrate on shares and share equivalents that affect shareholder wealth. However, for banks, it is advisable to include banks' unsecured debt and bonds among the instruments used to pay identified staff variable remuneration in order to include other stakeholders' interests in the compensation policy, as suggested by Bebchuck and Spamann (2010).

This analysis is not an end but a starting point. Now that the regulation on bank remuneration has begun in 2017, an important point to analyze will be whether the regulation increases remuneration policy convergence among European banks. Moreover, it will be interesting to analyze which banks apply the limit ratio of 1 for variable to fixed pay and which request their shareholders to increase the ratio to above 1. Additionally, it will be of interest to observe the degree of coordination worldwide on regulating bank compensation policies.

References:

Armstrong, C. S., Gow, I. D. and Larcker, D. F. 2013. “The Efficacy of Shareholder Voting: Evidence from Equity Compensation Plans” Journal of Accounting Research 51 (5): 909-950.

Andres, P. and E. Vallelado. 2011. “Changes in board composition and compensation in banking in the period 1999-2008”, in Philip Molyneux (Ed.): *Bank Strategy, Governance and Ratings*, Palgrave Macmillan Studies in Banking & Financial Institutions series, pages 49-71.

Andres, P. and E. Vallelado. 2011. “Las remuneraciones del sector bancario y el gobierno corporativo (Remunerations in Banking and Corporate Governance).” *Papeles de Economía Española*, 130: 320-333.

Basel Committee on Banking Supervision. 2015. *Guidelines Corporate governance principles for banks*. Bank for International Settlements.

Bebchuk L. and Spamann H. 2010. “Regulating Bankers’ Pay”, Georgetown Law Journal 98(2): 247–287.

Bloomberg. 2014. *Banker Bonuses. Culture of Risk.* [ONLINE] Available at: http://www.bloomberg.com/quicktake/banker-bonuses [19 June 2016].

Bolton, P., H. Mehran and J. Shapiro. 2015. “Executive Compensation and Risk Taking”. *Review of Finance* 19: 2139-2181.

Cai, J. and Walkling R. A. 2011. “Shareholders’ Say on Pay: Does It Create Value? 2011”, Journal of Financial and Quantitative Analysis 46(2): 299-339

Calomiris, C. W. 2011. “Un programa para la reforma financiera de incentivos consistentes”. *Papeles de Economía Española,* 130: 21–41.

Calomiris, C.W., and Jaremski, M. 2016. “Deposit insurance: theories and facts”. NBER Working Paper 22223, Cambridge (MA).

Committee of European Banking Supervisors. 2010. *Guidelines on remuneration policy and practices*. European Central Bank. Frankfurt.

Commission Delegated Regulation (EU) No 604/2014 of 4 March 2014 supplementing Directive 2013/36/EU of the European Parliament and of the Council with regard to regulatory technical standards with respect to qualitative and appropriate quantitative criteria to identify categories of staff whose professional activities have a material impact on an institution's risk profile. Official Journal of the European Union L 167/30.

Cuñat, V., Giné, M., & Guadalupe, M. 2016. “Say pays! shareholder voice and firm performance” Review of Finance 20(5): 1799-1834

De Haan, J., and R. Vlahu, 2016. “Corporate Governance of Banks: A Survey.” *Journal of Economic Surveys* 30(2): 228-277.

Delgado, M.D. 2015. “*Corporate governance and risk management: the SSM approach*”, In Espí (Ed.): *31 claves para la gestión de riesgos en entidades bancarias. Nuevos riesgos, nuevos retos.* Madrid: Colegio de Economistas de Madrid.

Deloitte. 2015. *Link’n Learn Financial services remuneration (CRD,MiFID, AIFMD, UCITS)*. [ONLINE] Available at:

https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/FinancialServices/investmentmanagement/ie_2015_.Linkn_Learn_Remuneration_Deloitte_Ireland.pdf [Accessed 1 June 2016].

DIRECTIVE 2013/36/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC. Official Journal of the European Union L 176/338.

Edmans, A. 2016. “Performance – Based Pay for Executives Still Works”, *Harvard Business Review*. February.

Ertimur, Y., Muslu, V., and Ferri, F. 2011. “Shareholder Activism and CEO Pay”, Review of Financial Studies 24(2): 535-592.

EBA, 2014a. “EBA Report *High Earners 2010* and 2011 data”. London.

EBA, 2014b. “EBA Report *High Earners 2012* data”. London.

EBA, 2015a. “Guidelines on sound remuneration policies under Articles 74(3) and 75(2) of Directive 2013/36/EU and disclosures under Article 450 of Regulation (EU) No 575/2013”. EBA/GL/2015/22. London.

EBA, 2015b. “Opinion of the European Banking Authority on the application of the principle of proportionality to the remuneration provisions in Directive 2013/36/EU”. EBA/Op/2015/25. London

EBA, 2015c. “EBA Report Benchmarking Of Remuneration Practices at Union Level and Data on High Earners”. London.

EBA, 2016. “EBA Report Benchmarking Of Remuneration Practices at The European Union Level And Data On High Earners (Data As Of End 2014)”. EBA-OP-2016-05. London.

EBA, 2017. “EBA Report On High Earners Data As Of End 2015”. London.

Ferrarini, G. 2015. “CRD IV and the Mandatory Structure of Bankers´ Pay”. *ECGI Law Working Paper* nº 289/2015.

Ferri, F., and Maber, D. 2013. “Say on Pay Votes and CEO Compensation: Evidence from the UK” Review of Finance 17(2): 527-563.

Iliev, P. and Vitanova, S. 2017. The Effect of the Say-on-Pay Vote in the U.S. Working Paper available at SSRN number 2235064

Jackson, P. 2015. “Risk appetite and risk responsibilities”. [ONLINE]. Available at: http://www.ey.com/Publication/vwLUAssets/ey-risk-governance-2020-risk-appetite-and-risk-responsibilities/$FILE/ey-risk-governance-2020-risk-appetite-and-risk-responsibilities.pdf [Accessed 1 June 2016].

Kahneman D, and Tversky A. 1979. “Prospect theory: an analysis of decision under risk”. *Econometrica* 47: 263-291.

Lautenschläger, S. 2016. “Two years and three days of European banking supervision – what has changed?” Transcription, *ECB Website*, 7 November 2016, available at: https://www.ecb.europa.eu/press/key/date/2016/html/sp161107.en.html

Murphy, K. J. 2012. “Executive Compensation: Where We Are, and How We Got There”. *Handbook of the Economics of Finance*. Volume 2, Part A, 211-356.

Murphy, K. J. 2013. “Regulating Banking Bonuses in the European Union: A Case Study in Unintended Consequences”. *European Financial Management* 19(4): 631–657.

Murphy, K. J. and M. C. Jensen, 2011. “CEO Bonus Plans: And How To Fix Them”, *Harvard Business School Nom Unit Working Paper* No. 12-022.

PwC. 2015. “Final EBA Guidelines on sound remuneration policies”. [ONLINE] [Accessed 1 June 2016]. Available at: https://www.pwc.lu/en/banking/docs/pwc-banking-final-eba-guidelines.pdf

REGULATION (EU) No 1093/2010 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC. Official Journal of the European Union L 331/12.

REGULATION (EU) No 575/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012. Official Journal of the European Union L 176/1.

Sandel, M. J. S. 2009. *Justice: What's the Right Thing to Do?* Reprint. Farrar, Straus and Giroux.

Stulz, R. 2015. “Risk-Taking and Risk Management by Banks.” *Journal of Applied Corporate Finance* 27(1): 8-18.

Tversky A, and Kahneman D. 1991. “Loss aversion in riskless choice: a reference dependent model.” *Quarterly Journal of Economics* 106: 1039-1061.

Tversky A, and Kahneman D. 1992. “Advances in prospect theory: cumulative representation of uncertainty.” *Journal of Risk and Uncertainty* 5(4): 297-323.

Zalewska, A. 2016. “A New Look at Regulating Bankers´ Remuneration.” *Corporate Governance: An International Review* 24(3): 322-333.