Bank manager compensation systems that materially impact the risk profile of large European banks

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Following the recent economic crisis a need has emerged to regulate the existing remuneration practices which created a professional environment where high short-term profits led to generous bonus payments to managers without adequate consideration of the longer-term risks they imposed on their institutions. In 2009 for the first time the Financial Stability Forum (later Financial Stability Board) issued a set of Principles for Sound Compensation Practices. These principles were later incorporated into the Basel III Accord and have been part of the Capital Requirement Regulation and Directive since 2013 in the European Union. This article provides an overview on the different regulatory expectations with attention on their implementation in the European Union. Based on samples taken, it analyses data on remuneration disclosed by European banks in 2014 as part of the latest European stress testing.

Introduction

The overall compensation system of bank managers at large financial institutions was one of the many contributing factors to the financial crisis that began in 2007. The lack of regulations around the remuneration practices created a professional environment where high short-term profits led to generous bonus payments to staff without adequate consideration of the longer-term risks they imposed on their institutions. These inappropriate incentives amplified risk-taking to excessive levels that severely threatened the stability not only of the national financial system, but also of the global financial system. Bebchuk (2010) and later Uhde (2015)[1], on the basis of the examination of 63 banks from 16 European countries, found statistical evidence that increased compensation, especially the increased variable element of the overall compensation, results in higher levels of risk-taking. This harmful risk-taking practice can be put under control by new regulations. However, they can jeopardize the efficiency of the banking system, for such regulations can lead to declining performance of senior managers (Fahlenbrach and Stulz, 2011). Furthermore, as the research of Ayadi and Boujelbene (2012)[2] suggest, a negative change in the overall compensation of bank managers is inversely proportional to banks' solvency. In other words, the increase in the remuneration of bank managers increases the chance of maintaining bank's solvency. Murphy (2013) also highlights that the increased proportion of the fix element of the overall compensation will put the efficiency, performance and new value adding processes at risk. Such changes in remuneration practice erode competitiveness and can eventually lead to higher cost of capital in the European banking sector.

In the recent years many researchers have been focusing on the new regulations. They are aiming to determine the impact of the change in the proportions of the fix and variable elements of the compensations packages. Although the new regulations standardised the remuneration of bank managers, Hüttenbrinka et al. (2014) found that the overall income of bank managers in countries with stricter regulations is higher than in other countries. Other studies concentrated on the time horizon over which the variable element can be paid to the senior management, based on the new regulations. Liesen (2011) believes that withholding of performance bonuses would not prevent managers with material impact on the bank's risk profile to take excessive risks. More recently, the study by Cullen and Johsen (2015) suggests that such withholding is required not only for 3 to 5 years but for 7 to 10 years instead.

The previously cited publications are focusing on different parts of the new remuneration policies: a group of these studies are assessing the impact of the policies on banks' performance, efficiency and solvency. Other researches are focusing on the fix, variable and withholding elements of compensation. In the next section the current study summarises the main parts of the new remuneration policies and their formation.

The reform of the remuneration system

In order to address the above detailed problem, the Financial Stability Forum (FSF) issued a set of

1 *Research is based on data between 2000 and 2010.*

2 *Research paper based on data between 2004 and 2009 from 30 European retail banks.*

Principles for Sound Compensation Practices in 2009. These principles aimed to regulate: the effective governance of compensation; the effective alignment of compensation with prudent risk taking; and the effective supervisory oversight and engagement by stakeholders. In the same year the FSF (later restructured to Financial Stability Board – FSB) issued new standards to help the implementation of the principles. The standard expected large financial institutions, especially institutions where insolvency could put the national financial system in danger, to set up Compensation committees as part of the prudent banking operations. The committee has to have enough legal power to exercise competent and independent judgment on compensation policies and practice. It should carefully evaluate practices by which compensation is paid for potential future revenues whose timing and likelihood remain uncertain. Furthermore it has to work closely with other committees in the evaluation of the incentives created and of the compensation system. Furthermore, it has to ensure that an independent compensation review is conducted annually. The firm's compensation policy has to be in compliance with the FSB Principles and Standards as well as with complementary guidance by the Basel Committee.

The primary aim of the Compensation Principles and Standards Assessment Methodology guide (Basel Committee on Banking Supervision, 2010) is to give guidance to supervisors in reviewing the assessed firms' compensation practice whether these are compliant with the FSB Principles for Sound Compensation Practices and their implementation standards. For revisions of the compensation system of assessed firms, the following guidance has been given to the supervisors:

- The firm's board of directors must monitor and review periodically the compensation system to ensure the system operates as intended.
- Staff engaged in financial and risk control must be independent, have appropriate authority, and be compensated in a manner that is independent of the business areas they oversee and commensurate with their key role in the firm.
- Compensation must be adjusted for all types of risk and both quantitative measures and human judgment should play a role in determining risk adjustments.
- Compensation systems should link the size of the bonus pool to the overall performance of the firm.
- Compensation pay-out schedules must be sensitive to the time horizon of risks.
- The firm has to choose the adequate mix of awards. It can include a mix of cash, equity and other forms of compensation, but must always be consistent with risk alignment.
- Supervisory review of compensation practices must be rigorous and sustained.
- Firms must disclose clear, comprehensive and timely information about their compensation practices to facilitate constructive engagement by all stakeholders.

The main objective of Pillar 3 disclosure requirements for remuneration (Basel Committee on Banking Supervision, 2011) is to help the market to receive standardised and reliable information about the compensation practices at large firms. In order to achieve the desired level of transparency, the Basel Committee combined the principles outlined by the PSF (PSB) and Compensation Principles and Standards Assessment Methodology guide. These regulations require banks, depending on their risk materiality or proportionality, to publish information relating to the design and structure of remuneration processes, e.g. information relating to the number of material risk takers, their compensation as well as the division between variable and fix remuneration on an annual basis.

In 2009 the European Commission issued the Recommendation on remuneration policies in the financial services sector (2009/384/EC), according to which the remuneration policy should be in line with the business strategy, objectives, values and the long-term interests of the financial institution. The recommendation is in line with the PSF (PSB) principles and reinforces the need for a risk-focused remuneration policy where the compensation methods are standardised and variable elements are respective of the long-term risks of the firm.

Also the Regulation on prudential requirements for credit institutions and investment firms (European Parliament and Council, 2013a) and the Directive on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (European Parliament and Council, 2013b) consider the remuneration practices of credit institutions. These regulations were an important milestone in the legislation. Unlike the previously detailed principles and standards which were not mandatory for all institutions in Europe, the Regulation is to be applied in all Member States. Only the Directive can be amended to reflect national specifications, but all elements of the basic concept have to be maintained. The Regulation, in accordance with the recommendations of the European Commission, oblige banks to disclose detailed information on their remuneration policies, practices, composition of committees and the aggregated remuneration details of managers taking material risks:

- aggregated quantitative information on fixed and variable remuneration,
- aggregated amounts for those members of staff whose professional activities have a material impact on the risk profile of the institution,
- the mix of awards (cash, equity and other forms of compensation),
- compensation pay-out schedules.

3 The EU-wide stress included 123 financial institutions from 22 European countries

4 Data for one of the banks were not available and the bank was excluded from the calculation.

In addition to the above detailed requirements, large firms and firms that could have a systemic impact on the economy are required to disclose the compensation information on staff with material impact on the institution's risk profile on an individual basis. The Directive also covers the questions around the remuneration practice of credit institutions. It limits the ratio of variable and fix compensation by stating that the variable element cannot exceed the fix compensation. Only the shareholders' approval can change the ratio, but limitations still remain: the variable component cannot be more than 200% of the fix compensation. The Directive requires financial institutions to defer at least 40% of the variable compensation element over a period which is not less than three to five years. It is also required to correctly align the bonus component with the nature of the business, its risks and the activities of the member of staff in question.

The remuneration of bank managers with material impact on the banks' risk profiles in 2014

In the current study authors have assessed the following metrics and ratios based on the disclosed remuneration information of the staff identified as material risk-takers at large financial institutions in Europe:

- the proportion of staff with material impact on the bank's risk profile;
- the average income of the staff with material impact on the bank's risk profile;
- the proportion of fix and variable components at the assessed credit institutions;
- the correlation between the number of staff with material impact and the total assets;
- the strength and the direction of the relationship between the accumulated compensation of staff with material impact on the bank's risk profile and the total assets.

The selection of considered financial institutions and the analysis were conducted on the basis of the latest EU-wide stress[3] test of the European Banking Authority (2014). The current analysis included banks with Common Equity Tier 1 capital greater than or equal to €4,750 million at the end of 2013. 51 European and 2 Swiss Banks met the criteria but 19 financial institutions had not complied with the information disclosure requirements set by the Regulation before the start of the current analysis. Therefore the study summarises the data from 34 credit institutions only. Although the sample size may seem small, it is important to highlight that the aggregated total assets of these financial institutions in 2014 was €23,786 billion out of the €35,704 billion total assets stock of all European credit institutions (European Central Bank, 2015). Hence the examined sample (excluding the two Swiss institutions) represents banks with over 66% of the total European banking assets.

To identify the number of staff with material impact on the bank's risk profile and the related data, annual reports and the disclosure reports required by Pillar 3 were also used in the study. However, in some cases it was not possible to find the dividing line between fix and variable remuneration, the annual bonus provisions and in some cases the mix of cash, equity and other forms of compensation. Therefore, calculations and ratios include only banks from the sample where data was available for the relevant metric[4].

The total number of staff in the sample (34 financial institutions) was 2,404,930 employees, of which the number of managers with material impact on the bank's risk profile was 24,062. In other words, on average one hundredth of employees have material risk impact. Their average compensation was €572,937. Concerning the compensation structure, all European banks complied with the limits set by the Directive for the ratio of variable and fix compensation. The variable element was lower than the fix component in 27 financial institutions. In five cases the variable element exceeded the fix element, nevertheless the variable component was not more than twice of the fix compensation. Only the two Swiss banks exceeded that limit, however, these banks are exempt from the requirements of the Directive. These two examples suggest that, in the absence of existing regulations, there are some European financial institutions that would potentially continue or adopt the practice of greater variable compensation than fix remuneration in the current economic environment. Therefore, the question is whether the regulations of the remuneration would influence risk taking behaviour only, or it would also influence managers' performance in longer term. For example, Murphy (2013) concluded that out of two managers with the same initial performance and impact on their institutions' risk profiles, one with and one without the regulations on compensation, the manager with the 'less' compensation would eventually perform poorly compared to the other manager.

The correlation between the number of staff with material impact on risk and the total assets was evaluated with a linear, bivariate regression analysis. In this analysis the total assets were considered as independent variable and the number of staff was the dependent variable. The correlation coefficient was 0.54, which suggest that statistically there is a moderate relationship between the number of staff with material impact on risk and the total assets. Although such a relationship exists, the total assets, or in other words the size of the institution, is only one factor, and other factors like geography, structure and risk management process need to be considered as well. In order to describe the relationship of these variables we can use the linear formula:

$$\hat{y} = 289.3967+0.00056x \qquad (1)$$

In this context (1) every increment of €1,000 million to the total assets yields 0.56 staff incre-

References

Ayadi, N. – Boujelbene, Y. (2012): Compensation of the CEO, Board of Directors and bank risk taking. Journal of Advanced Research in Management, Vol. III, No. 1, pp. 4-16.

Basel Committee on Banking Supervision, (2010): Compensation Principles and Standards Assessment Methodology. http://www.bis.org/publ/bcbs166.pdf

Basel Committee on Banking Supervision, (2011): Pillar 3 disclosure requirements for remuneration. http://www.bis.org/publ/bcbs197.pdf

Bebchuk, L. (2010): How to fix bankers' pay. Daedalus Fall, No 139.

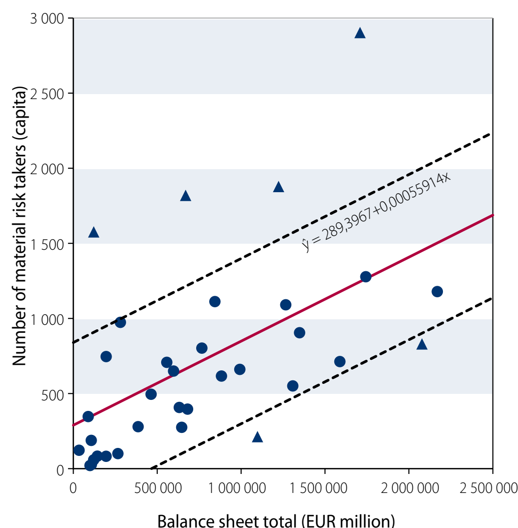
European Banking Authority (2014): 2014 EU-wide stress test results. https://www.eba.europa.eu/risk-analysis-and-data/eu-wide-stress-testing/2014/results

European Banking Authority,(2015): Benchmarking of approved higher ratios. http://www.eba.europa.eu/documents/10180/950548/Benchmarking+Report+on+Approved+Higher+Ratios+for+Remuneration.pdf

European Banking Authority (2016): Benchmarking of remuneration practices at the European Union level and data on high earners. http://www.eba.europa.eu/documents/10180/1359456/EBA+Op-2016-05++%28Report+on+Benchmarking+of+Remuneration+and+High+Earners+2014%29.pdf

European Commission (2009): Commission Recommendation of 30 April 2009 on remuneration policies in the financial services sector.

The relationship between the number of staff with material impact and the total assets



Source: Pillar 3 reports, Annual statements, EU-wide stress test of European Banking Authority (2014).

ment in the stock of staff with material impact on the bank's risk profile. Figure 1 shows the dispersion of the different data points in the space of total asset and to the number of material risk takers.

The relationship is significantly different in the case of six financial institutions. Any values greater or less by 500 employees at any given point (dotted lines on the graph) compared to the regression line (red continuous line on the graph) were considered significantly different; such data points are marked with a triangle. The correlation coefficient increases to 0.76 if we exclude the mentioned six extreme credit institutions from the sample. Another regression analysis was carried out to understand the strength and the direction of the relationship between the accumulated compensation of staff with material impact on the bank's risk profile and the total assets:

$$\hat{y} = -27.8+0.0006x \qquad (2)$$

The linear model shows that the bigger the total assets of the financial institution the more compensation they pay to staff with material impact on the bank's risk profile. Every additional €1 million of the total asset results in a €0.0006 million spent in such compensation. For example, if the volume of total assets is €400,000 million, the remuneration of the high risk-impact managers is €240 million. The correlation coefficient of the variables is 0.61, which represents a moderate relationship.

Benchmarking Trends and Ratios

Following the implementation of the Capital Requirement Regulation and the Directive, the European Banking Authority (EBA) is required to benchmark remuneration trends at the European Union level and to publish aggregated data on high earners and other compensation related questions. The EBA in a recent (2015) study found that all Member States except for Belgium, Slovenia, Sweden and Romania have implemented the possibility for institutions to increase the maximum ratio between the variable and the fix remuneration to 200% with shareholders' approval. Following the introduction of the limitation, the average ratio for all identified staff plunged to 65.48% compared to 104.27% in 2013. Furthermore, the most recent EBA study (2016) concludes that the number of high earners, who have been awarded €1 million or more annual remuneration for 2014, increased significantly, from 3,178 in 2013 to 3,865 in 2014 (+21.6%), mainly driven by changes in the exchange rate between EUR and GBP. However, the average total remuneration per identified staff decreased from 347.595 in 2013 to 307.281 in 2014 (-14.6%). This reflects mainly the fact that, after entering into force (June 2014) of the RTS that introduced a harmonised set of qualitative and quantitative criteria to identify staff who have a material impact on the institution's risk profile, the number of identified staff increased significantly, from 34,060 in 2013 to 62,787 in 2014 (+84.34%). In 2014, overall 2.34% of staff in institutions were marked as identified staff compared to only 1.17% in 2013.

Conclusion

In response to the excessive risk-taking practice of bank managers, which led to the financial crisis in 2007, the different financial committees and forums issued recommendations about the remuneration of managers with material impact on the bank's risk profile. Later, after the implementation of the Capital Requirement Regulation and the Directive, the compensation system became officially regulated. One of the key changes concerning remuneration of bank managers was the introduction of compensation pay-outs aligned to the time horizon of risks and the maximisation of the ratio between the fix and variable components.

The study confirmed that the total amount of variable compensation paid to bank managers in 2014 did not exceed the fix element in the majority of assessed European financial institutions. The analysis also highlighted the fact that the variable compensation component in banks that were included into the stress tests but are not established in the European Union, exceeded twice the fix element of the compensation in the same year. Furthermore, based on the analysis of the disclosed remuneration data of the 34 assessed banks it can be stated that there is a moderate relationship between the total assets and the compensation of employees with significant influence on the organisational risk taking.

http://eur-lex.europa.eu/legal-content/ENG/TXT/PDF/?uri=CELEX:32009H0384&qid=1426671379173

European Central Bank (2015): Statistical Data Warehouse. http://sdw.ecb.europa.eu/

European Parliament and Council (2013a): 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.

http://eur-lex.europa.eu/legal-content/ENG/TXT/PDF/?uri=OJ:L:2013:176:FULL

European Parliament and Council, (2013b): 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.

http://eur-lex.europa.eu/legal-content/ENG/TXT/PDF/?uri=OJ:L:2013:176:FULL

Fehlenbrach, R. – Stulz, R. (2011): Bank CEO incentives and the credit crisis. Journal of Financial Economics, Issue 99, pp. 11–26.

Financial Stability Board (2009): FSB Principles for Sound Compensation Practices, Implementation Standards. http://www.financialstabilityboard.org/wp-content/uploads/r_090925c.pdf

Financial Stability Forum (2009): FSF Principles for Sound Compensation Practices. http://www.financialstabilityboard.org/wp-content/uploads/r_0904b.pdf

Freifeld, K. (2009): Banks Paid $32.6 Billion in Bonuses Amid U.S. Bailout. Bloomberg; http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aHURVoSUqpho

Hüttenbrinka et al. (2014): Regulation, Compensation and Risk Taking in Banks: Evidence from the Credit Crises. EFMA Paper, EFMA_2014_0585.

Lentner, Cs. – Szegedi, K. – Tatay, T. (2015): Corporate Social Responsibility in the Banking Sector. Public Finance Quarterly, Vol. 60, No. 1. pp. 95-103.

Murphy, K. J. (2013): Regulating Banking Bonuses in the European Union: A Case Study in Unintended Consequences. Center in Law, Economics and Organization Research Papers Series, No. C13-8.

Taylor, S. (2009): Update 1-Natixis to pay bonuses amid growing row. Reuters France; http://fr.reuters.com/article/idUK98199+27-Mar-2009+RTRS20090327.

Uhde, A. (2015): Risk-taking incentives through excess variable compensation Evidence from European banks. Taxation, Accounting and Finance, TAF Working paper, No. 6.