

Study on the remuneration provisions applicable to credit institutions and investment firms

Prepared by the institute for financial services for European Commission's DG JUST

(Contract JUST/2015/MARK/PR/CIVI/0001)

Final Report

January 2016



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Abstract

Variable remuneration in credit institutions and investment firms can encourage excessive risk-taking behaviour. The present research investigates the impact of the Capital Requirement Directive and Regulation (CRD IV package) on this type of behaviour. The research shows that the Directive has had a significant effect on risk management. Deferral of variable pay, malus arrangements and a maximum ratio for the variable pay of risk-taking personnel are seen to be effective incentives even at this early stage. Competitive disadvantages with regard to attracting and retaining staff from unregulated sectors could not be verified. Problems have been found with regard to clawback clauses in the context of national employment law. Other problems concern the need for rules that are better adapted to the business scale. The rules work well in the case of big and significant institutions. For small and non-complex institutions, which are less engaged in risky activities and which pay out low amounts of variable remuneration, the relatively high implementation cost of deferral and payout in instrument are of concern. Member States have made wide use of exclusions. Regulating the extent, process and identification of such exclusions at the EU-level would further harmonise remuneration policies in the member states.



Résumé

La rémunération variable des établissements de crédit et des entreprises d'investissement peut encourager des prises de risques excessives. Cette étude examine l'impact de la mise en œuvre de la directive et du règlement relatifs aux exigences de fonds propres (CRD IV et CRR). Elle démontre leurs effets significatifs sur une meilleur gestion des risques. Les règles de report de la rémunération variable, de dispositifs de malus ainsi que du ratio maximal entre les composantes fixes et variables de la rémunération totale des preneurs de risques sont considérés comme des incitations efficaces, même à ce stade précoce. Sans pouvoir vérifier la pertinence des désavantages concurrentiels par rapport aux entreprises des secteurs non réglementés dans leurs capacités à attirer et à retenir le personnel, des problèmes ont été identifiés dans l'application des dispositifs de récupération ('clawback') au sein des codes du travail nationaux. Des règles mieux adaptées à l'échelle de l'entreprise paraissent nécessaires car si elles font preuve d'efficacité de fonctionnement quand elles s'appliquent aux gros établissements de portée significative, elles le sont de façon moindre pour celles de plus petite taille ou de moindre complexité. Les coûts relativement plus élevés pour elles du report de la rémunération variable et du paiement en instruments ne correspondent souvent ni avec les risques de leurs activités ni avec leurs politiques de rémunérations avec peu de variable. Les États membres font fort usage d'exclusions, mais la réglementation de la portée du processus et de l'identification de celles-ci au niveau européen permettrait une meilleur harmonisation des politiques de rémunération dans les Etats membres.



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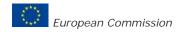
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Abbreviations

AFME Association for Financial Markets in Europe

AIFMD Directive 2011/61/EU of the European Parliament and of the Council of 8

June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No

1060/2009 and (EU) No 1095/2010

AMC Asset Management Companies

AuM Assets under management

BCBS Basel Committee on Banking Supervision

CEO Chief executive officer

CET1 Common Equity Tier 1 ratio

CIO Chief information officer

CRD IV 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, OJ L 176, 27.6.2013, p. 338-436

CRO Chief risk officer

CRR 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

e.g. exempli gratia (for example)

EBA European Banking Authority

EBF European Banking Federation

EEA European Economic Area (EU 28 Member States plus three of the four

member states of the European Free Trade Association (EFTA): Iceland,

Liechtenstein and Norway).

EFAMA European Fund and Asset Management Association

EPS Earnings per share

ESMA European Securities and Market Authority

ESRB European Systemic Risk Board

EVA Economic value added

FINMA Swiss Financial Market Supervisory Authority

FSB Financial Stability Board

G-SIBs Global systemically important banks (list established by the FSB and the

BCBS)

HKMA Hong Kong Monetary Authority



HR Human resources

i.e. id est (that is)

LLC Limited liability company

MAS Monetary Authority of Singapore

MiFID II Directive 2014/65/EU of the European Parliament and of the Council of

15 May 2014 on markets in financial instruments and amending

Directive 2002/92/EC and Directive 2011/61/EU

MRT Material Risk Taker

RoA Return on assets

ROAA Return on Average Assets

ROAE Return on Average Equity

RoE Return on equity

RoRWA Return on risk-weighted assets

SIFIs Systemically important financial institutions

UCITS V Directive 2014/91/EU of the European Parliament and of the Council of

23 July 2014 amending Directive 2009/65/EC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) as regards

depositary functions, remuneration policies and sanctions



Executive Summary

- 1. (Purpose and problem) "Remuneration policies which encourage excessive risktaking behaviour can undermine sound and effective risk management of credit institutions and investment firms." (Recital 62 CRD IV). The G20 summit following the financial crisis of 2008 took the view that the variable elements of pay should be designed to ensure that excessive risk-taking would not be encouraged by the form of their remuneration. This idea was reiterated in the 2009 Principles of the Financial Stability Board and then implemented in the EU in the form of Directive 2013/36/EU (CRD IV) and Regulation (EU) No 575/2013 (CRR). Among its detailed prudential rules, the Directive also focused on remuneration policies in credit institutions and investment firms, and set clear rules on determination and pay-out of remuneration, performance-based adjustments, maximum ratios between variable and fixed remuneration, transparency and corporate governance requirements. This project reviews relevant international developments, the effectiveness of the CRD IV/CRR remuneration provisions, the effects of the maximum ratio on financial stability, competition and staff working in third countries, as well as proportionality of their application to different institutions.
- 2. (Methodology and sources) The research was based on a review of the international economic literature, on the analysis of merged data, from 140 leading EU banks, from Bankscope and from European Banking Authority surveys of remuneration policies as well as on data and reports from surveys conducted by international consultancies and financial organisations. In addition, five parallel surveys Q1: of credit institutions and investment firms (188 + 6 responses), Q2: asset management companies (7 responses), Q3: individual material risk-takers (36 responses), Q4: competent authorities (16 responses) and Q5: other general stakeholders (9 responses) were carried out. Interviews with qualitative and quantitative elements were conducted with stakeholders: banking, investment and asset management organisations, consultancies and head hunters. The research area was the EEA with a particular focus on states (France, Germany, Italy, and the United Kingdom) with a significant number of relevant institutions. Due to the low response rate by investment firms and asset management companies, and the lack of information about them in the EBA data set, objective information for these sectors was scarce. The evaluation of the effectiveness of the regulation for them could not therefore be sufficiently supported with the available data. Additional information was gathered from the USA, Singapore, Hong Kong and Switzerland. A legal survey was conducted by national experts on the implementation of the proportionality principle and the labour law issues referred to in the Directive. In addition to the various benchmarking reports and the consultation recently summarised by the EBA, a considerable number of statements and opinions from the industry was collected and used. The methodology of the research was economic data analysis, sociological analysis of responses to questionnaires and interviews, and legal analysis of the legal and factual implementation of CRD IV/CRR.
- 3. (Policy approaches) The lessons learned from the financial crisis with regard to variable pay were that credit institutions and investment firms should set clear and measurable objectives for remuneration policies for individual staff members. Malus/clawback provisions should be used to adjust for adverse risk outcomes, including cases of misconduct. The objective was to prevent the undesirable effects of pay arrangements on risk-taking by influencing the incentives that variable remuneration has the capacity to create. Remuneration committees and transparent data on remuneration practices were intended to raise awareness of the dangers



which different forms of variable pay can create, such as rewarding staff for short-term profits even when they have taken excessive risks to generate them.

- **4.** (Factual developments) In a sample of 140 EU banks, using EBA data, we see a marked drop in the ratio of variable to fixed remuneration for identified staff since 2010. In 2013, almost 10% of the banks had ratios above 100%. In 2014, none of them did. The same tendencies can be seen in the data derived from the responses to the iff survey from credit institutions and investment firms. We divided respondents into three categories (small, medium and large). Among small institutions, the median ratio of variable to fixed remuneration for identified staff was very low (about 5%) in both 2010 and 2014. Among large institutions, the median fell from 74% to 54%.
- **5.** (International regulation) The 2009 FSB principles have been implemented worldwide including in the EEA, the USA, Hong Kong, Singapore and Switzerland. Similar regulations, in addition to CRD IV, have been adopted within the EEA with regard to remuneration standards for asset management and also in part for the insurance industry. The main distinguishing feature of the regime for CRD institutions to the regimes in force for other institutions lies in the clear definitions of the maximum ratio of variable to fixed pay (100%/200%).
- 6. (National implementation) CRD IV imposes rules in order to protect society's general interest in safe banking. In our research, we identified a challenge to the implementation of the rules that arises from national principles prohibiting the retrospective application of legislation to existing contractual relations, collective agreements and national employment law. However, the practical implications of this challenge are limited because the threshold for variable remuneration under contracts concerned is far lower (i.e. 8%) than the maximum permitted by CRD IV. Thus most variable income is not covered by collective agreements.
- **7. (Economic discussion)** Regulation of remuneration in financial institutions is justified by excessive risk arising from the failure of markets to align the interests of their staff with those of other stakeholders. In institutions which are "too big to fail" or which can rely on deposit insurance, managers acting primarily in the interests of shareholders have incentives to take higher risks that would increase shareholder value while shifting the downside risk to bondholders and taxpayers. From a systemic or macroprudential view, the interests of staff must be aligned with those of society as a whole by taking into account the contribution of risk-taking behaviour to systemic risk.
- 8. (Public awareness) In our research on public awareness of remuneration issues, we identified ca. 102,000 articles, published between 1.1.2007 and 15.10.2015, addressing the of remuneration issue in the financial sector. The number of articles peaked in the crisis year of 2009. After a short period of relative decline the public interest in these issues has again increased since 2012. The most frequently cited banks were those involved in scandals and those who registered the highest fines and/or losses. The broad transparency provided for remuneration through the Regulation enabled broader press coverage of these issues.
- 9. **(Effects on Risk-Taking)** Quantitative analysis based on data from Bankscope, the FSB and the EU Business Model Monitor for the period 2006-2014 shows that the benefits of the remuneration provisions in terms of reducing risk-taking are greatest for big and global systemically important financial institutions, investment banks and listed banks, which demonstrate a bigger appetite for risk than other banking groups do. While the social benefits of increasing financial stability would be high and would certainly outweigh implementation and compliance costs at firm level, reliable



calculations of their scale are not yet possible. Estimates would be distorted because the classification of identified staff has changed with and because of implementation of the new rules in the course of 2014.

For the period 2010-2014, data gathered by the iff survey of credit institutions and investment firms show that there has been a reduction in both the ratio of variable to total remuneration and in variable remuneration paid in cash, as well as an increase in the deferred part of the cash variable remuneration of identified staff. According to our survey, the number of identified staff has changed significantly following the adoption of harmonised identification rules the 2014. Thus, the comparison is rather difficult. In turn, the statistical and econometric analyses in this report offer some initial support for the hypothesis that these observed changes in banks' remuneration policies are having an influence on taming risk-taking in European banks. Specifically, decreasing the cash element of variable remuneration is associated with decreased loan impairment and less impairment of financial assets. Also, increasing the deferred share of cash variable remuneration is associated with reduced financial assets impairment.

Deferral of variable remuneration seems to be the most effective measure for reducing risk-taking, because it aligns the interests of staff with those of creditors and the long-term performance of the institution. This has been confirmed by our study. The deferral of financial instruments is more effective than the deferral of cash in the sense that the long-term alignment of remuneration with the risk profile of the institution is achieved not only by the possible application of malus, but also by changes of the prices of instruments. The deferral ratio in both cash and instruments and the deferral period for identified staff increased from 2010 to 2014 according to our survey. Although most supervisors, firms and identified staff agree that a deferral period of 3 years is sufficient to change staff risk-taking behaviour, academic literature and studies for the UK and Iceland suggest that deferral periods of 3-5 years are not long enough to prevent excessive risk-taking, because financial cycles usually last much longer.

Firms, supervisors and identified staff agree that ex-post risk adjustment by malus and clawback have benefits by reducing misconduct and risk-taking. Malus seems to be more effective in reducing risk-taking than clawback, which tends rather to address misconduct. However, the use of malus and especially clawback remains low.

The link of remuneration with risk-adjusted performance has improved. A large range of performance measures, which differ across institution types, are used at firm, business unit and individual levels. Remuneration is often linked to the minimum equity capital ratio, thus complementing the CRD IV prudential capital requirements. In the context of our survey, linking remuneration to performance at the level of the individual has been assessed by credit institutions and investment firms as more effective than linking it to performance at firm or business level. Supervisors criticise the lack of transparency in the process of setting up performance criteria.

Based on our survey, pay-out of variable remuneration in instruments for identified staff increased from 2010 to 2014. 40% of the supervisors as well as of the firms and identified staff agree that pay-out in shares, other equity or equity-linked instruments reduces staff risk-taking behaviour. Deferral is positively associated with pay-out in instruments (and especially equity-based instruments) because it mitigates the potential short-term focus induced by non-deferred instruments and aligns the interests of identified staff with that of debt-holders as well.



To examine the relationship between remuneration of identified staff and financial stability for about 140 banks selected by the EBA, which cover 60% of the banking activity in each member state, we matched data from EBA about remuneration of identified staff in 2013 and 2014 with firm data from Bankscope. Estimations show that changes in financial stability or performance between 2013 and 2014 cannot yet be explained by changes in the remuneration of identified staff, which in turn do not seem to have been driven by changes in financial stability or performance. Severance payments even significantly increase with the level of credit risk, which may indicate that they are not aligned with financial stability. The maximum ratio seems to have reduced short-term shareholder value orientation, which is considered to have been one of the drivers for excessive risk-taking in the financial industry. These preliminary results need to be interpreted with care because the classification of identified staff changed in 2014. Further research for longer time periods are necessary in the future.

- 10. (Costs and detriments) The costs of implementation and compliance varied greatly according to the size and nature of the firm, and different entities raised different concerns. Smaller non-complex credit institutions that do not engage in risky activities indicated that deferral, pay-out in financial instruments and malus and clawback would be costly and difficult to implement, but that the maximum ratio requirement would not because their ratios were far below the 100% threshold. By contrast, small investment firms engaged in proprietary trading felt that the maximum ratio would seriously affect their business model because that model relies on low fixed remuneration and high variable remuneration. Most small credit institutions were operating with at least one CRD IV waiver, the waiver most likely being used for CRD IV requirements related to the pay-out of variable remuneration in instruments and deferral. Larger firms were less likely to be operating with a waiver; if they had one, they were likely to be using it for deferral of variable remuneration or for payment in instruments for staff with low amounts of variable remuneration. Retraining and other HR costs related to the administration of complex remuneration schemes were expected to be significant, however specific quantitative estimates are scarce.
- 11.(Corporate Governance) Quantitative analysis based on the iff survey data for the period 2010-2014 shows that, beyond changes in remuneration, policies for good internal governance of remuneration could also be improved, especially in the case of small banks. The most critical areas are recognised to be in the involvement of the credit risk officer in reviewing senior managers and the performance of identified staff, and in the contribution of the remuneration and nomination committees to the review of identified staff.
- 12. (Effective Supervision and transparency) Responses to the *iff* survey suggest that transparency has had a significant impact on credit institutions and investment firms. That impact was more pronounced in smaller firms. The results from the questionnaire and case studies show that transparency continues to be a key factor in risk reduction practices, and this view is shared by financial institutions, regulators and supervisory bodies, and other stakeholders. Increased transparency is therefore key to ensuring best practice in remuneration policies within the sector. While the information on remuneration policy is readily available, the ease of locating the information varies from bank to bank, which hampers both the comparability and the information content of disclosures. Standardisation of disclosure requirements could include a more streamlined disclosure format to allow for ease of access and to minimise obfuscation of remuneration policy information.

The level of detail in disclosure still varies across CRD institutions and across member states as a result of variation in state-level regulation. When the EBA Final Guidelines on Sound Remuneration Policies come into force in 2017, the consistency of disclosure



will improve. As for the relationship between the effectiveness of supervisory oversight of remuneration policies and risk-taking, most CRD institutions that participated in our survey have no view on this issue. However, supervisors, and stakeholders in general, state that risk-taking can be better aligned with the firm's target level of risk tolerance if there is strong supervisory oversight of remuneration policies.

- 13. (Impact of Maximum Ratio on Risk-Takers) While concerns have been raised by firms about the impact of the bonus cap on incentives and motivation, this is of little concern to affected employees. The impact on fixed costs would be nominal even if firms were to double fixed pay and pay maximum variable pay. Moreover, the number of firms that would begin to record losses when operating profit falls is low, and is not enough to suggest that the implementation of the maximum ratio would create financial distress across the sector as firms strive to maximise fixed pay in order to continue to be able to offer higher levels of variable pay. In fact, the results of the survey suggest that only a small percentage of material risk-takers have had their fixed pay in their firm increased in order to increase their variable pay. On the whole, regulators are split between rating the provisions as having a low or a high impact on stability. But in an interview remuneration consultants insisted that the changes in remuneration policies have fostered a stronger risk culture in banks and thus influenced financial stability indirectly.
- 14. (Attract or Retain Staff) Since the maximum ratio limits at least the form of remuneration, staff recruitment and retention can be affected where these elements are seen as the most important factor for job search. The fear of interested groups has been that staff might be drawn away from the EU, EU based institutions or from the financial sector as such. Objective data on mobility after the introduction of the maximum ratio for variable pay are not yet available. Our survey with material risk takers shows that there is a multitude of factors of equal or even higher importance than the opportunities provided by variable pay, like job security, living conditions, employer quality, increased responsibilities, language, or nature of work. The survey with institutions and competent authorities did not confirm fears that the maximum ratio rule could significantly weaken the ability of EU-based firms to attract or retain staff. A majority of CRD institutions had not experienced such difficulties. Banks have indeed become less attractive to top graduates from business schools, but limits on variable payment are probably not a significant factor in this. The majority of surveyed firms also do not envisage difficulties in recruitment for their subsidiaries outside the EEA. All this considered, the report discusses a number of empirical factors like work quality, job security, labour market constraints, higher pay with regard to the nonfinancial sector and reputational gains, which may be relevant in assessing the impact of the maximum ration rule on the ability to attract or retain staff. Those factors seem to support the assumptions of nearly all competent authorities that the impact of the maximum ratio rule is at least for the vast majority of identified staff not as significant as interested groups seem to assume.
- 15. (Competition) It is too early to assess whether Europe's leading financial centres' competitiveness will decline compared to their major competitors in North America and Asia as a result of the maximum ratio rule. Most recent indicators on competitiveness do not indicate that this has been the case so far. Eastern and central European financial centres are even catching up with the leading centres across the world. Parallel to the implementation of these rules in the EEA, the FSB reports that in general the proportion of variable to fixed remuneration is declining. Internationally, the four leading financial centres examined more closely lean towards a similar structure in the regulation of variable remuneration, even though they do not provide for maximum ratios. Similar effects had been envisaged with absolute caps for the



remuneration of bankers in Switzerland but failed in a public vote. In the United States a system of fines for fraudulent bonuses applies.

- 16. (Proportionality: reasons) The application of a one-size-fits-all approach to banking and financial regulation could lead to unintended consequences for the effectiveness of banking regulation. The degree of regulation should be related to how much a financial institution contributes to amplifying systemic risks. The size of that contribution depends both on the size of the institution and on its internal organisation, scope, and business complexity. CRD IV therefore requires institutions to comply with the rules "in a manner and to the extent that is appropriate to their size, internal organisation and the nature, scope and complexity of their activities." (Art. 92 (2) CRD IV) The iff survey of credit institutions revealed that small institutions with simple operations do not offer substantial amounts of variable remuneration to staff (see above at 4) and would face disproportionate costs if asked to comply with all CRD IV remuneration rules. The business model in use by investment firms is quite different from that in place for credit institutions. They could be only randomly surveyed and thus data available is not sufficient for a full assessment.
- 17. **(Proportionality: legal application)** The Directive itself uses a number of factors like ownership, state rescue, legal form, listed, complexity, contractual form or asset management to provide exemptions or extensions. The principle of proportionality in Article 92 of the Directive has led to additional variation which are country specific. The factors driving this additional variation including size, significance, risk, variable pay, business type, procedures of identifying institutions have created a diversity of systems which need better harmonisation by the Directive itself. There are a number of propositions regarding how the common basis for all these exemptions could be turned into criteria that provide sufficient legal certainty and effectiveness with regard to the purpose of the regulations.
- 18. (Small non-complex institutions) Small non-complex credit institutions are significantly different from larger institutions and therefore should be treated differently by the law for the following reasons: (1) they are not actively involved in taking large risks that might spill over into the financial system as a whole and often pay little variable remuneration; (2) they are virtually unanimous in reporting that the costs of all measures, except the maximum ratio, would both affect their costs to a great extent and be unnecessary. Because the administrative burden does not vary in direct proportion to size, their costs would be disproportionately high. This is why most small institutions have received waivers from national supervisors that permit them to disapply some of the CRD IV rules. The problems of cooperative banks, savings banks are largely identical to those of small credit institutions. An exemption of small non-complex institutions from the rules, based on levels of variable remuneration or of assets, would solve their problems.

As noted above, however, some small investment firms that iff surveyed relied on paying staff large amounts of variable remuneration in order to keep fixed costs low, allowing overall remuneration to follow the fortunes of the firm. They reported that being forced to apply the maximum ratio would endanger their business model. As previously explained, the factual basis for those statements could not be sufficiently verified with the available data.

19. **(Groups and asset management)** According to respondents to our survey in order to ensure compliance by bank groups, it is sufficient that the mother company apply the prescribed procedure and implement its results across the whole group. That argument might also be advanced in favour of one single shareholder meeting within a group where the maximum ratio shall be increased beyond 100%. The claim of asset



management companies that they have a different risk structure from credit institutions could only be described but not be assessed properly because the survey did not provide sufficient empirical evidence.



Introduction

This research has been commissioned by the EU Commission DG Justice to evaluate the effect of the implementation of Directive 2013/36/EU (CRD IV) and Regulation (EU) No 575/2013 on remuneration policies in credit institutions and investment firms in the EU.

The project has been divided into four tasks: (1) review of international developments, (2) application of the regulation by a range of institutions in terms of size, internal organisation, and activities with regard to the principle of proportionality, (3) efficiency of the provisions, (4) a special focus on the impact of the maximum ratio between the fixed and variable components of remuneration.

The problem this package of legislation responds to is summarised in recital 62 of CRD IV: "Remuneration policies which encourage excessive risk-taking behaviour can undermine sound and effective risk management of credit institutions and investment firms."

Objectives of the CRD IV remunerations (REM) provisions

(referred in the terms of reference for this study)

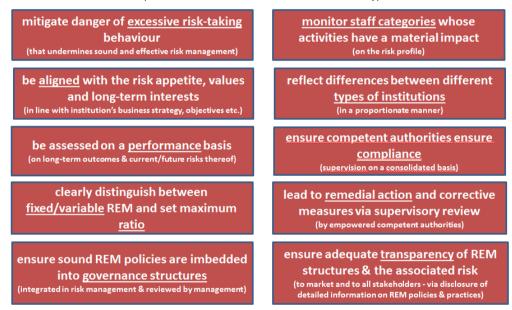


Figure 1: Objectives of the CRD IV remunerations provisions

The Directive and the Regulations target variable forms of remuneration which are seen as incentivising excessive risk-taking behaviour (Art. 94 and recital 64 CRD IV).

The present interdisciplinary research is based on a review of the international economic literature, amalgamated data from Bankscope, EBA data on remuneration policies of the 140 leading EU banks as well as a number of data and reports provided by private entities. Five parallel surveys have been conducted with a qualitative and a quantitative element: credit institutions and investment firms (Q1/199 responses), asset management companies (Q2/7), material risk-takers (Q3/36), competent authorities (Q4/15). Interviews have also been conducted with a number of other stakeholders, including compliance boards, consultancies and head-hunters. The



research covers the EEA with an overview of the situation in the USA, Singapore, Hong Kong and Switzerland. Several legal reports, mostly providing a short general overview of the implementation of CRD IV were available to the researchers. A vast number of statements and opinions from the industry and literature has been collected. While trying to prepare, originate, collect and master the abundance of scattered information within the short timeframe of half a year there was a continuous influx of new statements and regulations which showed that the project is situated at the heart of an ongoing process of implementation. EBA alone issued a number of reports, a collection of opinions, guidelines and annual statements with empirical data whose final form was published only in December 21, 2015. It is not possible to provide an exhaustive overview in this final report of all the developments currently taking place. The report therefore focuses on insights into the development and effect of the implementation process. Most of the empirical information as well as literature reviews, theoretical and methodological deliberations have been stored in a working file available to the Commission.

Readers should bear in mind that the subject of remuneration policies, and especially those concerning variable remuneration in investment banking, is controversial, subject to much debate, regulation and comment both in the EU and worldwide. This research does not purport to participate in this debate but aims instead to highlight some of the practical effects of the policy choices which have been made. It should also to be kept in mind that remuneration policies with regard to risk-taking behaviour in credit institutions and investment firms have quite a short history (since 2009). They are only part of a major international effort to influence such behaviour, most of which are focussed on capital requirements. The banking legal environment and the economic landscape have changed dramatically since the crisis. Alongside the changed business environment, there has also been a shift in public attitudes, political pressures, as well as the nationalisation of major banks. It is therefore difficult to assess impact in isolation. This project can only indicate where the rules on remuneration in CRD IV may plausibly have direct effects. The surveys show at least one central effect. All stakeholders, including the general public, regulators and supervisors have developed opinions and insights on possible relationships between variable remuneration and excessive risk-taking.

The structure of the report is presented in four sections on the basis of the four tasks of the project. **Section 1** has looked **at international developments** over the past years in the field of remuneration in the financial sector and has assessed these in the wider political, social and economic context. It includes a review of the recommendations and reports from the Financial Stability Board and the Basel Committee on Banking Supervision, as well as of media reporting and public awareness of remuneration issues in the financial sector. Related to the subject matter of this section is also provided in Section 3 and the Annex to this report which contains information on the major financial centres outside of the EU.

Section 2 is dedicated to an assessment of the efficiency of the remuneration provisions and especially how the rules have influenced the design of remuneration policies in such a way as to constitute an effective control of risks. While the individual measures stipulating the requirements for the sound structure of remuneration are looked at in detail (performance measures, pay-out in instruments, deferral, and expost adjustment mechanisms), the section also attempts to assess any shortcomings with respect to the integration of the design of remuneration policies in risk management of the institutions. Each relevant CRD IV provision was addressed by drawing hypotheses for the research questions which were then answered with a thorough overview of existing literature (described in detail in the Annex) and own



assessments aided by analysis of the data collected from EBA and from our surveys and interviews. Measurement of the benefits of the measures in terms of firm risk-taking were analysed using bank data from Bankscope, and in terms of improved governance structures from details collected from annual reports for a sample of over 30 institutions.

The section also contains an indication of efficiency and possible shortcomings in corporate governance practices in institutions. While it is difficult to assess the level of adequacy of corporate governance practices, this part of the report analyses the extent to which appropriate governance structures now exist or are more robust in terms of contributing to preventing a further aggravation of any unwanted impact of unsound remuneration policies. A variety of sources of information were used (surveys, annual reports, and interviews, and EBA data) to inform our analysis in this section. The last two part of Section 2 are concerned with assessing the provisions related to **oversight by supervisors** and institutional **transparency** to stakeholders. Without being privy to the details of national supervisory activity, these parts nevertheless describe the views received from supervisors, institutions and general stakeholders and help inform our assessment of the efficiency and adequacy of supervisor activity in monitoring remuneration policies and the risks arising from them. Likewise, a sample of annual reports were analysed together with industry responses in order to assess the improvements to sound risk management and remuneration contributed by efforts at remuneration policy transparency.

Section 3 covers the research findings with regard to the effect of one specific provision that is unique to the EU regulatory sphere, namely the **maximum ratio** of fixed to variable remuneration for identified staff (the principle found in CRD IV Article 94(1)(g) (i)). Due to the lack of objective data, the recent implementation of these parts of CRD IV in which the maximum ratio is part of the general changes already investigated in Section 2 with regard to competitiveness, financial stability, and staff working in subsidiaries outside the EEA of parent institutions established within the EEA we have to rely our findings mostly on opinions from our stakeholder surveys and interviews. The research questions were analysed by drawing up hypotheses that were then assessed using a range of sources but mostly interviews and survey responses. Existing literature on the subject is rather scarce in terms of analysing factual developments but rational arguments for desired and unintentional effects or consequences of the maximum ratio were taken into account. The research team complemented the information available with its own assessment of the findings.

Section 4 of this report assesses the extent to which institutions are applying the provisions on remuneration using responses received from national supervisors and institutions directly. A survey and targeted interviews were conducted among a representative sample of institutions in order to assess the implementation of the CRD/CRR at institutional level. Deviation according to **proportionality** was thus assessed by identifying which member states and which institutions apply the provisions in a more lenient way than proscribed by the rules. Section 4 also contains material that overlaps with information assessed under Section 3 looking at the efficiency of the provisions, namely cost implications of CRD IV implementation. In the relevant part of Section 4, we cover the difficulty of CRD IV implementation for especially small, simple or specialised institutions, and include some additional facts about the cost and potential difficulties for those institutions that can potentially avail themselves of the requirements on the grounds of proportionate treatment e.g. those associated with creating instruments for paying out part of variable remuneration and in deferring part of variable remuneration.



The research was based on a review of the international economic literature, on the analysis of merged data, from 140 leading EU banks, from Bankscope and from European Banking Authority surveys of remuneration policies as well as on data and reports from surveys conducted by international consultancies and financial organisations. In addition, five parallel surveys Q1: of credit institutions and investment firms (188 + 6 responses), Q2: asset management companies (7 responses), Q3: individual material risk-takers (36 responses), Q4: competent authorities (16 responses) and Q5: other general stakeholders (9 responses) were carried out. Interviews with qualitative and quantitative elements were conducted with investment and asset management organisations, stakeholders: banking. consultancies and head hunters. The research area was the EEA with a particular focus on states (France, Germany, Italy, and the United Kingdom) with a significant number of relevant institutions. Due to the low response rate by investment firms and asset management companies, and the lack of information about them in the EBA data set. objective information for these sectors was scarce. The evaluation of the effectiveness of the regulation for them could not therefore be sufficiently supported with the available data. Additional information was gathered from the USA, Singapore, Hong Kong and Switzerland. A legal survey was conducted by national experts on the implementation of the proportionality principle and the labour law issues referred to in the Directive. In addition to the various benchmarking reports and the consultation recently summarised by the EBA, a considerable number of statements and opinions from the industry was collected and used. The methodology of the research was economic data analysis, sociological analysis of responses to questionnaires and interviews, and legal analysis of the legal and factual implementation of CRD IV/CRR.

This report is associated with an Annex document that contains supplementary information on legal developments, detailed summaries of relevant economic literature, the methodology used for the research including further tables and figures from the analysis, some survey and interview responses, definitions of key terms and a bibliography of the literature used. Some extracts from surveys and interviews have been reproduced in this report, however these are primarily provided by way of exemplification grouped in the Annex. When we refer to interviews and use quotation marks, these are not to be taken as literal quotes or citations but are instead iff own formulation of the content of the discussion. In a few occasions the interviewee allowed the recording of the conversations allowing a more exact formulation of the information received.



1 International developments

International developments in the field of remuneration in the financial sector began in 2009 in a broad discussion on the causes of the financial crisis. That led to the introduction of the Principles for Sound Compensation Practices and Implementing Standards by the Financial Stability Board (FSB). This section of the report is concerned with reporting on the work of international fora and standard-setting bodies by identifying and reviewing the recommendations and reports from the FSB, BCBS (Basel Committee on Banking Supervision), and major financial centres. Alongside the FSB progress reports and past industry surveys of the wholesale banking industry (e.g. Oliver Wyman studies), research covers evolution and trends in both continental practices, and those in the US and the UK, as well as a review of regulatory developments in other financial centres. This International Review section of the report includes aspects related to competitiveness of EU financial institutions and its financial centres. Based on the information collected, a discussion of globalisation trends in the financial sector (and staff movements) is also included.

This section is organised as follows. This Section 1.1 describes the main points of the discussion on the new remuneration framework following the FSB/G20 Principles issued in 2009 with a special focus on the results of the FSB and the IIF (Institute of International Finance)-Oliver Wyman surveys on compliance in the wholesale banking industry. Section 1.2 provides literature references on the topic. Section 1.3 deals with public opinion on the regulation of remuneration and financial industry practices as reported by the media.

The following Section 1.1.1 probes regulatory developments in EU and non-EU countries (also replicated in Annex 1.1). A wide and detailed analysis of EU provisions and their implementation in major Member States is complemented by a review of the UK senior managers regime and references on non-EU countries.¹

1.1 Financial crisis and variable remuneration

1.1.1 Policy responses to the financial crisis

Remuneration structures affect financial stability by affecting incentives for both risk-taking and misconduct. Penalties imposed to punish firms for misconduct have impaired the stability of EU financial institutions. Over the past five years, the amount of misconduct costs (fines, settlements and redress costs) has been increasing, reaching a cumulative total of around EUR 50 billion for EU banks, compared to around EUR 200 billion for all banks, in December 2014. In the EU, the majority of fines are related to the mis-selling of guaranteed investment products and market manipulation, involving several large banks in a number of jurisdictions. Fines are highly concentrated among the global systemically important banks (G-SIBs), which

Data sources include desk research, questionnaires sent to regulators and interviews with key stakeholders. Also relevant to this task is a review of the extent of bank misconduct in various jurisdictions and their role in prompting faster reform in industry-wide or individual firm-level policies and practices on remuneration. Examples will include scandals leading to new alternative regulation of accountability issues at senior management level (UK Senior Managers Regime), industry guidelines on clawback (UK code of conduct) or via cases of massive clawback due to misconduct (e.g. JP Morgan in the US).



emphasises the systemic relevance of the issue. The total accumulated profits of EU G-SIBs in the last five years would have been a third higher without past litigation costs and provisioning for future litigation costs, and all the capital issued by these banks in the last five years has been erased by these costs. The Common Equity Tier 1 ratio of these banks, an indicator of solvency, would be, on average, around two percentage points higher without such fines (ESRB 2015).

Since the G20 Summit in Cannes in November 2011², the Financial Stability Board has undertaken ongoing monitoring and public reporting on remuneration practices focused on remaining gaps and impediments to full implementation of its Principles for Sound Compensation Practices, which were issued in 2009³. On 10 November 2015, the FSB issued its fourth progress report, focussed on the remaining implementation gaps, key challenges and evolving practices. The report also examined remuneration practices in relation to risk conduct and in the insurance sector⁴.

The results of the fourth assessment show a generally high level of implementation of the standards. Governance is the area with the largest number of "high" grades (22 jurisdictions), followed by risk alignment and stakeholder engagement.

Some major concerns remain with regard to the following aspects, on which supervisors are still fostering improvements in banks' practices:

- The link between compensation frameworks and risk governance frameworks. Banks should set clear and measurable objectives for remuneration policies at the level of individuals. They should include elements related to conduct, and risk metrics should be granular enough to affect business lines and individuals. Appropriate amounts should be at risk of forfeiture through malus and clawback.
- The use of malus/clawback provisions to adjust for adverse risk outcomes, including for cases of misconduct. The scale of misconduct in some financial institutions has risen to a level that has the potential to create systemic risks and undermine trust in financial institutions and markets, if it continues on this scale. The FSB strongly believes that sound remuneration policies should, if appropriately calibrated and used in practice, enable firms more to effectively prevent or deter misconduct⁵. Supervisors have however only sparse information at this stage on the use of malus, and this is insufficient for them

G-20 Summit, in Cannes in 2011 (the sixth meeting of the G-20 heads of government in a series of ongoing discussions about financial markets and the world economy).

To conduct the monitoring exercise, the FSB established a Compensation Monitoring Contact Group (CMCG) in early 2012 comprising national experts from FSB jurisdictions with regulatory or supervisory responsibility for compensation practices.

⁴ There are important differences in the implementation of insurance sector standards across jurisdictions.

If applied rigorously, deferrals aligned with the time horizon of risks (particularly for employees in roles where the risks are harder to measure or will be realised over a longer time-frame), as well as adjustments to variable pay (e.g. "zeroing out" current-year bonus if misconduct is detected, or ex post risk adjustments such as malus and clawback) can be effective in demonstrating a firm's intent to take action in the event of misconduct.



properly to assess whether there is any direct evidence that remuneration has been appropriately adjusted in cases of misconduct. The evidence on the application of clawback to vested awards is even more scant.

- Undesired effects that limit the scope to affect risk-taking through remuneration incentives, such as an increase in the fixed portion of remuneration paid by banks (particularly those headquartered in the EU)⁶ and an increased competition for talent coming from a diverse set of firms, including firms in other sectors that have different remuneration structures and/or regulatory frameworks.
- The development of quantitative and qualitative measures to assess changes in risk-taking behaviour.

The fourth FSB report highlights also the following remaining challenges:

In corporate governance and monitoring on remuneration practices: internal firm documentation not yet adequate; lack of systems to generate the information needed for the remuneration committee; need to increase the effectiveness board challenges of management decisions, and of local board or management's authority and discretion over risk adjustments, such as the exercise of malus or clawback in the case of subsidiaries or branches of foreign firms.

In **risk alignment of remuneration schemes**: gate conditions not set at "challenging" levels; clawback not readily pursued; risk-adjusted performance measures not effectively and transparently linked to individual performances; need to create better documentation of risk adjustment process and decisions.

In **stakeholder engagement**: improve the clarity and comprehensiveness of disclosures; uneven level of detail in the information provided to the public.

More generally, remuneration is seen, by both firms and supervisors, as an important tool, but not the only tool to address misconduct. A combination of strong leadership and governance processes, robust risk and control environments independent from inappropriate influence by lines of business, and consideration of conduct-related performance when deciding on promotion are seen as key drivers of firm culture. All these aspects, together with remuneration awards, have an important role to play in demonstrating the extent of a firm's intolerance for certain behaviour. The report notes (p.20) that synergies between governance, remuneration and culture merit further investigation.

The FSB recommends a more intensive and effective supervision of remuneration practices, focussed on monitoring and assessing the effectiveness of reforms, proportionality issues, the identification of "identified staff" and the treatment of control functions and/or senior executives.

With specific reference to misconduct risk, the FSB⁷ will continue to collect information and examine the case for strengthening disincentives to misconduct through

This has been observed in 2014 compared to 2011 in several jurisdictions, both EU and non-EU members.

⁷ FSB Measures to reduce misconduct risk. FSB 2015b.



remuneration-related tools and if appropriate will make proposals. In particular, it will continue its current study of malus and clawback practices and the use of different instruments as an element of deferred remuneration and, if appropriate, will make recommendations on steps to incentivise better practices for significant firms, while recognising that individual jurisdictions may also want to consider application to a broader range of firms.

Alongside the FSB progress reports, the IIF (Institute of International Finance) and Oliver Wyman have conducted surveys on compliance with the FSB Standards and remuneration practices in the wholesale banking industry. The four IIF/Wyman reports, published in 2009, 2010, 2011 and 2013, document the efforts made by the wholesale banking industry to meet the FSB's requirements. The last update of the review in 2013 covers 26 of the world's leading financial institutions.⁸

The 2013 survey shows that, despite the remaining challenges enumerated in the fourth FSB-Report, the industry believes that it has essentially completed the implementation of the FSB Standards:

- Across all categories, an average of 83 % of respondents have implemented all of the FSB's Standards (2011: 77 %), with a further 11 % implementing them in part or in modified form.
- Remuneration has been aligned with risk-adjusted performance and the overall performance of the firm. 92 % of respondents use risk adjustments that reflect the cost and quantity of capital (compared with 75 % in 2011 and less than half in 2009). Total wholesale profit after risk charges is calculated by all respondents and used in front office remuneration by 96 %. Banks have also made major progress in the calculation of desk-level metrics, with 41 % now calculating risk-adjusted profit at this level (2011: 27 %). Implementing more granular performance metrics through the remuneration framework not only at the level of the firm but at the level of the division or individual operations has strengthened the link between risk-adjusted performance and reward. Nevertheless, data quality and granularity remain a challenge and need further improvements. While 94 % of respondents use risk adjustments that reflect the capital required, only 62 % also make them reflect the liquidity risk assumed, with a further 20 % implementing the guideline in part or in modified form.
- Deferrals, vesting and clawback/malus arrangements have been widely introduced, and the payment of guaranteed bonuses has been limited. 90 % of respondents report full implementation of the FSB Standard which states that at least 60 % of remuneration for the most senior management should be deferred. 91 % of respondents have an average vesting period of three years

This group accounts for approximately 60 % of global wholesale banking revenues (compared to approximately 70 % in the previous survey). Respondents include both standalone wholesale banks and wholesale divisions of larger banking groups, with the following geographic distribution: Europe 17, North America 6, others 3. The survey is supported by interviews and discussions with Board and C-Suite level management and Human Resources professionals.

The risk adjustments used for performance metrics reflect those used in a firm's financial reporting. The most commonly used adjustments are Risk Weighted Assets (RWAs)/regulatory capital (83 %), potential losses as measured by NPLs impairments or trading losses, (83 %) and regulatory fines (70 %). The majority of banks also apply discretionary risk adjustments to provide flexibility and enable any risks not reflected in the metrics noted above to be adequately reflected in the assessment of performance (53 %).



or more. 96 % of deferred remuneration covered by the survey is subject to bonus-malus or clawback. Some banks are beginning to increase their use of individual-level malus clauses too and individual triggers are explicitly defined at most institutions. Losses outside of those reasonably anticipated are an explicit trigger for malus for 70 % of respondents, while misconduct events are explicit triggers for 99 % of respondents (showing progress from 83 % in 2011). Those interviewed emphasised that the size of the adjustments permitted is also important: there must be sufficient downside to outweigh the potential upside that could arise as a result of misconduct. Besides, the true enforcement of the rules remains the real driver of their credibility and impact on employees' risk culture. In particular, enforcing malus adjustments in case of long deferrals is considered difficult to apply in practice when employees have moved on to different roles or left the organisation.

- Governance on remuneration policies and practices has been tightened through board committees and supporting processes. Remuneration Committees are working closely with the Risk Committee at 88 % of respondents (2011: 75 %).
- The public disclosure of information on remuneration schemes and levels has been significantly enhanced. In this regard, the survey registered some differences between European and non-European banks. The first are more likely to submit an independent remuneration review to the public regulators (62 % European respondents vs. 8 % outside Europe) and to disclose aggregate quantitative information on remuneration for senior executives and Material Risk Takers to the public (87 % European respondents vs. 47 % outside Europe).

In essence, major improvements registered in the period 2011-2013 concern the following: more mature and development risk-adjusted performance measurement systems; increasing awareness and transparency of the use of bonus-malus within the organisation and the introduction of both individual- and team-level triggers with a meaningful impact on behaviour throughout the firm. These changes seem to have been more relevant in smaller institutions. In the largest ones, links between remuneration and firms' financial condition and future prospects were already in place prior to the Standards as well as more robust governance arrangements that provided independent and effective oversight over remuneration policies and practices.

Culture is considered the most important lever to influence behaviour by 38 % of survey respondents. They recognise that the new measures have produced a significant impact on business culture, helping to build a culture of prudent risk management and increased focus on risk-taking in the front office. In most banks, conduct and behavioural expectations have been clearly communicated to employees. It is widely thought that, although remuneration is deemed to be a limited lever for bringing about cultural change, badly designed remuneration can quickly undermine cultural change or even create a bad culture.

Among effective measures for influencing individual conduct are actions aimed at linking failures to demonstrate the desired cultural values and conduct with remuneration reductions. Combined with explicitly defined trigger events for conduct investigations (used by more than 80 % of respondents), malus adjustments, bonus 'knock-outs', scorecard-based bonus adjustments and salary freezes commonly complete a suite of financial penalties for misconduct.

Some in the industry fear that a delay in achieving the desired effects on bank culture and the risk-taking behaviour of employees could determine further legislative



interventions by policymakers, driven by a perception that the industry has not yet changed.

Despite the significant transformation that took place in the industry, the survey also registers a need for further improvements in order to:

- ensure that remuneration pay-outs have sufficient flexibility and are consistent with maintaining a sound capital base;
- complete the on-going work in the area of bonus-malus, in particular to resolve issues related to taxation and labour laws, most likely in collaboration with regulators and policy makers;
- refine the application of malus triggers to ensure greater individual accountability;
- embed the changes into the institutional culture at the various levels of the organization, ensuring employees understand the expected behaviours and how these feed into remuneration outcomes.

The IIF/Wyman 2013 survey highlights that, if on the one hand global compliance with the FSB Standards has helped to level the playing field across jurisdictions, on the other hand, the UK Senior Managers Regime and the new CRD IV provisions have acted in the opposite way, creating important differences with respect to the US framework, thus hampering the uniform application of the FSB Standards, and leading to differences across key markets. The maximum ratio of variable to fixed remuneration for Material Risk Takers of European banks is considered to be well beyond the FSB approach.

From this perspective, the EU reform seems to raise issues with regard to multinational banks, because of the different regimes that have to be applied to employees based on their national locations in EU vs. non-EU entities.

As shown by the survey, pay-out structures diverge between EU and non-EU banks. The first are more likely to defer 40-60 % of variable remuneration (100 % European respondents vs. 52 % outside Europe), to pay at least 50 % of variable remuneration in non-cash instruments (98 % European respondents vs. 45 % outside Europe), and to match risk-holding periods to remuneration deferral periods (69 % European respondents vs. 57 % outside Europe).

Moreover, 65 % of respondents believe that a shift to a greater percentage of fixed pay would form part of their response to the directive, with consequences that are inconsistent with the FSB's Principles for Sound Compensation Practices, such as:

- a reduction in banks' cost-base flexibility, with negative impacts on their ability to vary pay-out levels with financial results and to increase capital with retained earnings;
- a difficulty in aligning pay-outs with risk-adjusted performance and prudent risk-taking;
- a general increase in guaranteed pay-outs and a reduction of deferred pay as a proportion of total remuneration, reducing the impact of measures that link remuneration to conduct

In the long term, the impact of the new measures on behaviour will also depend – according to respondents –on the enforcement of the rules, which could vary across jurisdictions due to different regulatory approaches.



1.1.2 Developments of remuneration in banks

In this section, we review three sources of information:

- A McLagan report that is summarised in a .pdf available online. The information in the McLagan report is based on a relatively small subset of large banks and credit institutions which are members of the Association for Financial Markets in Europe (AFME). No data on individual institutions or individual employees is presented;
- A data base constructed by the European Banking Authority (EBA) that contains information on the some of the remuneration practices of about 140 EU banks. Data is available for each of the banks but no information is available for individual employees of the banks.
- A survey of both institutions and individual employees conducted for the project by iff.

McLagan is a private company that bills itself as "the leading Performance / Reward consulting and benchmarking firm for the financial services industry." A McLagan report that was prepared for the Association for Financial Markets in Europe (AFME) appeared In January, 2015 (AFME 2015). Using data on a small group of large AFME member institutions in the banking and capital markets industry, the report summarises remuneration trends over the period 2009-2013 in the overall size, composition (fixed versus variable components) and timing (deferral of bonuses). The data are reported in an aggregate form, combining information from varying numbers of large AFME institutions, with the actual number of institutions varying from 8 to 18.

At that level of aggregation, several trends are quite clear.

- There has been a clear increase in the ratio of fixed remuneration (salary) to variable remuneration (bonus). In 2009, 33 % of total remuneration was fixed and 67 % was variable. By 2013, that situation had flipped with 62 % fixed and 38 % variable (based on the combined data from 18 AFME banking sector members with global combined revenue of €135 billion).
- The deferral of bonuses meaning that bonuses for any particular year are actually paid in future years is now common practice with the median proportion deferred now at about 50 % for the highest paid employees.
- Almost all firms now have the right to claw back previously awarded bonuses in the event of misconduct by the relevant employee. Whether that right is being exercised is not made clear in the McLagan report.
- These changes are consistent with the application of CRD rules but it would be premature to say that the CRD rules caused the changes. In discussing the reported decline in total remuneration in the sector since 2009, the McLagan report says explicitly that "CRD IV-linked increases in capital charges reducing risk adjusted profitability have been more impactful in reducing total remuneration than direct CRD remuneration regulations (e.g. bonus ratio cap, deferral requirements)."

To analyse the relationship between remuneration and firm risk, an analysis that appears in a later section (3.2), we began with data on the remuneration policies of 140 banks selected for 2013 and 2014 by EBA. The list of banks for which EBA data I available was constructed from lists provided by the competent authorities in each of the Member States. Each member country list must cover 60 % of the banking activity in the state, implying that most of the institutions in the sample are relatively large banks. Given the 140 banks for which remuneration data was available, we then



matched those data with corresponding information on bank type, risk and performance from Bankscope and other sources.

Here we simply summarise the remuneration data from the matched sample, leaving the more complicated analyses for later sections.

The two tables below summarise three important variables collected by the EBA for its sample of 140 banks for 2013 and 2014:

- across all staff in the institution, the sum of variable remuneration divided by the sum of all remuneration;
- across only identified staff, the sum of variable remuneration divided by the sum of fixed remuneration.
- across only identified staff, the sum of deferred variable remuneration divided by the sum of variable remuneration.

The table shows the first quartile (the value that 25 % of all values lie beneath), the median (the value that half of all values are less than) and the third quartile (the value that 75 % of all value lie beneath). In addition, we note the number of "outliers", values for individual banks that are extreme in the sense that they lie substantially above the third quartile (or below the first quartile).

We see that the ratio of variable remuneration to total remuneration was similar in 2013 and 2014. In both years, about 10 percent of the banks (12/140) had ratios that were well above the 15.6 % ratio that is the third quartile.

More interesting, however, is the ratio of variable to fixed remuneration for identified staff, the ratio that the CRD IV rules cap at 100 %. We see that the value of the third quartile dropped by 20 percentage points (from 90 % to 70 % across the two years). Moreover, in 2013, 17 of the banks were outliers with ratios in excess of 200 %. By the next year, however, only one bank was an outlier on the upper end. Together, these are clear signs that the maximum ratio is starting to take hold.

Table 1: Remuneration ratio 2013

Remuneration ratio 2013	First Quartile	Median	Third Quartile	Number of O	utliers
				Below First Quartile	Above Third Quartile
All Staff Variable Remuneration / Total Remuneration	3.0 %	9.6 %	15.7 %	0	12
Identified Staff Variable Remuneration / Fixed Remuneration for IS	7.2 %	28.4 %	89.1 %	0	17
Identified Staff Deferred Variable Remuneration / Variable Remuneration	23.0 %	48.6 %	63.6 %	0	1

Note: ¹ An outlier is defined as a bank whose value for the variable is either (1) more than 1.5 times the interquartile range above the third quartile or (2) more than 1.5 times the interquartile range below the first quartile.



Source: EBA Remuneration benchmarking data

Table 2: Remuneration ratio 2014

Remuneration ratio 2014	First Quartile	Median	Third Quartile	Number of O	utliers
				Below First Quartile	Above Third Quartile
All Staff Variable Remuneration / Total Remuneration	3.9 %	10.0 %	16.2 %	0	12
Identified Staff Variable Remuneration / Fixed Remuneration for IS	9.0 %	27.8 %	69.7 %	0	1
Identified Staff Deferred Variable Remuneration / Variable Remuneration	19.5 %	41.7 %	56.7 %	0	1

Note: ¹An outlier is defined as a bank whose value for the variable is either (1) more than 1.5 times the interquartile range above the third quartile or (2) more than 1.5 times the interquartile range below the first quartile.

Source: EBA Remuneration benchmarking data

These same ratios are also available from the *iff* survey. There, however, we can break down the banks by size, distinguishing between large banks with revenues greater than EUR 1 billion, medium-sized banks (revenues between EUR 100 million and EUR 1 billion) and small banks (revenues less than EUR 100 million).

Table 3: Remuneration ratios 2010 (by bank size)

Remuneration ratio 2010	Small	Medium	Large
Identified Staff	Mean: 8.5 %	Mean: 76.5 %	Mean: 221.5 %
Variable Remuneration /	Median: 6.1 %	Median: 44.2 %	Median: 74.2 %
Fixed Remuneration for IS			
Identified Staff	Mean: 5.6 %	Mean: 12.5 %	Mean: 38.5 %
Deferred Variable Remuneration /	Median: 0.0 %	Median: 0.0 %	Median: 41.6 %
Variable Remuneration			

Source: iff-bank survey

Table 4: Remuneration ratios 2014 (by bank size)

R	Remuneration ratio 2014	Small	Medium	Large
10	dentified Staff	Mean: 6.2 %	Mean: 114.9 %	Mean: 56.5 %
V	ariable Remuneration /	Median: 4.5 %	Median: 30.0 %	Median: 54.0 %
F	ixed Remuneration for IS			
10	dentified Staff	Mean: 7.5 %	Mean: 35.8 %	Mean: 41.2 %
C	Peferred Variable Remuneration /	Median: 0.0 %	Median: 40.0 %	Median: 41.3 %
٧	ariable Remuneration			

Source: iff-bank survey



From these tables we see one of the central findings of the *iff* bank survey. *Variable remuneration is only a tiny proportion of remuneration for small credit institutions.* The median ratio for variable to fixed remuneration ratio was about 6.1 % as compared to 74.2 % and 54 %in the large institutions. Not surprisingly, the median proportion of variable remuneration that was deferred by small institutions was zero.

There is a similar difference with regard to the part remuneration of senior management plays within that of identified staff. The following graph represents the accumulated figures provided in the bank survey (Q1).

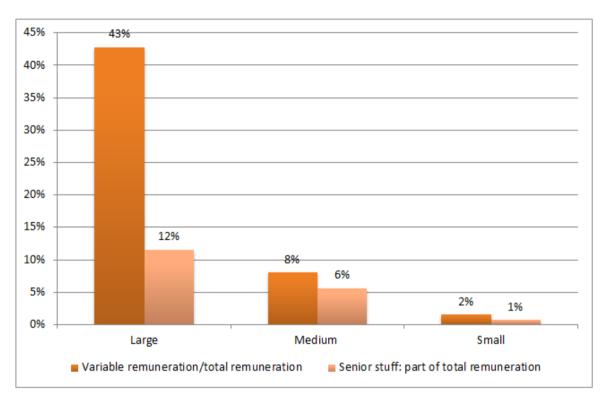


Figure 2: Variable and senior management remuneration in identified staff 2014 (iff-survey Q1)

1.1.3 Legal developments¹⁰

In 2009 the Financial Stability forum of the FSB published its "Principles for Sound compensation Practices" (FSB 2009). These nine principles are presented in three areas with regard to remuneration: (I) Governance, (II) Alignment with Prudent risk-taking, (III) Supervisory Oversight and Engagement by Stakeholders. Part II contains four principles with regard to the structure of variable remuneration in relation to risk-taking as they have been transposed into EU-law, and especially in articles 92 and 94 CRD IV where Articles 93 and 94 provide for the following variable elements of remuneration (Table 5).

¹⁰ Since the present study is focussed on the economic effects of the legislation the underlying legal development and its effective implementation is described in more detail in Annex 1.



Table 5: CRD IV provisions on the structure and composition of variable remuneration

Provision	Description
Assessment of the performance-based component	Assessment of the performance-based component of the remuneration based on long-term, accounting for current & future risks of that performance (Art. 94(1) k)., considering financial and non-financial criteria and taking into account the cost of the capital and the liquidity required (Art. 94(1) j).
Deferral to align remuneration with long-term interest of the institution	Deferral of the actual payment of performance-based components of remuneration over a period which takes account of the underlying business cycle of the credit institution and its business risks (Art. 94(1) a-b)), in order to align incentives with the longer-term interests of the institution. A substantial portion, and in any event at least 40 %, of the variable remuneration component, is deferred over a period which is not less than three to five years and is correctly aligned with the nature of the business, its risks and the activities of the member of staff in question (Art. 94(1) m). Remuneration payable under deferral arrangements shall vest no faster than on a pro-rata basis. In the case of a variable remuneration component of a particularly high amount, at least 60 % of the amount shall be deferred.
Variable to fixed remuneration ratio	The variable component shall not exceed 100 % of the fixed component of the total remuneration for each individual. Member States may set a lower maximum percentage (Art. 94(1) g, i). The ratio of 1:1 can be raised to a maximum of 2:1, if a quorum of shareholders representing 50 per cent of shares participates in the vote and a 66 per cent majority of them supports the measure. If the quorum cannot be reached, the measure can also be approved if it is supported by 75 per cent of shareholders present (Art. 94(1) g, ii). In this context, for the purposes of calculating the maximum ratio, the use of deferred and bail-in-able instruments is encouraged through the application of a notional discount factor to up to 25 per cent of total variable remuneration, provided that it is paid in instruments, which are deferred for more than five years 11 (Art. 94(1) g, iii).
Payment in shares or bonds	A substantial portion, and in any event at least 50 %, of any variable remuneration shall consist of a balance of shares or equivalent ownership interests and where possible bail-in-able instruments (Art. 94(1) I).
Malus and clawback	Up to 100 % of the total variable remuneration shall be subject to malus or clawback arrangements. Institutions shall set specific criteria for the application of malus and clawback (Art. 94(1) n). Such criteria shall in particular cover situations where the staff member: (i) participated in or was responsible for conduct which resulted in significant losses to the institution; (ii) failed to meet appropriate standards of fitness and propriety.
New entries or Early termination of a contract	Remuneration packages relating to compensation or buy out from contracts in previous employment must align with the long-term interests of the institution including retention, deferral, performance and clawback arrangements (Art. 94(1) i). Payments relating to the early termination of a contract reflect performance achieved over time and do not reward failure or misconduct (Art. 94(1) h).

The requirements apply only to staff whose professional activities have a material impact on their risk profile, such as senior management, risk takers, staff engaged in control functions and any employee receiving total remuneration that takes them into the same remuneration bracket as senior management and risk takers.

Pension	The pension policy is in line with the business strategy, objectives, values and long-term interests of the institution. If the employee leaves the institution before retirement, discretionary pension benefits shall be held by the institution for a period of five years in the form of instruments referred to in point. Where an employee reaches retirement, discretionary pension benefits shall be paid to the employee in the form of shares or bonds subject to a five-year retention period (Art. 94(1) o).
Institutions that benefit from government intervention	Institutions that benefit from government intervention have to limit the variable remuneration as a percentage of net revenue where it is inconsistent with the maintenance of a sound capital base and timely exit from government support; variable remuneration cannot be paid to members of the management body of the institution unless justified; if required by competent authorities, remuneration is restructured in a manner aligned with sound risk management and long-term growth, including, where appropriate, limits to the remuneration of the members of the management body (Article 93).

The main rules fixing the composition of remuneration components for identified staff can be summarised as follows.

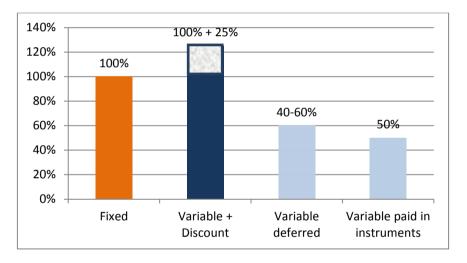


Figure 3: Remuneration components under a 1:1 ratio 12

National transposition into domestic laws and regulation followed in the years 2013-2015, albeit with some delay in individual countries. Most EU Member States have taken up the wording of CRD IV into their national law which for the CRR follows from its direct effects in national law. This has not solved all legal questions since some of the rules provide leeway for differences, for example in the period for deferral, allowing harsher rules on the maximum ratio, making general reservations to allow for national labour law in malus and clawback and, most significantly, providing leeway with the principle of proportionality which will be dealt with specifically under task II (4.).

[&]quot;1:1 ratio between fixed and variable remuneration; at least 40 %-60 % of variable remuneration is deferred; at least 50 % of variable remuneration is paid in instruments. 25 % of variable remuneration was paid in instruments deferred for a period of at least five years and can be discounted." EBA, Guidelines on the Applicable Notional Discount Rate for Variable Remuneration (27 March 2014).



As outlined in Annex 1.2.2 Member States have made quite different use of the leeway provided by CRD IV with regard to the maximum ratio, the deferral period and most significantly the principle of proportionality.

Since the FSB principles were established internationally in 2009, all states monitored in the present report have implemented rules on variable remuneration for staff identified as having a material impact on the risk-taking of the institution for which they work. ¹³ Information about the developments in financial centres outside the EEA can be found in Annex 1.4.

Further differences stem from labour law restrictions which are detailed in Annex 1.3.5 for seven Member States. They concern in particular clawbacks and/ or maluses, which apply in six of these countries. The experts consulted could not point to systematic exclusions or restrictions on the use of such clauses. However clawbacks were often in direct conflict with key principles of labour law (this was confirmed by the survey of credit institutions which stated that they were not using clawbacks because they were contrary to labour law). A key element of different applications was the relationship with collective agreements and protective labour which at national level is seen as a significant obstacle to its application. However, the practical implications appear to be somewhat limited because the threshold for variable remuneration in such contracts is far below (i.e. 8 %) the 100 %/200 % of the Directive and most of the variable contractual income is not guaranteed by collective agreements.

1.2 Economic discussion

Since 2008, the international debate and regulatory effort have centred around the G20 initiative on renewed remuneration policies.

The focus of debate¹⁴ is on questions largely dealt with in the TOR and is based on the open discussion EBA launched with the public EBA in 2015¹⁵. In the first Wyman/IIF survey of the leading banks of the world which account for more than 80 % of investment banking services, similar issues were raised from the bankers' perspective (IIF-Oliver Wyman 2009).

The main points of discussion concern the core measures taken in response to the financial crisis. The general intention is to link variable remuneration with risk-taking

Robins, Hong March 11 - different jurisdictions around the world, covering Australia, Belgium, Canada, China, France, Germany, Hong Kong, Italy, Africa, South Africa, the Netherlands, United Kingdom, European Union, and the United States. on March 11, 2015 (http://www.nortonrosefulbright.com/knowledge/technical-resources/banking-reform/remuneration-requirements-for-banks---a-global-analysis/). Additional authors: Alan Bainbridge (London), Peter Snowdon (London), Simon Lovegrove (London), Tessa Hoser (Sydney), Jay Modrall (Brussels), John Jason (Toronto), Martin Gdanski (Paris), Achim Döser (Frankfurt), Attilio Pavone (Milan), Keith Mukami (Johannesburg), Bridget King (Johannesburg), Floortje Nagelkerke (Amsterdam), Kennedy Masterton-Smith (London) and Kathleen A. Scott (New York). Specifically for the Netherlands see www.lexology.com.

¹⁴ See for literature and scientific discussion Annex 2.

¹⁵ EBA/CP/2015/29, 22 December 2015, Consultation Paper "Draft Guidelines on remuneration policies and practices related to the sale and provision of retail banking products and services".



behaviour and its overall effect on (1) the individual transaction, (2) the performance of the institution and (3) the financial system as a whole by (4) taking into account qualitative elements of sound banking behaviour.

In order to achieve these goals:

- variable remuneration has been transformed into tools which incentivise longterm orientation through deferrals, vesting and clawback/malus arrangements,
- a rational and publicly transparent process with board committees and regulatory procedures must be implemented.

In addition to design of these measures, a number of arguments put forward in favour of limiting bank regulation in this area are scrutinised and empirically evaluated. Further concerns arise with regard to the overall willingness to accept risk exposure where economic value creation demands this type of entrepreneurial behaviour, and the obstacle which might be created to entrepreneurialism by significant participation in losses as well as profit.

Historically the emergence of the credit society, which provided high productivity, relied on the reverse process, whereby responsibility for the losses of a business was transformed into limited liability for shareholders and a guarantee of income and repayment for depositors.

A parallel development has taken place in remuneration for labour. From this perspective, one might have expected the practical move back towards variable remuneration to have limited the appetite for risk-taking which, according to the international consensus, has not happened. Instead there is a wide assumption that variable remuneration schemes have triggered less entrepreneurial risk-taking more akin to gambling behaviour with no regard for the social costs of increasing systemic risk. There are two main schools of thought in the international discussion, which started out with the questions of the extent to which variable pay truly influences management behaviour and how in practice the form of variable pay has developed in financial institutions. There is significant literature showing large variations across countries and banking market segments. ¹⁶

The critique of the move back towards more fixed salaries centres around the question of whether this will only serve to raise the actual amount of pay while restricting the willingness also to take risks which are part and parcel of proper entrepreneurial financial decision-making. Problems could also arise in relation to deferred payments which, because of their insecurity and long-term effects, may hinder a more behaviour-oriented approach in remuneration policies. While the discussion of the basic theory of such approaches are not part of this remit of this report, the philosophy underlying the regulatory efforts described above, as well as its implementation into national law, will need special attention. In this, the macroprudential regulatory framework and the relationship between the three main

E.g. Germany: Osterloh, Rost 2011; Efing et al. 2014; Efing et al. 2015; Kampkötter, Sliwka 2011; Kampkötter et al. 2010; Nastansky, Lanz 2010a; Nastansky, Lanz 2010b; UK: Ashurst 2012; Boeri et al. 2013; Thanassoulis 2011; Thanassoulis 2011; Afme 2012; USA: Angelis, Grinstein 2015; Australia: Caddy 2009; the Netherlands: Kam 2011; Oskam 2006; Vos 2007; Switzerland: Hausmann, Bechtold-Orth 2010; South Africa: Bussin 2014; Bussin et al. 2012.



regulatory reactions to the crisis - capital requirements, remuneration policies and transparency and collective consumer protection - should be taken into account.

1.2.1 Variable remuneration and risk-taking behaviour

The rules on variable remuneration target the attitudes of identified staff which underpin their investment decisions. I, theory, identified staff will seek only to contract risks which they imagine as sustainable for their institution as a whole. In other words, they are expected to keep the vulnerability of the bank or the investment firm in mind when making their decisions.

This implies that identified staff should

- be aware of the fact that the opportunities they find to make profitable investments are accompanied by a balancing risk of losses. To make this evident, CRD IV implements rules which tailor remuneration according to both profits and losses (i.e. clawback clauses, postponed payments);
- obtain all necessary information necessary to evaluate the inherent risks and their impact on the vulnerability of their institution;
- have enough time to evaluate these risks;
- be able to communicate with colleagues or a superior in due time before the decision has been taken.

Identified staff members do not play their own game when taking excessive financial risks for their financial institutions. Variable remuneration changes this attitude in so far as they participate directly in winnings without being liable for losses. It is obvious that if a material risk-taker takes the attitude of a gambler, excessive risk-taking is inherent in his or her behaviour. It is therefore important to know whether investment bankers view their risk-taking activity as closer to gambling than to a business in which, although chance cannot be excluded, the personal ability to evaluate future developments and to hedge risks is a significant element in the control of these risks. This may to a large extent depend on the kind of business in which an investment banker is engaged. While, for example, roulette is seen as a form of gambling which is independent of individual skills, playing cards, although dependent on the initial distribution of cards, is seen as a game in which the personal ability to master information can be more important than luck.

If, however, information and personal skills play a more or less negligible role in risk-taking behaviour, there are different options for more or less responsible behaviour.

- Cautious and successful players will use the law of dice. In the long run, profit and losses will match each other if affordable small sums are played in a constant and regular order.
- Problematic gambling arises if gamblers try to become the master of their fate and play large sums in the belief that they can predict the specific outcome of the next game. Such behaviour, as observed in the cases of Nick Leeson and Jerome Kerviel, can arise for different reasons:
 - A gambler may take greater risks if the money he may lose is the money of others;
 - o Bankers who have lost large sums and failed to recover their losses, to the point that their institution is close to default, will develop a much higher risk appetite and switch from rational investments to gambling (so-called "gambling for resurrection").



1.2.2 Economic justification for the regulation

Because executive remuneration often reaches high levels and can be insensitive to corporate performance, it gives the impression that obviously "something should be done" to satisfy both a sense of social justice and the fiduciary duty to shareholders. This orthodoxy has been enshrined in the "managerial power" hypothesis of Bebchuk and Fried. Recently there has been a resurgence of interest in the "efficient contracting" perspective on managerial remuneration, that regards high managerial pay as simply arising "because they're worth it". Here an "efficient contract" is one that yields the maximum possible value to shareholders net of the costs of contracting (Core et al. 2003). It may be that high executive pay, displaying little sensitivity to shareholder returns, simply emerges (Edmans, Gabaix 2009) from a freely entered into bargain between CEOs and their employing corporations. If this is true it is less clear that State intervention to constrain/restructure executive pay contracts is justifiable in a liberal and free-market polity. Certainly it serves to remind us that any benefits to regulatory intervention must be offset against the lost gains from trade derived from allowing CEOs and corporations to contract freely.

According to the "efficient contracting" perspective on managerial remuneration, the very sharp increase in executive pay and its weak relationship to corporate performance partly reflects the corporation's (as well as the individual executive's) needs¹⁸, with increased demand for executive talent arising from the increased size and complexity of the modern (multinational) corporation (Gayle, Miller 2009). One easy way to align shareholders', executives' and owners' interests is simply to make managers into owners by making a large part of their pay take the form of equity in their own company. If they damage the company they then will feel the pain. Yet most executives are rewarded by the award of call options, not equity. This allows managers to benefit from the upside of rising equity, without facing the downside if equity falls in value. This type of reward mechanism may well appeal to risk-averse managers (Dittmann et al. 2010). And CEOs may have good reason (Edmans, Gabaix 2011) for being concerned about risk, given that both their human and their financial capital value are tightly linked to the fortunes of their employer corporation.

In the special case of banks, even if managerial pay arises from an "efficient contract" to maximise shareholder value, this may conflict with the interests of other stakeholders such as depositors, bondholders, or the public. In credit institutions, which can rely on public deposit insurance or bail-out because they are considered as "too big to fail", shareholders have incentives to take excessive risks, because they can shift the downside risk of their investments to the deposit insurance or the public. From a systemic or macroprudential view, the market fails to align the interests of shareholders with those of society as a whole, because the externalities related to systemic risk are not taken into account by managers who are aligned with shareholders through pay-out in shares or equity-linked instruments. An individual bank's optimal level of risk-taking would exceed the socially optimal level if the

Bebchuk, Fried 2004; For the respective literature used for this sub section, see references section for: Acharya, Bisin 2009; Amernic, Gaig 2006; Bebchuk, Fried 2004; Core, Guay 1999; Core et al. 2003; Dittmann et al. 2010; Edmans, Gabaix 2009; Edmans, Gabaix 2011; Edmans et al. 2009; Gabaix, Landier 2008; Gabaix et al. 2014; Gayle, Miller 2009; Gervaid et al. 2011; Jensen, Murphy 2010; Marin, Verdier 2012; Murphy, Zabojnik 2004; Rosen 1981.

¹⁸ Edmans, Gabaix 2009.



external or social costs of its effect on other institutions and taxpayers are neglected. This happens if systematically important banks do not control their contribution to systemic risk. This market failure justifies macroprudential regulation, for example through higher capital requirements for systematically important banks. Restrictions of equity-based pay in such institutions may complement this prudential regulation.

1.2.3 Micro and macroprudential considerations

The goal of the new regulations is that the risk-taking of banks becomes more prudential. The key for successful implementation of the provisions on remuneration builds on the incentives and mechanisms of banks' decision-making about their portfolio of risky assets and capital structure, which both affect value creation (see Figure 4).

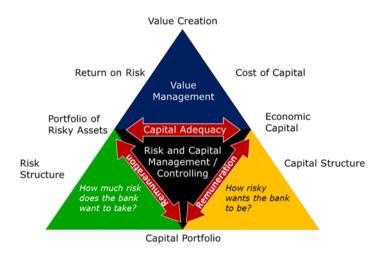


Figure 4: Regulation and the optimisation of banks

To achieve the goal of a stable financial system in the European Union, the following conditions must be met:

- (1) Efficiency of the new regulations. Provisions on remuneration must restrict banks' risk-taking and the risk of their investment portfolio to increase long-term, sustainable value creation.
- (2) Full integration of the new measures in the policy landscape, taking into account differences in financial systems, banking market structures and bank business models.

If one of these conditions is not met, the efficiency of the new measures is at least in jeopardy.

Remuneration provisions are an instrument not only of microprudential regulation aimed at preventing the costly failure of individual financial institutions, but also of macroprudential regulation which recognises the importance of general equilibrium effects and seeks to safeguard the financial system as a whole (Hanson et al. 2011).

Our study is based on an amended version of the financial stability and macroprudential policy framework published by the IMF, which has inspired the CRD IV regulations and recognises that "financial regulation is integrated with other public policies", that "one size does not fit all"; the final shape of the macroprudential

financial regulation framework (choice of analytical methods, policy instruments, and institutional arrangements) should take into account existing local conditions "and be able to encompass all important providers of credit, liquidity, and maturity transformation regardless of their legal form, as well as individual systemically important institutions and financial market infrastructures" (IMF 2011).

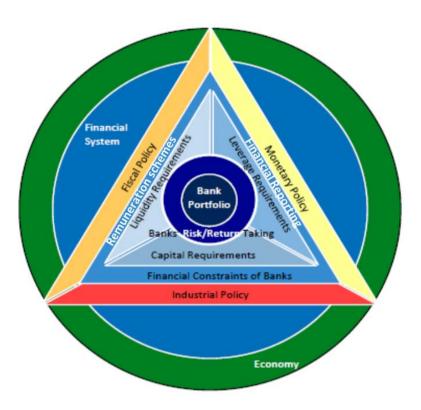


Figure 5: Macroprudential Policy Framework

Source: (Reifner et al. 2011)

The three pillars of this framework are monetary policy, fiscal policy and industrial policy. Apart from addressing macroprudential dimensions, industrial policy also focuses on microprudential issues, defining the financial constraints of banks. Key aspects of regulations in that field are: risk measurement methodologies, financial reporting, regulatory capital, funding liquidity standards, collateral arrangements, risk concentration limits, remuneration schemes, profit distribution restrictions, insurance mechanisms, and managing failure and resolution. ¹⁹ The most discussed ones have been highlighted in Figure 5 and are capital, leverage and liquidity requirements, remuneration schemes and financial reporting.

Compensation schemes comprise "Guidelines linking performance-related pay to ex ante longer-horizon measures of risk; back-loading of pay-offs; Use of supervisory review process for enforcement" (BIS 2011, p. 10, table 3).



1.3 Public awareness

Mass media have great influence in shaping people's ideas. Besides the significant impact on public opinion, media affect financial market movements because news can contribute to the formation of the expectations of investors and, more generally, to the improvement of market information efficiency (Deephouse 2000). Carretta et al. (Carretta et al. 2011) found a significant relationship between the ways of communication of governance news and investors' behaviour by analysing a large sample of corporate governance news published in Italy in the period 2003-2007.

To test the sentiment expressed by the media on remuneration rules and practices in the finance industry, we conducted research on news in the press as to remuneration issues, trends as regards bonus payments, scandals, clawback exercised by banks and related topics and how it was reported.

Analysis of the news was performed using the database Factiva-Dow Jones²⁰. We extracted all news on the subject published over the period 1.1.2007 to 15.10.2015. In order to reduce the margins of subjectivity in selecting the news and obtaining replicable results, the classification followed that of Factiva. In particular, our query considered the following criteria:

- Keyword: remuneration²¹;
- Regions: all the 14 MS countries, plus Switzerland, Singapore, Hong Kong and the US;
- Language: for the keyword "remuneration", we extracted all articles in English, Italian, German, French, Spanish; we then extracted a sub-selection of news in English only;
- Industry: Banking or Investing/Securities;
- Subject: i) Broader search through the categories: "Content Types Or Corporate/Industrial News Or Economic News Or Political/General News Or Commodity/Financial Market News" (first sample); ii) Restricted search only on sub-content types: Analyses, Blogs, Columns, Commentaries/Opinions, Editorials, Interviews" (second sample).

Another search (third sample) was conducted of articles published over the same period by the Financial Times, using "clawback" as keyword with no subject restriction. To avoid duplications we always excluded as search criteria "identical" news available in different sources (e.g. paper and online). A sample of all news extracted in the second and third restricted sample was read by the authors of the research.

The wider search²² in all subject categories on the keyword "remuneration" (5 languages) showed ca. 102,000 articles (61,788 if the UK and the US were excluded),

Factiva is a business information and research database owned by Dow Jones & Company, that aggregates content from both licensed and free sources and provides access to more than 32,000 sources, as newspapers, journals, magazines, etc., from nearly every country worldwide in 28 languages, including more than 600 continuously updated newswires.

²¹ On this keyword we also included following translations: Vergütung (D), remuneration (F), remuneracion/retribución (Esp), remunerazione/i (I).

²² Considering following Subject-categories: Content Types Or Corporate/Industrial News Or Economic News Or Political/General News Or Commodity/Financial Market News.

with a peak in the crisis year 2009 and in the last three years, testifying to the increasing attention to the subject after the introduction of new binding rules on bank management remuneration schemes (Figure 6).

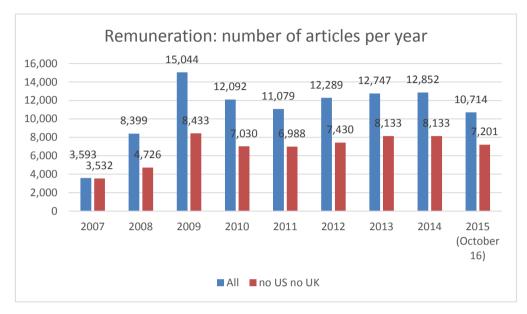


Figure 6: Number of articles on the subject "remuneration" per year

Most of the countries and companies referred to are reported in Table 6. The most cited banks are those involved in scandals and registering the highest fines and/or losses.

Table 6: Most cited companies and regions over the period 2007–2015

Ranking	Company		Region	
	Name	Number of items	Name	Number of items
1	Royal Bank of Scotland	4.651	UK	36.6k
2	Barclays	2.909	US	15.1k
3	Lloyds Banking Group	2.289	Spain	12.9k
4	Banco Santander	1.701	France	12.7k
5	HSBC	1.693	Europe	10.8k
6	The EU	1.659	Germany	10.6k
7	UBS	1.616	Australia	6.466
8	Deutsche Bank	1.471	Switzerland	5.420
9	BNP Paribas	1.377	Hong Kong	4.176
10	UK FSA	1.221	China	3.753

Source: Factiva

Among the main sources, apart from regulatory and stock exchange news services and press agencies, were the newspapers: Financial Times (UK), Les Echos (F), The Times (UK), Espansiòn (E) and The Telegraph (UK), El Economista (E), El Pais (E), La



Tribune (F), MF Mercati Finanziari (I), Le Temps (F), El Mundo (E), Il Sole 24 Ore (I), Le Figaro (F).

Restricting our query by subject²³, we found about 3,124 articles dealing with "remunerations", in 4 languages (English, French, German, Italian and Spanish), of which approximately 1,500 were in English. Figure 7 shows the result of our restricted search, distributed by year. Given the fact that most articles extracted were in English or from English sources, the news refers mainly to the UK and the US, although France is also well represented. The main newspaper within the extracted sources transpired to be the Financial Times (324 articles), Money Marketing and the French Les Echos.

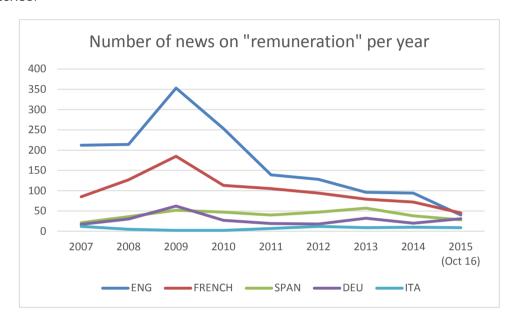


Figure 7: Number of articles on the subject "remuneration" per year (restricted research)

Table 7: Number of articles on the subject "remuneration" per year (restricted research) by language

Year	ENG	FRENCH	SPAN	DEU	ITA
2007	212	85	21	17	12
2008	214	127	36	30	5
2009	353	185	52	62	2
2010	253	113	47	27	2
2011	139	105	40	19	7
2012	128	94	47	18	12
2013	96	79	57	32	9
2014	94	72	38	20	10
2015 (Oct 16)	40	45	28	31	9
Total	1.529	905	366	256	68

²³ Considering only following Subject-categories: "Analyses, Blogs, Columns, Commentaries/Opinions, Editorials, News Agency Materials, Interviews, Reviews".



The third search of the Financial Times with reference to "clawback" showed 269 results (Figure 8). Despite the fairly significant number of items, most of the news dealt with the new EU regulatory provisions.

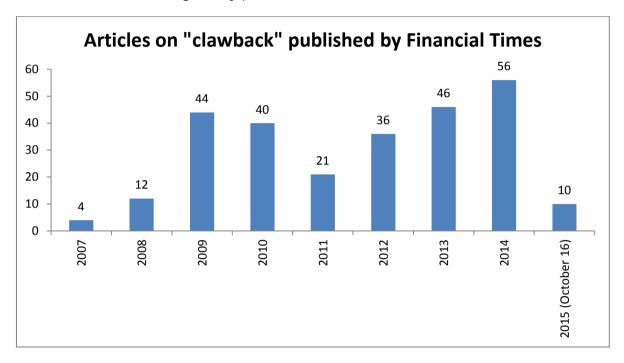


Figure 8: Number of articles on "clawback" published by Financial Times (2007–2015)

We processed a sample of the news extracted by reading the articles directly, in order to identify the main topic of discussion and debate during the period. This may be summarised as follows.



Table 8: Examples of press coverage

Theme	Citation
Scandals, poor performances and weak link with executives' remuneration	"What's the word for that money employees get paid just for showing up?" Financial Times, 21 June 2012
Disclosure and competition	"There was a time when bankers' pay was a private matter between the bank's owners and employees. Now it is everyone's business". Financial Times, 18 November 2014
Complexity and opacity of executives' remuneration schemes	"Very often, executives don't understand the plan because it's too remote from them." Financial Times, 1 May 2015
Positive effects of shareholders activism through "say on pay"	"Retention payments without performance targets are notorious even within an executive pay culture that makes outsiders gape". Financial Times, 21 June 2012
	"The annual meetings season has brought renewed anger over executive pay." Financial Times, 1 May 2015
Proportionality, burden on small banks and competitiveness	"The question bankers are asking themselves is whether they want to work in such a challenging environment". Financial Times, 28 September 2015
Labour market attractiveness given different regulation: US vs. UK. Strong reaction by asset managers	Remuneration committees are being very careful to make sure performance is achieved on multiple measures and it is not as easy to get full payment as it once was. In the US, despite a growing pressure on pay, the society is polarised on the issue. A very strong Wall Street lobby strongly believes that companies should pay for talent and performance. Good or bad, it is much more American to allow CEOs to be compensated well if they are making wealth for themselves as well as other people.
Wage gap	"Vorstände kassieren das 250-fache eines Angestellten" Handelsblatt, 25 September 2014; "Stipendi italiani, ci vogliono quattro operai per fare un dirigente". La Repubblica, 10 October 2015
Will clawback be truly enforced?	The enforcement of those rules—meant to reclaim remuneration paid executives whose companies restated financial results as a result of misconduct—has been limited to few cases. HSBC has yet to exercise clawback in relation to its money laundering scandal, but bankers think only a few million dollars will probably be recoverable, compared with the \$1.9bn penalty it paid. Financial Times, 5 March 2013



2 Efficiency of the rules

Task 3 focuses on collecting evidence to inform the extent to which the objectives of the remuneration provisions to reduce risk-taking have been met. Against the measurable or expected benefits of these reforms, the costs for credit institutions and investment firms are estimated. On the benefits side, we assess how individual risk-taking attitudes of identified staff and institution-level risk-taking / risk-controlling policies have changed as a result of CRD IV — with the caveat that notions such as "risk-taking", "risk appetite" or "excessive/acceptable risk" might be difficult to define and measure. On the costs side, we evaluate the cost of complying with CRD IV requirements. Besides, the research considers the relationship between some corporate governance and internal governance features and remuneration schemes and remuneration levels as a mean to improve the coherence between firm strategy, risk appetite framework and managerial incentives.

2.1 Effects on risk-taking

2.1.1 Economic literature²⁴

Higher risk-taking is value-creating as long as it makes possible profitable investment projects, which would otherwise not been realized by risk-averse investors. Optimal risk-taking means choosing a portfolio on the efficient risk-return frontier depending on the investor's risk appetite. Excessive risk means choosing an inefficient portfolio, i.e. one where the same expected return could be achieved with a lower level of risk, at a given risk appetite. In the case of a financial institution, the views on excessive risk are likely to conflict between its stakeholders, which hold different claims on the investment returns. While the key stakeholders of commercial (and universal) banks are depositors, bondholders, shareholders and the public, the key stakeholders of investment banks and asset management firms are the ultimate asset holders, respectively investors.

In commercial banking, excessive risk-taking is most likely at listed, shareholder-oriented banks, because shareholders may shift the downside risk of their investments to depositors, the deposit insurance or public. The bank's shareholders profit from an increase in risk beyond the level that would maximize the total value of the firm, because they can claim deposit insurance services in case of default. The upside benefits of increasing risk accrue to shareholders and in the case of equity-based remuneration, also to managers, while the downside costs are borne by bondholders or taxpayers. Such incentives are also created by an implicit government guarantee to 'bail out' financial institutions near default, as given by the too-big-to-fail guarantee for large, systematically important institutions. From a systemic or macroprudential view, the main problem is not a conflict between the interests of managers and shareholders, but between the interest of shareholders, managers, and debt holders on one side, and society at large on the other side, which arise from externalities related to systemic risk (IMF 2014). If variable remuneration is based on the bank's return on equity or paid out in equity or equity-linked instruments, there is a strong

²⁴ For more details see Annex 2.



incentive for the bank manager to grow the bank via leveraging. If however, variable remuneration is based on risk-adjusted return on assets or the total value of the firm, the incentives of bank managers would be aligned to the interests of all stakeholders.

In investment banking, systemic risk arises from risks created and spread across the society through origination and trade in securities. To curb excessive risk-taking, remuneration of investment bankers should be linked to performance of securities originated, floated and traded (Levina 2014).

In the asset management industry, excessive risk-taking tends to be less important, because asset managers invest as agents on behalf of their clients. However, large global asset management firms are likely to create systemic risk, because fund managers do not take into account their contribution to the fragility of the whole system (FSB 2015, The Economist 2015).

Potentially excessive risk-taking of an individual bank may be measured by a variety of indicators depending on the type of institution or business area. For all types of institutions, the key indicator of excessive risk or high risk appetite is the debt-equity ratio or leverage ratio (equity to total non-risk weighted assets). Also a high target return on equity indicates a high risk appetite (see Annex 2.1). While EU banks' risk appetite has declined and solvency increased, their profitability and quality of loan portfolios remains weak, and solvency is impaired by penalties for misconduct (see Annex 2.3).

Many empirical studies show that variable remuneration based on return on equity (RoE) and in pay-out in equity or stock options encourages short-term strategic horizons and risk-taking in the banking industry (see Annex 2.3). To focus managers' attention on the long-term and better align their incentives with creditors, and society at large, the following instruments have been proposed, among others: an equity / cash sliding scale according to the level of the firm's leverage, linking remuneration to the aggregate value of a basket of securities rather than the value of shares only, use of debt, subordinated debt or contingent convertible debt (CoCos) as pay-out instruments (see Annex 2.4).

Theoretical and empirical literature shows that deferral of remuneration is beneficial, because it aligns management with creditors. The benefit of deferral is positively related to the institution's level of risk. Deferred pay-out in equity-linked instruments or stock options may be harmful, because it would create incentives to increase risk. Deferral should be extended to a period of 7 years. Empirical research on the Icelandic banking collapse and the duration of the financial cycle shows that mandatory deferral periods of 3-5 years are not long enough to prevent short-termism and excessive risk-taking (see Annex 2.5).

Ex post risk-adjustment tends to have the highest benefits in large, systemically important or government-owned institutions. To perfectly correct the too-big-to-fail distortion, malus and clawback would have to be conditioned fully on the ex-ante risks taken by the manager (see Annex 2.6).

Discretionary pension benefits, like deferral of remuneration, constitute a form of "inside debt", offsetting the equity incentives to shift risk to bondholders by making (older) executives more risk-averse (see Annex 2.72.7).



2.1.2 Results from surveys and interviews on CRD remuneration policies

2.1.2.1 Risk appetite

Survey responses from credit institutions and investment firms confirm that a firm's risk appetite is usually measured by a variety of indicators:

- Big and medium listed banks: capital ratios, leverage ratio, liquidity ratios (NSFR, LCR), limits on RWA, BPV, VaR, zero tolerances, ICAAP (Internal Capital Adequacy Assessment Process), capital planning, stress-testing and results in setting limits on several risk measures, measures for all material risk types (credit, market, operational, liquidity, reputational, business, aggregated risk). Examples include credit loss level, credit portfolio mix and growth tolerance levels, VaR, max loss in stress, delta 1, FX aggregate, operational loss/gross income, outage time in IT, CET1 ratio, solvency I/II, leverage ratio.
- Small, listed bank: a number of target/limits in terms of capital adequacy, profitability, liquidity of the balance sheet, composition of the different asset portfolios of the bank (trade finance, factoring, forfaiting).
- Medium, non-listed bank: Our long-term strategy is to provide low-risk retail banking products and to distribute asset management products.
- Small, non-listed bank: current delinquency ratio described as volumes rolled to 90+ delinquency from all booked volumes within selected time period. Time period is specified for every credit product line, e.g. 18 months for cash loan.
- Small cooperative banks: strategic planning was based on a risk return profile before obligation to define a risk appetite framework in 2014.

The majority (68 %) of the 76 firms which answered the question "How often has the Board of your firm changed its formal risk appetite framework since 2010?" indicated that the formal risk appetite framework was changed by the Board just once a year. Ad-hoc reviews were taken place in 20 % of the cases and occurred more than once a year in 12 % of the cases.

Changes in the methodology of the risk appetite framework seem to have occurred mainly in big and medium-sized listed banks:

- Big, listed banks: "The capital and liquidity targets have increased over time, other limits have mostly come down." "Mainly changes in market risk tolerance since 2010 (reduced)." "Refinements have been made on some indicators such as liquidity and on the formalization on the way to report potential breaches to the Board. The Risk Appetite is intended to be relatively stable overtime. As such no major changes have been made since 2012." "The changes includes new metrics and fine-tuning of some limits and triggers." "The Group is currently implementing its formal risk appetite framework which will be completed by the end of 2015; therefore the Board has not changed its risk appetite framework since 2010."
- Medium, listed bank: "The formal risk appetite framework changed since 2010 approximately once a year, with more significant changes adopted with introduction of CRD IV."
- Medium, non-listed banks: "The methodology of the framework has not been changed since 2010. The board only adjusted the limits once a year." "There is an annual calibration process, the framework can be changed outside the annual process but it has not been deemed necessary."
- Medium, non-listed investment firm: "Basic risk appetite is stable (and very low), circumstances are assessed multiple times a year."



Risk and control behaviours in some banks have become a key part and input into performance and pay management. They have become an important driver and assessment of performance. Changes in practice for risk management and remuneration practices have occurred but their extent is difficult to quantify. The role of the risk function at every stage of the remuneration process appears to have increased (level, setting policies so that they contribute to the right behaviours and in the assessment of their performance) Big listed bank interview (13.11.2015)

2.1.2.2 Performance-based pay

CRD IV prescribes that to reduce firm risk or identified staff's risk-taking behaviour, variable pay should be linked to risk-adjusted performance (adjusted for current and future risks and taking into account the cost of the capital and the liquidity required)²⁵ at three levels²⁶: the individual concerned (taking into account financial and non-financial criteria), the business unit concerned and the overall institution.

Performance criteria at the firm or business area level are:

- shareholder value: return on equity (RoE), growth in earnings per share (EPS)
- total value of the firm: return on assets (RoA), return on risk-weighted assets (RORWA), economic value added (EVA), operating profit, net profit, revenue sales/asset growth, qualitative firm-level criteria
- solvency: regulatory minimum equity capital ratio, equity/total assets or debt/equity.

Determination of variable remuneration pools are usually based on net profit of the activity (i.e. income after deduction of liquidity costs, overheads, cost of risk, cost of capital etc.). Its methodology will typically involve approval by Risk, Finance, the Board of Directors and the Remuneration Committee. Pools are typically set by business line, at a global level and allocation depends on quantitative and qualitative factors. In line with the EBA guidelines, "the remuneration of independent control functions should be predominantly fixed, to reject the nature of their responsibilities. (...) The methods used for determining the variable remuneration of control functions, i.e. risk management, compliance and internal audit function, should not compromise staff's objectivity and independence". In addition perhaps as an exception, institutions will typically reward their senior managers (CEOs and Committee members), variable remuneration that is not based on a collective pool but is determined individually on the basis of the firm's overall financial results, the results of the business activity they supervise, the extent to which they have met their qualitative and quantitative objectives and market pay practices produced by remuneration consultants.

See CRD IV, Article 94, 1 (j): "the measurement of performance used to calculate variable remuneration components or pools of variable remuneration components includes an adjustment for all types of current and future risks and takes into account the cost of the capital and the liquidity required".

See CRD IV, Article 94, 1 (a): "where remuneration is performance related, the total amount of remuneration is based on a combination of the assessment of the performance of the individual and of the business unit concerned and of the overall results of the institution and when assessing individual performance, financial and non-financial criteria are taken into account".



Some credit institutions use economic value added (EVA) as risk-adjusted performance measure to comply with CRD IV, Article 94, 1 (j), (e.g. Commerzbank 2014, p.11).

Performance criteria at the individual level depend on the staff's function and business area. According to a major bank there is no direct or automatic link between the financial results of an individual employee and his or her level of variable remuneration insofar as employees are assessed on their results, those of their activity and the way in which said results were achieved. In addition to the individual appraisal carried out by line managers, the Risk Division and the Compliance Department independently assess regulated employees and review in particular:

- risk awareness, technical expertise and management of risks, as well as respect of policies and procedures related to risk management;
- respect of regulations and internal procedures in terms of compliance, as well
 as the extent to which they are transparent vis-à-vis clients with respect to
 products and the associated risks;
- the quality of the interactions between the concerned staff and the Risk and Compliance Divisions (transparency, pro-activity, completeness of information).

The employees concerned are informed that their position is considered regulated and are subject to specific objectives related to risk management and compliance.

Responses of credit institutions and investment firms to the question which performance criteria were used to determine variable pay for senior managers in 2014 show that: Compliance and conduct ranks first, followed by qualitative firm-level criteria, minimum equity capital ratio, operating profit, net profit, Return on equity (RoE), performance of loans originated, revenue sales/asset growth, Return on risk-weighted assets (RoRWA), Return on assets (RoA), economic value added (EVA), performance of securities originated, floated and traded, total shareholder return, growth in earnings per share (EPS), and debt-equity ratio.

As performance criteria used for variable remuneration of other identified staff in 2014, compliance and conduct ranks first, followed by qualitative firm-level criteria, quality of risk management, customer satisfaction, against objectives, operating profit and net profit, minimum equity capital ratio, Return on equity (RoE), revenue sales/asset growth, performance of loans originated, Return on risk-weighted assets (RoRWA), Return on assets (RoA), Economic value added (EVA), performance of securities originated, floated and traded, growth in earnings per share (EPS), total shareholder return, and debt-equity ratio.

The relatively frequent usage of the minimum equity capital ratio for both senior management and other identified staff indicates that remuneration of identified staff is linked to the CRD IV regulatory capital requirements to increase financial stability. However, shareholder returns (RoE) still play a larger role than total firm performance (RoRWA, RoA, EVA), and the debt-equity ratio, a key indicator for excessive risk, is used least often for remuneration of identified staff. A similar pattern arises from the answers of identified staff.

Respondents' comments to the above question show that a large variety of performance criteria at the firm, business unit and individual level is used for remuneration of identified staff, which differs according to the firm's size, legal form, and business units as well as to the level of identified staff. Big, listed credit institutions and investment firms, which tend to have a higher risk appetite use a



larger number of performance criteria than smaller ones. In small cooperative banks variable remuneration components exclusively refer to national collective labour agreements (e.g. the annual bonus for senior management and productivity bonus for middle management). (See Table 72 in Annex 5.)

Supervisory authorities observe progresses in using risk-adjusted performance criteria for variable remuneration of identified staff, 40 % of them to a small or large extent.

Table 9: Answers of supervisors to "How have firms improved in their measurements of risk adjustment of performance?"

	Frequency	Percent	Cumulative Percent
n.a.	5	33.3 %	33.3 %
To a large extent	4	26.7 %	60.0 %
To a small extent	2	13.3 %	73.3 %
To some extent	4	26.7 %	100.0 %
Total	15	100.0 %	

However, they criticise the complexity and discretionary nature of these models, which limits transparency (for the Comments of supervisors to the question "How have firms improved in their measurements of risk adjustment of performance?" (see Annex 5)

To the question: "What is the role of determining pay using return on debt, as opposed to ROE?", 14 of the 15 responding supervisory authorities answered that they were not aware of pay based on return on debt, while only one authority affirmed that many firms use this criteria. To this question the Financial Conduct Authority noted: "We have been clear in our Remuneration Codes that measures such as ROE, EPS and TSR are not suitably adjusted for longer-term risk factors. Whilst ROE is not uncommon, firms typically utilise a wide range of risk and performance measures when determining their bonus pools. ROE would therefore normally only be used alongside a range of other measures including return on risk-weighted assets, return on capital, economic profit etc. In recent years we have also seen the introduction of a wider range of non-financial and conduct risk factors."

Table 10 shows that supervisory authorities see lower benefits in linking pay to risk and performance than credit institutions and investment firms. While the majority (66.7%) of the responding supervisors ranked "Linking pay to the firm financial condition and future prospects" as low (1-4), the majority of the responding firms (64.1%) ranked this as high (5-8). "Making the size and allocation of bonus pool reflect full risk range" got high ranks (5-8) by the majority (65%) of the firms, but only by about a quarter (26.7%) of the supervisors.



Table 10: Impact on regulated firms

	"Please rank the following measures on the basis of how much impact they have had on the regulated firms (Ranking based on size of impact - 1 to 8)"						
		1-2	3-4	5-6	7-8		
Linking pay to the firm financial condition and future prospects							
	Credit institutions and investment firms	8.0 %	9.6 %	18.6 %	45.5 %		
	Supervisors	26.7 %	40 %	0 %	6.7 %		
Making the size and allocation of bonus pool reflect full risk range							
	Credit institutions and investment firms	12.7 %	13.2 %	9.1 %	46.9 %		
	Supervisors	20 %	20 %	26.7 %%	0 %		

According to credit institutions and investment firms, linking pay to individual-level criteria has a larger impact on risk-taking than linking pay to firm or business level criteria. 39 % of the responding credit institutions and investment firms agreed or strongly agreed to "Linking of individual variable pay to firm-level criteria has reduced staff risk-taking behaviour", 40 % agreed or strongly agreed to "Linking of individual variable pay to business area criteria has reduced staff risk-taking behaviour", and 44 % agreed or strongly agreed to "Linking of individual variable pay to individual-level criteria has reduced staff risk-taking behaviour".

Answers of identified staff to the question "Performance at what level determined your variable pay in 2010 and 2014?" show a slight tendency towards higher shares of remuneration at the individual level. In 2010, less than a third of the respondents received 20 % of remuneration at the individual level, while in 2014, this frequency increased to 47 %.

To the question "To what extent would the inclusion of the following performance metrics affect your risk-taking incentives?", the share of identified staff that answered "to a certain extent" or "to a large extent" was:

Return on Equity (RoE): 44.1 %

Return on Risk-weighted Assets (RoRWA): 41.2 %

Performance of securities: 39.4 %
Economic value added (EVA): 37.1 %
Poture on Assets (PoA): 32.4 %

Return on Assets (RoA): 32.4 %
Total shareholder value: 31.4 %
Minimum equity capital ratio: 21.9 %
Leverage-adjusted RoA: 15.6 %

Return on equity, which provides incentivizes to take excessive risks, ranks first, followed by criteria of total firm performance (RoRWA, EVA, RoA) and the performance of securities originated, floated and traded, which would counteract these incentives. However, these are less often used.

When asked to describe the performance criteria used by AMCs to determine staff variable pay for awards in 2014 some responded using metrics such as RoE, Net



profit, AuM, Market share and performance against benchmark (small AMC), but the majority stated using a balanced evaluation approach with two respondents confirming that benchmarks used in evaluating staff performance were different from those used in the client relationship. E.g.:

- Well balanced judgment of team performance and individual contribution (targets for investment outperformance and for sales net new money as well client relationship), living our company values and personal development. (Large AMC)
- As of 2011 clear guidelines have been defined on how to set performance objectives: quantitative, qualitative and risk related objectives, linked to the business activities, are used to evaluate performance. Risk awareness measures are integrated through the risk gateway and part of the variable is determined by Risk Adjusted Profit. (Medium AMC)
- The activation conditions for the variable remuneration system is linked to specific requirements defined both at the Parent Company level and the AMC. These conditions are based on principles of financial sustainability of the variable component and are represented, by measures of the "quality" of the earnings achieved and its consistency with the limits provided within the Risk Appetite Framework of the Parent Company (i.e. 1. Common Equity Tier Ratio (CET1), 2. Net Stable Funding Ratio (NSFR), 3. No Loss/Positive Income Before Taxes. (Medium AMC)
- Among other metrics and depending on the function: Net Profit, Operating profit, AUM, Risk adjusted fund performance 1&3 year, respect of risk & compliance procedures, conduct of function specific projects and missions (Medium AMC)
- Objectives are set individually for each employee, with their managers, every year. Performance criteria depend on such objectives. (Large AMC)
- AMC uses composite criteria to assess individual staff performance: for front office employees, NBI and asset growth are taken into account, as well as overall financial performance, respect of risk and compliance guidelines, and general behaviour. (Medium AMC)

Examples of relevant interview findings are provided in Annex 5.

2.1.2.3 Pay-out in instruments

CRD IV, Article 94, 1 (I) requires that "a substantial portion, and in any event at least 50 %, of any variable remuneration shall consist of a balance of the following: (i) shares or equivalent ownership interests, subject to the legal structure of the institution concerned or share-linked instruments or equivalent non-cash instruments, in the case of a non-listed institution; (ii) where possible, other instruments within the meaning of Article 52 or 63 of Regulation (EU) No 575/2013 or other instruments which can be fully converted to Common Equity Tier 1 instruments or written down, that in each case adequately reflect the credit quality of the institution as a going concern and are appropriate to be used for the purposes of variable remuneration. The instruments referred to in this point shall be subject to an appropriate retention policy designed to align incentives with the longer-term interests of the institution. Member States or their competent authorities may place restrictions on the types and designs of those instruments or prohibit certain instruments as appropriate. This point shall be applied to both the portion of the variable remuneration component deferred in accordance with point (m) and the portion of the variable remuneration component not deferred". According to a major bank, individual variable remuneration breaks down into four portions:



- a vested, non-deferred component paid in cash;
- a vested component non-deferred in the form of share indexed instruments
- a non-vested deferred cash component (which is not indexed to the share price)
- a non-vested component deferred in firm share indexed instruments on two instalments for which vesting is conditional on the employee remaining employed by the Bank and dependent on certain conditions and the final value depending on the share price at the end of the non-transferability period.

The higher the level of the variable remuneration award, the higher the proportion of the non-vested component.

Our survey of credit institutions and investment firms shows the following changes in the form of pay-out between 2010 and 2014:

- Total fixed remuneration for identified staff paid in cash decreased. The share
 of respondents that indicated that 100% of total fixed remuneration was paid
 in cash decreased from 92 % in 2010 to 73 % in 2014.
- The ratio of variable remuneration paid in cash decreased by 0.9 % for the total sample, by 3.1 % for the larger banks and is constant for the Banche di Credito Cooperativo (BCC), which were using variable remuneration much less
- From a sample of the 120 respondents that provided data on pay-out in instruments over both years 2010 and 2014, 13 % reported data showing a rise in their portion of pay-out in non-cash instruments since 2010 in line with the objective of the CRD IV, however the over 80% that did not show a change were almost exclusively comprised of the small institutions that do not apply the CRD rules. Care should be taken in interpreting the results since the 3 % that saw an increase in their pay-out in cash were 4 large institutions. This may be explained by sample changes in the identified staff population which make drawing conclusions from the comparison difficult.
- The use of other types of instruments for variable remuneration of identified staff increased. The percentage of banks that did not use any other types of instruments declined from 96 % in 2010 to 36 % in 2014.

However, several banks note that the numbers for 2010 and 2014 are almost not comparable considering the huge change in the number of identified staff.²⁷

Answers of identified staff to the question "How was your variable pay (bonus) awarded?" show changes that are in line with the CRD IV requirement that at least 50 % of variable remuneration consists of pay-out in shares or equivalent instruments:

- Variable remuneration paid in cash declined. The share of respondents that indicated that more than 60 % of total variable remuneration was paid in cash declined from 89 % in 2010 to 17 % in 2014.
- Variable remuneration paid in shares and other equity increased. The percentage of identified staff that received less than 5 % of their bonus in shares or other equity instruments declined from 61 % in 2010 to 9 % in 2014.

²⁷ For their comments see Table 77 part II.



- In 2014, 72 % of the respondents received more than 40 % of their bonus in shares and other equity, compared to 9 % of the respondents in 2010.
- The use of equity-linked instruments for variable remuneration of identified staff increased. The percentage of identified staff that received less than 5 % of the bonus in equity-linked instruments declined from 100 % in 2010 to 67 % in 2014. In 2014, a third of the respondents received 41-50 % of the bonus in equity-linked instruments, compared to 0 % of the respondents in 2010.
- However, the share of debt-linked and other instruments in variable remuneration remained below 5 % still in 2014.

About half of the responding credit institutions and investment firms disagree or strongly disagree with the statement that pay-out in instruments reduces staff risk-taking behaviour (50 % for pay-out in shares and other equity, 49 % for pay-out in other types of instruments, 48 % for pay-out in equity-linked instruments). 41 % of the respondents agreed or strongly agreed that pay-out in shares and other equity is negatively related to staff risk-taking, while the effectiveness of pay-out in equity-linked instruments was agreed by a third and the effectiveness of pay-out in other types of instruments by only a fourth of the respondents.

42%, respectively 44% of identified staff agrees that pay-out in shares, other equity or equity-linked instruments, respectively other types of instruments is negatively related to staff risk-taking behaviour. Also identified staff sees low benefits in pay-out of variable remuneration in instruments. The majority of respondents indicate that pay-out in shares and share-linked instruments (63.6%) as well as pay-out in other instruments (75%) does not affect or only slightly affects risk-taking behaviour. (See all responses with regard to the effects on risk-taking behaviour summarised in Annex 0).

The large majority (89 %) of identified staff disagrees with the statement "The rules on pay have had an effect on my own risk behaviour". 50 % of the respondents agree or fully agree, and only 28 % of them disagree with the statement "Receiving my bonus in instruments other than cash and shares would be very unsatisfactory for me." (See for the responses reflecting the attitudes on remuneration issues Figure 53 in Annex 0)

None of the supervisors agreed to a large or very large extent that pay-out in instruments affects firm risk or staff risk-taking behaviour. 60 %, respectively 47 % of the supervisors agreed to some extent that pay-out in shares, other equity or equity-linked instruments, respectively other types of instruments affects staff risk-taking behaviour, a third agreed to some extent that pay-out in shares, other equity or equity-linked instruments affects firm risk or firm risk, and 27 % agreed to some extent that pay-out in other types of instruments affects staff risk-taking behaviour or firm risk.

Three third of the responding supervisors observed difficulties for firms in paying out variable pay in instruments for most or some firms (see Table 11 below).



Table 11: Responses of supervisors to the question "Have you observed any particular difficulties for firms in paying out variable pay in instruments?"

	Frequency	Valid Percent	Cumulative Percent
Yes, but only for a few firms	1	6.7 %	6.7 %
Yes, for some firms	5	33.3 %	40,0 %
Yes, for most firms	5	33.3 %	73.3 %
No	3	20.0 %	93.3 %
n.a.	1	6.7 %	100.0 %
Total	15	100.0 %	

These difficulties arise in particular for small and non-listed institutions or very small amounts of variable remuneration (see Table 76).

(For responses of supervisors to the question "Have you observed any particular difficulties for firms in paying out variable pay in instruments?" see Table 76 Annex 5.)

A supervisory authority noted: "The rationale behind the requirement that 50 % of both upfront and each tranche of deferred remuneration must be paid in instruments is unclear. The intent of payment in instruments is to align the incentives of the individual with the long-term interests of the firm. As such, firms should be able to weight the payment in instruments to the deferred proportion, rather than application to the upfront element, which does not align incentives and has little to no prudential benefit."

These rather negative opinions on the effectiveness of pay-out in instruments cannot be supported by quantitative evidence. Using data from the iff firm survey, we examined the relationship between the change in the form of pay-out of variable remuneration for identified staff and changes of risk-taking measures between 2010 and 2014. We find a significant negative correlation between the change in the ratio of variable remuneration paid out in cash and the change in the coverage ratio. Multivariate regressions show that increasing the cash paid share of the variable remuneration associates with increased loan impairment and financial assets impairment. This indicates that by paying less in cash and more in instruments might make managers more prudent (see Section 2.1.4).

According to the interviews the rules on form of pay-out (types of instruments or share of instruments) were not generally seen as more effective as malus. (For extracts of the interviews and survey responses see Annex 5)

2.1.2.4 Deferred remuneration

CRD IV requires that at least 40 % of variable remuneration is deferred for a period of at least three to five years. If a particularly high amount of variable remuneration is paid, at least 60 % should be deferred. A significant portion of variable remuneration — at least 50 % — must be paid out in non-cash equity or eligible debt instruments. The latter applies to both, the deferred and the non-deferred variable remuneration. The application of deferral arrangements is a precondition for a long-term alignment of



remuneration incentives with an institution's risk profile and for the application of malus to variable remuneration. ²⁸

The 'deferral period' is the period after the award of the variable remuneration and before the vesting of the variable remuneration during which staff is not the legal owner of the remuneration awarded. An amount of remuneration 'vests' when the staff member becomes the legal owner of the remuneration awarded, independent of the instrument which is used for the payment or if the payment is subject to additional retention periods or clawback arrangements. A 'retention period' is a period of time during which instruments which have been awarded and vested as variable remuneration cannot be sold or accessed.

One large bank reports that the deferred part vests over a period of three years on a pro-rata basis, with the first instalment in cash and the two following instalments in corporate share-indexed instruments. The non-transferability period is at least six months for instruments indexed to its share price. For this bank, all payments corresponding to instalment in share equivalents, made after the non-transferability period, will be increased by the value of the dividend paid during the non-transferability period, if applicable. Deferral arrangements were applied predominantly to non-cash instruments and with lower intensity to the cash portion of variable remuneration. As mentioned in the EBA Benchmarking Study (September 2015), the deferral of instruments is a more efficient tool than the deferral of cash to ensure the long-term alignment of remuneration with the risk profile of an institution, as this alignment is achieved not only by the application of malus but also by changes to the prices of instruments.

Regarding the ratio of deferred variable to total variable remuneration for identified staff by business area in 2013, the deferral is greatest for investment banking (73 %) and lowest in retail banking (54 %) which is likely to reflect the higher total remuneration of the former group which if high enough are required to be associated with higher deferral ratios (EBA Benchmarking Study, September 2015).

Our survey shows that the deferral of variable remuneration for identified staff increased between 2010 and 2014:

- According to credit institutions and investment firms the deferral of variable remuneration in both cash and instruments increased. The deferred variable share in cash increased by 3.8% for the total sample, by 9.9% for the larger banks and by only 1.6% for the BCC.
- The changes in the ratio of variable remuneration paid out in cash and that in the variable remuneration deferred are significantly negatively correlated, which indicates that the increased use of pay-out in instruments is associated with an increased use of deferral (see Section 2.3.2).

See CRD IV, Article 94, 1, (m): "a substantial portion, and in any event at least 40 %, of the variable remuneration component is deferred over a period which is not less than three to five years and is correctly aligned with the nature of the business, its risks and the activities of the member of staff in question. Remuneration payable under deferral arrangements shall vest no faster than on a pro-rata basis. In the case of a variable remuneration component of a particularly high amount, at least 60 % of the amount shall be deferred. The length of the deferral period shall be established in accordance with the business cycle, the nature of the business, its risks and the activities of the member of staff in question".



- While the percentage of institutions with no deferral of variable cash (25-26%) and instruments (24-25%) remained stable, the percentage of institutions with at least 50% deferral of variable cash increased from 9% in 2010 to 31% in 2014, and the percentage of institutions with at least 50% deferral of variable remuneration in instruments increased from 5.5% in 2010 to 12% in 2014.
- According to identified staff, the percentage of those with a deferral ratio above 40% increased from 14% in 2010 to 58% in 2014.

Two thirds of the supervisors agree that some or a few firms go beyond and apply deferral above the minimum portion required.

Also the deferral period increased.

- The percentage of firms using a deferral period of 3 years (5 years) increased from 62 % (0 %) in 2010 to 67 % (8 %) in 2014, while the use of deferral periods below 2 years declined from 38 % in 2010 to 23 % in 2014. The percentage of firms with a maximum deferral period of 5 years increased from 3.5 % in 2010 to 8 % in 2014, and the percentage of firms with a minimum deferral period of 3 years increased from 9 % in 2010 to 13 % in 2014.
- The percentage of identified staff whose variable remuneration was deferred for 3 years increased from 21 % in 2010 to 74 % in 2014.

Only one third of the supervisors agree that some or a few firms go beyond and apply deferral periods above the minimum required.

Regarding the benefits of deferral in terms of reducing risk-taking, the majority of responding firms (70 %) and supervisors (67 %) agree or strongly agree that a deferral portion of 40-60 % of variable pay is sufficient to change staff risk-taking behaviour or firm risk, and the majority of firms (more than 80 %) and supervisors (67 %) agree or strongly agree that a deferral period of 3 years is sufficient to do so. 60 % of the supervisors, but only 35 % of the firms agree or strongly agree that a deferral period of 5 years is sufficient to change staff risk-taking behaviour or firm risk. 40 % of the supervisors, but only 25 % of the firms agree or strongly agree that a deferral period of 7 years is sufficient to change staff risk-taking behaviour or firm risk. However, a minority (27%) of identified staff answered that deferral rules for variable pay had no effect on their risk-taking behaviour.

Our survey of identified staff asking for attitudes on deferral (Figure 52 of Annex 0) provides the following results:

- 73% agree slightly, somewhat, to a certain or large extent that a deferral period of 3 years discourages from taking higher risk. Only 15% agree that a deferral period of 3 years discourages to a certain or large extent from taking higher risks, while 36% agree that this would be the case for a deferral period of 5 years, 33% for a deferral period of 7 years, and 31% for a deferral period of 10 years.
- 68% agree slightly, somewhat, to a certain or large extent that deferral of 40% discourages from taking higher risk. Only 12% agree that a deferral portion of 40% discourages to a certain or large extent from taking higher risks, while 21% agree that this would be the case for a deferral portion of 60%, and 35% for a deferral portion of more than 60%.
- Only 12% agree that a deferred portion paid contingent on attaining a predefined condition discourages to a certain or large extent from taking higher risks, but 41% agree that this discourages from taking higher risks somewhat.



- 45% agreed or fully agreed, but 47% disagreed to "I would prefer no deferral of my bonus and would accept a smaller bonus if this could be the case."
- 92% disagreed to "A deferral portion of 70% would not be problematic for me."
- 47% agreed or fully agreed, but 42% disagreed to "I prefer a smaller portion to be deferred and would accept a longer deferral period."

Our survey of supervisors also shows that:

- 67 % of supervisors agree to a large or very large extent to "At least 40 % of variable pay is deferred for more than three years and is correctly aligned with business and risk."
- 47 % agree to a large or very large extent, and 27 % to some extent to "At least 60 % of variable pay is deferred when variable pay is of a particularly high amount."
- "Effectiveness of deferral for 3-5 years of 40-60 % of variable pay in producing the desired prudential results" is ranked "to a large or very large extent" by 47 %, and "to some or a small extent" by 40 % of the supervisors.

The hypothesis that deferral of variable remuneration reduces risk-taking is supported by quantitative evidence. Using data from the iff firm survey, we examined the relationship between the change in the use of deferred cash variable remuneration for identified staff and changes of risk-taking measures between 2010 and 2014. Multivariate regressions show that increasing the ratio of deferred cash variable remuneration to total variable remuneration for identified staff associates with lowered financial assets impairment (see Section 2.1.4.).

(For interview extracts on deferred remuneration see Table 77 in Annex 5)

2.1.2.5 Ex-post risk adjustment (malus and clawback)

CRD IV requires that up to 100 % of the variable pay of material risk takers be subject to malus or clawback provisions.²⁹

Malus is an arrangement that permits the institution to prevent the vesting of all or part of deferred variable remuneration based on ex-post risk adjustments. Vesting of the deferred remuneration component depends entirely on both (i) the fulfilment of a performance condition and (ii) appropriate management of risks and compliance. Performance conditions are set according to the level of responsibility, and are increasingly demanding in line with the beneficiary's hierarchical level.

See CRD IV, Article 94, 1, (n): "the variable remuneration, including the deferred portion, is paid or vests only if it is sustainable according to the financial situation of the institution as a whole, and justified on the basis of the performance of the institution, the business unit and the individual concerned. Without prejudice to the general principles of national contract and labour law, the total variable remuneration shall generally be considerably contracted where subdued or negative financial performance of the institution occurs, taking into account both current remuneration and reductions in pay-outs of amounts previously earned, including through malus or clawback arrangements. Up to 100 % of the total variable remuneration shall be subject to malus or clawback arrangements. Institutions shall set specific criteria for the application of malus and clawback. Such criteria shall in particular cover situations where the staff member: (i) participated in or was responsible for conduct which resulted in significant losses to the institution; (ii) failed to meet appropriate standards of fitness and propriety".



Clawback is an arrangement under which the staff member has to return ownership of an amount of variable remuneration paid in the past or which has already vested to the institution under certain conditions.

According to the EBA Benchmarking Study, the level of ex-post adjustments was significantly reduced in 2013. This sharp decline comes as something of a surprise as in 2013 some institutions were subject to material administrative penalties and also experienced poorer performance than in 2012. Total amounts of ex-post adjustments affecting identified staff affect variable remuneration awarded for previous performance periods and are applied to deferred variable remuneration that has not yet vested. The data would tend to suggest that also lower ratios of variable remuneration to fixed remuneration could generally provide sufficient amounts for expost risk adjustments to be applied if necessary.

Cooperative banks have specific remuneration systems, which prevent them from applying malus. A small cooperative bank commented: "It's impossible to exercise expost performance adjustments in the form of malus on the variable remuneration components which refer to collective labour agreements because this could imply a breach of the collective agreements. Indeed, collective labour agreements state that the annual bonus for management and the productivity bonus must be paid in full in a specific time determined by collective agreements. The amount of the above mentioned bonuses is linked to indicators - set out by the collective agreement - that take into account profitability, risks, productivity and efficiency in order to measure the economic performance of the bank, and it is allocated to the staff on the basis of their placement. It would be difficult for the firm to reclaim the vested awards. With regard to individual agreements, we emphasize that ex-post performance adjustments in the form of malus on the variable are very burdensome, especially because the weight of variable remuneration in the total one is quite modest. We think that a threshold – in absolute or relative terms (in the latter case with reference to the gross yearly income) - below which ex post risk adjustments (malus) are discretionary."

Regarding **malus**, our survey of credit institutions and investment firms did not provide much reliable data but shows that:

- Only 10 % of firms report that malus has been exercised in past years.
- 12 % of firms (N=21) stated that malus arrangements either existed before 2010 or have been exercised in past years.
- The data provided is too limited to be able to draw conclusions as to the relationship between the size of variable pay (or the amount of outstanding deferred variable pay at risk) and the application of malus. 2010 data for malus was too scarce for comparisons.
- The number of identified staff subject to malus adjustments ranged from 1 to 63 in 2014 (the average being 12 in 2014).
- The main triggers of malus are: firm-wide performance conditions are not met (22 % of cases), individual was responsible for action which led to a substantial deterioration of the financial situation of the firm (19 %), due to the overall situation of the firm not directly linked to the individual (17 %), individual did not meet the required standards of behaviour (15 %), business unit performance conditions are not met (12 %), individual performance conditions are not met (10 %).
- In 13 % of the cases the firm is not able to apply malus as not practical under national law



Regarding **clawback**, our survey of credit institutions and investment firms shows that:

- Only in 1 % of the firms clawback arrangements were applied before 2010.
- Only in 1.5 % of the firms clawback has been exercised in past years.
- In 23 % of the firms clawback has not been completely possible.
- The respondents did not provide any data on either the number of staff affected by clawback or the total amounts of clawback.
- The main triggers of clawback are: Individual was responsible for action which led to a substantial deterioration of the financial situation of the firm (32 %), Individual did not meet the required standards of behaviour (14 %), Individual did not meet the required standards of competence (8 %), Variable pay is reduced if firm-wide performance conditions are not met (7 %)
- In 18 % of the cases, the firm is not able to apply clawback as not practical under national law.

Our survey of identified staff showed that in the majority of cases malus arrangements (58 %) and clawback arrangements exist (63 %).

Answers of supervisors indicate that

- 73 % of supervisors agree to a large extent (60 %) or very large (13 %) extent and none of them disagrees to "Total variable pay is paid or vests only if it is sustainable and justified and malus and clawback apply in situations of negative firm financial performance."
- 73 % of supervisors agree to a large (33 %) or very large (40 %) extent none of them disagrees to "Arrangements exist so that up to 100 % of the total variable pay is subject to malus or clawback (with triggers such as irresponsible conduct resulting in significant losses, or improper fitness and propriety)."

(Reponses from institutions, identified staff and consultants are reproduced in Annex 5.1 Table 79.)

2.1.2.6 Impact and relative effectiveness of the different measures as seen by survey respondents

Supervisors assess the benefits of the remuneration provisions lower than firms. "Increasing the usage of deferral, pay-out in instruments and malus/clawback to better align long-term incentives" has been ranked as:

- low (1-4) by 31 % and high (5-8) by 50 % of the firms,
- low (1-4) by 53 % and high (5-8) by 20 % of supervisors.

Table 12 shows that according to firms, supervisors and identified staff, deferral of variable remuneration is the most effective instrument in reducing staff risk-taking behaviour, followed by malus and clawback. Performance-based pay is considered effective in terms of reducing risk-taking by a majority of supervisors, while the opinions of firms and identified staff on the effectiveness of pay-out in instruments in discouraging risk-taking are somewhat divergent.

When asked about the most effective instruments in terms of cost effective and effect on excessive risk taking, banks found it difficult to answer. What is the best combination or mix may be subjective but banks have been differing in shares before the CRD regulations so the payment in shares is not seen as problematic for the



largest banks. See extracts from interviews on this issue of effectiveness and efficiency in Annex 5. Table 78 e.g. "The differed award is efficient from a bank perspective but from a risk perspective malus is most efficient (and least costly compared to clawback)" (Big listed bank interview, 13.11.2015).



Table 12: Agreement of firms, supervisors and identified staff to effects of remuneration provisions on staff risk-taking behaviour

	Percentage of respondents that agree*	Percentage of respondents that disagree**
Linking of individual variable pay to firm-level criteria has reduced staff risk-taking behaviour	Firms: 39 % Supervisors: 67 %	Firms: 37 % Supervisors: 0 %
Linking of individual variable pay to business area criteria has reduced Staff risk-taking behaviour	Firms: 39 % Supervisors: 67 %	Firms: 36 % Supervisors: 0 %
Linking of individual variable pay to individual- level criteria has reduced Staff risk-taking behaviour	Firms: 44 % Supervisors: 67 %	Firms: 35 % Supervisors: 0 %
Pay-out in shares and other equity is negatively related to staff risk-taking behaviour	Firms: 41 % Supervisors: 60 % Identified staff: 42 %	Firms: 50 % Supervisors: 7 % Identified staff: 33 %
Pay-out in equity-linked instruments is negatively related to Staff risk-taking behaviour	Firms: 33.3 % Supervisors: 60 % Identified staff: 42 %	Firms: 48 % Supervisors: 7 % Identified staff: 33 %
Pay-out in other types of instruments is negatively related to Staff risk-taking behaviour	Firms: 26 % Supervisors: 47 % Identified staff: 44 %	Firms: 49 % Supervisors: 20 % Identified staff: 56 %
A deferral portion of 40-60 % of variable pay is sufficient to change staff risk-taking behaviour	Firms: 70 % Supervisors: 67 %	Firms: 13 % Supervisors: 0 %
Deferral of 40 % discourages from taking higher risk	Identified staff: 68 %	Identified staff: 32 %
Deferral of 60 % discourages from taking higher risk	Identified staff: 67 %	Identified staff: 33 %
Deferral of more than 60 % discourages from taking higher risk	Identified staff: 68 %	Identified staff: 32 %
A deferral period of 3 years is sufficient to change staff risk-taking behaviour	Firms: 84 % Supervisors: 67 %	Firms: 10 % Supervisors: 0 %
Deferral of 3 years discourages from taking higher risk	Identified staff: 73 %	Identified staff: 27 %
Deferral of 5 years discourages from taking higher risk	Identified staff: 64 %	Identified staff: 36 %
Deferral of 7 years discourages from taking higher risk	Identified staff: 64 %	Identified staff: 36 %
Deferral of 10 years discourages from taking higher risk	Identified staff: 59 %	Identified staff: 41 %
Deferral rules for variable pay affected risk-taking behaviour	Identified staff: 74 %	Identified staff: 26 %
The introduction of malus reduces risk-taking incentives	Firms: 72 % Supervisors: 73 % Identified staff: 56 %	Firms: 14 % Supervisors: 7 % Identified staff: 44 %



The introduction of clawback reduces risktaking incentives

Firms: 69 %

Supervisors: 60 %

Identified staff: 55 %

Firms: 16 %

Supervisors: 7 %

Identified staff: 46 %

Note: *firms: "agree or strongly agree", supervisors: "agree to a small, some, large or very large extent", identified staff: "agree slightly, somewhat, to a certain extent, to a large extent"; ** firms: "disagree or strongly disagree", supervisors and identified staff: "agree not at all". A slightly different interpretation of answers is necessary for response answers provided by identified staff as based on them being asked to assess the effect of the measures on their own risk-taking, and not the effect on risk-taking in general.

2.1.3 Quantitative analyses of data provided by EBA and Bankscope

The following is based on EBA and Bankscope data matched with data about systemic importance from FSB (2015) and bank business models from the EU Business Model Monitor (Ayadi et al. 2015) providing a quantitative analysis of the relation between risk, performance and remuneration patterns of 138 leading banks. (For data set and methodology see Annex 3.2, 3.1). While the data set collected from the iff survey of credit institutions and investment firms is biased towards smaller firms, the data set provided by the EBA is supposed to cover 60% of the banking activity in each Member State and thus focuses on larger banks. However, the remuneration data from the EBA were only available to us for 2013 and 2014. We use these data to show changes in the remuneration patterns between both years and match them with data about banks' size, legal forms, business models and systemic importance to examine whether these changes differ between banking groups (see Section 2.1.3.1). Bankscope data are used to examine changes in financial stability and performance of firms over the longer period 2006-2014 on average and differentiated between banking groups (see Section 2.1.3.2). Knowledge about such differences will be helpful to assess the benefits of the remuneration provisions: they are likely to be highest for the least stable banking groups. Finally, we match performance data from Bankscope with the remuneration data from EBA to examine relationships between remuneration and firm performance in the period 2013-2014 (see Section 2.1.3.3).

2.1.3.1 Development of remuneration patterns (2013-2014)

To examine the changes in the remuneration structure for identified staff we compare the values of the remuneration variables between 2013 and 2014. Outliers which influence the mean have been eliminated. Table 13 shows the changes of different remuneration schemes for all banks (second column) and partitioned with respect to bank size, if it is a global systemically important bank (G-SIB), legal form, if state aid has been received, ownership and business model. An arrow pointing upward indicates an increase of the respective indicator of more than five percentage points, an arrow pointing downward indicates a drop of more than five percentage points. Indicators that have not changed by more than five percentage points in absolute value are left out of the table.



variable to total

Category	All	Ba	nk s	ize	GS	SIB	Leg	al fo	rm	Sta		Ba	nk d	own	ersh	ip	В	ank n	bus rode		S
Characteristic		small banks	medium size	large	ou	yes	listed	unlisted	delisted	no	yes	Commercial bank	Cooperative bank	n.a.	Nationalised bank	Savings bank	Diversified retail bank	Focused retail bank	Investment bank	n.a.	Wholesale bank
variable to total				K		И		Ŋ				K							K		
deferred variable to total variable	И		Z	K		И		Z	K		Z	K			K	Z	K	K		7	И
cash variable to total variable									7		7				7			7	Z		K
share variable to total variable	7	7			7		7		Z	7			7	7	Z	7			7	7	7
severance									7								K				

Table 13: Development of remuneration patterns for identified staff (2013-2014)

Source: own calculations based on remuneration data from EBA matched with data on bank characteristics from Bankscope, FSB (2015) and the EU Business Model Monitor (Ayadi et al. 2015)

On average, the ratio of variable/total remuneration for identified staff declined. This decline seems to be driven by large and global systemically important banks (G-SIBs), unlisted banks, commercial banks and investment banks. On average, the deferral ratio of variable remuneration dropped across the board. Pay-out of variable remuneration in cash increased for delisted banks, state-aided banks, nationalized banks, and focussed retail banks. However it decreased for investment banks and wholesale banks. On average, pay-out of variable remuneration in shares and share-linked instruments increased. This is attributable to small banks, not globally systematically important banks, listed banks, state aided banks, cooperative banks, savings banks, investment banks, and wholesale banks. However, it decreased for delisted banks and nationalized banks. The severance payments increased for delisted banks and fell for diversified retail banks.

2.1.3.2 Development of risk and performance (2006-2014)

The figures on the development of risk and performance (2006-2014) based on Bankscope data placed in Annex 4.1 show the development of bank stability and performance for the period 2006-2014. To measure risk we use three indicators: (1) the Tier 1 regulatory capital ratio, (2) the ratio of equity to total assets and (3) the ratio of impaired loans to gross loans. While the third one is an indicator only of credit risk-taking (which may be beneficial for the real economy), the first two are indicators of the solvency or loss-absorption capacity of the whole institution, and therefore more suitable to measure excessive risk-taking.



The tier 1 ratio (1) is defined as the ratio of Tier 1 equity capital (i.e. Common Equity Tier 1 capital and Additional Tier 1 capital) to risk-weighted assets according to the Basel III/CRD IV/CRR capital rules. 30 In contrast, (2) is defined as the ratio of equity to non-risk-weighted assets, also called leverage ratio. Empirical evidence shows that regulatory measures such as the Tier 1 ratio are misaligned with underlying risks. An explanation is that to reduce their risk-weights and the implied capital charges, banks engage in 'risk optimisation' without reducing any risks (Ayadi et al. 2015). The Basel III/CRD IV/CRR risk-based capital requirements aim to make excessive risk-taking less profitable by linking the capital requirements to the size of risk. However, this incentivizes banks to upgrade their risk management and design internal models to reduce their capital charges, creating a self-calibrating regime (e.g. Haldane 2012; Ferri, Neuberger 2015). There is a concern among researchers, supervisors and policy makers about regulatory arbitrage through the use of internal models. Banks may decrease their capital requirements by "changing the calibration of the risk-weights (i.e. changing from standard to internal models with lower average ratios or changing the internal models) or by changing the composition of the assets to assets with lower risk-weights" (Ayadi et al. 2015, pp. 52). Being neither based on internal riskweighting models nor on opinions of external rating agencies the simple leverage ratio is a better indicator of bank solvency than the risk-weighted regulatory capital ratio (e.g. Schäfer 2011, Admati, Hellwig 2014). A leverage ratio has been introduced in the Basel III framework³¹ to constrain the build-up of excessive leverage by banks and provide an extra layer of protection against model risk and measurement error. Therefore, we use equity/total assets as main indicator of bank stability, respectively excessive risk.

As performance indicators, we use Return on Average Assets (ROAA), Return on Average Equity (ROAE) and the cost-income ratio. ROAA (i.e. net income divided by average total assets) is a measure of a firm's total profitability or total (debt + equity) value, while ROAE (i.e. net income divided by average shareholders' equity) measures a firm's profitability only for its shareholders (so-called shareholder value). The cost-income ratio (i.e. operating costs divided by operating income) indicates how efficiently the firm is run. The lower it is, the more profitable the bank is.

On average, there is a remarkable increase in banks' solvency since 2011, measured by both the regulatory Tier 1 ratio and the equity to total assets ratio. However, the quality of loan portfolios (impaired loans/gross loans) improved only slightly and remains weak. Also bank's profitability (Return on Average Assets ROAA, Return on Average Equity ROAE) and efficiency (inverse cost-income ratio) remain at low levels. These results confirm those of EBA (EBA 2015a) and ECB (FSB 2015b) (see Annex 2.2).

The Basel III/CRD IV/CRR rules require banks to hold a minimum Tier 1 ratio of 6 % (or 8.5 % including the capital conservation buffer and G-SIBs buffer) since 2015 (up from 4 % under Basel II), which is composed of 4.5 % of Common Equity Tier 1 (CET1), plus an extra 1.5 % of Additional Tier 1 (AT1).

Basel III intends to introduce a minimum leverage ratio of 3 %, measured by the ratio of Tier 1 capital to average total consolidated assets (exposures of all assets plus non-balance sheet items) (BCBS 2014), which would limit the balance sheet size to the 33.3-fold of the Tier 1 capital. According to the EU Capital Requirements Regulation CRR, EU banks are required to disclose the leverage ratio since January 2015, while a minimum regulatory leverage ratio shall be implemented as a binding requirement not before 1st January 2018 (CRR 2013). Admati and Hellwig (2013) suggest that banks should maintain equity capital of 20 % to 30 % of their total assets, unadjusted for risk.



- Solvency measured by equity/total assets differs remarkably across banks of different sizes, legal forms, ownership structures and business models.
- Large and medium-sized banks are less stable than small banks measured by equity/total assets. The differences between large and small banks as well as between medium-sized and small banks are statistically significant (2014: at 0.1 % level, 2013: at 1 % level). The regulatory Tier 1 ratio does not differ significantly across banks of different sizes.
- Global systemically important banks (G-SIBs) are less stable than non-GSIBs, measured by the equity to total assets ratio (see Figure 45, Annex 4.1).
- Listed banks are less stable than unlisted ones, measured by the equity to total assets ratio (see Figure 46, Annex 4.1)
- Commercial banks are less stable than nationalized banks and cooperative banks, measured by the equity to total assets ratio (see Figure 49, Annex 4.1).
- Investment banks are less stable than banks on average, measured by the equity to total assets ratio. This difference is significant (2014: at 5 % level, 2013: at 10 % level). In particular, investments banks have significantly lower equity/total assets than focused retail banks (2014: significant at 10 % level). (see Figure 50, Annex 4.1)

2.1.3.3 Relationships between remuneration and risk/performance (2013-2014)

We match the EBA remuneration data of 2013 and 2014 with Bankscope data for the same years to examine the relationships between the remuneration structure and risk or performance of individual institutions. These relationships based on simple descriptive statistics cannot be interpreted as causal ones. If we observe for example a negative relationship between firm risk and variable/fixed remuneration, this may indicate that the structure of remuneration is better aligned to risk-taking at the firm level (riskier firms using less variable remuneration). Likewise, a positive relationship between firm risk and e.g. use of deferred remuneration would indicate a better risk alignment by deferral of remuneration. On the other hand, a negative relationship between firm risk and deferral may have been caused by a negative effect of deferral on risk-taking.

To identify relationships between the various remuneration and risk/performance variables in 2013 and 2014 we use Pearson correlation coefficients, two-sided significance tests and scatterplots. In the following only those scatterplots are presented which show a correlation coefficient of at least 0.4. Beyond the correlation between remuneration and risk/performance variables in each year, we examine the correlation between the 2013-2014 changes of the respective variables.

Relationship between ratio of variable to total remuneration and firm risk or performance:

The ratio of variable to total remuneration for identified staff as well as for all staff does not seem to be related to solvency (Tier 1 ratio, equity/total assets). In both years, the correlation coefficients are negative, but very low and insignificant. Also the correlations of the changes are low (0.05).

Figure 9 shows that credit risk (impaired loans/gross loans) is negatively related to the share of variable pay in total pay for identified staff. The correlation increased from -0.34 in 2013 to -0.44 in 2014 and is significant at the 1 % level. This may indicate a better alignment of remuneration to credit risk. The relationship between the variable remuneration ratio for all staff and the ratio of impaired loans is less pronounced (correlation -0.31 in 2013, -0.42 in 2014). However, the correlation of the changes between 2013 and 2014 is low (0.09) and insignificant.

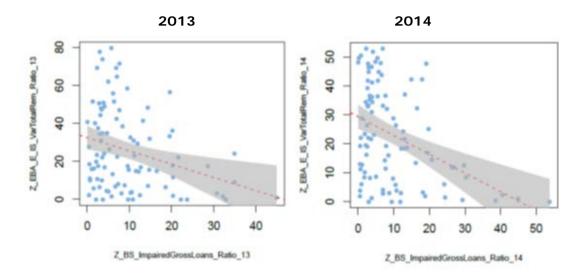


Figure 9: Ratio of variable/total remuneration for identified staff and impaired loans/gross loans, 2013 and 2014

The relationship between variable/total remuneration for identified staff and firm performance measured by Return on Average Assets (ROAA), Return on Average Equity (ROAE) or cost-income ratio is positive, but low in both years (correlation below 0.2). The same holds if we replace the ratio of variable remuneration for identified staff by the ratio of variable remuneration for all staff.

Relationship between guaranteed variable remuneration and firm risk or performance:

The use of guaranteed variable remuneration for identified staff does not seem to be related to the firm's solvency (Tier 1 ratio, equity/total assets) and efficiency (cost-income ratio) in both years. The relationship between guaranteed variable remuneration and credit risk (impaired loans/gross loans) is positive, which would indicate a wrong risk alignment, but the correlation is low (0.25 in both years). Guaranteed variable remuneration is negatively related to total firm performance (ROAA) and shareholder value performance (ROAE), but the correlation is low (2013: below -0.1, 2014: -0.16 for ROAA, -0.33 for ROAE).

Relationship between severance payments and firm risk or performance:

Figure 10 shows that the ratio of severance variable remuneration to total variable remuneration for identified staff increases with impaired loans/gross loans (correlation in both years 0.49, significant at 1 % level). Thus, severance payments do not seem to be aligned to credit risk.

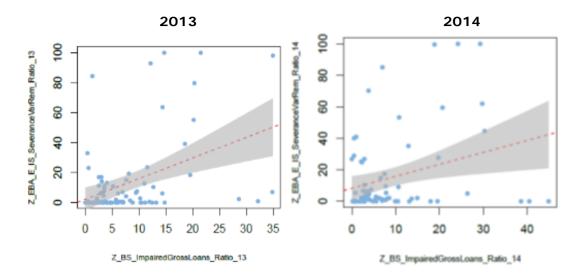


Figure 10: Ratio of severance variable remuneration to total variable remuneration for identified staff and impaired loans/gross loans, 2013 and 2014

The relationship between severance payments and the cost-income ratio changed from negative in 2013 to positive in 2014, but the correlation is low (2013 -0.29, 2014: 0.13) and the relationships are insignificant. The ratio of severance variable remuneration to total variable remuneration for identified staff is negatively related to ROAA (2013: -0.29, 2014: -0.27) and ROAE (2013: -0.35, 2014: -0.27) at a significance level of 1 %. Thus severance payments do not seem to be aligned neither to total firm performance nor to shareholder value performance of the institution.

Relationship between pay-out in instruments and firm risk or performance

The ratio of variable remuneration in cash to total variable remuneration for identified staff does not seem to be aligned to solvency measured by the Tier 1 ratio (correlation 2013: 0.11, 2014: 0.04) or equity/total assets (correlation 2013: 0.06, 2014: 0.03). The same holds for total firm performance ROAA and shareholder value performance ROAE, where the correlation is positive but below 0.2 in both years, as well as the cost-income ratio (correlation 2013: -0.19, 2014: -0.14). The relationship between the ratio of variable remuneration in cash to total variable remuneration for identified staff and credit risk (impaired loans/gross loans) is significantly positive with correlation coefficients above 0.3 (correlation 2013: 0.31, 2014: 0.36, significance level 1 %). However, the correlations of the changes between 2013 and 2014 are low and insignificant.

Also the ratio of variable remuneration in shares and share-linked instruments to total variable remuneration for identified staff is not related to the Tier 1 ratio (correlation 2013: -0.15, 2014: -0.07), equity/total assets (correlation 2013: -0.03, 2014: -0.01), total firm performance ROAA (correlation 2013: 0.11, 2014: 0.13), shareholder value performance ROAE (correlation 2013: 0.04, 2014: 0.08) and cost-income-ratio (correlation 2013: 0.16, 2014: 0.15). However, its correlation with credit risk, measured by impaired loans/gross loans, increased from -0.15 in 2013 to -0.29 in 2014 and is significant at the 1 % level. The change in impaired loans/gross loans is positively correlated with the use of shares and share-linked instruments (0.15), but this correlation is insignificant.

The ratio of variable remuneration in other type instruments to total variable remuneration for identified staff does not seem to be aligned to solvency (Tier 1 ratio, equity/total assets), credit risk (impaired loans to gross loans) and the cost-income ratio (correlation below 0.2). However, we find a significant negative and relatively high correlation with firm performance ROAA and shareholder value performance ROAE in 2013 (ROAA: -0.44, ROAE: -0.45, 1 % significance level), which vanished in 2014 (ROAA: 0.07, ROAE: 0.03). This is illustrated in Figure 11 and Figure 12. In 2013, other type instruments were more often used by firms with lower profitability, while they are not related to profitability in 2014.

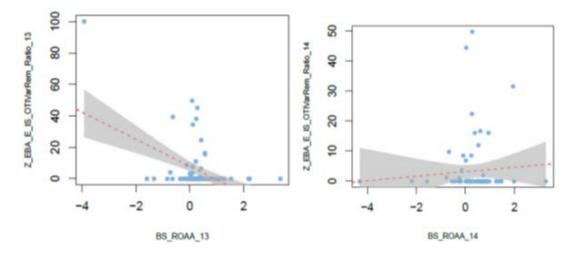


Figure 11: Ratio of variable remuneration in other type instruments to total variable remuneration for identified staff and ROAA in 2013 and 2014

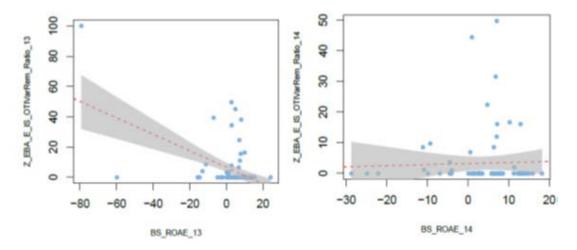


Figure 12: Ratio of variable remuneration in other type instruments to total variable remuneration for identified staff and ROAE in 2013 and 2014

Relationship between deferred remuneration and firm risk or performance

The use of deferral, measured by the ratio of variable remuneration deferred to total variable remuneration for identified staff does not seem to be aligned to the firm's risk or performance in both years. For all indicators, the correlation coefficients are insignificant and below 0.19 and even decreased from 2013 to 2014 (e.g. ROAA 2013:



-0.15, 2014: 0.04; ROAE 2013: -0.19, 2014: 0.06). Also the correlation of the changes between 2013 and 2014 are very low.

Relationship between ex-post risk-adjustment (malus and clawback) and firm risk or performance

The use of ex post risk adjustment (malus and clawback), measured by the ratio of ex-post adjusted variable remuneration to total variable remuneration for identified staff does not seem to be aligned to the Tier 1 ratio, equity/total assets, impaired loans/gross loans, cost-income ratio in both years (correlation below 0.2, insignificant). For 2013, we find a negative correlation with firm performance ROAA (-0.35, significant at the 1 % level) and ROAE (-0.39, significant at the 1 % level), which vanishes in 2014 (ROAA: -0.10, ROAE: -0,17, insignificant). This is illustrated in Figure 13 and Figure 14. While in 2013, less profitable firms used more often malus or clawback for identified staff than more profitable ones, there is no alignment of malus or clawback to profitability in 2014.

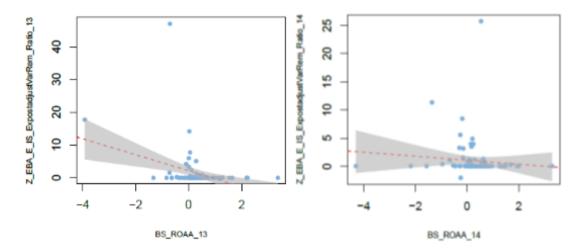


Figure 13: Ratio of ex-post adjusted variable remuneration to total variable remuneration for identified staff and ROAA in 2013 and 2014

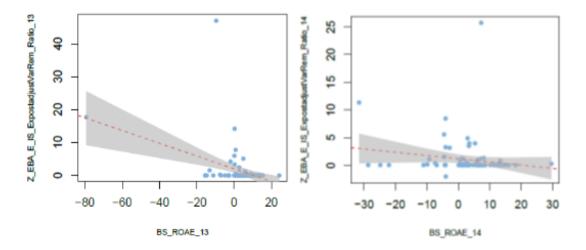


Figure 14: Ratio of ex-post adjusted variable remuneration to total variable remuneration for identified staff and ROAE in 2013 and 2014



Relationship between executive pay and shareholder value

To examine whether executive pay is aligned to shareholder value we focus on just 13 banks for which executive remuneration and market capitalization data are available for the years 2013-14. The analyses presented in Annex 3.2.2 show that: While the variable pay element of executive pay is indeed positively related to changes in shareholder value its effect is swamped in total executive pay by the negative relation between changes in shareholder wealth and the fixed element of bank executive pay. There is no statistically significant relationship between changes in shareholder value and any element of European banker's remuneration. It appears that whatever drives remuneration increases (and on average there are large increases) it is not increases in shareholder value.

These results, which contrast to evidence for US banks may reflect the diversity of financial systems: while in the shareholder-value oriented US system a positive correlation between remuneration and shareholder wealth is seen as a beneficial instrument to maximize shareholder value, it may be an obstacle to maximize the value for all stakeholders in the financial system of Europe, which tends to be more stakeholder-oriented. Academic literature shows that linking remuneration to shareholder value has been one of the main drivers of excessive risk-taking. The maximum ratio implemented in Europe appears to be beneficial in reducing the bias towards maximizing shareholder interests at the detriment of other stakeholders, such as depositors and taxpayers.

Regression results

To examine the influence of the 2013-2014 changes in the remuneration variables on the 2013-2014 changes in the risk/performance variables and vice versa we estimated bivariate regression models in both directions. The changes in the remuneration variables are not significant for the changes in the risk and performance variables, and the changes in the risk and performance variables are not significant for the changes in the remuneration variables. Summing up, our processing of 2013 and 2014 data shows that for these years remuneration of identified staff is not significantly aligned to risk and performance at the firm level, and changes in risk and performance cannot be explained by changes in remuneration structures. Note that these results have to be interpreted with care because the classification of identified staff changed in 2014.

2.1.4 Quantitative analyses with iff-survey data (Q1)

Different results however are achieved when using iff-survey data from the institutions questionnaire for years 2010 and 2014. The question is whether and to what extent recent remuneration trends can be associated with changes in institutions' riskiness. To start with, we set two key questions:

- (1) What are some of the recent trends?
- (2) Do those changes in remuneration schemes induce less risk-taking?

We introduced three remuneration variables based on changes in the period 2010 to 2014 reported directly by banks in responses to our ad hoc survey.

d_varrem:change in the variable share remunerationdvarbchange in the variable share paid in cashddef_varchange in the deferred variable share in cash



As better described and commented in other parts of this Report, our data show that, already in 2014, there were some changes in the remuneration schemes of institutions. On average:

- a. the variable share remuneration (d_varrem) decreases by 3.66 % for the total sample, by 8.6 % for the larger banks excluding the Banche di Credito Cooperativo (BCC) and by a mere 1.4 % for the BCC;
- b. the variable share paid in cash (dvarb) decreases by 0.9 % for the total sample, by 3.1 % for the larger banks and is constant for the BCC (which were using variable remuneration much less);
- c. the deferred variable share in cash (ddef_var) increases by 3.8 % for the total sample, by 9.9 % for the larger banks and by only 1.6 % for the BCC.

As to measures of risk-taking available from our survey data, we took the 2010-2014 changes in: impaired loans (d_impair); coverage ratio (dcoverage); accumulated impairment on financial assets to total (gross) assets (daccimpa); impaired financial assets to total operating income (dimpa_finass); Value at Risk (dvar). The latter performance variables are described as follows.

d_impair change in impaired loans dcoverage change in coverage ratio

daccimpa change in accumulated impairment on financial assets to

total (gross) assets

dimpa_finass change in impaired financial assets to total operating

income

dvar change in VaR

Table 14: Correlation between change in remuneration and risk taking (iff-survey)

	d_varrem	dvarb	ddef_var	d_impair	dimpa_fin	daccimpa	Dcove- rage	dvar
d_varrem	1.0000							
dvarb	-0.36623	1.0000						
ddef_var	0.1469	-0.22732	1.0000					
d_impair	-0.0540	0.2545	-0.1931	1.0000				
dimpa_finass	-0.0225	0.3101	-0.3093	0.47382	1.0000			
daccimpa	0.0414	0.3847	-0.1635	0.68993	0.2915	1.0000		
dcoverage	0.1137	-0.49203	-0.2258	-0.1240	-0.0385	-0.1068	1.0000	
dvar	0.0380	0.1440	-0.1473	-0.0455	0.1011	0.1430	-0.0520	1.0000
intern_gov_q	-0.1623*	-0.0575	-0.0246	-0.0693	-0.52673	-0.1752	0.1642	-0.0677

Exponents ^{1,2,3} indicate statistical significance at the 0.10, 0.05, and 0.01 level.

However, we cannot stop at correlations and need to move on to regression analysis for two main motives. First, as usual, pairwise correlations might be unable to detect links between any two variables that can instead be observed once we control for other factors via multivariate regression. Second, our database features two potentially nasty biases: i) one country (Italy) is incommensurably overrepresented (133 of the 195 banks or 68.2 %); ii) one category of banks the tiny BCC is also disproportionately represented (128 or 66.2 %). Unless we control for them appropriately, these two strong biases might distort our results. A control is offered by the multivariate regression. Hence, we inserted the two dummies ita (a dummy variable taking 1 if the bank is from Italy and 0 otherwise) and bcc (a dummy variable taking 1 if the bank is a BCC and 0 otherwise) to account for a possible shift effect on the intercept. In addition, to control for possible impact on the slope we included interaction variables between bcc and, in turn, d_varrem, dvarb, and ddef_var.



We considered also two independent dummy variables to capture banks' business model:

 $bm_ass = 1$ if the bank has > 7.5 % of asset management in 2014 and 0 otherwise; $bm_iv = 1$ if the bank has > 17.5 % of investment activity in 2014 and 0 otherwise.

The results are synthesized in the table below.

- increasing the cash paid share of the variable remuneration (dvarb>0)
 associates with increased loan impairment (d_impair) and financial assets
 impairment (dimpa_finass);
- increasing the deferred share of cash variable remuneration (ddef_var>0) associates with lowered financial assets impairment (dimpa_finass);

The ita and bcc dummies are sometimes significant and the same happens for the slope interaction between bcc and the variables capturing changes in remuneration policies (d_varrem, dvarb, ddef_var).

The business model variables (bm_inv, bm_ass) show no significance.



Table 15: Multivariate analysis remuneration policies/risk exposure

	Dependent variables						
	Regression o	n d_varrem					
Regressors	D_impair	Dimpa_finass	Daccimpa	Dcoverage	Dvar		
D_varrem	-0.034	-13.844	-4.196	-1.255	1.681		
Ita	0.182	4.841	1.547	1.056***	-1.920		
Всс	0.359	-1.277	0.550	-0.024	1.078		
D_Varrem_bcc	-6.986*	1.565	-10.151	-0.055	-20.106*		
Bm_inv	0.168	-0.769	-0.809	-0.053	-0.628		
Bm_ass	-0.318	-0.189	1.190	-0.262	0.599		
Good_gov	0.451	-2.025*	-0.315	-0.119	-1.453		
Bad_gov	0.029	5.955	1.595	-0.119	-1.425		
Regression on d_v	varb						
Dvarb	1.562**	4.093***	2.116	-86.178	0.123		
Ita	0.535	1.237	1.317	-21.480	-1.598		
Всс	0.079	-1.837	-0.111	9.326	1.561		
Dvarb_bcc	Omitted	Omitted	Omitted	Omitted	Omitted		
Bm_inv	0.328	-0.874	-0.731	27.241	-0.253		
Bm_ass	-0.153	-2.911	-0.172	-29.185	0.795		
Good_gov	0.579	-2.184**	-0.575	10.414	-1.410		
Bad_gov	-0.002	1.831	-0.690	3.265	-1.280		
Regression on ddo	ef_var						
Ddef_var	-0.234	-8.022*	-0.544	-0.796	-1.586		
Ita	0.387	2.046	1.753	0.975***	-0.664		
Всс	0.390	-2.692*	-0.596	-0.250	0.445		
Ddef_var_bcc	Omitted	Omitted	31.874**	Omitted	Omitted		
Bm_inv	0.381	-1.089	0.831	-0.050	0.305		
Bm_ass	-0.385	-1.365	-1.379	-0.235	0.430		
Good_gov	0.595	-2.114*	-1.130	-0.219	-0.509		
Bad_gov	0.106	1.700	-1.560	-0.191	-0.861		

Note: ***, **, and * indicate, respectively, statistical significance at the 0.10, 0.05, and 0.01 level.

These econometric analyses therefore offer some initial support for the hypothesis that recent changes in banks' remuneration policies are having an influence on risk-taking in European banks".



2.2 Cost connected to the implementation of remuneration provisions

2.2.1 Implementation and compliance costs

The CRD IV remuneration rules and the December 15, 2015 EBA guidelines for implementing those rules will undoubtedly increase the costs of administering the remuneration practices of credit institutions and investment firms.

What are the anticipated costs of implementing the CRD IV remuneration rules?

The costs mentioned most often in the documents reviewed (e.g., the most recent EBA guidelines and the EBF response to the earlier EBA draft guidelines) were as follows:

- Difficulty in attracting high quality staff, presumably resulting in lower profits accruing to the affected firms
- The cost of setting up and maintaining remuneration committees
- The costs of employing more human resources staff to administer the more complicated remuneration system
- The IT costs of developing new software to keep track of the now more numerous and complicated components of remuneration
- The costs related to issuing variable remuneration in shares (if share-linked instruments were not allowed) or share-linked instruments
- For small institutions, the potential need to increase their capital base
- The costs of conducting or commissioning an annual independent review of remuneration policy
- The costs of the required mandatory disclosures

The above costs will be incurred into two broad ways. First, there will be a *one-time implementation cost* (e.g., setting up IT systems to handle the new remuneration practices). Second, there will be an *ongoing compliance cost* (e.g., annual reporting requirements or the on-going operation of a new remuneration committee).

Are the overall costs proportional?

Overall, the EBA Guidelines assert that the implementation and compliance costs of the CRD IV remuneration rules will be modest, especially in comparison to the great benefits of the added stability of EU banking system as a whole. The EBA recognized, however, that small, non-complex institutions might face disproportionate costs. Commenting on its earlier proposal that the rules apply to all institutions, regardless of size, the most recent guidelines state (p. 98) that doing so "... would lead to significant costs (and possible unintended consequences on the structure of the remuneration schemes) for small institutions where normally not very sophisticated remuneration systems and risk management tools are used and the level of variable remuneration is low.

Confirmation of that view as it pertains to small institutions can be found in the *iff* survey of credit institutions and investment firms.

For the purposes of analysing the role of proportionality in the application of the CRD IV remuneration rules, we divided the institutions who responded to the *iff* survey into three categories, according to the size of their revenues.



Group 1: 144 institutions whose revenues were less than EUR 100 million 32

Group 2: 26 institutions whose revenues were greater than EUR 100 million but less than EUR 1 billion

Group 3: 22 institutions whose revenues were greater than EUR 1 billion.

Specific quantitative estimates of each of the costs of implementation mentioned above were not forthcoming from any of the surveyed credit institutions and investment firms. Indeed, given the uncertainties involved, it is not surprising that the relevant institutions were either unwilling or unable to provide specific estimates. We can get a sense of their views, however, from their responses to some of the survey questions.

Question 6.2 on the bank survey asked each respondent to first "[e]stimate the implementation cost associated with the implementation of these provisions [the CRD IV rules] for your firm" and then to estimate the compliance costs associated with the implementation of the rules. The question then listed five costs involved in changing the rules about variable pay: (1) the cost of deferral; (2) the cost of pay-out in instruments; (3) the cost of malus; (4) the cost of clawback; and (5) the cost of the bonus cap. Thus, in all, the institutions were asked about ten costs, the compliance and implementation costs of each of the five rules. While specific estimates could be provided, most chose to select one of five available categories that indicated how much implementation would affect their costs: "not at all", "to a small extent", "to some extent", "to a large extent" or "to a very large extent". The results are summarized in the two Tables below.

Among the small institutions, between 85 % and 90 % responded that both the implementation and compliance costs of deferral, pay-out in instruments, malus and clawback would affect their costs either to a large or very large extent (see the figures in bold in the tables below). By contrast, the costs of the bonus cap did not loom large for the small institutions. More than 90 % said that the bonus cap would not affect their costs at all. This is likely because, as we have seen, the typical ratio of variable pay to fixed pay is far below 100 % so that the cap will have little or no effect on the small credit institutions and investment firms.

The situation was less clear for the large institutions. Over 80 % of the large institutions chose the middle categories ("to a small extent", "to some extent" or "to a large extent") with regard to the compliance and implementation costs of deferral and the cost of pay-out in instruments. The large banks thought that the costs of malus and clawback would be smaller, with a significant number choosing either "not at all" or "to a small extent". The responses to the question about the costs of implementing the bonus were roughly evenly split among "not at all", "to a small extent" and "to some extent".

Respondents were given space to add open-ended comments for this question. Two large banks provided overall cost estimates, one for EUR 2.5 million and the other for EUR 5 million. The comments also revealed an ambiguity in how the credit institutions and investment firms responded. Some were reporting on the cost of these rules as they were currently being applied in their institution; others responded prospectively, reporting how much it would cost them if they were asked to implement the rules.

Note that the great majority of respondents in Group 1 were Italian cooperative banks.



Table 16: By how much will implementation affect costs?

	Not at all or to a small extent	To some extent	To a large extent or to a very large extent
Cost of deferral			
Small	5.9 %	1.5 %	92.7 %
Medium	21.1 %	42.1 %	57.9 %
Large	11.1 %	55.6 %	33.3 %
Cost of pay-out in instruments			
Small	6.6 %	0.7 %	94.6 %
Medium	60.0 %	16.7 %	33.4 %
Large	16.7 %	38.9 %	44.4 %
Cost of malus			
Small	9.6 %	0.7 %	89.7 %
Medium	57.9 %	26.3 %	15.8 %
Large	66.7 %	22.2 %	11.1 %
Cost of clawback			
Small	11.7 %	2.2 %	86.0 %
Medium	83.4 %	16.7 %	0.0 %
Large	84.7 %	7.7 %	7.7 %
Cost of maximum ratio			
Small	97.0 %	0.7 %	2.2 %
Medium	70.6 %	23.5 %	5.9 %
Large	55.5 %	27.8 %	16.6 %

Table 17: By how much will compliance affect costs?

	Not at all or to a small extent	To some extent	To a large extent or to a very large extent
Cost of deferral			
Small	5.2 %	2.2 %	92.6 %
Medium	26.3 %	47.4 %	26.3 %
Large	11.8 %	52.9 %	35.3 %
Cost of pay-out in instruments			
Small	6.6 %	1.5 %	91.9 %
Medium	55.5 %	22.2 %	22.2 %
Large	11.8 %	52.9 %	35.3 %
Cost of malus			
Small	9.6 %	0.7 %	88.7 %
Medium	52.7 %	31.6 %	15.8 %



Large	58.9 %	31.3 %	5.9 %
Cost of clawback			
Small	12.5 %	2.2 %	85.3 %
Medium	77.8 %	22.2 %	0.0 %
Large	69.3 %	23.1 %	7.7 %
Cost of maximum ratio			
Small	96.3 %	0.7 %	1.5 %
Medium	76.5 %	23.5 %	0.0 %
Large	56.3 %	31.3 %	12.5 %

Another source of information about the need for proportionality in the application of the CRD IV rules comes from the *iff* survey questions about whether the credit institutions were operating under a waiver of the remuneration rules and, if so, which rules had been waived. The relevant two survey questions were as follows and are summarized in the table below: q 2.1 Has your firm applied for or otherwise availed itself of a waiver of certain remuneration provisions?; q 2.3 If your firm is using the legal possibility of a waiver, please specify for which provisions they apply and indicate the extent of the cost savings of disapplying?

Not surprisingly, the small banks with relatively low revenues were far more likely than the larger banks to be operating with a waiver of at least one of the CRD IV remuneration rules. Almost 90 % of the small credit institutions and investment firms had a waiver as compared to 54 % of the medium-sized credit institutions and investment firms and 40 % of the largest credit institutions and investment firms.

Institutions that were using a waiver were asked whether they were waiving any of five provisions: (1) pay-out in instruments; (2) deferral and retention rules; (3) the maximum ratio; (4) the requirement to have a remuneration committee; and (5) other unspecified provisions.



Table 18: Institutions using a waiver

	Group 1 - Small (n=144)	Group 2 – Medium(n=26)	Group 3 – Large (n=22)
2.1 Has your firm applied for or otherwise availed itself of a waiver of certain remuneration provisions under the principle of proportionality?	88.9 % (128/144)	54.2 % (13/24)	40.0 % (8/20)
2.3 If your firm is using the legal possibility of a waiver, please specify for which provisions they apply.			
Firm makes use of waiver to disapply pay-out rules in instruments	85.1 % (109/128)	84.6 % (11/13)	75.0 % (6/8)
Firm makes use of waiver to disapply deferral and retention rules	84.4 % (108/128)	84.6 % (11/13)	97.5 % (7/8)
Firm makes use of waiver to waive the maximum ratio	77.3 % (99/128)	15.4 % (2/13)	0.0 % (0/8)
Firm makes use of waiver to waive the requirements for a remuneration committee	81.2 % (104/128)	30.8 % (4/13)	12.5 % (1/8)
Firm makes use of waiver to waive other provisions	12.5 % (16/128)	23.2 % (3/13)	25 % (2/8)

Among the small banks operating with a waiver, the vast majority were using their waiver to disapply all of the listed CRD IV remuneration rules (the maximum ratio, pay-out in instruments, deferral and retention and the requirement to establish a remuneration committee). Among the larger banks operating with a waiver, most were using the waiver to disapply the rule about pay-out in instruments or deferral and retention; only a few were using the waiver to avoid the maximum ratio or the requirement to establish a remuneration committee.

Respondents were also asked the open-ended question, "If you were to no longer enjoy the waiver and all provisions were to apply to your firm, to what extent would these increase your overall costs?" We received 45 responses. Six German savings banks wrote that the nature of their business was such that German law would not allow them to apply the CRD IV rules. Eleven Italian cooperatives wrote that, while they could not provide a quantitative estimate of the increase in overall costs, they would likely have to hire an additional 0.5 full-time employee, a large increase for these small banks. The larger banks that were using waivers tended to focus on the effect that applying the rules would have on employee recruitment and retention. Four firms noted that they would have to create instruments in order to pay-out variable remuneration in instruments.

While all of the costs listed at the beginning of this section were mentioned in the context of the CRD IV remuneration rules, estimates of the actual size of these costs were rarely offered. Nonetheless, we have more information about some of those costs and can describe the nature of the anticipated costs, document some of the points made either by those who submitted comments as part of the EBA



consultations or in response to the *iff* surveys. Note also that issues around the possible cost in terms of recruiting and retaining staff are discussed in Section 3.4.

Setting up and maintaining remuneration committees

Article 95 of CRD IV requires that "that institutions that are significant in terms of their size, internal organisation and the nature, the scope and the complexity of their activities establish a remuneration committee." The EBA Guidelines therefore require that all "significant institutions" establish an independent remuneration committee. Specifically, the guidelines (p. 31) say that "[i]n accordance with Article 92(1), in conjunction with Article 95(1) of the CRD, all institutions which are themselves significant, considering the individual, parent company and group level, must establish a remuneration committee. The guidelines ask (p. 84) that the competent authorities make sure that such a committee has been established. While the guidelines only require that significant institutions establish a remuneration committee, it recommends that all institutions do so (p. 89).

The decision about the requirement for non-significant institutions to establish a remuneration committee thus lies with the competent authorities. According to Table 18 above, most small credit institutions reported that they were exempted from "the requirements for a remuneration committee". Instead only 1 out of 22 significant banks reported that they had been exempted from having such a committee.

Apparently, many of those who responded in the EBA consultations thought that requiring subsidiaries of significant institutions to have their own remuneration committees "would result in significant costs, increase administrative burden, and reduce efficiency in return for questionable governance benefit" (EBA 2015d, p. 133). In response, the EBA made it clear that only subsidiaries that were themselves significant would be required to establish their own committees. In its interview with iff, however, a remuneration consultancy noted that even though "the Remuneration Committees had existed in most banks prior to the crisis so no new setting up costs were likely for many banks ... the level of attention, seriousness, accountability and disclosure of the remuneration committee work has been heightened significantly (both at the level of the board and the internal organisation)."

The responses on the *iff* survey regarding effectiveness of these committees in reviewing remuneration policies (used to inform Section 2.3.4 on corporate governance measures) show that a majority seems to be of the opinion that these committees are rather less important than other instruments. In a group discussion with internationally significant banks, the banks noted what they assumed would be the high cost of entity remuneration committees.

From their perspective, a major issue involves proportionality as it applies to complex global firms with subsidiaries operating in various jurisdictions. Creating a remuneration committee at each organisational level does not seem to them to be consistent with the sound remuneration practices that the regulation seeks to enforce. If governance is set at group level for the entire organisation, having local committees on remuneration may lead to instances where local structures of pay are not in line with the corporate policy. For example, key staff in the US would be required to sit on US remuneration committees when the issues discussed there would be far removed from having an impact on the overall firm.

Most problems with the requirement that a remuneration committee be established concern small institutions that are assumed to have the same absolute cost for



establishing and operating remuneration committees as the larger institutions and are therefore disproportionate.

A survey conducted by hkp group Markt Banken-Barometer in Spring 2015, and summarised in *die bank* in November 2015, argued that the German implementation of the EU CRD IV regulations via the Institutsvergütungsordnung provides limited guidance on how the remuneration committees were to be structured. This they argue is further complicated by the fact that in Germany, a dual-tier governance structure exists, whereas they consider that the EU regulation seems to presume single-tier boards. This raises the questions of whether there has to be an independent committee outside the existing management structure, whether the president and/or vice president should be full- or part- time and how the time spent working on the remuneration committee is itself remunerated.

The study in *die bank* provides data with regard to the cost of such committees and reveals the difference between small and large credit institutions and investment firms in the costs related to the establishment and operation of remuneration committees. It should be noted, however, that the definition of "small" institutions in this study as those with up to 2.500 employees is not consistent either with the idea of a "small non-complex" institution or with the definition of "small" applied in the iff-survey (i.e., revenues less than \$100 million euro).

As reported by the journal, the 27 banks surveyed had held at least one meeting of their remuneration committee in 2014. "The actual effort to comply with the requirements for a remuneration committee was not linked to the size of the institution. ... The number of members of the committee was between 3 and 10 and there was no difference for small and big firms. On an average the committee gathered three times a year.... The implementation of a remuneration committee imposes similar cost to big as well as small institutions" (p. 70, own translation).

In a table, they estimated the cost for small and for big institutions. They estimated that for small institutions (i.e., those with less than 2500 employees), 0.7 full-time equivalent (FTE) had to be allocated to management functions dealing with remuneration issues; the corresponding number for large banks was 1.35 FTE. In six out of ten institutions, the president of the Committee is also the human resources director of the institution. Expressed in a percentage of all available FTEs, small institutions would have to dedicate 4.7 % of their personnel while big banks only 0.9 % to these functions. An additional 0.26 FTE is calculated as the additional time the president of the committee has to invest while 0.18 FTE is calculated for the vice president. The respective figures for big banks are 0.29 FTE and 0.23 FTE. Including other function to be performed they conclude that small banks dedicate altogether 1.07 FTE to the remuneration committee while big banks dedicate 2.09 FTE. In terms of total personnel, according to this study, it amounts to 5.8 % in small institutions and 1.9 % in big institutions. Assuming that these figures are correct, one would estimate an additional annual cost of between EUR 100,000 and EUR 200,000 € for personnel.

But it remains unclear whether these remuneration committees had been newly established only because of CRD IV and whether they only serve those purposes which this regulation has imposed with regard to variable remuneration.

In conclusion, because "small non-complex" institutions are not required to establish a remuneration committee, proportionality is not an issue with regard to this cost.



Employing more human resources staff to administer the more complicated remuneration system

Almost by definition, the establishment of a new set of remuneration rules will require that all credit institutions incur one-time implementation costs as they adapt their human resource systems to accommodate the new rules. If the new rules demand the application of more complicated remuneration rules, more staff will be required, on an on-going basis, to administer the rules.

Smaller institutions will face disproportionate costs if they have to hire more staff on a continuing basis. The small institutions in the *iff* bank survey suggested that they would have to hire an additional 0.5 full-time equivalent staff member to handle the CRD IV rules if they were required to follow them. In addition, they would be forced to hire outside consultants to handle the one-time implementation costs related to deferred variable pay, payment-in-instruments, malus or clawback.

The German bank survey discussed above reported the need for small banks to hire two full-time equivalent staff simply to deal with the remuneration committee; for large banks, the associated number was four FTE.

The EBF response to the earlier EBA draft guidelines specifically raises the challenge that small institutions would face if asked to apply all of the CRD IV remuneration rules. They wrote (p.10) that "the requirements for variable remuneration regarding material risk takers are too complicated and difficult for small institutions that do not have resources for very sophisticated remuneration systems and people dedicated to the issue. On the flip side, the implementation of sophisticated remuneration systems and the full application of the CRD IV provisions would lead to significant costs and will also have consequences on the structure of the remuneration schemes."

One of the providers interviewed by *iff* noted that "[t]he greatest cost element" would be the time spend by staff on remuneration issues. Most of the costs would be internal HR staff time there would also be costs for external advice." The same provider noted that global firms would have access to these resources, it would be difficult for smaller credit institutions and investment firms to afford to allocate the required attention.

Another interviewee observed that considerable resources would be needed to monitor and check conditions put in place for identified staff. The most resource intensive work in that regard would communication efforts by HR staff. Moreover, managers would also spend a greater proportion of their time validating remuneration issues.

2.2.2 Legal, structural and transparency cost

CRD IV interferes in important ways with remuneration policies that are based in private law. Each of the instruments (including the maximum ratio, deferral, malus and clawback) becomes effective only if they are integrated into the contractual relation. Establishing contracts between the firm and its employees always requires legal expertise which must come either from the firm's own legal department or from an outside law firm hired as a consultant. These legal costs are part of the general cost of complying with the recent legislation.

But an additional cost attributable only to CRD IV and its transposition into national law emerges if *existing* contracts have to be changed which may lead employees to argue that firms do not have the right to make unilateral changes to their contracts. According to our survey (see 1.3.5) the question how far such interventions into



existing contractual relations are legally possible (especially in light of existing collective agreements and legal protections in labour law) has not been consistently answered in different legal settings. Many credit institutions and investment firms think that they are legally not able to force their employees into renegotiating existing contracts. The very few existing legal procedures for governing clawback rules are not linked to risk-affiliated contract terms but seem to follow the idea of damage suits for faulty behaviour which have always been part of the contractual system in private law. Legal cost may at this stage therefore not be new and specific to the new remuneration regulation.

International and especially non-EU banks are of the opinion that CRD IV has created additional cost for them since it forces them to apply one system of risk alignment for their subsidiaries within the EEA area and a different system outside. The cost of this double structure have been judged to be high by several reports (AFME 2015; PWC 2014; Deloitte 2013) but all refer primarily to the capital requirements of CRD IV and related measures. Especially in the Remuneration is not seen as a specific element which can significantly be related to the profit margin. In its study for the AFME PwC sees in the CRD IV requirements an overall increase in cost of debt finance for borrowers by 25 % in borrowing spread which could lead to a reduction in profits by 5 %. The same is seen for the value of investment for investors. But the regulation of variable remuneration is not seen as an extra element of losses but more or less on the contrary "to a varying degree these support financial stability alongside other policy objectives".

With regard to transparency requirements, we deal with these issues below at 2.4.1 where the practice of reporting and its size is described. But here again the reporting system to which Art. 435 ff of Regulation (EU) 575/2013 refers is mainly dedicated to other issues than remuneration.

2.3 Corporate governance characteristics and risk-based remuneration policies - Integration of remuneration policies into risk management

2.3.1 The justification for corporate governance regulation

The global market has created intense competition in the development of an elite group of CEOs/MRTs capable of "world class" management. This has encouraged the re-assertion of the "optimal contracting" perspective on pay levels of CEOs/MRTs, which the "managerial power" perspective seeks to displace. In this "new optimal contracting model", the market to assign the best CEO to command the most valued resources ensures that those charged to command the largest banks/companies must be rewarded with great wealth (Edmans, Gabaix 2015). In general terms it might be thought that there is little need for State intervention in corporate governance, which is simply the umbrella term used for the way rights are allocated within the corporation. Companies enter into private contracts every day for the provision of goods, capital and services without the State needing to be involved. Freedom of contract has its own virtues and only certain flaws (asymmetric information, addictive preferences, etc.) are accepted as justification for its suspension. Hart (Hart 2009), in commenting on the Sarbanes-Oxley (SOX) legislation in the US, suggests that the motivation is for politicians/legislators to "do something" in the face of the latest corporate scandal. He states



"What does explain SOX then? Probably the best explanation is the pressure on politicians to act – from the public, interests groups and the politicians themselves – was so great intervention was not an option" (Hart 2009, 444)

If Enron and Worldcom can make inaction not an option then RBS, Anglo-Irish, Fortis, Dexia and IKB Deutsche Industriebank may have the same predictable effect of bolting the stable door long after the horse has gone. The mere presence of a drive to greater regulation may not indicate any true justification for its implementation. So we need to develop a clearly reasoned justification for State intervention in a world of free and hopefully reasonably fair contracting.

2.3.2 Corporate governance characteristics, remuneration and risk-taking

Following the onset of the financial crisis in 2008, there has been vigorous debate among economists and regulators as to the impact of corporate governance within the banking industry on risk-taking. There is now a widely-held view that excessive risk-taking was at least in part caused by weak internal governance. In this context, certain recent regulatory reforms have emphasised the importance of reforming governance in order to control bank risk-taking ((Bolton et al. 2015, forthcoming.); Liikanen, (Chairman) et al. 2012; BIS 2015).

The extant literature has partially investigated the relationship between governance, pay, and risk-taking, mainly focussing on the United States. The results are very similar in some cases, but in others they are conflicting. Specifically, most existing studies find a positive relationship between bank risk-taking and: (i) concentrated ownership, (ii) performance-linked remuneration in the form of options, and (iii) larger and more diverse boards.

The role of risk-related functions has gained importance since the crisis. More boards have established board risk committees, and the chief risk officer (CRO) is more often a member of the board. This seems to improve board oversight and internal risk controls. Aebi et al. (Aebi et al. 2012) demonstrated that banks where the CRO reports directly to the board of directors perform significantly better in financial crisis, while banks in which the CRO reports to the CEO perform significantly worse than do other banks. This result supports our initial hypothesis that risk governance in general and the reporting line of the CRO in particular are important to a bank's crisis performance. As the CEO and CRO may have conflicting interests and if the CRO reports to the CEO, the risk agenda may not receive the appropriate attention. Moreover, previous literature shows that stronger risk management functions tend to be associated with reduced risk. On this point, Keys, Mukherjee, Seru, and Vig (Keys et al. 2010) find evidence that stronger risk management departments (measured by the share of the top risk manager's remuneration relative to that of the top five executives) result in less risky mortgage portfolios. Moreover, Ellul and Yerramilli (Ellul, Yerramilli 2013) show the negative linkage between bank tail risk and strong and independent risk management function, proxied by a Risk Management Index which consolidates different dimensions in the period 2007-2008. Such results are confirmed by Lingel and Sheedy (Lingel, Sheedy 2012) using an international sample for the period 2004-2010. The International Monetary Fund (IMF 2014) found evidence that the existence of a board risk committee is marginally associated with lower risk in banks, but such a relationship is weak.

Unfortunately, the relationship between internal governance characteristics and risk-taking is unclear and, in some cases, not yet explored. Specifically, the role of the



internal control function and its involvement in the definition of remuneration policies has to date been only partially investigated.

However, recent reviews of the empirical literature find that corporate governance reforms themselves cannot prevent excessive risk in the banking sector (Avgouleas, Cullen 2014; Cullen, Johnsen 2015; Ferrarini 2015). "...some studies since the GFC ...show that banks with 'good' corporate governance and remuneration systems i.e. those in which shareholder and manager interests were most aligned, performed worse than other banks during the GFC, and suffered the most losses (Fahlenbrach, Stulz 2011). We cannot therefore envisage that addressing any perceived flaws in the traditional approaches to corporate governance and pay-setting — such as strengthening shareholder rights and advocating more extensive use of 'performance-based pay' as conceived prior to the crisis — can possibly offer constructive solutions to inform future reform." (Cullen, Johnsen 2015, p. 15). In the banking industry, "good" corporate governance in the sense of aligning the interests of managers and shareholders is likely to induce bank managers to increase risk-taking, because most of the losses are externalised to stakeholders, while the gains are internalised by shareholders and managers (Ferrarini 2015, p. 10).

CRD IV requires adequate internal control mechanisms and remuneration policies to promote sound and effective risk management. To examine potential benefits of these provisions, we formulate the following hypothesis: Strong internal governance characteristics and risk-based remuneration policies are negatively associated with risk-taking.

We began our analysis by investigating the relationship between strong internal governance and risk-taking. On this point, we structured specific questions in our questionnaire in order to: (i) measure "good internal governance" and (ii) estimate risk-taking.

Good internal governance was measured by the following 10 items:

- 1. CRO has significant input into performance reviews of business heads;
- 2. CRO has significant input into performance reviews of identified staff;
- 3. Review of identified staff has received effective added value (inputs, information, suggestions) from the remuneration committee;
- 4. Review of identified staff has received effective added value (inputs, information, suggestions) from the nomination committee;
- 5. The supervisory function is effectively challenging risk-related decisions of the executive directors
- 6. There are effective controls at the business level;
- 7. There are effective controls at the control function level;
- 8. We use sophisticated models to measure risk;
- 9. There is significant training on risk appetite and the implications for non-compliance;
- 10. The board and senior managers specify what risk level is acceptable to the firm.

Answers were classified according to a 5-item Likert scale: 1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree) and 5 (strongly agree).

Risk-taking was instead measured by the 3 following indicators: (i) Impaired and Past due (>90 days) loans to total loans, (ii) Coverage ratio (all allowances for loans and



debt instruments to total gross impaired loans and debt instruments) and (iii) Accumulated impairments on financial assets to total (gross) assets.

In order to test the relationship between good internal governance and risk-taking, we carried out some correlations, which global results are reported in below in Table 69, Annex 4.2.

Such results show a general negative linkage between the quality of internal governance and credit risk-taking. Specifically, we find statistically significant negative correlation coefficients between Impaired and Past due (>90 days) loans to total loans and the role of the CRO in reviewing business head performance, the effective role of the remuneration and nomination committees in reviewing identified staff, the effectiveness of controls at the control function level, and the use of sophisticated models to measure risk. The use of sophisticated risk measurement models is also positively related to coverage ratio.

This evidence appears to confirm the hypothesis that strong internal governance characteristics appears to be negatively associated with credit risk-taking.

In order better to investigate this issue, we tried to calculate the same correlations from the global sample and from two different subsamples: small banks and medium-large banks. Our results are shown in Table 70, Annex 4.2.

As regards small banks (most of them cooperative banks), the results are quite weak. They merely showed a negative relationship between the effectiveness of controls at the control function level and credit risk-taking, and a negative linkage between the role of the CRO in reviewing business head performance and the coverage ratio.

As regards medium-sized and large banks, the focus of the board and senior managers on acceptable risk levels appears negative in relation to risk-taking. Moreover, the role of the CRO in reviewing performance of the CEO of the business and that of identified staff shows a statistically significant negative relationship with asset quality.

In a further analysis presented above at Section 2.1.4 with the iff-survey data received from banks and investment companies we have found that strong internal governance correlates negative with risk-taking or in other words has a moderating effect on risk-taking behaviour.

Some studies which are reported in the literature have also suggested that top executives receive greater remuneration when governance structures are less effective. They focus on the relationship between top executive remuneration and board composition in publicly listed firms, mainly operating in the US market. Lambert, Larcker and Weigelt (Lambert et al. 1993) and Boyd (Boyd 1994) show the positive impact of total CEO remuneration on the percentage of the board composed of outside directors i.e. that there is a positive relationship between CEO remuneration and the number of outside directors (the more the number of non-executive directors, the more the CEO tends to be paid). Morevoer, Hallock (Hallock 1997) finds evidence that CEO earnings are higher at firms with interlocked outside directors. Other studies reach different results. For example, Finkelstein and Hambrick (Finkelstein, Hambrick 1989) show that top executive remuneration and the percentage of outside directors on the board are not related. Core, Holthausen and Larcker (Core et al. 1999) find an association between the level of CEO total remuneration and the structure of the board of directors. Specifically, they show that CEO remuneration is higher when: (i)



the CEO is also the board chair, (ii) the board is larger, (iii) there is a greater percentage of the board composed of outside directors, and the outside directors are appointed by the CEO; (iv) outside directors are older and serve on more than three other boards. Anderson and Bizjak (Anderson, Bizjak 2003) find that CEOs who sit on remuneration committees receive less total remuneration.

While there are many studies investigating the relationship between the governance structure and the total top executive remuneration, empirical evidence on the relationship between internal governance and top executive remuneration is still limited.

In this context, our research reported in Section 2.1.4 tested the existence of a positive relationship between top executive remuneration and weak governance structures in the EU banking sector, as defined in the following hypothesis: *Top-executive remuneration is positively associated with weak internal governance structure.* In order to test this hypothesis, we calculated the correlation between strong internal governance (measured by 10 items, as described above) and the ratio "top executive remuneration to total revenue". Our results show no statistically significant correlation coefficients.

Overall, we can support the hypothesis that strong internal governance characteristics are negatively associated with risk-taking.

2.3.3 The governance of executive and market risk-takers' pay

The perceived problem of high executive pay and income inequality more generally is a staple of the European political landscape (Hargreaves 2015). This discussion has been most intense in the case of banks bailed out by tax-payers during the recent financial crisis, as a perverse form of "socialism for the rich". But while the debate on executives and identified "market risk-takers" (MRTs) has taken on a life of its own, it is important to recall it is embedded within a broader debate about the power of CEOs in relation to the board they lead. (For a review of the academic literature see Annex 2.8)

In this context, we tried to investigate an area that has not yet received enough attention in the literature, namely the internal governance of executive and market risk-takers' pay. Specifically, we focussed on the revision of remuneration policies in terms of frequency, related risk management activities, involved firm functions (e.g. CRO, remuneration committee, nomination committee, compliance function etc.), responsibilities and provided information.

We began our analysis by analysing responses to a questionnaire addressed to banks about corporate governance.

First, we investigated the frequency of respondent firms' remuneration policy revisions since 2010. Of the 198 banks surveyed, only 9 (4.5 % of the global sample) reviewed their remuneration policies on average more than once a year, while most firms (169 banks, about 85 % of the global sample) reviewed them once a year. About 4.5 % of revisions of remuneration policies were found to be *ad-hoc*. Frequent revisions were mainly conducted by medium-sized and large banks. 2.1 % of small banks (revenues under EUR 100 million), 7.7 % of medium-sized banks (revenues between EUR 100 million and EUR 1 billion) and 13.6 % of large banks (revenues above

EUR 1 billion) reviewed their remuneration policies on average more than once per year, as shown in the next Figure.

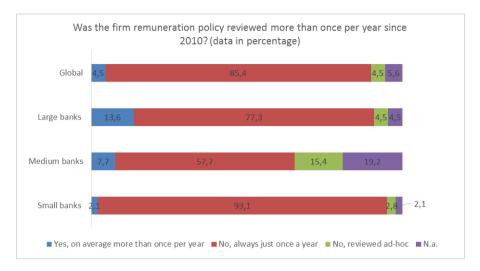


Figure 15: Review of firm remuneration policy

These data show clearly that most banks, and especially the small ones, conducted the revision of their remuneration policies only once a year.

Second, we analysed the quality of internal governance in order to identify best practice in risk management. We applied the following 10 criteria:

- 1. CRO has significant input into performance reviews of business heads:
- 2. CRO has significant input into performance reviews of identified staff;
- 3. Review of identified staff has received effective added value (inputs, information, suggestions) from the remuneration committee;
- 4. Review of identified staff has received effective added value (inputs, information, suggestions) from the nomination committee;
- 5. The supervisory function is effectively challenging risk-related decisions of the executive directors;
- 6. There are effective controls at business level;
- 7. There are effective controls at the control function level;
- 8. We use sophisticated models to measure risk;
- 9. There is significant training on risk appetite and the implications of non-compliance;
- 10. The board and senior managers specify what risk level is acceptable to the firm.

As regards the CRO, s/he appeared to play an important role globally in reviewing performance of both business head and identified staff.

Specifically, 45.9 % of the global sample (62 banks over 135 respondents) agreed and strongly agreed with the statement "CRO has significant input into performance reviews of business heads". The percentage rose to 57.9 % of large banks. Small banks were characterised by less involvement of the CRO in reviewing business heads' performance compared with medium-sized and large banks, as shown in the Figure below.

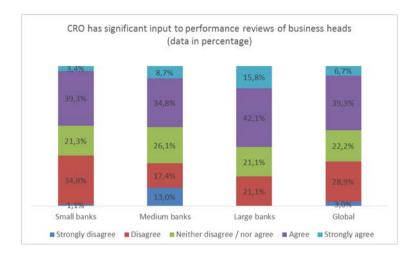


Figure 16: CRO's input to performance reviews of business heads

The results as to involvement of the CRO in reviewing identified staff performance were similar. Specifically, 51.5 % of the global sample (68 banks out of 132 respondents) agreed and strongly agreed with the statement "The CRO has significant input into performance reviews of identified staff". The percentage was 46.7 %, 55 % and 63.2 % for small, medium-sized and large banks respectively. On the other hand, 29.5 % of the global sample (39 banks out of 132) disagreed and strongly disagreed with the same statement. The percentage is 34.4 %, 25 % and 15.8 % for small, medium-sized and large banks respectively.

The evidence overall shows that the CRO had significant involvement in reviewing the performance of both business head and identified staff, but some improvements are possible, especially in small banks.

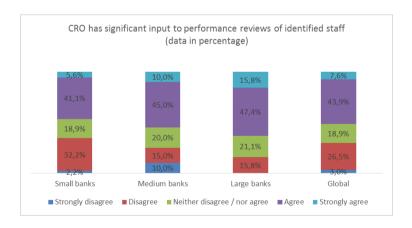


Figure 17: CRO's input into performance reviews of identified staff

The review of identified staff did not appear to have received the effective added value (in terms of inputs, information and suggestions) we expected from either the remuneration committee or from the nomination committee.

In fact, only 32 % and 12 % of banks (24 and 9 respectively out of a total of 75 respondents) agreed and strongly agreed with the statement "Review of identified staff has received effective added value from the remuneration committee". This

means that 66 % of the global sample (42 banks out of 75) stated their remuneration committee failed to give satisfactory inputs, information and suggestions in reviewing identified staff. Fortunately, this situation almost only seemed to characterise the small banks (46 banks out of 75), of which 58.7 % (27 banks out of 46) explicitly stated that the value added from the remuneration committee in the review of identified staff was not effective. Conversely, 80 % (8 banks out of 10) and 77.8 % (14 banks out of 18) of medium-sized and large banks respectively agreed and strongly agreed with the statement "Review of identified staff has received effective added value from the remuneration committee", as shown in the Figure below.

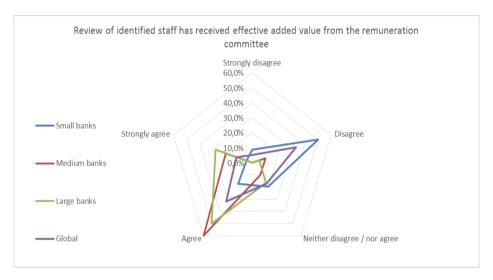


Figure 18: Added value from remuneration committee

The situation seemed to worsen in terms of the role of the nomination committee. Only 14 % of small banks (6 banks over 43 small banks) agreed and strongly agreed with the statement "Review of identified staff has received effective added value from the nomination committee". On the other hand, 33.3 % (2 banks out of 6) and 38.5 % (5 banks out of 13) of medium-sized and large banks respectively agreed or strongly agreed with the same statement.

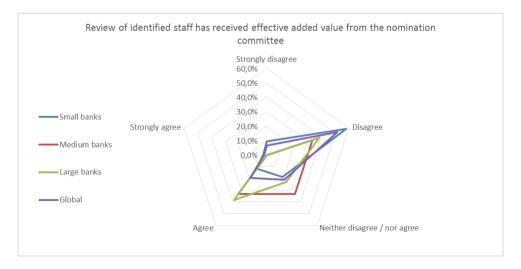


Figure 19: Active support through remuneration committees



These results clearly demonstrate that considerable improvement is needed in this area, as the contribution of the remuneration and nomination committees in the review of identified staff should be more effective in terms of inputs, information and suggestions.

As regards the supervisory function, it appeared to be effectively challenging risk-related decisions of the executive directors. Almost all the respondent banks (125 out of 130) agreed and strongly agreed with the statement to that effect, as shown in the Table below. No significant differences emerged among small, medium-sized and large banks.

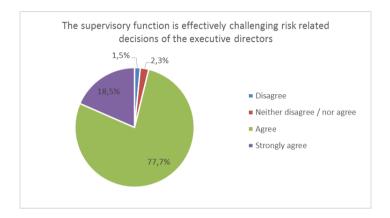


Figure 20: Challenging of risk related decisions

A further research area examined the effectiveness of controls at the business and control level. On this point, most respondent banks stated that they conducted effective controls at both levels. No significant differences emerged among small, medium-sized and large banks.

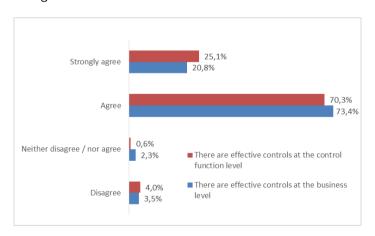


Figure 21: Effectiveness of controls

As regards the use of sophisticated risk assessment models, only 47.1 % of the global sample (72 banks out of 153 respondents) stated they use advanced risk measurement models. This breaks down as 32.7 % (35 banks out of 107) of small banks, rising to 68.2 % (15 banks out of 22) and 90.5 % (19 banks out of 21) of medium-sized and large banks respectively. This means that the use of sophisticated models to measure risk was positively related to bank size.

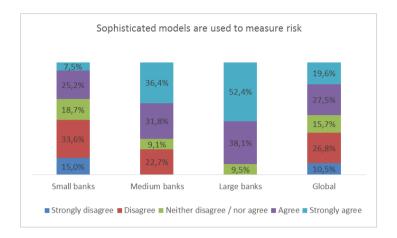


Figure 22: Risk measurement models

A further area of the research examined the level of training introduced in risk appetite and its implications for non-compliance. About 84.6 % of the global sample (143 banks out of 169) stated they had put in place significant training on this issue. Surprisingly, the most positive answers were given by small banks. 90.3 % (112 out of 124 small banks) stated that they had introduced significant training on risk appetite and its implications for non-compliance, while only 59.1 % (13 out of 22) and 75 % (15 out of 20) of medium-sized and large banks respectively agreed or strongly agreed with the statement.

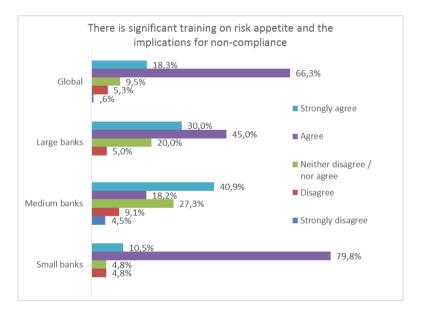


Figure 23: Training on risk appetite

As regards the involvement of management in definition of acceptable risk level, almost all respondents (170 out of 175, about 97.1 % of the sample) stated that the board and senior managers specified what risk level is acceptable to the firm. No significant differences emerged among small, medium-sized and large banks. This demonstrates that risk management culture is sufficiently widespread among board and senior managers regardless of bank size.



Thirdly, we attempted to assess which functions were mainly involved in the revision of remuneration policies and what their responsibilities were. We considered 11 bank functions (Supervisory Body, Management Body, Remuneration Committee, Risk Committee, Audit Committee, Internal Auditing, Compliance Function, Risk Management, HR function, General Manager and CEO) and 4 different levels of involvement and responsibility (responsibility for approval, responsibility with a binding option, responsibility with a non-binding option, responsibility other than approval and opinions). We analysed bank responses according to bank size.

Small banks mainly assigned the responsibility for approving revision of the remuneration policy to the supervisory body (87.5 % of respondents) and to the management body (43.1 % of respondents). These functions sometimes also assigned a binding opinion on this issue (according to 20.1 % and 14.6 % of the sample) to the supervisory body and the management body respectively, together with the compliance function (46.5 % of respondents), risk management (19.4 % of respondents), the general manager (16.7 % of respondents) and internal audit (12.5 % of respondents). About 50 % of small banks included in our sample assigned responsibility for the revision of remuneration policies consisting of a non-binding opinion to the compliance function (42.4 %), risk management (54.2 %), HR function (48.6 %), General Manager (58.3 %) and internal audit (11.8 %). The other functions, i.e. CEO and internal committees, appeared to have no significant responsibilities in this area.

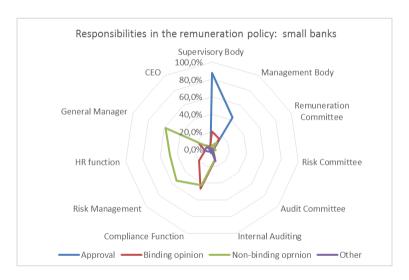


Figure 24: Responsibilities in remuneration policy (small banks)

The role of the remuneration committee appears to be much more important in the medium-sized banks, as its involvement in the revision of remuneration policies is in the form of both approval and binding opinion in 26.9 % and 30.8 % of respondents respectively. The supervisory body is shown to be mainly responsible for approval (80.8 % of the sample), while the management body is assigned both approval (53.8 % of respondents) and binding opinion (26.9 % of respondents). The involvement of Internal Auditing, Compliance Function, Risk Management and HR function was specified to be to provide a binding opinion (according to 23.1 %, 26.9 %, 30.8 % and 42.3 % of respondents respectively) and a non-binding opinion (according to 38.5 %, 34.6 %, 23.1 % and 26.9 % of respondents respectively). 19.2 % of medium-sized banks assigned responsibility to the CEO to give a binding opinion in the revision of remuneration policies.

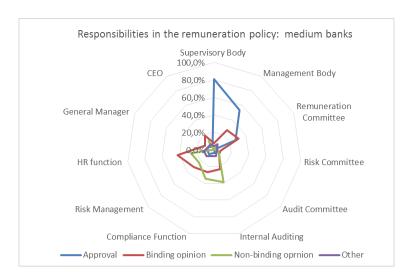


Figure 25: Responsibilities in remuneration policy (medium-sized banks)

The involvement of the various functions appeared to be much wider in the large banks. All functions, and especially the Supervisory Body (72.7 % of the sample), the Management Body (63.6 % of the sample), the Remuneration Committee (45.5 % of the sample) and the CEO (31.8 % of the sample), were often assigned responsibility for approving the revision of remuneration policies, except for the Audit Committee, Internal Auditing and General Manager. Similarly, almost all functions, except for the Management Body, Audit Committee and General Manager, were involved in this issue through provision of a binding opinion. On this point, the main involvement seemed to be for the Remuneration Committee (45.5 % of large banks), HR function (45.5 % of large banks) and Risk Management (36.4 % of large banks). Moreover, almost all functions, except for the Supervisory Body, Remuneration and Audit Committees, were assigned responsibility for providing a non-binding opinion in the revision of remuneration policies, most frequently the Compliance function (45.5 % of respondents).

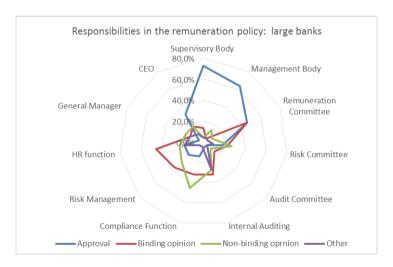


Figure 26: Responsibilities in remuneration policy (large banks)

This evidence shows that size of the bank is positively related to the number of functions involved in the revision of remuneration policies. In small banks, only the Supervisory and the Management Body appeared to be the key functions in this



process. The importance of the role of the other functions on this issue appears to rise in the medium-sized and, above all, in the large banks.

In our quantitative analyses with data from the questionnaire for credit institutions and investment firms (see above 2.1.4) where we used the responses from institutions to the iff-survey we also checked the correlation between corporate governance and ten items which we supposed to represent cop risk behaviour.

As measure of internal governance we used a variable, based on the ten items: intern_gov_q = sum of the 10 scores above; whose value varies in theory from a maximum of 50 and a minimum of 0. The effective data in our bank sample has a mean of 28.7, a median of 28, a maximum of 50 and a minimum of 4.

In addition, we introduced two variables to capture good governance, at one extreme, and bad governance at the other extreme:

good_gov 1 if intern_gov_q>=35 (equal to the value of the 75th centile) and

is 0 otherwise;

bad_gov 1 if intern_gov_q<=24 (equal to the value of the 25th centile) and

is 0 otherwise.

Table 14 presenting the statistical results of the iff-survey (2.1.4) report pairwise correlations among the main variables described so far. Table It's interesting to notice that, as expected, the change in d_varrem and that in dvarb are negatively correlated (at 1 % significance) as the changes in dvarb and ddef_var (at 3 % significance). As to the links among the remuneration variables and the risk-taking measures, the only significant (at 1 %) correlation is between dvarb and dcoverage. It is negative as expected: by paying less in cash and more in instruments might make managers more prudent calling for higher coverage. This finding seems to support the CRD IV requirement that at least 50% of any variable remuneration be paid in instruments. As to the other correlations among performance variables, there emerge two positive and significant ones between dimpa_finass and d_impair and between daccimpa and d_impair; intern_gov_q is negatively correlated with d_varrem and with dimpa_finass.

2.3.4 Shortcomings and costs of corporate governance provisions

To examine the efficiency of governance practice in the area of remuneration policies, the benefits of higher stability described above will be compared with potential shortcomings or costs.

On this point, we focussed our attention on the costs of providing information to the remuneration committee and attempted to identify the information set required to be provided.

As the involvement of the remuneration committee was very low in the small banks by comparison with larger banks, it was unsurprising that the information on the various issues provided to the committee was very limited. This also appeared true of medium-sized banks. On the other hand, the information set provided to the remuneration committee in the large banks appeared to be very extensive, covering information on benchmarking about remuneration in the banking industry (86.4 % of the large banks), supervisors' assessment on remuneration policies (81.8 % of the large banks) and competitors' remuneration schemes (54.5 % of the large banks).

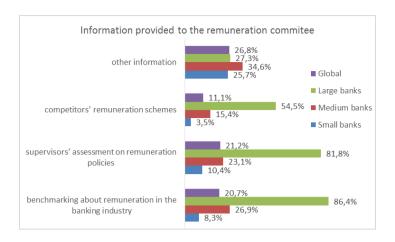


Figure 27: Information to remuneration committee

For this reason, we can conclude that the costs of providing information to the remuneration committee will be high only in the large banks.

More generally, banks stated that the remuneration provisions significantly increased their costs. This was particularly highlighted by the small banks, 84.6 % of which stated that these provisions had a very high impact on their costs.

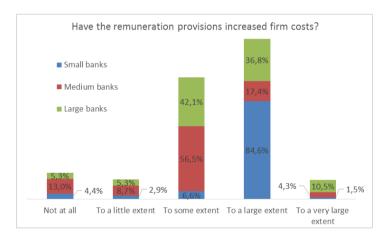


Figure 28: Increase of firm costs due to remuneration provisions

However, most banks were unable to quantify the specific increase in costs caused by the remuneration provisions. Future improvements are probably needed in this area.

2.4 Effective supervision and transparency to stakeholders

2.4.1 Impact and shortcomings of transparency of remuneration policies on risk-taking

Further measures required by CRD IV and CRR for the prevention of excessive risk are strong supervisory oversight 33 and disclosure 34 of remuneration policies. We assume

³³ See CRD IV, Article 75.



that transparency on remuneration policies will be negatively associated with risk-taking.

The importance of disclosure and transparency has long been a cornerstone of financial reporting, and allows for sufficient monitoring to take place. Lowenstein (Lowenstein 1996) argues that "good disclosure has been a most efficient and effective mechanism to induce managers to manage better". The shedding of more light on remuneration policies and practices allows both regulators and stakeholders to take appropriate action when necessary, and also provides control measures against risky behaviour.

While transparency and disclosure of financial information has long been established as being essential for evaluation purposes, Eccles and Krsuz (Eccles, Krzus 2010) argue that changes in the global economy have led to transparency and disclosure of non-financial information being seen to be of equal value. Indeed, with hindsight, the origins and the rise of increased disclosure can be traced back to the need to increase market confidence in the aftermath of the Great Depression in the 1920s and 1930s (Lowenstein 1996) – an economic crisis of equal scale to that of the 2007-2008 banking crisis which precipitated recent reforms in the banking sector.

It should therefore be no surprise that a common response of regulators and governments to fraud and governance crises over the years has been to improve the transparency by requiring more disclosure. The question that arises, however, is whether disclosure practice in existing remuneration policy meets the need for risk reduction, and what changes can still be made to existing practice to ensure continuous improvement.

In the next two sections, we discuss the findings of our survey on the issue of the current state of transparency of remuneration policies, and the findings of a case study looking at disclosure practice among sample firms. We then conclude with some recommendations and policy suggestions.

2.4.1.1 Survey Results

Transparency of remuneration policies is considered to be a major issue for banks, supervisory bodies and other stakeholders. When banks and credit institutions were asked to rank how much transparency had an impact on their firm, 45.6 % of respondents ranked it in the top two, with only the introduction of malus and clawbacks having a larger impact. By contrast, only 10.2 % ranked transparency as having the lowest impact on their firm. The issue is, as expected, more pronounced for smaller firms, with larger firms seeing it as having less of an impact.

Further, banks and credit institutions viewed transparency as a key factor in reducing risk. When presented with this statement, 62.6 % and 9.3 % of respondents agreed and strongly agreed, affirming the importance of the role of transparency in risk reduction. This result was consistent across all revenue groups.

From the perspective of the supervisory bodies, however, there is still some room for improvement in terms of disclosure of governance and remuneration data. More than

³⁴ See CRR, Article 450.



half of respondents expressed at least some satisfaction. While only 3 of the 13 supervisory bodies surveyed indicated that they were very satisfied with the firm's disclosure behaviour, no supervisory body indicated dissatisfaction. This is encouraging as firms were cooperating with supervisors with respect to providing satisfactory disclosure as a minimum, and it is consistent with the belief of firms generally that transparency plays a key role in risk reduction.

Overall, the response from the survey highlights the continued importance of transparency as a means of reducing risk, with consistent views shared between information providers, regulators and users. This is consistent with the requirements of the CRR with respect to Article 450, which outlines detailed disclosure requirements for relevant institutions. As part of the analysis of the transparency of remuneration policies, we also conducted a case study of five banks of different sizes in different Member States. The findings of the case study are discussed in the following section.

2.4.1.2 Case Studies

The disclosure and transparency of remuneration policies of five major banks in five different Member States were chosen: Standard Chartered in the UK, Erste Group in Austria, Commerzbank in Germany, Bank of Valetta in Malta and Svenska Handelsbanken in Sweden. All banks chosen were publicly listed banks for which annual reports were available in English, and all annual reports for the 2014 financial year were available. These Member States were chosen to represent the diversity of Member States in the sample. Table 19 below summarises the main observations.



Table 19: Case Study on Remuneration Policy Reporting Practices of European Banks

Bank of Valetta	Commerzbank	Erste Bank	Standard	Svenska			
(Malta)	(Germany)	(Austria)	Chartered	Handelsbanken			
(iviaita)	(Germany)	(Austria)	(UK)	(Sweden)			
C		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	(OK)	(Sweden)			
	ition Report (RR) within the						
The AR is 142 pages long, of which 3 pages is dedicated to the RR.	The AR is 347 pages long, and the RR is 17 pages long. The RR is presented as a sub-section of the corporate governance report. There is a separate RR provided by the firm that is 25 pages long.	The AR has 270 pages, with remuneration information provided in different parts: as part of the corporate governance section and in a separate Article 450 disclosure which is published separately from the AR (7 pages).	The AR has 340 pages. A brief 2-page overview of remuneration policies is provided as part of the strategic report, and a 30-page RR is presented in the AR under the heading of corporate governance disclosures.	The AR is 240 pages long, with the RR (2 pages) situated as part of the corporate governance report (14 pages).			
Structure of relevant d	isclosures (based on CRR Ar	ticle 450 requirements)					
Remuneration policy information is provided in the Capital Risk and Management report, while the RR itself reports on governance related remuneration matters.	Information is split between the remuneration section of the corporate governance report, and the standalone RR. The standalone RR discloses information for compliance with the German Remuneration Ordinance for Institutions, while the corporate governance remuneration section provides disclosures linked to the German Code of Corporate Governance requirements.	Remuneration policy discussed in the corporate governance remuneration segment, with quantitative information provided in the notes to the accounts. Detailed CRR Article 450 information is provided in a separate report.	All Article 450 disclosures are provided in the remuneration report.	Policy relevant information disclosed in the RR. Numerical /quantitative information provided in the Notes to the Accounts.			
Qualitative disclosures	·						
Qualitative disclosures are comprehensive	Very detailed and clear discussion on policy and other aspects of remuneration	Detailed information provided, but situated in different parts of the report.	Detailed information provided in the RR.	Information on pay of executives also provided in narrative form.			
Quantitative disclosure	es						
Limited information above the required minimum, with numerical information only provided in aggregate. However, no senior executives sit on the board.	Detailed information provided, including individual level pay for both management and supervisory boards	Detailed information provided, including pay-related information on the management board members.	Detailed information provided, including individual level pay information.	Pay of executives other than the CEO provided in aggregate form, in the notes to the accounts.			
Pillar 3 remuneration related disclosures							



Provided as part of the Capital and Risk Management report. Remuneration information in Pillar 3 report cross-referenced with the standalone RR.

Pillar 3 remuneration disclosures provided in a separate report

Provided as part of the RR.

Provided in the Notes to the Accounts.

Across all five banks, we observed different methods for disclosing information related to remuneration. Commerzbank and Erste Group provided information in both the annual report and a separate standalone report, while Standard Chartered, Bank of Valetta and Svenska Handelsbanken provided the information in the annual report. However, the location of the information in the annual report varied. Standard Chartered provided all the information in the Remuneration Report, while for the other banks, information related to remuneration was spread across sections of the Notes to the Accounts (Erste Group, Svenska Handelsbanken) and the Capital Risk and Management Report (Bank of Valetta). Some remuneration reports formed standalone sections of the annual report, while others were subsections of a larger corporate governance report (Svenska Handelsbanken).

The way information is presented in annual reports is not a trivial matter, as this affects both transparency and the usefulness of the disclosures. Eccles and Krsuz (Eccles, Krzus 2010) argue that a major problem with reporting and disclosure at present is not in the quantity of information provided, but its complexity. This needs to be counterbalanced with the risk of providing too much information, where pertinent information may be obfuscated by less important disclosures. In 2009, the UK Financial Reporting Council (FRC) expressed concern that "key messages (may be) lost in the clutter of lengthy disclosures", while the Pozen Committee Report on Improvements to Financial Reporting (Pozen Committee 2008) highlights that poor presentation of information resulting in difficulty navigating it reduces transparency as users need to sift through irrelevant information in search of what they need. While the EBA Guidelines on Sound Remuneration Policies (EBA 2015d) can help streamline information, we recommend that there is a need for a structured way of presenting information which should be addressed.

All firms analysed provided at least the minimum disclosure required under Article 450, although the larger banks (Commerzbank, Standard Chartered) provided more detailed information. This is consistent with Article 450's requirement that "for institutions that are significant in terms of their size, internal organisation and the nature, scope and the complexity of their activities, the quantitative information referred to in this Article shall also be made available to the public at the level of members of the management body of the institution". However, it is worth mentioning that the UK and Germany both have additional legally mandated disclosure requirements with respect to remuneration (for financial institutions in Germany, and for all firms in the UK), which may drive the level of disclosure provided by these two banks. The German Remuneration Ordinance for Institutions (InstitutsVergV) in particular integrates the Article 450 disclosure requirements into German law.

Overall, we observed that, while Article 450 of the CRR provides a list of required disclosure pertaining to information related to remuneration, there remained some discrepancies between the practice of institutions in the different Member States, in particular in terms of the quality and quantity of information provided. Our expectation is that clearer guidelines provided in the EBA Guidelines on Sound Remuneration Policies published on 21/12/2015 should go some way towards remedying this, but this should be revisited after full implementation of the guidelines in 2017.



2.4.1.3 Conclusions

The main conclusions and suggestions from this section of the study are as follows:

- (1) Transparency continues to be a key factor in risk reduction practices, and this view is shared by financial institutions, regulators and supervisory bodies and other stakeholders alike. Increased transparency is therefore key to ensuring best practice of remuneration policies in the sector.
- (2) While the information is readily available, the ease of locating the information varies from bank to bank, which hampers both comparability and the informativeness of the disclosures made. Consideration should be given to including a more streamlined disclosure format in the process of the standardisation of disclosure requirements to allow for ease of access and to minimise obfuscation of remuneration policy information.
- (3) The level of detail of disclosure still varies between banks and between Member States (as a result of state-level regulation pertaining to remuneration disclosure). It is expected that the EBA Final Guidelines on Sound Remuneration Policies (Title VI: 17-18) will improve this, although it is recommended that an evaluation be conducted after full implementation.

2.4.2 Impact and shortcomings of costs of supervisory oversight of remuneration policies

CRD IV and CRR require strong supervisory oversight as further measures for prevention of excessive risk. On this point, and in accordance with recital 68 of CRD IV we formulated the following hypothesis that strong supervisory oversight of remuneration policies is negatively associated with excessive risk-taking.

The perception of the possible link between aggressive remuneration packages for top executives of financial institutions and the incentives for these executives to take excessive risks with the financial institutions they manage calls for strengthening the supervisory oversight of remuneration policies. This can be achieved via external supervision or internal oversight.

On the one hand, external supervision can act by encapsulating a bank's remuneration policy as a new item it considers in assessing the performance and stability of a financial institution. Those familiar with the CAMEL rating of a financial institutions – Capital adequacy, Assets, Management Capability, Earnings and Liquidity – might envisage its evolution into a CARMEL rating, where the R stands for Remuneration policy. On the other hand, internal oversight can also play an important role. Financial institutions' boards of directors may have been unable to limit top executives' discretion in obtaining remuneration packages that could lead to excessive risk-taking because the board did not have adequate competence and/or power. It is also possible that the internal processes in place to set and approve remuneration policies might have been absent or insufficiently developed. The involvement of all the various internal parties that should have a say on pay may have been lacking. All of these dimensions can and should be improved (EBA 2015d).

As usual, the potential benefits of stronger supervisory oversight of financial institutions' remuneration policies have to be weighed against their cost. The cost may take the shape of regulatory compliance burdens as well as of limiting a financial institution's ability to recruit top managers. Only an appropriate cost-benefit analysis can provide an adequate assessment.



The virtual absence of evidence renders almost impossible an evaluation of the effectiveness of supervisory oversight of remuneration policies and quantification of the related supervisory costs so that compliance costs may be compared to the potential benefits of lower risk caused by stronger oversight.

The existing academic literature provides very limited guidance here. Cerasi and Oliviero (Cerasi, Oliviero 2014) find that pay-for-performance sensitivity given by CEOs' equity portfolio has negatively affected the performance of banks during the financial crisis when 1) effectiveness of supervision by shareholders of delegated managers was lower; 2) an explicit deposit insurance system was in place in the country where the bank operated. In particular, they show that the direct regulation of managerial remuneration alone, without controlling incentives for shareholders, may not effectively change risk-taking behaviour of banks. They therefore make a strong case for a stronger oversight of remuneration policies as a necessary complementary measure. Becht, Bolton, and Röell (Becht et al. 2012) also reach the conclusion that stronger supervision of remuneration policies is needed.

The paucity of literature on this subject implies that the understanding of the link between supervisory oversight of financial intermediaries' remuneration policies and their risk-taking should greatly benefit from new evidence collected on the field. For this reason, we structured a specific part of the questionnaire on this issue. Specifically, banks, asset management companies, supervisory bodies and other stakeholders in general were asked to describe the role of strong supervisory oversight of remuneration policies in risk reduction.

The virtually non-existent evidence on the relationship between the effectiveness of the supervisory oversight of remuneration policies and risk-taking was confirmed by our results. 54 % of banks (198 respondents) had no view on this issue. On the other hand, 3 % and 33.3 % agreed and strongly agreed when presented with this statement, confirming the potential role of strong supervisory oversight of remuneration policies in risk-reduction.

Asset management companies (7 respondents) provided different results, as 4 companies found a significant relationship between supervisory oversight and risk-taking, while 2 companies disagreed.

Supervisors appear to support the idea that risk-taking is more likely to follow the firm's target risk appetite if there is strong supervisory oversight of remuneration policies. This idea was supported and strongly supported by 20 % and 46.7 % of our respondents respectively, while 33.3 % did not know.

Such results are globally confirmed by stakeholders. All but one thought that the role of strong supervisory oversight of remuneration policies in risk-reduction is very important.

2.5 Summary: Net benefits of the remuneration provisions

In order to assess the net benefits of the remuneration provisions, their costs would have to be subtracted from their benefits. While the above results provide some initial support to the hypothesis that the changes in banks' remuneration policies sought by CRD IV are beneficial, their quantitative impact on financial stability has yet to be demonstrated. Estimates of overall cost range from $\{2.5 \text{ million to } \{5.5 \text{ million for large}\}$



banks, while small banks could not provide quantitative estimates of overall costs, which according to them would be significant if all provisions were to apply to them.

The above results show that there is no one-size-fits-all optimal mix of remuneration policies, because benefits and costs depend on various factors such as the type of institution or the business area concerned, the institution's risk appetite framework, and the category of identified staff. The benefits tend to be largest in big, systemically important banks and investment banks, which tend to have a higher risk appetite and are significantly less stable than small, non-significant banks and retail banks.

Table 20 contrasts the assessed benefits by reducing staff risk-taking behaviour to the assessed extent of compliance costs based on the results of the iff firm survey. This simple analysis underestimates the potential benefits for two reasons. First, it is based on opinions of staff whose remuneration may decline because of the new regulations. The CRD IV remuneration provisions seek to increase the liability of staff for the risks they take, while the CRD IV capital requirements (which have been assessed as more effective by the industry) improve risk-bearing by shareholders. Secondly, the potential benefits for the economy as a whole are not taken into account when estimating the effects on risk-taking by an individual institution. A sound and efficient financial system has positive effects on output and economic growth by influencing the saving rate, selecting investment projects and making funds available for investment. Social benefits of the CRD IV remuneration provisions are gains from reducing the probability and severity of banking crises. Empirical evidence suggests that, across all comparable studies, each 1 percentage point reduction in the annual probability of a crisis yields an expected benefit per year equal to 0.6% of output when banking crises are seen to have a permanent effect on real activity (Reifner et al. 2011, p. 53). In 2014, this benefit would have amounted to more than €8 trillion in the European Union. 35

Small firms where the remuneration schemes discussed here are not very common responded that costs would outweigh benefits for all remuneration provisions except the maximum ratio, which justifies the proportionality principle. Pay-out in instruments is considered to be the least effective measure by both small and large firms.

 $^{^{35}}$ 0.6 x nominal GDP of EUR 13,958,352 million (Eurostat, 2016) = EUR 8,375,011 million.



Table 20: Benefits versus costs of remuneration provisions according to credit institutions and investment firms

	Benefits ^a	Costs ^b
Deferral	"A deferral portion of 40-60% of variable pay is sufficient to change staff risk-taking behaviour"	"Compliance cost of deferral"
Small	high	significant
Large	high	low
Pay-out in shares and other equity	"Pay-out in shares and other equity is negatively related to staff risk-taking behaviour"	"Compliance cost of pay-out in instruments (at least 50%)"
Small	low	significant
Large	low	low
Pay-out in equity-linked instruments	"Pay-out in equity-linked instruments is negatively related to staff risk-taking behaviour"	"Compliance cost of pay-out in instruments (at least 50%)"
Small	low	significant
Large	low	low
Malus	"The introduction of malus reduces risk-taking incentives"	"Compliance cost of malus"
Small	high	significant
Large	high	low
Clawback	"The introduction of clawback reduces risk-taking incentives"	"Compliance cost of clawback"
Small	high	large
Large	high	low
Maximum ratio	"The introduction of the bonus cap lowers variable pay and thus lowers staff incentive to take excessive risks"	"Compliance cost of bonus cap"
Small	high	insignificant
Large	low	low

Note: a) Based on the questions about effects on staff risk-taking behaviour, benefits are assumed to be low if most firms (or largest share of respondents) "strongly disagree" or "disagree", to be high, if most firms "agree", and to be significant, if most firms "strongly agree".; b) Based on the question "Estimate the compliance cost associated with these provisions for your firm", costs are assumed to be insignificant if most firms (or the largest share of respondents) answered "not at all", to be low, if most firms answered "to a little extent" or "to some extent", to be high, if most firms answered "to a large extent", and to be significant, if most firms answered "to a very large extent".

The social benefits of the remuneration provisions depend on their effectiveness in improving the long-term orientation of staff as well as risk-sharing between an institution's various stakeholders. In this regard, deferral seems to have the largest benefits, because it aligns staff with creditors and the sustainability of performance in



the long term. The *iff* survey shows that the deferral ratio in both cash and instruments as well as the deferral period increased from 2010 to 2014. Multivariate analyses for this period support the hypothesis that the use of deferral increases financial stability. However, some important empirical research indicates that deferral periods of 3-5 years might not be long enough to prevent short-termism and excessive risk-taking, because financial cycles, which are intertwined with the performance of banks, may persist for a decade or more. Deferral of instruments is more efficient than deferral of cash, because it implicitly adjusts remuneration to changes of the market price of listed instruments or the fair value of non-listed instruments, which are not related to any explicit decision of the institution. For the period 2010-2014, we find that the increased use of pay-out in instruments is associated with an increased use of deferral.

Empirical literature suggests that non-deferred remuneration based solely on the equity value of the firm (paid out in cash linked to Return on Equity, in shares or equivalent ownership interests, or in share-linked instruments or equivalent non-cash instruments) is harmful, because it encourages more risk-taking than is likely to be preferred by the institution's shareholders or creditors in the long run. In particular, the use of stock options in the case of listed institutions creates a "heads I win, tails I do not lose" approach to risk and thus pernicious incentives to transfer the downside risks to other parties. It is therefore justified not to allow the use of stock options towards fulfilling the CRD IV requirements on pay-out in instruments. Extensive use of shares or equity-related instruments may also be harmful, because such instruments are susceptible to manipulation and incentivise leverage to increase shareholder value at the expense of other stakeholders. Pay-out in instruments may be exposed to market tendencies which do not adequately reflect the risk taken. However, this drawback may be corrected by deferral, and in particular by extending the deferral period to better align it with the length of financial cycles.

Pay-out of variable remuneration for identified staff in instruments increased from 2010 to 2014. Multivariate analyses support the hypothesis that this change has increased financial stability. Most of the supervisors and about 40% of the firms and identified staff agree that pay-out in shares, other equity or equity-linked instruments reduces staff risk-taking behaviour. The benefits of pay-out in instruments linked to the equity value of the firm are lowest in stakeholder-value oriented unlisted institutions, which tend to be more stable than listed ones.

In order to align managers with creditors or bondholders and prevent risk-shifting from managers/shareholders to creditors, the use of non-equity instruments such as bonds or debt-linked instruments is beneficial (not only those reflecting the credit quality of the institution as a going concern or which can be converted to equity in adverse circumstances). Academic literature suggests that debt-linked payments made in proportion to the debt-equity ratio or leverage ratio of the firm would incentivise the preservation of solvency and link individual remuneration to the value of the firm in bankruptcy. However, payment in bonds cannot help to reduce socially excessive risk-taking in large, systemically important institutions, where bondholders would not suffer any losses due to government support. Our survey evidence shows that the use of debt-linked and other instruments in variable remuneration remains low

Remuneration based on a balanced use of risk-adjusted performance measures at the level of the firm, business unit and individual would reduce risk-taking incentives. Our survey shows that a large variety of performance measures were used at the three different levels and that measurement of risk-adjusted performance improved.



Remuneration is often linked to the regulatory minimum equity capital ratio and thus used as a tool to increase firms' loss absorption capacity. However, shareholder returns still seem to play a larger role than total firm performance, and the debt-equity ratio, a key indicator of excessive risk, is rarely used for the remuneration of identified staff. Linking remuneration to the leverage ratio at large, systemically important financial institutions would complement the existing macroprudential capital requirements. According to credit institutions and investment firms, linking remuneration to individual-level criteria is more effective than linking it to firm or business-level criteria. Supervisors see lower benefits in performance-based remuneration than firms and criticise the lack of transparency in the process of setting up performance criteria.

Firms, supervisors and identified staff agree that malus and clawback have benefits by reducing misconduct and risk-taking. Malus seems to have higher benefits in reducing risk-taking than clawback, which tends instead to address misconduct. Since excessive risk and misconduct are concentrated at big and systemically important financial institutions, ex post risk adjustment tends to have the largest benefits for those organisations. However, both instruments and in particular clawback have not yet been widely applied because their legal cost tend to be high.

Strong internal governance characteristics, including governance of remuneration has a positive impact on risk-taking. The benefits and costs of remuneration and nomination committees in reviewing identified staff are difficult to quantify, because they differ in banks according to their dimension and ownership.

Transparency of remuneration policies seems to have large benefits and comparatively low costs according to financial institutions, supervisory bodies, and other stakeholders. However, the ease of locating the information and the level of detail varies between banks and Member States which hampers the informativeness of the disclosures made. Supervisors and stakeholders also agree that strong supervisory oversight of remuneration policies contributes to taming risk-taking in financial institutions, without, however quantifying the costs and benefits.

The benefits and costs of the maximum ratio, which the responses of firms suggest also seem to depend on bank size, will be examined in more detail in the next section.



3 Maximum ratio between the fixed and variable components of remuneration

Art. 94(1) (g) CRD IV and CRR require that variable pay is capped at a ratio of 1:1 to fixed pay (2:1 with shareholder approval). ³⁶ The introduction of this maximum ratio between the fixed and variable components of remuneration was motivated by the assumption that variable remuneration schemes have triggered a risk-taking behaviour which caused not only the failure of individual financial institutions but also "systemic problems in the EU and globally" (TOR, p.2). It can thus be justified on economic grounds by reducing systemic risk and the likelihood of a future financial crisis³⁷ (for more details see above Section 1.2.3).

3.1 General

The issue of bankers' bonuses was very controversial during the recent financial crises, with the pursuit of multi-million dollar bonuses being flagged as a major reason behind excessive risk-taking behaviour in the popular media (Taleb 2011)³⁸ despite academic empirical evidence suggesting that the underlying problems were much more complex and the remuneration structure was not to be wholly blamed (Adams et al. 2012). The recommendations of CRD (IV) and Art 94(1)(g) of the CRR requires capping variable pay to a ratio of fixed pay, in effect stemming unlimited bonus potential and changing the shape of many banker's remuneration packages. This requirement has been rather controversial given that the EU is unique in requiring the maximum ratio, which affects not only a major number of financial centres, but also subsidiaries of EU institutions operating in non-EU jurisdictions. No other known monetary authority or regulatory body have imposed a maximum variable pay ratio on their banks and investment firms.

There are trade-offs and consequences in implementing the ratio. Many industry players and supervisors are concerned that changing the pay mix will have an impact on staff motivation, not to mention that more fixed pay would decrease flexibility in times of economic downturns as firms are committed to pay a larger amount of wages. There is also potential that talent may desert EU financial institutions in preference for better remuneration packages in other financial centres that are not affected by the maximum ratio requirement, such as Switzerland, the US, Singapore and Hong Kong. In this section we explore these issues in detail.

See CRD IV, Article 94, 1: "(f) fixed and variable components of total remuneration are appropriately balanced and the fixed component represents a sufficiently high proportion of the total remuneration to allow the operation of a fully flexible policy on variable remuneration components, including the possibility to pay no variable remuneration component; (g) institutions shall set the appropriate ratios between the fixed and the variable component of the total remuneration, whereby the following principles shall apply: (i) the variable component shall not exceed 100 % of the fixed component of the total remuneration for each individual. Member States may set a lower maximum percentage; (ii) Members States may allow shareholders or owners or members of the institution to approve a higher maximum level of the ratio between the fixed and variable components of remuneration provided the overall level of the variable component shall not exceed 200 % of the fixed component of the total remuneration for each individual. Member States may set a lower maximum percentage...."

³⁷ Johnston 2014, Bebchuk, Spamann 2010

³⁸ http://www.nytimes.com/2011/11/08/opinion/end-bonuses-for-bankers.html?_r=2&ref=opinion.

0.0%

2007

2008

80.0% 70% 67% 62% 59% 57% 55% 60.0% 53% 40.0% 48% 45% 43% 41% 38% 33% 30% 20.0%

2009

3.1.1 Factual developments in ratios for variable remuneration

Figure 29: Proportion of total compensation awarded in fixed vs variable pay for AFME Members

Fixed —

2010

—Variable

2011

2012

2013

Source: Reproduced from: McLagan – AFME Review of the Reward Environment in the Banking Industry

Even before the implementation of the maximum ratio of variable pay, the banking industry in general had already begun to shift the balance between fixed and variable pay. The above reproduced figure shows that the mix was 70:30 variable to fixed prior to the financial crisis, at which point the gap narrowed somewhat but remuneration was still titled towards more variable than fixed. In 2010-2011 however, a major shift came about and fixed pay began to take a larger share of the pie. By the end of 2013, the proportion of variable to fixed was almost reversed from its pre-crisis position, with now a 38:62 ratio in place.

This is important in reflecting upon the context in which the maximum ratio is being implemented. Rather than having the maximum ratio imposed during a time of high variable remuneration pay-outs, the industry has already been slowly adjusting towards a more fixed-pay structure over the past five years. A study carried out by Mercer and published as the Mercer Global Financial Services Executive Compensation Snapshot Survey (2015) also reveals that 92 % of their respondents indicate that pay levels have not changed much / within 5 % of pre-ratio levels, with a large shift (between 5 % to 15 % increase) in fixed pay and a similar rate of decrease in variable pay relative to pre-ratio levels. Section 3.3 provides some further evidence.

3.1.2 Theoretical discussion

The justification for the CRD IV maximum ratio between the fixed and variable components of remuneration, referred to below as the maximum ratio, in practice also often referred to as a "bonus cap", is market failure in alignment of the remuneration of CEOs or other material risk-takers with the interests of all stakeholders. A lower level of variable remuneration is considered to be likely to reduce the type of risk-taking behaviour that increases executive pay and shareholder value at the expense of depositors, taxpayers or society as a whole (see above section 2.1.2.1 for survey results on institutions' risk appetite). The positive relationship between executive compensation and risk-taking in credit institutions and investment firms is a well-established empirical fact. However, causality has been questioned and the effect of the maximum ratio on the behaviour of market participants remains unclear. Bankers' bonuses may be an effect rather than a cause of excessive risk-taking, driven by an



implicit "too big to fail" policy in large, systemically important institutions (Matthews, Matthews 2010). A maximum ratio may have unintended consequences, such as reducing the competitiveness of the banking sector concerned, or increasing the cost of capital (Murphy 2013). To be effective, it should be combined with other policy measures, such as a credible non-bailout policy (Matthews, Matthews 2010) and capital requirements. A regulatory restriction on leverage may be a more effective tool for reducing bankers' risk-taking than the regulation of remuneration packages (Avgouleas, Cullen 2014). However, by constraining the portfolio and financing decisions at the level of the institution, regulatory capital requirements may only increase the institution's capacity for absorbing losses, without directly affecting risk-taking behaviour. A maximum ratio may be more efficient than prudential regulations at firm level, because it directly targets individual incentives for risk-taking behaviour or (mis)conduct. The maximum ratio is not a cap on income levels. It differs significantly from usury legislation in credit law or minimum wages in labour law where the applicable caps directly influence existing contracts.

To examine the efficiency of the CRD's maximum ratio provisions, we analyse their impact on financial stability, competitiveness and staff working in third countries.³⁹

A global comparison (using the findings from Task 1) suggests that the financial services sector in the EU is subject to more stringent regulation with respect to the composition and implementation of remuneration packages of risk takers. One EU requirement stands out in particular. Variable pay is limited to 100 % of fixed pay (or up to 200 % with shareholder approval). No other jurisdiction has required a similar 'cap' on variable pay. The banking industry, its commentators, the UK government and leading academics and economists have argued that this restriction on pay packages would reduce the competitiveness of the financial sector in the EU, leading to a possible migration of talent to less restrictive jurisdictions. Additionally, should EU banks wish to increase variable pay, they may do this by first increasing fixed remuneration. Incentive and risk effects aside, this will also raise the bank's fixed remuneration costs, which would further increase their financial obligations, unless total remuneration remains stable and the appropriate penalty is applied.

3.2 Impact of maximum ratio on incentives for risk-takers

The rationale behind the implementation of the ratio on variable pay is to limit excessive risk-taking. However, existing empirical evidence is mixed in that the impact differs in different settings. Some researchers found that more variable pay encouraged risk-taking (Balachandran et al. 2010; Cheng, Indjejikian 2009), while others have concluded that variable pay stems risk-taking behaviour because executives bear risks associated with their personal wealth when they hold shares and options (which are the most common forms of variable pay) (Houston, James 1995; Victoravich et al. 2011; Shiyyab et al. 2015). Work by Shiyyab et al. (2015) also demonstrates that different components of pay have different effects on bank risk – in particular, their findings suggest that, based on a sample of 67 banks and bank holding companies in 13 EU countries between 2000 and 2010, higher levels of variable incentives reduce bank risk-taking.

³⁹ For the respective literature see Balachandran et al. 2010; Clementi, Cooley 2009; Cheng et al. 2015; Cheng, Indjejikian 2009; Core, Guay 1999; Jensen, Murphy 1990; Shiyyab et al. 2015.



So while the implementation of the ratio would have some sort of impact, we sought evidence to ascertain what this impact would be in the context of EU banks. Would more fixed remuneration encourage risky behaviour because the staff concerned have a large proportion of guaranteed pay? Or if the variable pay component were capped, thereby limiting the incentive of a potential large pay-out, would excessive risk-taking be limited?

These questions were put both to banks and to a sample of bank staff, and the results of the survey are examined below.

It would be useful first to understand the context of risky behaviour among the respondents surveyed. The table below shows that the respondents are relatively conservative with respect to risk. Only 30 % would take greater risks in professional settings than in their private life, 14 % where there was opportunity to increase pay, 8 % where pay was guaranteed regardless of the outcome of the risk taken, 9 % if clawback were not applied, 6 % if higher pay were possible even with clawback and 8 % if variable pay were not at risk in the future.

Under which condition Strongly Disagree Neither **Agree** Strongly disagree/nor would you decide to take disagree agree greater risks agree If professional rather than 24.3 % 16.2 % 29.7 % 16.2 % 13.5 % private circumstances If my variable pay would 36.1 % 33.3 % 16.7 % 13.9 % 0 % increase If my pay was guaranteed 52.8 % 25.0 % 13.9 % 2.8 % 5.6 % 28.6 % 5.7 % If no clawback applies 48.6 % 14.3 % 2.9 % 34.3 % If higher pay were possible even 45.7 % 14.3 % 2.9 % 2.9 % with clawback If my variable pay would not be 50.0 % 22.2 % 19.4 % 5.6 % 2.8 % at risk in the future

Table 21: Incentives for greater risks

When asked about the application of the maximum ratio, with an increase in fixed pay and lower levels of variable pay, identified staff stated that the structure of pay would not affect their risk-taking behaviour and incentives; 41 % of respondents said that more fixed pay would have no effect and 27 % said that it would have little effect. An overwhelming 94 % of respondents disagreed that more fixed pay would reduce motivation to take risks. The same survey also revealed that the specifics of the remuneration package, such as performance metrics and deferral options would have an impact on incentives; only 6 % of respondents said that having less variable remuneration would affect their risk-taking behaviour to a significant degree.

The survey of banks carried out by *iff* also suggests that there are mixed feelings as to whether the introduction of the maximum ratio is in fact effective in reducing incentives for staff to take excessive risks. When asked, 29 % disagreed that the maximum ratio reduced the incentives for staff to take risk, 23 % were not sure and 39 % agreed. Similarly, AFME members stated in an interview that the maximum ratio reduced the role of incentives in such packages, although they did not reach a conclusion as to whether this was a good thing (i.e. that it would lead to less risky behaviour) or be a bad thing (i.e. it would be harder to motivate staff).



Despite mixed feelings from employers, evidence from the survey overwhelmingly suggests that the maximum ratio would not affect the incentivisation of identified staff. A human resources consultancy went on to argue that the reaction of employees to incentives if they receive more fixed pay as a result of application of the maximum ratio may be cultural. Certain cultures respond to higher fixed pay as an incentive, while others are more motivated by the opportunity to earn more through more variable pay. In a global marketplace, where employees have different cultural backgrounds and varied risk preferences, it is hard to say conclusively whether the maximum ratio affects incentives uniformly.

Overall, we can conclude that, while concerns have been raised by firms about the potential issues relating to incentives and motivation arising from implementation of the maximum ratio, these issues were of little concern to the employees affected by them. This gives rise to an interesting dichotomy of conflicting views, in which power and politics may play a role. While this is beyond the scope of this research, it is worth reflecting upon the motivation for firms to be more critical of the maximum ratio (possibly the attendant potential increase in fixed costs) than the employees concerned (who may enjoy the more stable fixed pay element in their remuneration).

3.3 Impact on fixed costs and ability to respond to financial distress

3.3.1 Overview and preamble

Concern has been raised that the cap on variable pay of 100 % of fixed pay (or 200 % with shareholder approval) would have an impact on the firm's costs, because fixed pay remains an expense even where targets are not met or firms make a loss. A survey of banks carried out as part of this study suggests that there are mixed views among banks as to whether the maximum ratio would affect fixed costs. When asked whether banks felt that "the introduction of fixed pay has led to an increase in fixed pay", 47 % of respondents either agreed or strongly agreed, while 35 % disagreed or strongly disagreed. 18 % of respondents were undecided. (Source: *iff* survey of banks and financial institutions, Nov 2015).

Following imposition of the maximum ratio, firms have begun to introduce fixed allowances into the remuneration packages of identified staff. The fixed allowances are treated as fixed pay but are essentially an allowance that can be withdrawn if need be. This enables firms to expand the fixed salary base against which the cap can be applied and would allow higher variable remuneration in good years, while allowing some flexibility in bad years. In October 2014, EBA following a review clarified the conditions that must be met for allowances to be mapped as fixed remuneration (EBA 2014b). This was further clarified in the EBA Report on Allowances (EBA 2015f) and the EBA Guidelines on Sound Remuneration Policies (EBA 2015e).

In this section we provide a brief outline of the use of fixed and variable pay as context, before proceeding to discuss the impact of the maximum ratio on fixed costs. A more comprehensive discussion of the overall costs associated with the implementation of remuneration provisions is provided in Section 2.1.4.



3.3.2 The relationship between fixed and variable remuneration and the impact of the maximum ratio on fixed costs

Data from the iff survey of credit institutions and investment firms show that between 2010 and 2014, the ratio of variable remuneration to total remuneration of identified staff decreased by 3.66% for the total sample, by 8.6% for the larger banks excluding the Banche di Credito Cooperativo (BCC) and by a mere 1.4% for the BCC.

The following analyses are based on data from the EBA benchmark study, together with accounting information obtained from Bankscope for the years 2013 and 2014.

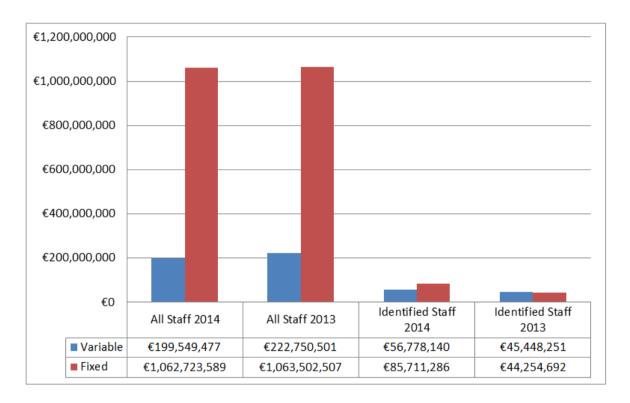


Figure 30: Average fixed and variable pay per bank (2013 & 2014)

The above figure shows the mix between variable and fixed pay before and after implementation of the maximum ratio. We can see that, overall, fixed pay has already before 2014 been a major component of staff remuneration packages. According to the McLagan Review of the Reward Environment in the Banking Industry (Afme 2015), this trend has been observed since 2009. An interview with Goldman Sachs revealed that, for its identified staff population, fixed pay has increased from 11 % in aggregate in 2009 to 51 % in aggregate in 2014.

The data for identified staff in the above table needs to be interpreted with care. In 2014, the classification of identified staff changed resulting in a larger number of staff being classified as identified staff. One of the identified staff respondents to the questionnaire also stated that "As a result of the CRR remuneration rules my fixed pay has increased and I receive only nominal variable pay.

To allow for a more nuanced comparison of the variable and fixed pay of identified staff between the two years, Figure 31 shows average fixed and variable pay scales by

number of staff for a subset of banks in the EBA dataset, where some firms have been omitted due to data availability issues.. Here we observe that that, while in 2013 the mix between variable and fixed pay per identified staff was almost identical, in 2014 fixed pay has become a much larger component of the pay package. However, while the ratio of fixed to variable pay was more equal in 2013, when we compare the fixed pay per staff in 2013 and 2014, the level is comparable. Indeed, results of the t-test findicate that there is no significant difference between the fixed pay of identified staff in both years. Despite this, the results of the *iff* survey of identified staff show that approximately 50 % of respondents have seen their fixed pay increase significantly over the past three years, although no rate of increase was provided. This data was drawn from the respondents to a survey of regulatory supervisors carried out by iff, showing that 47 % of supervisors feel fixed pay has increased from 2013 to some extent, although it is unclear whether this increase can be directly linked to implementation of the maximum ratio.



Figure 31: Average pay per identified staff (subset of EBA 2013 & 2014 data)

We probe this further by examination of the set of EBA data combined with BankScope data. Of particular interest to us here is how the fixed pay of identified staff compares to the expenses of the firm, and from there, what impact the maximum ratio would have should firms begin increasing fixed remuneration to maximise potential variable remuneration pay-out. This can be illustrated from the next table.

⁴⁰ A t-test is any statistical hypothesis test. It determines if two sets of data are significantly different from each other.



Total Fixed Remuneration for All Staff as a proportion of:	2014	2013		
Total Personnel Costs ⁴¹	69 %	68 %		
Non-Interest Expense	35.40 %	35.50 %		
Operating Profit	77.90 %	59 %		
Total Fixed Remuneration for Identified Staff as a proportion of:				
Total Personnel Costs	8.40 %	6.30 %		
Non-Interest Expense	4.60 %	3.50 %		
Operating Profit	4.40 %	2.30 %		

While total fixed remuneration makes up a significant amount of personnel costs and expenses not related to interest, the costs associated with the fixed pay of identified staff who will be subject to the maximum ratio are very low, allowing us cautiously to suggest that the impact of any increase in fixed remuneration for identified staff may not be as large as many think. It should be noted here, however, that the increase we observe between 2013 and 2014 for identified staff again needs to be interpreted with caution as the 2014 exercise in reclassification of identified staff means we are not comparing like with like.

Taking this into consideration, we offer an evaluation of the impact on firms should all firms choose to maximise variable remuneration pay-out potential by increasing fixed pay by means of the three simplified scenarios described as follows:

- Scenario 1: Fixed pay for identified staff is maximised at 200 % of 2013 fixed pay. 42 No variable remuneration is paid out, and all other expenses remain the same (except for relevant adjustments for increase in remuneration).
- Scenario 2: Fixed pay for identified staff is maximised at 200 % of 2013 fixed pay, and variable remuneration is paid out at 50 % of the allowable amount (i.e. 100 % of fixed pay). All other expenses remain the same (except for relevant adjustments for increase in remuneration).
- Scenario 3: Fixed pay for identified staff is maximised at 200 % of 2013 fixed pay, and variable remuneration is paid out at 100 % of allowable amount (i.e. 200 % of fixed pay). All other expenses remain the same (except for relevant adjustments for increase in remuneration).

Table 23 summarises the finding.

^{41 &}quot;Personnel expenses: This category includes wages and salaries, social security costs, pension expenses and other personnel costs, including the expensing of staff stock options" (see The Fitch Universal Format on BankScope, April 2009 www.bvd.co.uk/bankscope/bankscope.pdf)

⁴² The fixed to variable remuneration ratio can be set to 2:1 with shareholder approval. We use the 2013 fixed remuneration figures as the baseline as the 2014 figures may have already been adjusted for the bonus cap ratio.



	No of banks moving from operating profit to operating loss	Average increase in loss for loss-making banks	Average increase in Personnel Costs	Average Increase in Non- Interest Expenses	Average Decrease in Operating Profit
Scenario 1	0/86	15.05 %	6.27 %	3.53 %	-2.44 %
Scenario 2	1/86	30.09 %	12.54 %	7.06 %	-4.89 %
Scenario 3	3 / 86	45.14 %	18.82 %	10.59 %	-7.33 %
Source: BankScope and EBA Data.					

In the first column, we observe that even under the most extreme circumstances (i.e. the firm maximises pay to 200 % and chooses to pay out the maximum allowed variable remuneration), only three profit-making firms out of 86 would move from an operating profit to an operating loss. Of course, variable remuneration is paid at the discretion of the board / management and there is therefore considerable flexibility for adjustment of that amount in order to avoid an operating loss. In fact, if we were to revert to Scenario 1 where no variable remuneration is paid, no firm currently making a profit will go on to make a loss by choosing to double its 2013 fixed remuneration amount.

The average increase in non-interest expenses for the firm is only 11 % should firms opt for the most extreme of circumstances, and only 4 % under Scenario 1. This strengthens our argument that the impact on fixed costs of the imposition of the maximum ratio is small, as even doubling the amount of fixed remuneration of identified assets in 2013 only increased non-interest expenses by an average of 4 %.

Based on the feedback from identified staff who responded to our questionnaire, 16.5% of firms actually sought shareholder approval to double the amount allowable under the maximum ratio. The table below summarises the findings from the *iff* survey of identified staff on how the maximum ratio has affected them.

Table 24: Identified staff responses on maximum ratio questions

	Yes	Don't	No
Question		Know	
My variable pay has become capped at 1 times fixed pay	41.9 %	6.5 %	51.6 %
My colleagues' variable pay have been capped at 1 times their fixed pay	33.3 %	30.0 %	36.7 %
Shareholder approval was sought to allow me a bonus award of 2 times fixed pay	6.5 %	16.1 %	77.4 %
Shareholder approval was sought to allow colleagues a bonus award of 2 times fixed	10.0 %	33.3 %	56.7 %

As can be seen above, while a larger proportion of identified staff have experienced a capping of their variable pay, firms are less likely to try and maximise the potential pay-out of variable remuneration by seeking shareholder approval for an increase in the maximum ratio. This suggests that there is no rush into short-term behaviour that may affect the firm's costs just to ensure that a maximum bonus pay-out is in place.



3.3.3 Impact on ability to respond to financial distress

The scenario analysis in Section 3.3.2 is extended to evaluate how potential increases in fixed costs as a result of the implementation of the maximum ratio could potentially affect how firms respond to financial distress. Under the three scenarios outlined above, we project the impact on profitability if firms were to suffer a reduction in operating profit of 10 %, 30 % and 50 % respectively. The results of this analysis are summarised in Table 25.

Table 25: Number of profit-making firms making a loss under different fixed remuneration scenarios

	N	Scenario 1	Scenario 2	Scenario 3
When Operating Profit is unchanged	86	0	1	3
When Operating Profit is reduced by 10 % of 2013 rates	86	0	1	4
When Operating Profit is reduced by 30 % of 2013 rates	86	0	3	7
When Operating Profit is reduced by 50 % of 2013 rates	86	1	5	16

We observe that in the most conservative of the three projected scenarios, that is when fixed pay is double that of 2013 but no variable remuneration is paid out, profit-making firms in the sample only make a loss if existing operating profit decreases by 50 %, assuming other non-remuneration related costs remain the same. This suggests that when firms are distressed, there is still some way to go before the whole sector begins to record serious losses. Under scenarios 2 and 3 we see more profit-making firms potentially making losses if fixed pay increases when operating profit declines, but in these two scenarios, firms could opt not to pay variable remuneration. In fact, it would be open to challenge by the shareholders if the board were to allow variable remuneration to be paid out when the bank had recorded a reduction in operating profit.

The above analysis suggests that, even if firms were to double fixed pay, profit-making firms would be in a serious situation should they record a loss merely as a result of an increase in fixed remuneration. However, it is worth bearing in mind that in circumstances of an economic downturn, other costs would also increase which may affect the overall profitability of the firm. These costs however are not related to implementation of the maximum ratio.

Regulatory supervisors have expressed mixed feelings as to how remuneration policies could impact individual firms and overall sector stability. Table 26 summarises the findings of *iff*'s survey of regulators.

Table 26: Impact of remuneration policies on individual firms

How would you rate the contributions of remuneration provisions to:	Very little	Small	Sizeable	Very significant	N/a
individual firm stability	6.70 %	40 %	40 %	6.70 %	6.70 %
overall financial stability	13.30 %	40 %	33.30 %	0 %	13.30 %

On the whole, regulators are split between rating the provisions as having a low or a high impact on stability. It is noteworthy that no regulator rated remuneration provisions as having a very significant impact on overall financial stability, with the



majority of respondents rating the impact to be either low or very low. This view is also expressed by a remuneration consultant, who has also suggested that the overall impact of remuneration provisions, including the maximum ratio, has limited impact on stability.

3.3.4 Conclusions

In conclusion, this study suggests that, despite concern expressed by the industry that the maximum ratio would significantly affect fixed costs and limit the firm's ability to respond to financial distress, empirical evidence suggests that this is not the case. The impact on fixed costs is nominal even if firms were to double fixed pay and pay maximum variable pay. Also, the number of firms that begin to record losses when operating profits fall is low, and is not enough to suggest that the implementation of the maximum ratio would create financial distress across the sector as firms strive to maximise fixed pay in order to continue to be able to offer higher levels of variable pay. In fact, the results of the survey suggest that the fixed pay of only a small percentage of identified staff has been increased in order to increase their variable pay.

3.4 Staff recruitment or staff retention

3.4.1 Mobility of staff and maximum ratio

Staff recruitment and retention can of course be affected by nature and extent of financial remuneration. Because the CRD IV rules might negatively affect the nature and extent of remuneration, they might therefore affect recruitment and retention. Unless outweighed by other factors (including, for example, job security, living conditions, and attachment to particular communities) staff might be drawn away from the EU, EU based institutions or from the financial sector as such.

In its surveys, *iff* asked institutions, individuals and competent authorities whether they had encountered difficulties with staff recruitment or retention. This was denied by the majority of respondents and also by the competent authorities.

There remains a small proportion of respondents especially concerned with regard to competition with non-EU countries. A minority of staff could imagine that it has some influence on their decision to move. The following figure shows the responses of material risk takers to the question "How prepared are you to take the following actions to secure more pay?".

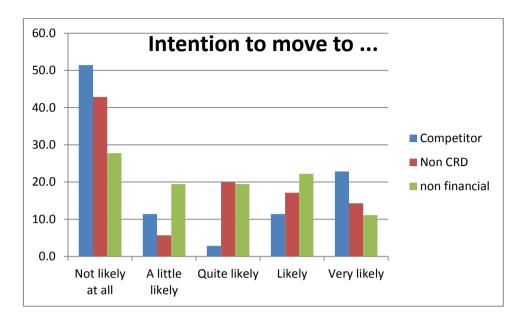


Figure 32: MRT questionnaire: How prepared are you to take the following actions to secure more pay?

But these responses should be treated with caution on the following reasons:

- The questions were not connected to specific cases. They are opinions. Moreover, some respondents have voiced their opposition to the rules in additional comments. Knowing that competition problems could support their criticism of the remuneration rules may have biased their answers.
- Respondents themselves pointed to the fact that it is difficult to attribute turnover in top management to any one cause, even if that cause is remuneration. The longer-term impact on the level of talent attracted to financial services as a result of the regulations cannot yet be known.
- Another factor which can undermine the reliability of the voiced concerns is the actual labour market situation. An ILO survey conducted in 2009 (ILO 2009; Escudero 2009) projected a significant increase in the number of jobs for investment bankers until 2016. Nonetheless, a 2012 survey conducted by the trade unions reported significant job cuts, amounting to 4.2% of the 2011 workforce in systemically important banks. (UNI Finance global union 2013) In the face of such job losses in the industry, job security may become more important than the form of pay.⁴⁴

The following table shows the responses concerning motivations for job search or change collected from 36 material risk takers in the financial sector.

Asked about mobility of staff, a banker responded that it is "important to remember that there are a set of reasons for staff to leave to go to another bank or another employer". By the same token, it was said that "Resignations are often for more than just one reason. " (representative of a large bank in an interview 1.12.2015)

⁴⁴ The press has widely covered unemployed investment bankers who were looking for job opportunities.



Table 27: MRT Survey result: What factors affect your decision to take up employment / to leave employment?

Important?	Not at all	Little	Some	Yes	Very
Level of total pay	2.8 %	5.6 %	22.2 %	44.4 %	25.0 %
Opportunity to earn large bonus	11.1 %	19.4 %	33.3 %	22.2 %	13.9 %
Employer quality and reputation			11.1 %	25.0 %	63.9 %
Nature of work conducted			5.6 %	36.1 %	58.3 %
Opportunity to excel against competition	5.6 %	5.6 %	30.6 %	22.2 %	36.1 %
Higher level of fixed pay	5.7 %	8.6 %	31.4 %	40.0 %	14.3 %
Higher non-salary benefits	11.4 %	14.3 %	31.4 %	25.7 %	17.1 %
Increased responsibilities		8.6 %	8.6 %	40.0 %	42.9 %

Employer quality and reputation and also the nature of work are import factors, just as increased responsibilities and opportunities to excel against competitors. The opportunity to earn large bonuses are less important.

It is sometimes argued by the EU financial industry and policymakers that the competitiveness of European institutions vis-à-vis major US and Asian banks might be damaged by the impact of being prevented from offering the same high performance-linked variable pay as their competitors on their ability to attract and retain talent.

While the maximum ratio may be seen as a disadvantage by certain parties, there are other benefits of working in financial institutions in the EU, both at a personal and an environmental level. EU cities, including global financial capitals, continue to rank at the top of quality of life surveys such as the Mercer Quality of Living Annual Survey. It is worthwhile evaluating the extent to which other advantages offered by life in the EU outweigh the financial losses that may arise as a result of the implementation of the maximum ratio.

Table 28 shows the developments since the introduction of the MRR on 1 January 2014 regarding attracting and retaining key talent from the bank survey.

Table 28: Results of Bank and investment Firms Survey Question 6.4: To what extent has staff turnover or recruitment changed for your firm since beginning of 2014?

Since 2014	Not at all	To a little extent	some	large	very large	Total #
it has become difficultto attract key staff to our firm	59.1%	10.9%	19%	9.5%	1.5%	137
to retain key staff at our firm	68.3%	11.7%	16.6%	3.4%	0.0%	145
Staff turnover has increased	72.1%	13.6%	12.2%	1.4%	0.7%	147
Recruitment of staff from non CRD- regulated sectors	71%	5.6%	11.2%	8.4%	3.7%	107



The majority of firms do not encounter difficulties in attracting key staff (59.1%, statement 1). About 11% of banks find it difficult to attract key staff (to a large or to a very large extent). Similarly, banks face on average no difficulties in retaining staff (68.3%) and staff turnover has not increased since 2014 (72.1%).

The interviews with a consultant and a major trade association elicited the opinion that the implications in relation to recruitment and retention of staff were not of great significance.

"The mobility of senior bankers does not appear to be as much of an imminent threat as is sometimes presented in public media reports and in the form of anxieties within the industry of a large outflow of talented staff to less strictly regulated jurisdictions. It does not appear that key staff can migrate to Singapore, Dubai, the US or elsewhere simply because of remuneration regulations. The medium-term threat to a competitive EU industry exists but people often overlook the fact that banking is often a relationship-based service industry and client bases are regional. This limits the flexibility of staff to leave the EU and their client base. In the short-term, there is less propensity among senior bankers to move geographically (factors such as family considerations and social contacts, the overall environment of the various cities in the US or the EU etc. are powerful considerations for staff)." (From an expert interview, 30.11.15)

3.4.2 Recruitment and retention of staff working at EEA institutions compared to non-EEA institutions

In this section we analyse whether the restriction on profit-related pay will affect the ability of EEA institutions to attract or retain talented staff compared to non-EEA institutions. The CRD rules apply to banks and investment firms, including subsidiaries and daughter companies in other countries, within the geographical range of the EEA. Even in countries where CRD IV is not applicable, employees of subsidiaries of EEA financial institutions will be subject to the restrictions on pay imposed by the regulations. This might have an impact on the competitiveness of staff retention by financial institutions subject to CRD IV.

We questioned 15 EU supervisory financial authorities in 14 countries. The responses are shown below.



Table 29: Question 4.10: To what extent do you agree with the following statements about CRD Article 94(1)(g) on the maximum ratio?(Extent of agreement with supposed effects of the maximum ratio)

Statement	(1) Staff leaving firms after the implementation of the bonus cap is likely to go to firms outside the EU/EEA not regulated by CRD	(2) EU firms operating in non-EU countries are disadvantaged in recruitment and retention as they are restricted by bonus caps
To a very large extent	1	1
To a large extent	2	2
To some extent	1	4
To a small extent	4	1
Not at all	0	1
n.a.	7	6
Total	15	15

Only 3 out of 15 supervisory agencies agree with statement (1), Staff leaving firms after the implementation of the maximum ratio is likely to go to firms outside the EU/EEA not regulated by CRD and statement (2) EU firms operating in non-EU countries are disadvantaged in recruitment and retention as they are restricted by maximum ratios to a large or very large extent. However, it should be noted that around 40 % of agencies have no opinion regarding these statements.

Similarly, statement (5) in Table 30 shows that financial institutions do not encounter difficulties in recruitment of non-EU/EEA staff for financial institutions since beginning of 2014. 81.8 % of the responses stated that recruitment of non-EEA staff has not become more difficult, which suggests that it is unlikely that CRD IV regulation creates disadvantages for European banks. On the other hand, 8.1 % stated that it is more or much more difficult to attract non-EU/EEA staff. This group of banks is apparently negatively affected by the regulation.

Table 30: Results of Bank and investment Firms Survey Question 6.4: To what extent has staff turnover or recruitment changed for your firm since beginning of 2014?

Statement	(5) Staff leaving firms after the implementation of the bonus cap is likely to go to firms outside the EU/EEA not regulated by CRD			
To a very large extent	3%			
To a large extent	5.1%			
To some extent	9.1%			
To a small extent	1%			
Not at all	81.8%			
Total #	99			

Table 31 displays results from the survey on selected statements regarding the effects of the 'bonus cap' regarding recruitment of talent for banks in EU/EEA firms versus non EU/EEA firms.



Table 31: Results of Bank and Investment Firms Survey Question 6.8: To what extent do you agree with the following statements about CRD Article 94(1)(g) on the 'maximum ratio'

Level of Agreement	Stron- gly disagree	Dis- agree	Neither /nor	Agree	Strong ly agree	Total #
(1) The introduction of the bonus cap has made working for EU/EEA firms in the EU/EEA less attractive for talent	2.9%	28.6%	17.1%	34.3%	17.1%	70
(2) The introduction of the bonus cap has made working in non EU/EEA firms more attractive for talent	4.6%	30.8%	24.6%	24.6%	15.4%	65
(3) Staff leaving firms after the implementation of the bonus cap is likely to go to firms outside the EU/EEA	1.6%	32.8%	29.5%	31.1%	4.9%	61
(5) EU firms operating in non-EU countries are disadvantaged in recruitment and retention as they are restricted by bonus caps	1.5%	16.9%	21.5%	38.5%	21.5%	65

51.4% of banks agree or strongly agree with the statement (1) that the maximum ratio has made working for EU/EEA firms in the EU/EEA less attractive for talent. Note that Table 31 expresses opinions. The perception of the negative effects from the regulation is stronger compared to when institutions are asked for a statement on the actual development. (see Table 30)

Credit institutions and investment firms are of the opinion that it is more difficult to attract staff in non-EU countries. Statement (5) in Table 31 reflects the opinion that EU firms operating in non-EU countries could be disadvantaged in recruitment and retention as they are restricted by maximum ratios. 60% of the credit institution and investment companies agreed with this proposition.

In countries where CRD IV is not applicable, employees of subsidiaries of EEA financial institutions will be subject to the restrictions on pay imposed by the regulations.

Because mother companies are also bound on behalf of their daughter companies, they see a conflict between the local quality of markets and the international structure of financial institutions. As the rules are founded in administrative law they are subject to the single passport concept, whereas under civil law the idea of one region one law dominates.

3.4.3 Asset management companies

One important aspect of the competitiveness of CRD-institutions to attract and retain staff is whether one can observe an increase in remuneration being paid to staff in stand-alone asset management firms vis-a-vis asset management firms that are subsidiaries of a CRD-regulated group. It might be that the non-CRD regulated financial sectors are benefiting from the maximum ratio limiting banks thus allowing



them to attract ex-bankers into their firms. This could be relevant if investment bankers can switch over to stand-alone asset management firms, that is, if their skills and competences can be transferred to a different segment in the financial industries.

Remuneration consultants confirm the very large movement from investment banking to asset management both as a result of poaching by hedge funds etc. and the searching for employees has become more difficult for banks. The movement is not primarily linked to pay. Employees switch for reduced salaries for a number of reasons including the perception that asset management companies are more stable or reliable employers and the prospects are seen as less vulnerable than in investment banking where the sector is undergoing change and where the work culture can be less appealing to new recruits (interview with a head-hunter, 23.11.2015).

In our iff firm survey we have addressed the issue whether restrictions for profitrelated pay affects the ability of institutions to attract or retain talented staff compared to entities not regulated under CRD, such as asset management or private equity firms. Statement (4) in Table 32 provides a summary of the banks' responses on this question. 50% of surveyed banks agree or strongly agree with the statement that staff leaving firms after the implementation of the bonus cap is likely to go to companies that are not CRD-regulated in the EU.

Table 32: Results of Bank and Investment Firms Survey Question 6.8: To what extent do you agree with the following statements about CRD Article 94(1)(g) on the 'maximum ratio'?

Statement	(4) Staff leaving firms after the implementation of the bonus cap is likely to go to companies that are not CRD-regulated in the EU
Strongly disagree	3%
Disagree	24.2%
Neither/nor	22.7%
Agree	37.9%
Strongly agrree	12.1%
Total #	66

Variable remuneration structure is very similar in investment banking and asset management inside banks (see EBA 2015b). The important difference can be seen in the regulation of the bonus cap, which is part of the CRD, but not UCIT and AIFMD directives. As it will be described more in depth below in Section 4.3.4 the factual situation with regard to variable remuneration is quite similar in both business lines. But it is too early to assess whether these differences in regulation on one hand and the similarities in the remuneration structure on the other lead to empirically evident distortions in the level playing field between entities that are only indirectly covered by CRD, and their competitors that are regulated by other sector legislation.

3.4.4 Recruitment and retention of staff vis-à-vis the non-financial sector

Staff mobility between the financial and non-financial sector is assumed to be low, as skills and competencies which are relevant in banking cannot be easily transferred to other sectors.



Asked whether they would "move to another sector outside of finance" 63% said that this was not or little likely at all.

One concern regarding recruitment difficulties was expressed in the interview with a specialist (17.12.2015):

"While the EU as a financial centre has produced a more consistent landscape for remuneration arrangements, there is a much more restricted ability for firms to distinguish themselves from the competition and they find it more difficult to attract staff with specifically attractive incentive programmes anymore." (expert interview)

A different aspect regarding the relevance of the rules for attracting and retaining staff was given in the interview with a remuneration consultant (17.12.2015). It was highlighted that the effect of the results regarding attracting key staff is mainly relevant for recruitment of top graduates:

"[..] staffing levels are still similar to before the cap, survey respondents from the finance industry said hat 20% of them had faced a decrease in the ability to attract new staff and 25% decreased ability to retain existing staff. Other factors may be behind these answers but the respondents assumed the cap had contributed. The issue is more specifically felt in terms of the young persons that could potentially join the banks. Banking jobs have become less attractive for them (e.g. due to reputational factors) and the general industry and high tech firms are more attractive propositions to many." (Expert interview)

A recent FT article⁴⁵ supports this view and claims that the investment banking sector is becoming less attractive to top talent from business schools, and the maximum ratio is mentioned as one of the reasons, but not as the main one. "Even if investment banks were still able to offer the financial rewards they once could, students' priorities seem to be changing." But none of these publications provide hard data. On the contrary the data representing the average income of investment bankers in comparison to other well paid professions shows that there is little financial incentive to leave this sector so that the main reason to quit remains the enforced loss of job opportunities in this area.

Salaries of persons working in the financial industry are still in the top range and therefore very competitive. According to new research reported in the Financial Times, PricewaterhouseCoopers estimates that average investment banker in the UK earns GBP 212,000 a year, which is 5.8 times the average salary in the UK private sector (see Figure 33). It is noteworthy that this ratio has dropped from 9.5 times the average as it was in 2006. (Butcher 2013.)

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The Economist 2014, http://www.economist.com/news/business/21623673-graduates-worlds-leading-business-schools-investment-banking-out-and-consulting, retrieved on 6th January 2016.

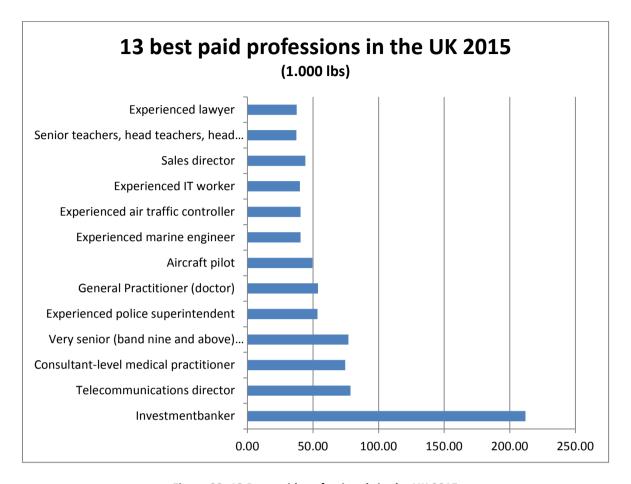


Figure 33: 13 Best paid professionals in the UK 2015

3.5 Competition with financial centres outside the EEA

This section analyses whether the attractiveness of the EU as an international financial centre has been affected by the implementation of maximum ratios. CRD rules may affect attractiveness for bankers working at a higher level because of their ability to choose between different legal jurisdictions. Countries with less stringent regulation may tolerate mechanisms for circumventing enforcement.

Many factors make a financial centre competitive (QFC 2015). Those factors include business environment, financial sector development, infrastructure, human capital and reputational and general factors. According to the QFC ranking, New York, London, Hong Kong, and Singapore remain the four leading global financial centres. The top five European centres are London, Zurich, Geneva, Luxembourg, and Frankfurt.



Table 33: GFCI Ranks and Ratings (Source: GFC reports September 2013 and 2015)

Financial Centre	Rank		Score	
	2015	2013	2015	2013
London	1	1	796	794
New York	2	2	788	779
Hong Kong	3	3	755	759
Singapore	4	4	750	751
Tokyo	5	5	725	720
Seoul	6	10	724	701
Zurich	7	6	715	718
Toronto	8	11	714	699
San Francisco	9	12	712	697
Washington DC	10	17	711	689
Chicago	11	14	710	695
Boston	12	7	709	714
Geneva	13	8	707	710
Frankfurt	14	9	706	702
Sydney	15	15	705	692
Dubai	16	25	704	671
Montreal	17	18	703	688
Vancouver	18	19	702	686
Luxembourg	19	13	700	696
Osaka	20	30	699	655
Shanghai	21	16	698	690



Table 34: Main areas of financial centre competitiveness

Area of Competitiveness	Number of Mentions	Main Issues
Business Environment	201	Corruption Rule of Law
Taxation	164	Simplicity and fairness Stability & transparency
Human Capital	146	Centres becoming more competitive in attracting skilled people Diversity of nationalities is become more important Security and safety are becoming more important
Reputation	116	Securityandsafetyarebecomingmore important Centres need to market themselves more – they are in a competitive marketplace
Infrastructure	106	People are becoming less patient and don't want to wait for transportation ICT infrastructure is now a given—without it a centre cannot compete
Financial Sector Development	100	Professional services clusters are vital Physical proximity still very important

Source: QFC 2015, p.10.

Figure 34 shows that Western Europe has not lost competitiveness as against the major competitors in North America and Asia since CRD rules were implemented in 2011 (GFCI 19). Eastern and central European financial centres are even catching up with leading centres across the world.

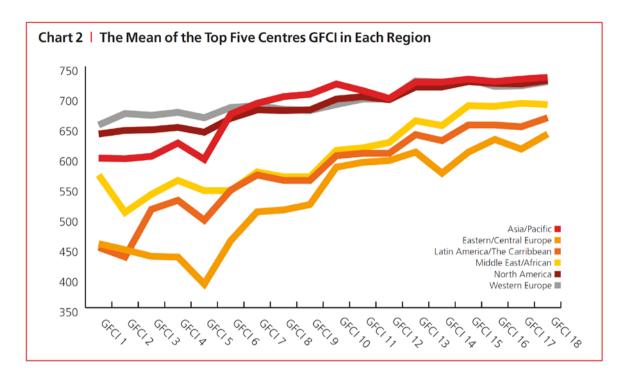


Figure 34: The mean of the top 5 global financial centres by region

Source: GFC 2015 23 Sept 2015, timeframe May 2007 (GFCI 1=May 2007 to GFCI 18=May 2015)

Table 35 shows the four important financial centres outside the EEA are regulated by national regulations which regard to especially executive remuneration.



Table 35: Examples of international reforms in executive remuneration

Jurisdiction /Regulator	Selected Remuneration Related Reforms
Financial Stability Board (FSB)/G20	Presents a set of principles on effective governance of remuneration, effective alignment of remuneration with prudent risk-taking and effective supervisory oversight and engagement by stakeholders. Implementation standards: Clawback / malus to apply on cash bonuses 40 % (60 % for senior executives) of bonus must be deferred 50 % of variable remuneration to be awarded in shares / share-linked instruments Minimum deferral period is 3 years At least 50 % of cash bonus to be paid in restricted shares
United States	As part of the Frank-Dodd Act (2010), the following measures were put in place on listed companies: Nonbinding votes on remuneration of executives by shareholders ('say on pay') Nonbinding votes on golden parachute packages by shareholders ('say on golden parachutes Additional disclosure requirements Introduction of clawback provisions
Hong Kong	No legislation or directive, but the Hong Kong Monetary Authority has introduced a Guideline on remuneration practices. The guidelines do not specify explicit limits on fixed or variable remuneration, and judgment is left to the bank / their boards to decide an appropriate remuneration structure given business objectives, strategy and risks.



Jurisdiction /Regulator	Selected Remuneration Related Reforms
Switzerland	In 2013, a Swiss referendum rejected a proposal to cap the salaries of top executives at 12 times that of a company's lowest wage. They approved however a "say on pay" provision, requiring that – from 1.1.2014 – the Annual General Meeting votes the total remuneration (both monetary and in kind) of the board, the executive board and the advisory board. Board members receive no compensation on departure, or any other remuneration, or any remuneration in advance, any premium for acquisitions or sales of companies and cannot act as consultants or work for another company in the group. The management of the company cannot not be delegated to a legal entity. Violation of the provisions set out in letters a to c above shall be sanctioned by imprisonment for up to three years and a fine of up to six years' remuneration.
	The ordinance does not cap remuneration nor provide for a maximum ratio but requires (inter alia) the following: - an (annual) shareholder vote on the remuneration of the members of the board and the executive committee; - maximum term and notice period for employment agreements of one year; - prohibition of certain forms of remuneration,(i.e. severance payments; advance payments; payments/premiums related to the acquisition or disposal of businesses; loans/credits/pension benefits or performance based remuneration not provided for in the articles of incorporation, and; allocation of shares/other equity security and options or conversion rights not provided for in the articles of incorporation).
	These rules apply to corporations under Swiss law whose shares are listed on a stock exchange in Switzerland or abroad (foreign companies listed on a Swiss stock exchange or having a tax residence in Switzerland are not affected). FSB report (November 2015) registered an effective alignment of banks' remuneration policies with risk-taking. Even though there is no formal guidance, the Standard concerning no hedging in respect of remuneration is addressed by larger institutions through internal compliance processes. The adherence by larger institutions to this Standard is confirmed by supervisory evidence.

This shows that specific requirements as to the composition and implementation of pay packages are specified by the EU and the FSB, whereas the US requirements are focused on actions to be taken by shareholders as monitors. This is in line with increased disclosure requirements, which are required in almost all jurisdictions. Financial services centres in Asia, meanwhile, are more relaxed in terms of their requirements and have only issued guidelines rather than laws.

The above suggests that the financial services sector in the EU is subject to more stringent regulation with respect to the composition and implementation of executive remuneration packages. In particular, one EU requirement stands out. Variable pay is limited to 100 % of fixed pay (up to 200 % with shareholder approval). No other jurisdiction has required a similar 'cap' on variable pay.

Further details on country-specific regulations are outlined in Annex 1.4.



4 Proportional application

4.1 Proportional application

4.1.1 Legal principle - CRD IV and EBA guidelines

Article 92(2) of Directive 2013/36/EU requires national authorities to apply the rules "in a manner and to the extent that is appropriate to their size, internal organisation and the nature, scope and complexity of their activities." Art. 97 (4) regulating the extent of supervision (see also Art. 161 (2) (a) for the review of its implementation) refers to this limitation as "the principle of proportionality". According to Recital 104 of the Directive this refers directly to Article 5 (4) of the European Treaty, which holds that "under the principle of proportionality, the content and form of Union action shall not exceed what is necessary to achieve the objectives of the Treaties".

The principle is further explained in the EBA 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 of 21 December 2015 (EBA 2015d), which comes into force on January 1, 2017.

"The draft guidelines were subject to a three-month consultation period between March 2015 and June 2015. The EBA received 127 responses to the draft guidelines. EBA highlights the inherent proportional adaptations provided for in the choices and limitations of the CRD IV regarding the extension of the maximum ratio to 200 %, the flexibility in the deferral period in addition to the general application of the proportionality principle. But contrary to some national legislators and practice, the EBA insists that the maximum ratio as such "should be applied in any case" (recital 22). It underlines the close relationship between risk profile and risk appetite with the application of remuneration rules (EBA 2015d, p. 78). It also points out that the identification of staff "should be performed ... before remuneration requirements are applied in a proportionate way...". (EBA 2015d, p. 79) With regard to "large (including significant) and more complex institutions and groups" they are required to have "more sophisticated remuneration policies and risk measurement approaches, while small and less complex institutions and groups may implement simpler remuneration policies and approaches." (EBA 2015d, p. 82)

4.1.2 Economic rationale

As we have seen above, the Principle of Proportionality is enshrined in the EU approach to legislation and regulation. There are various ways of thinking about proportionality in the EU (see, e.g., Pelkmans 2012). But what is the economic rationale behind this principle? The basic idea stems from two considerations. The first pertains to the efficiency of banking regulation and the potential distortions of a unitary approach to regulating a banking system composed of a variety of types banking. In this sense, the application of a one-size-fits-all approach to banking and financial regulation could lead to perverse effects, such as a permanent detriment to SME lending by financial institutions (Masera 2015a). In this respect, contrary to the EU approach that "has added complications and further regulatory layers ... the US authorities, meanwhile, adopted instead a streamlined approach ... modulated and tiered on the basis and complexity of banks" (Masera 2015b). On contiguous grounds, Ferri and Kalmi (Ferri, Kalmi 2014) show that even in the case of US and Canadian Credit Unions – where Basel III does not apply – there has been a major rise in recent



years in the burden of compliance costs of regulation. Since these costs have a large fixed component, de facto if not de jure, banking regulation appears to be unintentionally introducing artificial economies of scale in banking. In turn, based on data for Italy's mutual credit cooperative banks, Ferri and Pesce (Ferri, Pesce 2011) report evidence that the increasing regulatory compliance burden may be propelling Mergers and Acquisitions that would not otherwise be undertaken.

Following the focus on the macroprudential approach in reaction to the financial crisis (see, e.g., de Larosière 2009), the second economic rationale for proportionality in the regulation of financial institutions derives from observing that the effectiveness of regulation should be related to the degree to which a financial institution contributes to systemic risk. In this respect, size, internal organisation, scope, and business complexity can lead to classifying financial institutions in different groups. Specifically, smaller financial institutions, and/or those which engage in less complex activities, and/or have a narrower scope of activities, and/or have stronger internal organisation, are expected to contribute less to generating systemic risk compared to larger financial institutions, and/or those which engage in more complex activities, and/or have a wider scope of activities, and/or have weaker internal organisation. Accordingly, the former could be granted more favourable regulatory treatment, including the waiver of some rules.

The concept of proportionality in financial regulation leading to allowing softer requirements in terms of remuneration policies, stems from this second economic rationale. In other words, proportionality in remuneration policies should be linked to the expected contribution of the financial institution concerned to systemic risk. It is believed that CRD IV and the CRR rules on remuneration policies could induce problems for regulated entities in recruiting and keeping skilled staff against the potential competition of the shadow banking system, which, by definition, does not have to obey the same rules.

Waivers of remuneration policies granted to financial institutions may entail one or more of the following (EBA 2015):

- variable remuneration in financial instruments (e.g., in cash vs. equity instruments);
- retention (malus);
- deferral;
- ex post incorporation of risk for variable remuneration;
- requirement to establish a remuneration committee.



Table 36: Dimensions	for proportionate	selection of institutions
Table 30. Difficilisions	ioi bioboi tioliate	sciection of mistitutions

Dimension	Indicators	Examples
Size/importance	systemic, large, medium, small	systemically important credit institution
Organisation	coporate governance control system	
Activities	nature scope complexity	investment banking, retail banking National, multinational Number of subsidiaries, diversity of activities, revenue
Risk affinity	risk appetite, profile	investment banking, asset management, retail
	ownership/mission	private banks, savings banks, cooperative, and public banks etc
Transparency	quality/degree of disclosure requirements	

4.2 Problems of national transposition of the proportionality principle

4.2.1 General diversity in application: EBA report 2015⁴⁶ and supervisory responses

In parallel to *iff*'s questionnaire addressed to supervisors, EBA has conducted its own survey of national authorities on the application of the principle of proportionality. This also included rules in the Directive allowing Member States to make choices.

The EBA survey concludes that nearly all Member States apply the principle of proportionality, in addition to the choices offered by the CRD IV, but with diverse outcomes. It concludes: "There is no consistent approach across the EU regarding the application of waivers." (No 20 EBA-Report 2015). There is a wide variety of applications which, more for legal than for competitive reasons, need harmonisation. The five criteria of proportionality referred to in Art. 92 and 95 CRD IV are: "size, internal organisation and the nature, scope and complexity of their activities". Two of these criteria are widely used in national legislation, namely size and nature.

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EBA 2015e, Annex II: Report on Member States' implementation of the principle of proportionality in the area of the CRD IV remuneration provisions. Empirical findings of EBA Survey: Findings Proportionality.



Dimension	Sub dimension	Waivers
Size	Assets	EUR 1 billion; EUR 5 billion; GBP 15 billion; EUR 30 billion
	Investment banking	< 20 %; EUR 125 million (required own funds); "small investment firms"
	Variable remuneration	<eur %="" %;="" (ratio)<="" 100,000="" 13,000;="" 30="" 30,000;="" 70="" 8,000;="" <25="" eur="" td=""></eur>
	Qualification	"significant institution"
Nature	Banking activity	coop banks; savings banks; retail banks; non listed banks;
	Non-banks	Investment firms, asset management companies, insurance companies,
Scope	Groups	Only for subsidiaries; for the whole company
	international	Not in non-EEA countries
Complexity		case-by-case or linked to size ("small" institutions)
Internal organisation		(unused)
Other	Decision making	Automatic; case-by-case; self-assessment; listed; (some still based on CEBS 2009)
	Waivers	identification of staff; deferral; pay-out in instruments; malus; clawback
	Stricter rules	60 % (where significant); retention period 2 years; limits on total remuneration; 20 % maximum ratio;

Table 37: Summary of proportional application according to EBA-report 2015

The **Dutch** authorities summarised the existing generalised exemptions as follows:

- Individuals not or not fully governed by an applicable collective labour agreement, provided that the average variable remuneration awarded to this category does not exceed 20 % of fixed remuneration;
- If a person primarily performs services in a state (not being the Netherlands) that forms part of the EEA, the financial institution in question may award variable remuneration of 100 % of fixed remuneration. If a person primarily performs services outside the EEA, the financial institution may award variable remuneration of 200 % of the fixed remuneration provided approval has been given by the shareholders, owners or, in case of a co-operative, the members;
- Provided more than 75 % of the staff of that group primarily performs services outside the European Union for more than three years (which is to be measured retroactively over a period of five years), the bonus cap provision of CRD IV (instead of the Dutch rule) applies to the holding company;
- managers of investment institutions, i.e. alternative investment firms (AIFs);
- managers of Undertakings For The Collective Investment Of Transferable Securities (UCITS);
- investment firms that act solely and exclusively on their own account with their own funds and capital and do not have external clients.

The **Italian expert** enumerates the exemptions as follows:

 It should be noted that the aforementioned provisions do not apply to smaller banks or banks with less operational complexity, nor to employees or identified



staff. This might be the case for many Italian banks. However, Circular 285/2013 specifies that the provisions set out in Section III, para. 2.1 (3) include the retention rules, and must be applied to smaller banks if these banks intend to pay part of variable remuneration in financial instruments.

There are two general factors, which increase and decrease diversity in the EEA. Diversity in the applied legal or administrative rules is accompanied by additional diversity in the procedures that define the role of the competent authorities in the process of granting exemptions and reduced application. Automatic waivers, waivers which require consent and those where the objective criteria need an additional justification (by risk-related criteria) coexist.

4.2.2 "Significant institution", "clawback", "malus" and "pay-out in instruments"

Asked how a "**significant institution** is assessed", the competent banking authorities gave the following responses, which show material and procedural differences.



Table 38: Selected definitions of significant institutions (Responses from competent authorities)

	Significant Institution
Germany	"balance sheet total on the balance sheet dates for the last three completed financial years reached or exceeded an average of EUR 15 billion, unless the institution provides BaFin with risk analysis pursuant to paragraph 5 proving that it is not a major institution." "BaFin may classify an institution when 1.the institution has high off-balance sheet positions, especially in derivative instruments, 2.the institution acts to a large extent as an originator, sponsor or investor of securitisation transactions or uses a securitisation special purpose vehicle pursuant to Article 4 number 66 of Regulation (EU) No. 575/2013 for this purpose, 3. the institution has large positions in its trading book or 4. the remuneration structures within an institution are dominated by a large proportion of variable remuneration components in the overall remuneration. Where a group company is classified as a major institution, all other companies of this group are also considered to be major institutions.
UK	Proportionality level one: Bank, building society or full scope investment firm with total assets exceeding £50 billion over a three-year average. The use of a three-year average of total assets is aimed at achieving a consistent approach, which takes account of longer-term changes in firms' business models.
Belgium	a) a systemically important credit institution;
	b) a credit institution with a balance sheet total of more than EUR 3 billion.
Finland	Four institutions have been designated significant in Finland: Nordea Bank Plc , OP Group, Danske Bank Plc and Municipality Finance Plc.
Luxembourg	b) The total value of institution's asset exceeds 30 billion euros or the ratio between its total assets and Luxembourg GDP is above 20 %, unless the total value of its assets is less than 5 billion euros d) The institution is a parent company of the supervised institutions e) The institution is the parent establishment of a large number of subsidiaries in other countries f) Shares of institutions are admitted to trading on a regulated market.
Austria	Regulated by law: Balance sheet above EUR 1bn and/or listed on a regulated market.
France	Regarding the remuneration committee credit institutions, finance companies and investment firms (other than portfolio management companies) which solo or consolidated assets are equal to or more than EUR 5 billion.
Denmark	 Total assets in per cent of GDP > 6.5 per cent Loans in per cent of the total lending by the sector > 5 per cent Deposits in per cent of the total deposits of the sector > 5 per cent The Danish SIFIs are allocated into five different subcategories based on the level of systemic importance of the institutions. The systemic importance is calculated as an average of the total assets in per cent of the total assets of the sector, loans in per cent of the total lending by the sector and deposits in per cent of the total deposits of the sector. in the two most recent financial years at the balance sheet date, on average have employed 1,000 or more full-time employees.

With regard to **clawback and malus arrangements** only 2 out of 15 authorities were of the opinion that there was complete or almost complete application. In addition to the 3 authorities who estimated that there was "broad application", the



positive answers were provided by only one-third of respondents, while about half found only some or little application.

With regard to "pay-out in instruments" two-thirds saw problems of application in this area, equally distributed among "some" or "most" firms.

4.2.3 Implementation by delegation

While some national legislators and authorities from larger countries have used the proportionality principle to provide general formalised exemptions, which, in the end, reformulate the selection criteria of CRD IV, others have passed these principles through to practice, even delegating the first decision to the targeted institutions themselves.

The **German** legal expert explains this as follows.

The German supervisory authority (BaFin) has issued an "Auslegungshilfe" (interpretation guidelines) with regards to the InstitutsvergütungsVO. In these guidelines, the rules are specified to an even more specific level. This corresponds to established practice in administrative law, where the administration interprets and applies the more general rules laid down in the law. In summary, one can therefore say that at the level of administrative law, the remuneration rules in Germany are quite strict and detailed.

We find more reservations in the statement of the **Portuguese** expert where CRD IV seems to have been taken more literally:

In theory, the utilisation of vague and undetermined concepts leaves a large margin of discretion to credit institutions and financial companies, who may excuse themselves from the strict application of remuneration policies by virtue of its own interpretation of its own characteristics. Moreover, the absence of legal criteria to pinpoint which of the policies are applicable to which institutions is likely to promote over-compliance situations for small financial companies, who don't have the proper means, structure and financial resources.

This is underlined by the **Polish** expert:

The proportionality principle stipulated in the Resolution and in the Regulation is open and imprecise. It lists only factors to be considered by the banks and brokerage houses such as size, risk, internal organisation, character/scope/complexity of the activity, legal form.

The **Spanish** expert supports this view:

We agree in principle that the principle of proportionality has not led to different wordings in national law (it is as open and imprecise as in CRD IV or in the EBA-Guidelines). However in practice there are large differences in application (automatic waivers and requested disapplication).

The understanding of the principle of proportionality by national authorities is therefore hidden in the formal rules they apply for automatic exclusion or adaptation. But considering the Directive itself and its legislative transformation of general principles, all stakeholders confirm that these formal rules of exclusion are "not automatic" but will be monitored in the light of both the purpose of the regulation,



which favours a wide application, and the proportionality principle, which favours exclusions. Because to date there is little empirical evidence about these case-by-case decisions, the source for the understanding of the principle remains with the formal rules of exclusion and the opinions of the stakeholders.

With regard to legal exclusions, we will rely on the findings of the 2015 EBA Report, and for opinions we will rely on the reports of national legal experts, the responses of the competent authorities and the opinions of the identified institutions themselves.

4.2.4 The process of identification

The experts describe the decision-making process as being situated between automatism, the granting of exemptions by the competent authorities, and direct application by the institutions themselves.

In **Denmark** the institution and specifically its board of directors is responsible for applying the rules.

In accordance with the Executive Order of Payment Art. 8(2) the board will in each case decide whether it is justifiable to exclude the company from one or more requirements. The company will explain this assessment at the request of the FSA. In practice, the assessment may apply to both the company's affairs and the beneficiary's relevant conditions. The board may consider exemptions from the requirements at company level if it also estimates that no individual has a sufficiently significant impact on risk, as it considers that an exemption from one or more of the requirements would be irresponsible. The board may also consider that it is only justifiable to exempt one or more groups of employees or individuals in the company from any requirement.

All regulations under the Danish Financial Business Act address "the undertaking" which has to apply these rules. The Financial Services Authorities have the right to make additional rules.

In **Germany**, there are general rules which are applied under the scrutiny of the competent authority which can intervene at different stages of the process.

The definition of significant institutions is contained in § 17 InstitutsvergVO and relates mainly to the institution's amount of total assets over the last three years. If this amount is at least \in 15,000,000,000, the institution is deemed to be significant, unless the institution can show on the basis of a risk analysis that it is not significant, considering certain criteria set out in § 17 par. 5 InstitutsvergVO. Furthermore, there are certain categories of institutions that are "significant" regardless of their asset figures (§ 17 par. 2 InstitutsvergVO), and the supervisory authority may also declare an institute to be "significant" for substantive reasons (§ 17 par. 3 InstitutsvergVO) even if the amount of total assets is below \in 15,000,000,000.

The distinction between significant and non-significant institutions is seen as a consequence of the principle of proportionality in the sense that the stricter rules should apply only to the more significant institutions.

Italy addresses the banks directly but provides general rules for exemptions:

Circular 285/2013 (Banca D'Italia 2013) requires that the choices of each credit institution in relation to remuneration policy and the application of the principle of



proportionality are suitably motivated, formalised and disclosed in the remuneration policy that will be subject to the approval of the shareholders' meeting of the bank, pursuant to the provisions set out in Section II, para. 1 of Circular 285/2013.

Pursuant to Circular 285/2013, the banks are classified into three categories, based on their size and of the complexity of their respective activities:

- larger banks or banks with greater operational complexity ("banche di maggiori dimensioni o di maggior complessità operativa");
- smaller banks or banks with less operational complexity ("banche di minori dimensioni o di minor complessità operativa");
- intermediate banks ("banche intermedie").

The banks under (i) must apply all rules and provisions regarding the remuneration contained in the Circular 285/2013, included the rules concerning variable remuneration. The banks under (ii) are not subject to the provisions set out under Section III, para. 2.2.1, having as their object discretional pension benefits ("benefici pensionistici discrezionali"), nor are they subject to the rules set out under Section III, para. 2.1 (3) and (4).

In the **Netherlands** the legislator has turned the principle into a formal legal framework, which provides certainty, and extends its application significantly through formalised exceptions:

The Act on the Remuneration Policy of Financial Undertakings applies, as a matter of principle, to all financial institutions incorporated or established under Dutch law, as well as to the Dutch and foreign subsidiaries of these financial institutions. ...

It is ... also applicable to a wide group of persons. ... The Act on the Remuneration Policy of Financial Undertakings applies to all natural persons employed under the responsibility of a financial institution. Its provisions apply to individuals working for the financial institution on the basis of an employment agreement as well as to individuals working on the basis of other types of contractual agreements, such as permanently insourced individuals employed by external business outsourcing companies. ...

The relevant provision entails that variable remuneration cannot exceed 20 % of annual fixed remuneration ... Additionally, this bonus cap also applies to Dutch branches of foreign financial institutions that are not a bank or investment firm. There are, however, several exceptions to this rule.

The **Polish** expert finds it critical that there seems to be a self-assessment process inherent in CRD IV:

Banks and brokerage houses have to decide for themselves based on the proportionality principle whether they should or should not apply the deferral and malus rules at all or with regard to any categories of identified staff. In the letter to banks of 23.12.2011 (ref no DOR/WR2/0735/10/2/MO/11) the Polish Financial Supervision Authority explained that its above-mentioned Resolution does not define any precise thresholds because the authority deems it to be more flexible to leave this question open. According to the authority, the banks will thereby be better able to adjust their variable remuneration policies to the particular situation of each bank. The bank must be able to justify how it has applied the proportionality principle.



4.2.5 Automatic or individualised exemptions 47

There is considerable diversity in the way waivers are established. While in some countries there appears to be an automatic mechanism, others provide waivers on an individual basis. This seems to be related to the number of banks which potentially fall under this legislation. Smaller countries provide a positive list of identified institutions, by implication excluding others from its scope. The competent authorities have described this process using the following examples:

National Bank of Belgium: We apply waivers in line with the criteria set out in the CEBS Guidelines of 2011. Automatic waivers are granted to staff earning less than EUR 75,000 in variable remuneration.

Financial Supervisory Authority Finland: Given the relatively low level of remuneration in Finland and no cases have been observed where remuneration would have encouraged excessive risk-taking. It has been deemed that neither deferral nor payout in instruments need to be applied when a member of identified staff is awarded variable remuneration below €50,000 for one year or below two months' fixed salary. We assess this to be the application of the proportionality principle and not a waiver. The administrative burden for the supervised entities can thereby be eased. During the time of deferral (3 to 5 years), an organisation, the roles and responsibilities of members of identified staff may change considerably, and the number of risk-takers has been increasing lately. Keeping track of them is time-consuming, resource-intensive and will not serve reaching the ultimate aim of the regulation.

Financial Market Authority Austria: Waivers are neither "automatic" nor "on request".

Autorité de Contrôle Prudentiel et de Résolution (ACPR) France: National regulation specifies the application of the proportionality principle by setting thresholds and exemptions for several kinds of entities. ... Institutions: The following entities are given a waiver from the aforementioned remuneration requirements (i.e. Articles 92 to 94 CRD4): Asset management companies (Article 198), insurance companies (Article 198), entities which belong to a banking group and have total balance sheet inferior to €10 billion and which do not pose a risk to the solvency and liquidity of the group (Article 201), entities which have total assets inferior to €10 billion (or which belong to a group having total consolidated balance sheet inferior to €10 billion) which have identified their risk-takers and have implemented a policy on variable remuneration including deferral, limitation and payment in instruments. Entities having a total balance sheet inferior to €10 billion and which belong to a group having a total consolidated balance sheet superior to €10 billion are exempted on a solo basis (i.e. have to apply group-level requirements) (Article 200) and Individuals. To this day, in line with the principles of "neutralisation" permitted by the CEBS Guidelines, supervisory practice has considered any annual individual variable remuneration

The following authorities have responded to the questionnaire and provided comments: Austria: Financial Market Authority; Belgium: National Bank of Belgium; Denmark: Danish Financial Supervisory Authority; Finland: Financial Supervisory Authority; France: Autorité de Contrôle Prudentiel et de Résolution (ACPR); Germany: BaFin and Dt. Bundesbank; Italy: Banca D'Italia; Luxembourg: Commission de Surveillance du Secteur Financier - CSSF Luxembourg; Netherlands: De Nederlandsche Bank N.V.; Poland: Polish Financial Supervision Authority; Spain: Banco de España; Sweden: Finansinspektionen (the Swedish FSA); UK: Financial Conduct Authority and separately Bank of England Prudential Regulation Authority.



inferior to €100,000 does not need to be subject to deferral and payment in instruments.

Financial Conduct Authority UK: Whilst we have ticked these boxes in the spirit of transparency, we do not 'waive' directive principles. ... We would therefore expect firms not simply to apply the remuneration principles in a proportionate manner (which may include their disapplication in some cases) but also to justify why it is not appropriate for them to apply the CRD provisions to the full extent.

Banco de España: Common practice in Spain which is based on a supervisory internal procedure: proportionality principle applicable MRTs whose variable remuneration is under €50,000.

Danish Financial Supervisory Authority: All institutions are allowed to apply waivers in order to establish a level playing field across the financial sector in Denmark.

In the responses to the closed y/n questions eight out of fifteen competent authorities required **preapproval of exclusions** under Art. 4 (2-5) Reg. 604/2014, while 5 did not.

The number of **non-compliance** with the remuneration provisions detected by the banking authorities is rather low. Six found a few firms, one "some firms" while five had no firms where non-compliance had been detected. Four cases were reported with pending outcomes.

4.3 Cost of CRD IV implementation for (non-Listed) small, simple or specialised institutions

4.3.1 Small non-complex institutions

The data on specific cost as well as comments and opinions of such institutions in our survey (Q1) and interviews concerning the implementation of remuneration systems have already been presented with a clear distinction between small institutions, medium-sized entities and large companies (see Section 2.1.2).

The findings can be summarised as follows:

- First, small non-complex institutions are not actively involved in taking large risks that might spill over into the financial system as a whole.
- Second, when asked to estimate the costs of implementing the CRD-IV rules, the small banks were virtually unanimous in reporting that the costs of all measures, except the maximum ratio, would affect their costs to a great extent. Setting up and maintaining complex and unfamiliar remuneration systems that would be applicable to only a few staff members is thought to be costly and unnecessary.
- Finally, most small institutions reported that they have already asked for and received a waiver that permits them to disapply the remuneration rules (again, with the exception of the maximum ratio).



4.3.2 Groups

Many large banks who responded in the EBA consultations thought that requiring subsidiaries of significant institutions to have their own remuneration committees "would result in significant costs, increase their administrative burden, and reduce efficiency in return for questionable governance benefit" (EBA 2015d, p. 133). In response, the EBA made it clear that only subsidiaries that were themselves significant would be required to establish their own committees.

Most large credit institutions already have an independent remuneration committee (EBA 2015d, pp. 94-95) and small institutions will not be deemed "significant", so the incremental costs associated with this requirement should be small. In its interview with iff, however, Mercer noted that even though "the Remuneration Committees had existed in most banks prior to the crisis so no new setting up costs were likely for many banks ... the level of attention, seriousness, accountability and disclosure of the remuneration committee work has been heightened significantly (both at the level of the board and the internal organisation)." (iff remuneration consultant interview)

AFME in its *iff* interview argued that "The main cost factor and complication of a reassessment of the principle of proportionality lies primarily with global firms with more complex organisational structures with subsidiaries operating in various jurisdictions. Creating a remuneration committee at each organisational level does not seem to be consistent with the sound remuneration practices that the regulation seeks to enforce. If governance is set at group level for the entire organisation, having local committees on remuneration may lead to instances where local structures of pay are not in line with the corporate policy."

4.3.3 Investment firms

The scope of the CRD IV remuneration rules clearly includes investment firms. As the recent EBA Guidelines clearly state (p.128): "The CRD applies to credit institutions and investment firms. EBA [Guidelines] cannot exempt investment firms from the scope of application defined in the CRD."

That said, both the CRD IV rules and the EBA Guidelines are clear that the rules must be applied in a proportionate way. Recital 66 of Directive 2013/36/EU CRD IV reads as follows:

In order to ensure that the design of remuneration policies is integrated in the risk management of the institution, the management body should adopt and periodically review the remuneration policies in place. The provisions of this Directive on remuneration should reflect differences between different types of institutions in a proportionate manner, taking into account their size, internal organisation and the nature, scope and complexity of their activities. In particular it would not be proportionate to require certain types of investment firms to comply with all of those principles. (Emphasis added)

The EBA recently (December 2015) issued its recommendations for a sound prudential regime for investment firms. In the report (p. 78), EBA acknowledges that investment firms are different in their risk appetites compared with credit institutions and, indeed with each other. They write: "... one of the more specific challenges is related to the application of the proportionality principle, which could arise from the full application of the CRD/CRR remuneration requirements to investment firms." The section of the

report on remuneration requirements ends with the statement that the EBA was investigating the idea "that specific exemptions could be introduced for certain institutions, including investment firms under certain conditions, in particular regarding the application of deferral arrangements and payment in instrument." As we wrote above (p.75), large investment firms, (the non-bank, non-insurer entities) can create system-wide dangers but many investment firms are considered to be less significant and pose less risk. Regarding proportionality, in its "Opinion of the European Banking Authority on the application of the principle of proportionality to the remuneration provisions in Directive 2013/36/EU", EBA recommends that "Waivers of the limitation on the ratio between variable and fixed remuneration should not be introduced for institutions falling under the scope of Directive 2013/36/EU. The so-called bonus cap is easy to apply and does not create additional administrative costs. The cap ensures that no inappropriate incentives for risk-taking can be provided." (p. 6).

In Section 4.2, Table 37, we show that Member States are currently applying proportionality to investment firms on the basis of their size (some are small) and the nature of their business.

Since there is little quantifiable information about the cost of the pay-out process in investment firms covered by CRD we present data collected by ESMA from UCITs and AIFs which may serve for the approximation of cost for similar processes in the institutions of concern in this subchapter.

Table 39: Estimates of costs linked to Pay-out Process in UCITs and AIFs

Pay out Process costs est.		One-off	Recurring	Total 1st year
	in €000s	medium vs. large	medium vs. large	medium vs. large
With spec	ific* proportionality			
	Deferral	50-200	20-50	70-250
	Retention /	30-200	20-50	50-250
	Malus	30-60	20-30	50-90
	Total	110-460	60-130	170-590
Without s	pecific*			
	Deferral	100-500	60-250	160-750
	Retention /	60-500	60-250	120-750
	Malus	40-150	40-100	80-250
	Total	200-1150	160-600	360-1750
* specific proportionality = de minimis		imis threshold		

Table 40: Estimates of costs linked to remuneration committee in UCITs and AIFs

	in €000s	One-off	Recurring	Total 1st year
		medium vs. large	medium vs. large	medium vs. large
With general* proportionality		0-150	0-250	0-400
Without general*		80-150	150-250	230-400
proportionality				
NB: "medium" firms have some €50bn AuM; "large" firms have some € 500bn AuM.				

In these estimates, "general proportionality" refers to the proportionate application of the remuneration rules (deferral, pay-out in instruments and so on) at the institutional level while "specific proportionality" refers to the application of rules to identified staff.



With proportionality applying across the board, the estimate is EUR 360,000–1.75 million for medium and large firms to implement the variable remuneration rules and another EUR 230,000-400,000 for setting up and operating a remuneration committee.

The financial crisis 2008 has revealed that the systemic risk posed by large investment firms to the financial system is comparable to the risks posed by investment banks and investment banking in general. It therefore does not seem to be "unnecessary" to include in the application of the remuneration rules of CRD IV *in toto*.

If as proposed in this report the proportionate application within the Directive and not only through its application would be linked to the size of variable remuneration instead of an institutional approach to the exemptions (see 4.4) problems of small investment firms would also be solved.

The investment firms that responded to the *iff* survey of credit institutions and investment firms were proprietary traders, firms that use their own resources to buy and sell financial instruments. ⁴⁸ They argue, along with their professional organisations, that they are fundamentally different from banks in terms of their structure and lines of business.

One example that consistently arose in their comments was that the 100 % bonus cap would challenge the nature of their business, for which low fixed payments are essential for surviving economic downturns and for which high bonuses are essential for attracting and retaining staff. Examples of responses are as follows:

"We strongly believe that imposing a bonus cap is detrimental to many firms rather than beneficial: modern investment firms need to keep their fixed costs under strict control in order to move back and forth with the economic cycle. Variable pay serves as an important means to control risks and the financial condition of the firm, because, unlike fixed remuneration, variable pay moves in line with actual business performance: no profit, no bonus. In addition, unlike fixed pay, unpaid instalments of variable remuneration can legally be held 'at risk' for deductions or forfeiture if the firm would incur a loss or require additional capital." (Q1_41)

"If bonus caps were introduced fixed salaries would have to spike in order to compensate, removing all benefits of variable remuneration at once: risk mitigating features / risk alignment is cancelled, agility in cost management too (the firm has to control its fixed costs tightly to move through the economic cycle)." (Q1_43)

"Furthermore, [variable remuneration] allows us maintain a flexible cost base, enabling us to respond in a prudentially responsible manner to unpredictable revenue streams. This low fixed-cost environment is essential to help us manage risk appropriately." (Q1_17)

"Compliance with the fixed-to-variable pay ratio would require proprietary trading firms to increase fixed salaries across all staff in a manner anathema to

⁴⁸ Such firms are also known as principal trader or own-account traders.

the flexible remuneration structures that currently aid such firms' risk management.... remuneration structures within the proprietary trading sector generally comprise low fixed salaries with a potentially high variable component if the firm, and/or the relevant individual, performs well ... By enforcing a ratio on remuneration of 1:1 (max 2:1) variable to fixed, proprietary trading firms will see a significant increase in their cost base without cause. Our internal analysis shows firms' fixed remuneration costs could increase by three to four times their current level, while greatly damaging the flexibility and risk-mitigating effects of discretionary variable remuneration. This is a dramatic impact that will inevitably hamstring such firms' ability to reduce costs during stress events or downturns." (Q1 44)

"The bonus cap will make the firm less attractive for talent, relative to banks and larger firms." (Q1_49)

On the question of deferred variable remuneration, two investment firm respondents noted that they already had a form of clawback of variable remuneration:

"Realised variable remuneration will be paid out over two years in two equal instalments. Prior to payment of the second instalment of a variable remuneration, the entitlement of an employee to this deferred payment will be reassessed. Payment of variable remuneration can be reduced, postponed or cancelled." (Q1_41)

Investment firm respondents anticipated incurring significant costs if they were forced to apply the remuneration rules:

"If we would have to apply the bonus cap, the financial impact would be major." $(Q1_41)$

"Costs that the firm would incur are not limited to compliance expenses, but giving up agility, budget flexibility (low fixed costs, no profit = no bonus or forfeited bonus) and powerful risk mitigants (variable pay is profit-sharing and may be forfeited when the firm incurs a loss)." (Q1_43)

"Complying with these provisions would threaten our very existence, despite the fact that we have no client funds and the only people at risk in the event of our failure are the owners and employees of our own firm." (Q1_17)

"No other major jurisdiction has contemplated or is contemplating such prescriptive and restrictive remuneration requirements or compensation limits for their financial services firms." (Q1_44)

There is a clear conflict between the position of the investment firms, who feel they should not have to abide by remuneration rules that they feel were written for banks, not for investment firms, and the EBA which is clear the investment firms are subject to the CRD IV rules.

In December 2015, EBA in cooperation with ESMA published its report on investment firms ((EBA 2015c) issued in response to a call for advice by the European Commission on the prudential requirements applicable to investment firms. The report identifies the lack of risk sensitivity in the CRD and CRR regime for investment firms as a primary issue to be addressed, and proposes a series of recommendations to target specific risks posed by investment firms (e.g. in terms of a re-categorisation of

investment firms to distinguish between systemic and "bank-like" (i.e. proprietary trading) investment firms and other investment firms, which would lead to a more proportional framework to taking into account the threefold objectives of preserving financial stability, protecting investors and ensuring the orderly failure of these firms when this may be needed. With specific reference to the remuneration requirements, the EBA report stresses the relevance of provisions to firms that may have different risk profiles, based on differing investor bases, risk appetites and risk horizons. It says that the overarching aim of remuneration requirements for prudential purposes is to create a strong link between remuneration policies and risks. In addition, the EBA report also stresses that some investment firms will have different business models and structures and thus different remuneration structures.

"Therefore, one of the more specific challenges is related to the application of the proportionality principle, which could arise from the full application of the CRD/CRR remuneration requirements to investment firms. For instance, to take into account the case of:

- agency brokers, where pay is structured primarily in the form of commission on matched trades, meaning the broker acts as an intermediary and does not risk the firm's own capital. Commissions are only paid on trade completion;
- private equity firms, certain asset managers and other investment firms operating carried interest plans (where bonuses are agreed upfront in line with the management fee);
- wealth managers that may have few employees (less than 100) and may be structured as LLPs."

EBA concludes: "On the application of the proportionality principle, the EBA is investigating the impediments to a full application of the CRD remuneration provisions, with the view that specific exemptions could be introduced for certain institutions, including investment firms under certain conditions, in particular regarding the application of deferral arrangements and payment in instrument. In this regard, the EBA intends to send its advice to the European Commission, suggesting legislative amendments that would allow for a broader application of the proportionality principle."

Our own research would support the EBA argument that further work is needed to better understand the suggestion of greater proportionate application of the CRD IV requirements to all investment firms.

4.3.4 Asset management companies

Unlike investment firms CRD IV does not include asset management firms if their business is not part of a bank's business but provided independently. Although there had been a number of contacts with the association of such firms AFME only one response to the questionnaire came from such an independent asset management company hosted by an insurance company while the six others were filled out by asset management companies related to banks.

Neither interviewees nor the literature search was able to provide evidence of the magnitude of the unlevel playing field issue. Sector presentations and overviews and outlooks found did not identify this issue. E.g. a presentation from the consultancy Deloitte Ireland in 2015 identified the key themes in asset management remuneration as: base salary increases generally low, there is an increase in deferrals, usually over



3 years, an increased focus on risk and conduct and a trend towards balanced scorecard approach. Firms considering the use of fund units to satisfy AIFMD and UCITS V as well as the use of malus have become more common.⁴⁹

The EBA benchmarking report 2014 (EBA 2014: 18) compared remuneration schemes of asset management within identified institutions to other forms of banking especially to investment banking. The data concern the situation between 2010 and 2014 and should be treated taken care since the number of identified staff to whose remuneration relates has changed significantly. But the figures are comparable in the relation of the different business lines for each year. It shows that the remuneration mix in asset management and investment banking is closer related to each other than to other banking business lines. "In investment banking, the highest variable remuneration was paid on average, followed by asset management, other business areas (which includes the members of the management body) and retail banking." Also with regard to the ratio between variable and fixed remuneration both sector showed similarities which may also be typical with regard to those competing asset management companies outside the banking sector.

Table 41: Average ratio between variable and fixed remuneration for identified staff per business line

	Investment banking	Asset management	Other business areas	Retail banking
2010	336.48 %	208.63 %	112.50 %	45.55 %
2011	181.97 %	134.31 %	96.03 %	42.15 %
2012	179.47 %	128.86 %	59.64 %	35.05 %
2013	191.71 %	107.88 %	69.26 %	24.97 %
2014	89.04 %	100.19 %	61.89 %	31.29 %

Source: (EBA 2015b); (EBA 2014a); EBA data for 2014 own calculation

The main factor affecting competitiveness of banks vis-à-vis independent asset management companies and other adjacent financial or non-financial firms are the heightened capital requirements and other prudential measures that have made certain activities less attractive for banks. This is also the case in other jurisdictions and the US banks have own stringent regulation introduced by the Volker rules that will also affect US level of competitiveness in the affected business areas. The greater competition felt by standalone banks and banking groups from asset management firms is a structural change that is independent from the additional remuneration requirements, and this is especially noticeable in areas such as infrastructure, private equity. Furthermore, the remuneration component of the changing relative competitiveness of the sectors is not affecting all firms, activities and job seniority to the same extent. For example, while total pay packages for the most senior staff can be similar, it is mainly the more junior positions that have seen a widening gap between levels of pay of staff at banks and staff at asset management and boutique firms with the former finding it difficult to match the offers being made to staff of the later sector.

While the remuneration structure as well as risk-taking activities resemble those of identified credit institutions and investment firms there was a much stronger will to

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⁴⁹ www.deloitte.com



escape these regulations than in the comparable sector of larger banks. Basically two arguments have been raised: increased cost because two remuneration systems have to be provided within one firm and second that such rules are unnecessary because AMCs administer not their own but their clients' risks. EBA and ESMA have largely commented on this situation. Our own database and survey results do not allow for a detailed analysis of the differences which have been claimed. The results of this small survey are summarised in Annex 0.

4.4 Conclusion

Table 42 summarises the factors which have led to a wide range of categories for reaching a proportionate application of the remuneration rules of CRD IV at national level.



Table 42: Factors influencing proportional application

Dimension	subject	Identification	effects	Reasons
Size	Assets	Small with different limits (between €1-30 billion)	Total exclusion	Some are too small for investment banking
	Remuneration	Minimum (50 000 €)	Total exclusion	
	Ratio	Minimum (20 %)	Total exclusion	
Ownership	Private-state owned; state rescued;	State acquired after the crisis	Harsher regime for state rescued banks	Due to irresponsible risk-taking in the past
Legal Form	Corporations, savings banks, coops	Non-listed banks (Coops)	Total exclusion	Not necessary, good history, no profit seeking
Business area	Retail, no investment activity		Management remains concerned	CRD IV aims at investment banking
Contractual form of remuneration	Labour law restrictions	Covered by collective agreements	No application for existing contracts, existing collective agreements, no application of clawback and malus	Labour law guarantees necessary income. Those covered by collective agreements are not the risk takers
Empirical evidence	No variable pay practice	No variable payment detected	Smaller countries with no own investment banking	Feel not concerned
Double effort	subsidiaries	Extra remuneration committee not necessary	Not applicable since no remuneration committees necessary	Unnecessary efforts
No risk taker	asset management	Not included in CRD IV if not done by banks	Total exclusion	Manage the risks of their clients and not own risks
Procedure	Self-assessment	By bank and investment firm	Ex post control	Ability and closeness to process

National implementation reveals different criteria limiting the scope of application: Size (assets); Maximum Ratio (i.e. 20 %; 8 %); private, state-ownership or participation when rescued; legal form (coop banks, savings banks, listed/unlisted); business (retail, investment); complexity; contractual form (collective agreements); structure (group); and takes into account the assumed lack of own risks (asset management). While these exemptions have a formalised legal form, the principle of proportionality is also applied through different procedures of identification. Some MS prefer a case-by-case decision from the competent authorities or lists based on whether the organisation carries out investment banking, or its size or the existence of



variable remuneration, while others allow self-assessment with ex post control where the institution itself takes the initiative with regard to proportionality. All these criteria are covered by a minimum ratio for all institutions that use variable remuneration within financial institutions. Benchmarks at national level are a minimum ratio of 20 % or 8 % fixed in collective agreements. An absolute minimum income level (i.e. EUR 100,000) would have similar effects. All other criteria could thus be superseded.

Small non-complex credit institutions are significantly different from larger institutions and should therefore be treated differently under the law on the following basis (1) they are not actively involved in taking large risks that might spill over into the financial system as a whole and accordingly have very few material risk-takers and variable remuneration; (2) they are virtually unanimous in reporting that the costs of all measures, except the maximum ratio, would affect their costs to a great extent and be unnecessary. Because the administrative burden does not vary in direct relation to size, their costs would be disproportionately high. This is why most small institutions have received waivers that permit them to disapply the CRD-IV rules. The problems of cooperative banks and savings banks are largely identical to those of small institutions. Their general exemption from some of the rules, rules that are considered the most burdensome, based on either the level of variable remuneration or assets) would solve these problems.

Such criteria are implicitly present throughout the regulation, where some exemptions apply where the assumed relationship between the payment of variable remuneration and risk-taking is not present. This is where the case for variable pay serves other purposes and is not linked to risk-related performance. Guaranteed variable pay is seen as a means for attracting personnel and therefore is excluded from maximum ratios. Asset management firms are excluded because their business is seen as less risk-related. Investment firms under MiFID are excluded for the same reasons. They have significant shares in variable remuneration but this cannot be risk-related if the firm is not active in such risk-taking activity. This idea can, however, be turned on its head. Variable pay may have many purposes beyond a reward for risk-taking. If we turn this argument upside down, wherever variable pay reaches a certain notoriety, the risk alignment of its calculation should be taken into account. As we find similar structures of variable pay in credit institutions, investment firms and asset management companies, it is basically right to provide the same remuneration regime for all of them.

However, a means test for each form of variable remuneration would be to draw the wrong conclusion. Remuneration policies in risk-taking institutions are inseparably combined with the remuneration policy as a whole. A means test would make the regulation ineffective and introduce more uncertainty into its application.

A more harmonised implementation of the rules would be substantially supported if objective assumptions existed to help determine the conditions under which the intention to engage in further excessive risk-taking is deemed to be likely. This would also require combination with a more precise right for institutions to apply for individualised exemptions according to a similar objective list of criteria. A template that could be used for elaboration of such guidelines could be inspired by the identification criteria EBA has developed for the purpose of defining the perimeter of the regulated population as "identified staff".

On the one hand CRD IV should be applied wherever excessive risk-taking in financial matters has been observed in relation to significant amounts of variable remuneration relative to fixed remuneration. This coincides largely with what is known as



investment banking or the business of investment bankers where the word "banking" is not linked to a credit institution but comprises functions which are certainly but not exclusively fulfilled by investment banks. The inclusion of investment firms and asset management companies owned by credit institutions into the scope of application of these rules is therefore necessary and correct.

On the other hand, levels of remuneration which are small in absolute terms as well as in relation to the portion of fixed pay should be taken as the basis for a legal assumption that the typical risks associated with variable pay in investment banking are not likely to occur.





Study on the remuneration provisions applicable to credit institutions and investment firms (JUST/2015/MARK/PR/CIVI/0001)

Annex

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1 Legal developments

1.1 International regulation

1.1.1 FSB principles

Table 43: Extract of FSB Principles for Sound Compensation Practices (April 2009)

FSB Principles no. 4-7: "effective alignment of compensation with prudential risk-taking"	Detailed by the EU into
[Remuneration] must be adjusted for all types of risk, outcomes must be symmetric with risk outcomes, its pay-out schedules must be sensitive to the time horizon of risks and the mix of cash, equity and other forms of compensation must be consistent with risk alignment.	 clawback or malus to apply on cash bonuses, 40 % (60 % for senior executives) of bonus be deferred, 50 % of variable remuneration to be awarded in shares or sharelinked instruments, minimum deferral period of 3 years, at least 50 % of cash bonus to be paid in restricted shares.

Source: http://www.fsb.org/2009/04/principles-for-sound-compensation-practices-2/

In its 2011 report on institutional coverage of these principles (BIS 2011), the Bank for International Settlement (BIS/BCBS) examined the following states, which are also covered by our study.

Table 44: FSB Principles BIS Review 2011

Country	Applied to	Size thresholds
Belgium	Banks, investment firms	No
France	Banks, insurers	No
Germany	Banks, insurers	General requirements apply to all banks and insurers, special requirements apply to large & complex banks and insurers
Hong Kong	Banks, insurers	No – insurers to observe the guidance promulgated by IAIS
Italy	Banks, investment firms, asset managers	6 large banking groups
Luxembourg	Banks, insurers, pension funds	No
Netherlands	Banks, insurers	No
Singapore		Applied to locally incorporated banks. Applied to locally incorporated life insurers with total assets > \$\$5 billion



In its third progress report of November 4, 2014 (FSB 2014) the FSB monitored implementation of these principles in the states covered by the present tasks. It included the EEA, the USA, Hong Kong, Singapore and Switzerland. Overall implementation of these principles was held to be satisfactory. ⁵⁰ While most other countries retained the form of "principles", whose legal implications are difficult to assess, the EU transformed these principles into strict rules enforceable by the supervisory agencies of credit institutions and investment firms. However, its "principle of proportionality" left some discretion to the national legislature and financial authorities to provide the flexibility allowed for by the FSB principles.

The complex legislative process since 2009 in the EU can be followed in the following table.

Table 45: Regulatory initiatives for variable remuneration in the finance sector since 2009

Date	Regulatory intervention	Adopter
04/2009	Committee of European Banking Supervisors (CEBS): High-level principles for Remuneration Policies	CEBS
04/2009	European Union (EU): Commission Recommendation on remuneration policies in the financial services sector	EU
04/2009	FSB Principles for Sound Compensation Practices	FSB
04/2009	High-Level Principles for Remuneration Policies	CEBS
04/2009	Recommendation on Remuneration Policies in the Financial Services Sector	EU
09/2009	Principles for Sound Compensation Practices – Implementation Standards	FSB
09/2009	Approval of FSB Principle (London)	G20
01/2010	Compensation Principles and Standards Assessment Methodology	BCBS
2010	i.e. Instituts-Vergütungsverordnung (InstitutsVergV)	National
11/2010	Directive 2010/76/EC (CRD III)	EU
12/2010	Guidelines on Remuneration Policies and Practices	CEBS
05/2011	Range of Methodologies for Risk and Performance Alignment of Remuneration	BCBS
07/2011	Pillar 3 disclosure requirements for remuneration	BCBS
07/2011	Alternative Investment Fund Managers Directive (AIFMD) 2011/61/EU	EU
07/2011	Pillar 3 disclosure requirements for remuneration	BCBS
06/2013	Directive 2013/36/EC (CRD IV)	EU
06/2013	Order (EU) 575/2013 (CRR)	EU
07/2013	RTS on classes of instruments that are appropriate to be used for the purpose of variable remuneration	EBA
2013	National transposition CRD IV (i.e. KWG and InstitutsVergV)	Nat.

The following countries were monitored and were also represented on the evaluation committee AR; AU; BR; CA; CN; FR; DE; Hong Kong; IN; ID; IT; JP; KR; MX; NL; RU; SA; Singapore (SG); ZA; ES; Switzerland (CH); TR; UK; US; EU.



03/2014	RTS on criteria to identify categories of staff whose professional activities have a material impact on an institution's risk profile	EBA
06/2014	Markets in financial instruments (MiFID II) 2014/65/EU	EU
07/2014	Undertaking for the Collective Investment in Transferable Securities (UCITS V) 2014/91/EU	EU
03/2015	Draft Guidelines on Sound Remuneration Policies EBA/CP/2015/03	EBA

This report assesses below the effectiveness of the rules, assuming their application. This has its limitations where the Directive itself provides leeway for national implementation and discretion, for example under its proportionality principle or where it expressly concedes to restrictions in labour law, which may vary among Member States. In these cases, factual differences will mirror regulatory differences and cannot be understood without taking into account the different policy approaches taken in the different Member States.

1.1.2 CRD IV and CRR

After the crisis, disclosure of remuneration practices had already been enhanced in several countries⁵¹ as a result of "say on pay" provisions, that is the vote of shareholders at a general meeting on remuneration policy and/or various components of remuneration of executives and/or non-executives, depending on the country.

Considering in more detail the European framework, in order to ensure that a firm's remuneration policy does not incentivise staff to take imprudent risks and to promote sound and effective risk management, the Capital Requirements Directive III (CRD III) introduced in 2010 a number of technical rules on remuneration paid by EU-based credit institutions (banks) and investment firms to certain categories of staff.

The Capital Requirements Directive IV (Directive 2013/36/EU, CRD IV) and the Capital Requirements Regulation (Regulation EU No 575/2013, CRR) essentially carried over the existing provisions of the CRD III relating to remuneration with some enhancements in relation to the maximum ratio. The CRR supports the strengthened governance provisions by requiring firms also to make increased disclosures (Pillar 3 of the prudential regulation) in relation to their risk management objectives and policies (for each separate category of risk) and their enhanced governance arrangements, including their diversity policy and the existence of a separate risk committee, where applicable.

The Directive is complemented by two delegated regulations:

 Commission Delegated Regulation (EU) No 604/2014 of 4 March 2014 supplementing Directive 2013/36/EU of the European Parliament and of the

As shown by the ecoDa-IFA Report on Say on Pay published in November 2013, at the time fifteen countries of the European Union had already adopted - or were about to adopt - the principle of Say on Pay in various ways, as also suggested in European Commission Action Plan "Action Plan: European company law and corporate governance." (2012) 740/2. IFA 2013, http://ecoda.org/news-details/article/report-say-on-pay-international-comparisons-and-best-practices-ifa-november-2013/.



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;

Commission Delegated Regulation (EU) No 527/2014 of 12 March 2014 supplementing Directive (EU) No 2013/36/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the classes of instruments that adequately reflect the credit quality of an institution as a going concern and are appropriate to be used for the purposes of variable remuneration.

The CRD IV/CRR regime is also supplemented by guidelines and technical standards issued by the European Banking Authority (EBA 2015d). As a result of EU intervention, the financial services sector in the EU is subject to stringent regulation with respect to the composition and implementation of remuneration packages. No other jurisdiction has required a similar 'cap' on variable pay. Within the banking industry, its commentators, noted academics and economists it has been argued that this restriction on pay packages would reduce the competitiveness of the financial sector in the EU, leading to a possible migration of talent to less restrictive jurisdictions. Incentive and risk-effects aside, according to these arguments it could raise the bank's fixed remuneration costs, which would further expand their financial obligations.

The relevant provisions on remuneration within Directive 2013/36/EU and Regulation EU 575/2013 can be found in articles 74, 92 to 95 and 161 (in addition to recitals 62 to 69 and 83) in the CRD IV, and in article 450 on disclosure in the CRR.

Recitals 62 to 69 describe the rationale and the main principles of the intervention on remuneration.

In order to achieve this goal, institutions must:

- follow clear principles on governance and on the structure of remuneration policies (Recital 63);
- align remuneration policies with the risk appetite, values and long-term interests of the credit institution or investment firm, taking into account the current and future risks associated with performance (Recital 63);
- fix a maximum ratio between the fixed and the variable component of total remuneration (Recital 65);
- involve the management body in adoption of the regulation and periodically review their remuneration policies (Recital 66);
- apply the principles and rules on remuneration for institutions on a consolidated basis, that is at the level of the group, parent undertakings and subsidiaries, including the branches and subsidiaries established in third countries (Recital 67) and those established in offshore financial centres (Article 92(1));
- formalise and adopt prompt remedial action and, if necessary, appropriate corrective measures in order to avoid poorly designed remuneration policies and incentive schemes that could increase risks to an unacceptable extent (Recital 68);
- align the award of variable remuneration and discretionary pension benefits with the profit status of the institution during any period in which the combined buffer requirement is not met, taking into account the long-term health of the institution (Recital 83). Competent authorities have power to impose qualitative or quantitative measures in their supervisory review (e.g. power to require



firms to limit variable remuneration as a % of net revenues on sound capital base grounds; Article 104 and Recital 68⁵²);

In particular, remuneration policies must be defined, approved and monitored within the internal governance system of the institution, and provided with robust risk management and governance arrangements (Article 74-76).

The policy must make a clear distinction between criteria for setting basic fixed remuneration and variable remuneration (Article 92(2)g). The first should primarily reflect relevant professional experience and organisational responsibility as set out in an employee's job description as part of his or her terms of employment; the second should reflect a sustainable and risk-adjusted performance as well as performance in excess of that required to fulfil the employee's job description as part of the terms of employment.

The total remuneration⁵³ applying to categories of staff including senior management, risk-takers, staff engaged in control functions and any employee receiving total remuneration that takes them into the same remuneration bracket as senior management and risk-takers must reflect the business strategy, objectives, values and long-term interests of the institution, and incorporate measures to avoid conflicts of interest; it must be consistent with and promote sound and effective risk management and not encourage risk-taking that exceeds the level of tolerated risk of the institution (Article 92(2)a-b).

The corporate governance and internal control systems must guarantee effective oversight of compliance with remuneration provisions. In particular the institution's management body in its supervisory function must adopt and periodically review the general principles of the remuneration policy and is responsible for overseeing its implementation. Remuneration policy and its enforcement are, at least annually, subject to central and independent internal review of their compliance with policies and procedures for remuneration adopted by the management body in its supervisory function (Article 92(2)c-d). The staff engaged in control functions is remunerated in accordance with the achievement of the objectives linked to their functions, independently of the performance of the business areas they control. The remuneration of senior officers in the risk management and compliance functions must be directly overseen by the remuneration committee or, if such a committee has not been established⁵⁴, by the management body under its supervisory function (Article 92(2) e-f).

Pursuant to Article 450 of CRR (and Article 96 CRD IV), in order to ensure adequate transparency for the market, institutions must disclose a set of information, regarding the remuneration policy and practices of the institution for those categories of staff

⁵² If capital buffer is insufficient institutions have the duty to notify the NCA about the amount of distributable profits allocated to the payment of variable remuneration or discretionary pension benefits (Article 141(8)d)iv)).

 $^{^{\}rm 53}$ $\,$ Inclusive of salaries and discretionary pension benefits.

Significant institutions pursuant to Art. 95 have to establish a remuneration committee and pursuant to Art. 76 a risk committee (Art. 76 CRD) which shall assist in the establishment of sound remuneration policy (examine whether incentives by remuneration system consider risk, capital, liquidity, timing of earnings).



whose professional activities have a material impact on its risk profile. Additional transparency and disclosure requirements are to be put in place for individuals earning more than \in 1 million per year.

Along with the transposition of EU Directives into national laws and regulations, EBA issued the following technical standards and guidelines on remuneration.

Table 46: EBA Technical Standards

Date	Act	Contents
16 December 2013	EBA FINAL draft regulatory technical standards (RTS) on criteria to identify categories of staff whose professional activities have a material impact on an institution's risk profile under Article 94(2) of Directive 2013/36/EU.	Combination of qualitative and quantitative criteria
27 March 2014	EBA Guidelines on the Applicable Notional Discount Rate for Variable Remuneration (EBA/GL/2014/01).	25 % rate
15 October 2014	EBA document "Opinion of the European Banking Authority on the application of Directive 2013/36/EU regarding the principles on remuneration policies of credit institutions and investment firms and the use of allowances".	Inclusion of "role-based allowances" if not predetermined, transparent to staff, permanent, tied to the specific role and organisational responsibilities, not provide incentives to take risks and, without prejudice to national law, be non-revocable
4 March 2015	EBA public consultation on its Guidelines on sound remuneration policies.	Mapping all remuneration into either fixed or variable pay; deferral arrangements and payout instruments; allowances; identifying risk related staff; calculation of the ratio between variable and fixed components including allowances, sign-on bonus, retention bonus, severance pay; pay-out processes and types of instruments; application of proportionality
16 July 2015	EBA amendments to the adopted Regulatory Technical Standards (RTS) on the criteria to identify categories of staff whose professional activities have a material impact on an institution's risk profile.	Identified staff

1.1.3 Variable pay in private law

The requirements of CRD IV concern remuneration as a counterpart of a performance rendered within privately concluded synallagmatic contracts. There is significant concern that the CRD IV approach of intervention into contract law required by



administrative supervisory law are the reason why the implementation of ratios, malus and clawback are seen as problematic or even impossible. The principle of *pacta sunt servanda* is seen as a universal principle in private law. It is the expression of the freedom of contract. The basic equation between performance and remuneration should be decided freely by the parties of the contract, according to offer and demand.

Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts refers to these principles also in EU-contract law as it limits state intervention in favour of consumers to such clauses which are not "individually negotiated" (Art. 3 (1)) and do not "relate ... to the definition of the main subject matter of the contract nor to the adequacy of the price and remuneration". (Art. 4 (2))

Concerns have been voiced by the national legal experts as well as in the 79 comments received from credit institutions and investment firms. (q1)

There seems to be a general conviction that the remuneration rules of CRD IV and their national counterparts cannot be applied to such variable remuneration defined in collective agreements. This concerns especially smaller banks like coops and savings banks. The statement of an Italian coop bank is in so far representative for all smaller banks who claim that most of their variable payments are covered by collective agreements:

"It's very difficult (if not impossible) to apply clawback arrangements on the variable remuneration components which refer to collective labour agreements because this could imply a breach of the collective agreements. Indeed, collective labour agreements state that the annual bonus for management and the productivity bonus must be paid in full in a specific time determined by collective agreements." (q1_155)

Another respondent states: "Clawbacks are not possible in German labour law." (q1_18)

A representative UK statement refers to legal traditions according to which contracts have to be re-examined in case of wrong performance, disclosure and fraud:

"Where possible we apply adjustments against an individual's discretionary variable pay award first before considering application of malus. ...There have been no cases of clawback application as our clawback policy was only implemented in January 2015. We have applied adjustment for individuals in their supervisory capacity even though they were not directly involved in an incident. Similarly, we have applied adjustment for individuals in control functions and internal audit for their role as second line of defence and third line of defence, respectively, in respect of their indirect roles in incidents."

The legal experts see the conflict of such interventions with existing contracts and distinguish between (collective) labour and individual civil law.



Table 47: National Experts' statements

Country	National Expert: Statement with regard to variable pay in civil and labour law
Germany	"The German Federal Labour Court has ruled in the context of the control of unfair contract terms (§ 307 BGB) that variable payments are to be seen as remuneration for work that has been done and thus cannot be taken away retroactively dependent on certain contingent conditions. ⁵⁵ In the literature, this decision is interpreted as a rule in the sense of "money earned cannot be taken away again" and thus it is seen as making such clawback clauses null and void. ⁵⁶ Similar considerations would apply to a malus clause if it would take away remuneration from the employee that has already been earned and paid out."
Italy	"In the civil and labour laws, it seems that there are no limits to the possibility for the banks to apply malus and clawback mechanisms to the variable part of the remuneration, also considering that these mechanisms have to be considered as "exceptional", that a bank can define and apply only in specific circumstances, and only if there are reasons justifying their application. In this regard, the Circular 285/2013 provides that the malus and clawback mechanisms need to reflect individual performances and the risks undertaken by the bank over time also the banks must respect the limits eventually provided by the relevant collective agreements"
Netherlands	"Under the provisions of the Claw-back on Bonuses Act ⁵⁷ such an <u>adjustment</u> is justified if the payment of the variable remuneration in question would violate general standards of reasonableness and fairness. ⁵⁸ The public company has the power to <u>claw-back</u> the variable remuneration or part thereof if this remuneration has been granted on the basis of false information about the performance related to the payment of the variable remuneration."
Portugal	"As we believe that is well understood, the existence of ongoing contracts (whether employment or other) constitutes a clear obstacle to the implementation of 'clawback' or 'malus' mechanisms. In respect to the employment contracts, the Portuguese labour law establishes the principle of the wage irreducibility, whether it is variable or fixed remuneration. On the other hand, in what concerns to contracts or agreements of any other nature whatsoever, the Portuguese civil law establishes the principle of the strict fulfilment to the celebrated contracts. As shown, the application of the 'clawback' or 'malus' mechanisms would conflict directly with the contracts in force upon the entering into force of the transposition law Therefore, we only foresee the application of 'malus' and 'clawback' re-arrangements to new contracts (labour or other), since those contracts contain clauses providing those mechanisms."

⁵⁵ BAG 13 Nov 2013, NZA 2014, 368.

⁵⁶ *Löw, Glück 2015*, 140.

De Wet tot wijziging van boek 2 van het Burgerlijk Wetboek en de Wet op het financieel toezicht in verband met de bevoegdheid tot aanpassing en terugvordering van bonussen en winstdelingen van bestuurders en dagelijks beleidsbepalers, Stb. 2013, 563.

⁵⁸ Article 2:135 (6) DCC.



Country	National Expert: Statement with regard to variable pay in civil and labour law
Poland	"As far as the question is concerned whether and to what degree deferral, malus and clawback may be contradictory to civil (contract) law or labour law: a) civil (contract) law is governed by the principle of contractual freedom. The parties could therefore in my opinion agree on such provisions; b) the labour law does not explicitly prohibit application of deferral, malus and clawback. The labour law embodies the principle that employee's right to remuneration is to be protected."
Spain	In principle, Labour Law or Civil Law are not obstacles, as far as CRD IV has been introduced by Act (Act 10/2014, on June 26th - developed by Royal Decree No. 84/2015, on Feb. 13th) shall be regarded as special legislation, and rules over labour and civil contract law.

It seems that the arguments should be confronted with the general treatment of variable financial rewards in contract law. Credit institutions at least are acquainted with legal intervention concerning variable remunerations in financial services contracts in the form of variable interest or provisions paid for the marketing of financial products. The difference of financial services contracts with regard to general contract law lies in the time factor. The pacta sunt servanda principle that seems to be hostile to unilaterally decided variable pay has been developed in the realm of contracts that are normally executed in a relatively short period of time (spot contracts, especially sales contract). Those contracts and the principles attached to their execution still dominate general contract law. However, in banking law long-term relations govern legal practice. Those contracts are indeed longer in nature. In the economic and legal discussion on contracts dominating the service economy, notions such as relational contracts, life time contracts, service contracts show that the typical pacta sunt servanda case of long term relations is not fixed but variable pay. The importance the clausula rebus sic stantibus principle has got in modern contract law⁵⁹ reveals that time related contracts need variability just in order to comply with the will of the parties.

Since the conditions for the adaptation of the contract can usually not be foreseen, they have usually been adapted and decided later. This often implies unilateral decisions. Such contracts are normally assumed to be incomplete and void⁶⁰ or can be modified in good faith. Contract law in the Member States tend to accept **unilateral price setting** but gives the other party the right to review its fairness.⁶¹

Nogler, Reifner 2014; Nogler, Reifner 2009; Pulgar 2014. For its formulation see Draft Common Frame of Reference (DCFR) II.-9.105 Unilateral determination by a party; III.- 1.108 ff Variation by agreement, notice or court decision "on a change of circumstances".

⁶⁰ For example, Section 155 German Civil Code "If the parties to a contract which they consider to have been entered into have, in fact, not agreed on a point on which an agreement was required to be reached, whatever is agreed is applicable if it is to be assumed that the contract would have been entered into even without a provision concerning this point."

For example, Section 315 German Civil Code (Lack of Agreement): "Where performance is to be specified by one of the parties to the contract, then in case of doubt it is to be assumed that the specification is to be made at the reasonably exercised discretion of the party making it.... Where the specification is to be made at the reasonably exercised discretion of a party, the specification made is binding on the other party only if it is equitable. If it is not equitable, the specification is made by judicial decision; ...". In addition and more related to the subject of our study, is one major problem that



Variable interest rates (yields) for example are contractual conventions, which, at least from a supplier's perspective, provide a fixed amount of remuneration. The variability of the refinancing cost requires that a stable income should be linked to the variable cost elements. This is not arbitrary. In fact, fixed rates would shift the risk of market rate changes to the lender. This risk adjustment through variable pricing has caused regulatory concerns. EU-law requires that objective parameters exist and are disclosed in a way, which reveals that the decisions to adapt the interest rate are objective and therefore not truly "variable". Variable remuneration in labour relations is seen as critical since it may unilaterally deprive a worker from such income, which is necessary to cover his or her cost of living. Collective agreement and minimum wage legislation witness these problems.

Legislative intervention to secure a minimum wage comes under the realm of labour law to guarantee freedom of contract for the weaker party this type of long-term relationship. But in other set ups, variable remuneration through bonuses also concerns consumer protection legislation. Where variable remunerations is structured according to the kind and number of contracts an intermediary may conclude, there are problematic incentives to sell more or unwanted financial services to consumers (Reifner et al. 2014). EU-law has addressed this problem in MiFID II as well as the IMD II.

This kind of intervention into contracts with variable pay serves the protection of consumers and workers against non-transparent and unfair increases of prices. They respectively lower the level of income that the misuse of variable pay provides to the capital side. However, it brings with it another set of problems arising from the intermediation process.

Banks as well as multi-marketing organisations can act as intermediaries. In this case their staff is subordinated to the bank management. Where banks act as

executive contracts are always "incomplete" in the sense that shareholders know what they want (good returns) but not how to get it.

⁶² Article 5 (1) (f) Directive 2008/48/EC "...the conditions governing the application of the borrowing rate and, where available, any index or reference rate applicable to the initial borrowing rate, as well as the periods, conditions and procedure for changing the borrowing rate; ..."

Such variable remuneration agreements are in contradiction to good morals (§ 138 BGB) and therefore void if even under special circumstances they can hinder the employee to reach such a turnover which would create a sufficient income (German Supreme Labour Court BAG 20 Juni 1989 - 3 AZR 504/87). Sufficient income is defined by two thirds of the income in collective agreements or normally reached in this area. (German Supreme Labour Court BAG 22 April 2009 - 5 AZR 436/08 - Rn. 17; BAG 23. Mai 2001 - 5 AZR 527/99 - zu II 2 a der Gründe, EzA BGB § 138 Nr. 29). The German banking trade union ver.di is still battling to keep variable forms of remuneration limited. In 2002 it allowed 4 % of income increase to be shifted to variable parts linked to individual as well as general performance of a bank. (see http://geschichte.verdi.de/chronik/thema/banken) Its collective agreement allowed in principle performance orientation for parts of remuneration. It concerned especially the 13th monthly income of which 35 % should be transformed into a variable part. The variability would then have attained about 2.5 % of the total income. (see http://www.boeckler.de/wsi-tarifarchiv_2377.htm) After the financial crisis ver.di joined the general criticism and asked for the abolishment of bonuses in 2014 (see Kienbaum 2014).

⁶⁴ I.e. Section 652 German Civil Code "A person who promises a brokerage fee for evidence of the opportunity to enter into a contract or for negotiating a contract is obliged to pay the fee, only if the contract comes into existence, as a result of the evidence or as a result of the negotiation of the broker."



intermediaries, their personnel sell the financial products of other financial institutions. The commission a sales person of this bank obtains by selling such a product goes directly to the bank, who itself profits from variable pay. The same problems occur in insurance systems and are similarly regulated in MiFID II (and IDD for insurance).

This regulation is primarily based on transparency. It however contains elements of sustainability, understood as a long-term commitment, and proper warnings against the overburdening of risks to the client and against conflicts of interest. Similar to CRD IV, in state subsidised pension schemes, the payment of the commission has to be stretched over a number of years.

Short-term perspectives and improper risk-taking induced through remuneration systems have increasingly become the focus of legislative concern in the intermediation of financial services. Since banks, as intermediaries and Multiple Marketing Organisations, combine personal dependencies of labour contracts with the advantage of a commission based system of brokerage, there has been a tendency to merge both systems. In those cases, the employee gets a fixed percentage of the brokerage fee, which he himself earns for the employer. 66

The next table details the variety of reference points used and the problems that regulation is trying to tackle. The parallel with the problems and regulation of variable remuneration of bank or investment company staff is apparent.

It should be noted that variable remunerations also play an important role in the brokerage of leases, real estate and jobs. But the problems in these areas are quite different to financial services since they concern incomplete markets with an absolute shortage of offer, which is easily exploited for additional pay, which circumvents the protective legislation concerning housing and labour markets. This is why in this sector quite drastic interventions like a state monopoly on brokerage in the labour market or the interdiction to take brokerage fees other than from the supplier side in housing dominate.

The highest variable remuneration ever paid to an employee is supposed to be a reward to a banker of more than USD 400 million in one year. But it was not a variable pay originated by his bank, but his 30 % share of the commission the bank itself had earned from the bankers' activity in this year.



Variable Elements	Reference of variability	Legal concern	Legal protection	Remedies	Law
Interest rates, unilateral decisions	Refinancing market rates	Misuse of post- contractual power	Consumers	Adaptation in good faith, usury ceilings	Civil law
Contract for services / service contract	Output, individual performance	Insufficient pay, undermining general living standards/ collective agreement	Employees	Social minimum remuneration	Labour Law
Brokerage fees	Value of transaction	Market failure, pay for access	Users	Caps, relation to success	Civil law
Bonuses paid to intermediaries and marketing staff	Bonuses tailored to an individual product	Incentive to sell higher volumes and highly provisioned risky and inadequate products	Clients	Disclosure, conflict of interest, supervision, listing	Consumer Law; MiFID II; IDD
Variable pay to executive management (Bonuses)	Performance of the financial institution	Short term perspective, high risk-taking, instability of the system	Banks, State and public interest	Prudential and behavioural supervision	Supervisory law; CRD IV; AIFMD

Table 48: Regulating variable pay - general context

With the financial crisis, the core problem of variable remuneration has shifted away from the protection of employees' and consumers' claims and economic interests to the protection of a sound financial system. It remains, however, within the traditional parameters of a critical assessment of long-term financial relations. CRD IV regulations are therefore in no way inconsistent with the principle of pacta sunt servanda and its underlying idea of property rights and free will. They respond to the problems experienced historically under a 'sales contract' model, which ignores the duration of certain legal relations. In this model, all elements must be present at the time of conclusion of the contract, and changes in circumstances must be anticipated or taken into account later.

This causes two unwanted and contradictory effects. The party bound by the contract and unable to exit must accept changes decided by the other party if the legislator does not intervene (as it does in consumer and labour protection law). Promises of payment can burden the promisor if he or she has to make a decision on a temporary basis under circumstances which may change over time, if the legislature fails to limit this kind of payment and allow later alignment to such changes (as is the case in the CRD IV).

1.2 National implementation of remuneration policies

The present study concerns the application of remuneration principles in the EEA (31 states), taking into account the situation in the USA, Hong Kong, Singapore and Switzerland as the most important competitors of the EU banking centres. As the four



non-EEA financial centres are to be monitored with regard only to the competitiveness aspect, these have been dealt with under Section 3.5 and further below under Annex 1.4. With regard to the EEA we will limit this research to countries and developments which mark the area of implementation of these rules.

1.2.1 Legal implementation in selected countries

Regulatory provisions in place in non-EU countries (the USA, Singapore, Hong Kong, Switzerland) are described below at 3.4. Members of the G-20 committed themselves to implementing the 2009 Financial Stability Board (FSB) Principles for Sound Compensation Practices and Implementing Standards, which address the potentially detrimental effect of poorly designed remuneration structures on the sound management of risk and control of risk-taking behaviour by individuals. Many countries have adopted their own regulatory requirements using selected portions of the FSB Principles. Although European pay regulations have been more prescriptive (i.e., rules-based), while other countries, as for instance the USA, have taken more principles-based approaches, there are fewer differences in practice, as banks in different countries have responded in similar ways to pay regulations and have implemented consistent changes.

Transposition Acts

The following tables provide evidence on CRD IV and CRR implementation in major EU Member States (France, Germany, Italy, Belgium, The Netherlands)⁶⁷ and on major national legislative acts and regulations for the implementation of CRD IV into national law in Spain, Luxembourg and Austria. We mainly point to differences, if any, in the transposition of the Directive. We include some results from our survey of supervisors.

The following table provides general information on the key Transposition Acts.

Table 49: Transposition acts for major Member States

Country	National legislative act and regulations for the implementation of CRD IV into national law
Austria	2013: Die BWG-Novelle des BGBI (Bundesgesetzblatt) I 2013/184 zur Umsetzung der CRD IV ab 1.1.2014 BGBI. I - Ausgegeben am 7. August 2013 - Nr. 184
Belgium	2014: The Belgian legislator implemented CRD IV through the Law of 25 April 2014 on the status and supervision of credit institutions (the "Banking Law") which entered into force on 7 May 2014. CRD III had been transposed by the Regulation of 8 February 2011 of the Banking, Finance and Insurance Commission (now the Financial Services and Markets Authority) on the remuneration policy of financial institutions (approved by Royal Decree of 22 February 2011); and the Circular of 14 February 2011 of the Banking, Finance and Insurance Commission on the establishment of a good remuneration policy (altogether, Remuneration Rules). The Remuneration Rules transpose into Belgian law the remuneration provisions of the Capital Requirements Directive

⁶⁷ The main source of information is: http://www.nortonrosefulbright.com/knowledge/technical-resources/banking-reform/remuneration-requirements-for-banks---a-global-analysis/. Robins, Hong March 11. Some data and information have been revised and updated by our national experts. On the Dutch case see also www.lexology.com.



Country	National legislative act and regulations for the implementation of CRD IV into national law		
	III (CRD III) and the Capital Requirements Directive IV (CRD IV).		
France	Remuneration requirements from CRD IV (for the whole company as well as for identified staff) have been transposed in February 2014 in national law in Articles L.511-71 to L.511-103 of the Monetary and Financial Code ⁶⁸ . The requirements entered into force for remunerations based on 2014 results.		
Germany	2013: The rules on remuneration introduced by the Capital Requirements Directive III (CRD III) in 2010 had been implemented mainly into the Remuneration Ordinance for Institutions (Instituts-Vergütungsverordnung), with some additional requirements set forth in the German Banking Act (Kreditwesengesetz – KWG). However, most banks found it difficult to apply these rules which led to the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin) granting a non-official grace period, during which banks were not expected to have completely implemented the new rules but were required to show ongoing progress with this regard. On July 5th, 2013, the German Federal Council (Bundesrat) decided to raise no objection against the CRD IV Implementation Act passed by the German Federal Parliament (Bundestag) on June 27, 2013. It led to a revision of the German Banking Act (Kreditwesengesetz) that entered entering into force on January 1, 2014. A new Remuneration Ordinance for Institutions (Institutsvergütungsverordnung - InstitutsVergV) has been published, and several new requirements have been introduced in the KWG.		
Italy	In addition, the Commission Delegated Regulations (EU) No. 527/2014 (instruments) and No. 604/2014 (risk takers) directly apply, as well as art. 450 Capital Requirements Regulation (CRR) (disclosure). Whilst the BaFin did not expect institutions to have completed their implementation of the new requirements by 1 January 2014, it has become somewhat stricter following an earlier special audit which showed that institutions' implementation of the CRD III requirements did not meet expectations. 2011: In March 2011, the Bank of Italy issued the rules on remuneration policies and practices at banks and banking groups, thereby acknowledging the provisions contained in the Directive 2010/76/EU (CRD III) of 24th November 2010 and in the relative guidelines issued by the CEBS at the end of the same year. This is one of the parts of the regulatory framework aimed at bringing the domestic legal framework in line with the European one, together with changes		

⁶⁸ Transposition of CRD IV into the "Code Monétair et Financier" law by means of Ordinance (Ordonnance) n°2014-158 of 20 February 2014 "portant diverses dispositions d'adaptation de la législation au droit de l'Union européenne en matière financière", Decree (Décret) n° 2014-1316 of 3 November 2014 (the Decree), and several ministerial orders (Arrêtés) of 5 November 2014 (the Orders).



Country

National legislative act and regulations for the implementation of CRD IV into national law

made to the Banking Act and the CFA, the Bank of Italy Circular no. 263 concerning public disclosure under the Third Pillar, the joint Bank of Italy-Consob Regulation of 29th October 2007 on the organisation in the provision of investment services.

2013: In November 2013 a document – that revises the provisions of March 2011 to implement the new guidelines set out in Directive 2013/36/UE (known as CRD 4), which updates the overall prudential regulations for banks and investment companies – underwent a public consultation.

Bank of Italy published on 17 December 2013 a new prudential regulation implementing CRD IV (Basel III new capital requirements).

2014: Bank of Italy published a new regulation on "Remuneration policies and practices and incentives" on November 18th 2014 (7° Update of Circolare 285/2013) in execution of European Directive 2013/36/UE (CRD IV).

2015: With some delay, the Italian Parliament trasnposed the CRD IV into law approving the Legislative Decree n. 72, 12 May 2015 "Attuazione della direttiva 2013/36/UE, che modifica la direttiva 2002/87/CE e abroga le direttive 2006/48/CE e 2006/49/CE, per quanto concerne l'accesso all'attività degli enti creditizi e la vigilanza prudenziale sugli enti creditizi e sulle imprese di investimento. Modifiche al decreto legislativo 1° settembre 1993, n. 385 e al decreto legislativo 24 febbraio 1998, n. 58. (15G00087) (GU Serie Generale n.134 del 12-6-2015)"

Luxembourg

2015: The law of 23 July 2015, implementing the Capital Requirement Directive has been published on 31 July 2015, in the official journal (Mémorial A – No 149).

Spain

2013: Royal Decree-Law 14/2013 applicable to tax years starting as of 1 January 2014

The Netherlands

2014: In the Netherlands the CRD IV Implementation Act (*Implementatiewet richtlijn en verordering* kapitaalvereisten) entered into force on 1 August 2014 ("CRD IV Implementation Act"). Moreover, to give further substance to CRR and CRD IV, the Dutch Central Bank enacted the Decree specific regulations (Besluit specifieke bepalingen), which entered into force on 1 January 2014. The Capital Requirements Regulation (CRR) and the Capital Requirements Directive IV (CRD IV) have been implemented in the Act on the Financial Supervision (*Wet op het financieel toezicht*, AFS) and the Regulation on Sound Remuneration Policies under the AFS 2014 (*Regeling beheerst beloningsbeleid* Wft 2014, the Regulation).

On 7 February 2015, the Dutch Government approved the Act on the Remuneration Policy of Financial Undertakings (Wet beloningsbeleid financiële ondernemingen, "Wbfo"). It introduces - among other things - a 20 % cap on variable remuneration. The maximum variable remuneration component for persons is therefore equal to 20 % of the fixed remuneration that person received in that year. The cap has triggered the second written round of questions from the Upper House of the Dutch Parliament, as a result of which the envisaged entry into force of the Wbfo, initially planned for 1 January 2015, was delayed. The Wbfo amends the Dutch Financial Supervision Act (Wet op het financieel toezicht, "Wft").

The Wbfo entered into force on 7 February 2015. As of that moment, the remuneration policy of a financial undertaking must comply with the Wbfo.



1.2.2 Key requirements

Table 50: Specific key requirements in different national regulation (from Q4; Question 1.4)

Country	Specific key requirements
Belgium	Maximum ratio has been set lower than 100 % of fixed pay maximum ratio.
The Netherland	
Denmark	In Denmark the maximum ratio is 50 % for the management body and the
Italy	senior management.
	In Belgium variable remuneration must be limited to the higher of the two following amounts: (i) 50 % of the fixed salary; or (ii) €50 000, which amount cannot exceed that of the fixed salary.
Finland Luxembourg France	Shareholders or owners or members of the firm are allowed to approve a higher maximum ratio than 100 % of fixed pay but less than the 200 % of fixed pay.
UK Spain	In Finland the maximum ratio has been implemented to be applied to all staff, not only identified staff.
Denmark Germany	
Italy Greece	
Luxembourg Spain	Firms can apply the discount rate but to a maximum of less than 25 % of total variable pay
Germany	
Austria UK	Deferral and retention periods face additional restrictions or prohibitions on type/design of instruments.
Italy	In Austria minimum deferral is 5 years.
The Netherlands	In Austria minimum deferral is 5 years. The most important regulatory rules are: Maximum ratio: Variable remuneration is capped at 20 % of fixed annual remuneration. 'Fixed remuneration' is defined as the part of total remuneration that consists of unconditional financial or non-financial payments. 'Variable remuneration' is defined as all remuneration that is not fixed remuneration. Guaranteed variable payments: Guaranteed variable payments are, in principle, not permitted. Please see our answer to question 4. Sound remuneration policy: Banks are required to have in place a sound remuneration policy (beheerst beloningsbeleid) which promotes sound and effective risk management. Maximum severance payment: Banks are not allowed to pay severance payments exceeding 100 % of the fixed annual remuneration of the relevant person. Clawback: Banks are required to reduce or reclaim variable remuneration in instances where the relevant person did not meet the required standards of competence and/or behaviour, or was responsible for action which led to the financial situation of the financial undertaking deteriorating substantially.



Country

Specific key requirements

Concerning the variable remuneration cap, there has been heated debate on this topic as to the Netherlands has deviated from the EU rules in a much stricter way. The Wbfo entered into force on 7 February 2015. As of that moment, the remuneration policy of a financial undertaking must comply with the Wbfo. A variable remuneration which does not meet the 20 % cap rules may only be granted to individuals that have performed activities prior to 1 January 2015, to only the extent this results from an agreement prior to 1 January 2015. This transitional regime will end on 1 January 2016. Granting a variable remuneration which does not meet the 20 % cap rules is not allowed after 1 January 2016.

In certain situations a maximum ratio higher than 20 % is allowed. These exemptions are, amongst others, relevant to groups of affiliates located abroad. The most important exemptions are:

This is necessary in the context of a structural organisational change.

The purpose of the retention bonus is to retain the persons concerned.

Persons who are not solely remunerated based on a collective labour agreement (collectieve arbeidsovereenkomst, "cao") may receive a higher variable remuneration (with a maximum of 100 %) as long as the average maximum ratio within the financial undertaking with regard to the total group of persons who do not solely fall under a cap does not exceed 20 %.

A cap of 100 % is applicable to persons whose main activities take place in another country than The Netherlands.

A cap of 200 % is applicable to persons whose main activities take place in a third country (i.e. a country that is not a Member State of the European Union), if the shareholders of the financial undertaking have consented thereto.

Other exceptions from the maximum ratio are available for: 1) managers of investment institutions (i.e. alternative investment funds); 2) managers of UCITS; and 3) investment firms trading solely and exclusively for own account with own funds and capital, that do not have external clients and that are a local undertaking.

The cap is not only applicable to identified staff (as under the previous legislation), but includes all persons performing activities under the responsibility of the financial undertaking (or one of its group companies). Among other rules, the Wbfo obliges financial undertakings to have a written remuneration policy. Such policy should among other things set out the criteria on which a variable remuneration is based. A requirement in this connection is that the variable remuneration exists for at least 50 % of non-financial criteria.

The Dutch Civil Code (*Burgerlijk Wetboek*) already contained malus and clawback-arrangements. The new remuneration rules as laid down in the AFS are in addition to these rules.

The Wbfo requires a financial undertaking to lower (malus) or to reclaim (clawback) a variable remuneration in particular circumstances. The situations in which a malus/clawback is obliged are rather open ended. This is the case if the relevant individual (i) has not met suitable norms in respect of expertise and correct behaviour, or (ii) has been responsible for conduct that has resulted in a significant deterioration of the financial position of the undertaking. The Wbfo contains a ban on guaranteed variable remuneration. Guaranteed

The Wbfo contains a ban on guaranteed variable remuneration. Guaranteed variable payments are not permitted, unless: (i) the payment relates to the



Country Specific key requirements employment of a new person; (ii) at the time of the payment, that person has been in employment for less than a year; and (iii) the financial undertaking concerned meets certain capital requirements, that is has a prudent level of own funds. The Wbfo also contains conditions for the payment of a severance payment. In addition it includes a maximization of the severance payment for day-to-day policymakers of 100 % of the annual, fixed component of the individual's

remuneration.



1.2.3 Identification of staff

Table 51: Identified staff in different national regulation

Country	Identified staff
France	Article L. 511-71 of the Code applies the relevant requirements to the following categories of staff: those persons (who must be at least two in number pursuant to Article L. 511- 13 of the Code) who are in charge of the actual management (direction effective) of the bank (in the case of French branches of non-French banks, at least two persons must in charge of the actual management of the branch); risk takers; staff engaged in control functions, and any employee receiving total remuneration that takes them into the same remuneration bracket as senior management and risk takers, the professional activities of whom have a significant incidence on the risk profile of the bank or
Germany	All staff members that are involved in conducting banking business or rendering financial services; auxiliary staff (e.g., staff members in charge of facility management) are not covered. However, the application of the rules extends to staff members of service providers in so far as the staff members are directly involved in providing services to the institutions for the purpose of banking business/financial services, provided that the service provider belongs to the institution's regulatory group. Whereas the limitation to group service providers (the first draft of the Instituts-Vergütungsverordnung 2010 did not provide for such limitation, but covered all service providers) is helpful, the application of the rules to service providers' staff still causes some practical issues, which are generally resolved by a group-wide remuneration policy. For significant institutions, stricter rules apply to so-called risk takers. A significant institution has to identify its risk takers on the basis of a risk analysis to be prepared by the institution. However, the BaFin may order the significant institution to revise its risk analysis, if it is not plausible, extensive and comprehensible to third parties. The criteria to be used in the risk analysis are set forth in the Commission Delegated Regulation (EU) No. 604/2014.
Italy	All categories of staff are caught by the regulator's rules. The more stringent rules apply only to bank employees who are classified as "risk takers," as defined by the EU Commission Delegated Regulation n. 604 on 4th of March 2014 (the Risk Takers).
Belgium	The Banking Law provides that the remuneration policy must cover the members of the management body, as well as categories of staff whose professional activities have a material impact on the risk profile of the credit institution, including senior management, risk takers, individuals holding "independent control functions" (i.e., internal audit, compliance, and risk management), as well as employees whose total remuneration puts them on the same level as senior managers and risk takers.
The Netherlands	All persons working under the responsibility of financial undertakings (i.e. including contractors and seconded persons) are subject to the AFS and the Regulation. The definition of 'financial undertaking' is very broad and includes, amongst others, banks, insurers, investment firms, fund managers and payment services



	Country	Identified staff
		providers which have their statutory seat in the Netherlands, as well as their subsidiaries (both inside and outside the Netherlands).
		These rules apply to all financial undertakings which are subject to the AFS and the Regulation.



1.2.4 Proportionality

Table 52: General proportionality interpretations in different national regulation

Country	Proportionality
France	Article L.511-57, paragraph III, of the Monetary and Financial Code provides the basis for the proportionality principle by referring to the criteria of size, internal organisation, scale and complexity of the activities mentioned in Article 92(2) CRD4. The proportionality principle applies to Articles L.511-71 to L.511-88 of the Monetary and Financial Code, which transpose Articles 92 to 94 CRD4. National regulation specifies the application of the proportionality principle by setting thresholds and exemptions for several kinds of entities. These are all laid out in Articles 198, 199, 200 and 201 of the Ministerial order of 3 November 2014 on internal control of credit institutions. The Ministerial order entered into force the following day. The following entities are waived from the aforementioned remuneration requirements (i.e. Articles 92 to 94 CRD4): Asset management companies (Article 198) Insurance companies (Article 198) Entities which belong to a banking group and have total balance sheet inferior to EUR billion and which do not pose risk to the solvency and liquidity of the group (Article 201) Entities which have total assets inferior to EUR 10 billion (or which belong to a group having total consolidated balance sheet inferior to EUR 10 billion) which have identified their risk-takers and have implemented a policy on variable remuneration including deferral, limitation and payment in instruments. The remuneration policy of these entities shall take into account long-term interests of the company or the group and shall not limit their capacity to strengthen their own funds. If required by the threshold of 5 billion EUR of total balance sheet mentioned in Article 102 of the Ministerial order, these entities shall also be able to justify all these elements to the supervisor, as well as their efficiency and appropriateness regarding the size and nature of their activities. (Article 199) Entities having total balance sheet inferior to EUR 10 billion and which belong to a group having total balance s
	remuneration inferior to EUR 100,000 does not need to be subject to deferral and payment in instruments.
Germany	Generally, all institutions within the meaning of the KWG are subject to at least some of the remuneration rules set forth in the KWG and InstitutsVergV. That includes, but is not limited to, credit institutions within the meaning of art. 4 para. 1 No. 1 CRR and investment firms within the meaning of art. 4 para. 1 No. 1 MiFID. However, the term "institution" has a fairly broad meaning under the KWG and covers all entities that require a license as a credit institution

Country

Proportionality

(Kreditinstitut) or financial services provider (Finanzdienstleistungsinstitut). For example, an entity with a license for lending business (Kreditgeschäft) and guarantee business (Garantiegeschäft) qualifies as a credit institution within the meaning of the KWG (but not as a credit institution within the meaning of art. 4 para. 1 No. 1 CRR), and an entity with a license for factoring (Factoring) qualifies as a financial services provider within the meaning of the KWG (but not as an investment firm within the meaning of art. 4 para. 1 No. 1 MiFID).

The InstitutsVergV distinguishes two groups of institutions, i.e. significant institutions and non-significant institutions. Whereas the general rules on remuneration apply to all institutions, certain staff members of significant institutions are subject to additional rules (which are the most cumbersome in practice). Basically, an institution is deemed to be significant if its balance sheet dates for the last three completed financial years reached or exceeded an average of EUR 15 billion, unless the institution provides the BaFin with a risk analysis proving that it is not significant. However, the BaFin may classify an institution as significant even if its balance sheet dates do not meet the aforementioned threshold, provided that this is necessary due to the institution's remuneration structure and the nature, scale, complexity, risk content and international scope of its business activities. Besides, some institutions are generally considered as significant (e.g., banks that are subject to the ECB supervision under the single supervisory mechanism). In practice, the qualification as a significant institution is a crucial issue, and there have been cases where the BaFin has ordered an institution to amend its risk analysis and to classify itself as significant.

The principles set forth in the EU analysis apply, although some details may have been implemented differently. For example, in order to apply the notional discount factor to the maximum ratio, the KWG requires a deferral period of at least five years.

A particularly topical issue is the prohibition of guaranteed variable remuneration. Although this is based on the CRD IV, the BaFin has a particularly strict view of the prohibition. For example, the BaFin is of the opinion that any payment that is not granted for the complete term of the employment contract is to be considered as guaranteed variable remuneration.

In practice, the most cumbersome requirements are the deferral of at least 40 % or 60 % of the variable remuneration of risk takers or managing directors and staff on the level below managing director, respectively, for a period of at least three years, in connection with the further requirement to retain at least 50 % of both, the deferred and the non-deferred part of the variable remuneration. Institutions tend to apply the minimum thresholds to all managing directors and relevant staff. However, the BaFin has provided some relief by introducing a threshold of EUR 50,000 per staff member per year. If the variable remuneration does not reach this threshold, at least the deferral requirements (and probably the retention requirements as well) do not apply.

Italy

In Italian remuneration regulations, banks are classified as "big," "mid-sized" or "small," depending on their size and the complexity of their business. Small banks are subject to less stringent rules and regulations regarding employee remuneration, as compared to mid-sized or big banks.



1.2.5 Extraterritorial effects

Table 53: Extraterritorial effects in different national regulation

Country	Extraterritorial effect
Belgium	The Remuneration Rules apply to Belgian credit institutions on a consolidated basis, including their Belgian and foreign subsidiaries/branches, as well as to Belgian subsidiaries/branches of non-EEA based credit institutions.
Germany	A regulatory group has to establish a group-wide remuneration policy, which is to be applied to foreign subsidiaries as well, unless a foreign subsidiary is subject to stricter requirements under local state law. With regard to non-EEA based banks, the position is the same as set forth in the EU.
Italy	The EU remuneration requirements implemented in Italy in 2014 by the Banca d'Italia apply to Italian banks (wherever they do business) and to the Italian subsidiaries of non-EU banks.
The Netherlands	The Dutch remuneration rules are applicable to financial undertakings with their statutory seat in the Netherlands as well as their subsidiaries (including subsidiaries abroad).
	The maximum ratio is also applicable to branch offices in The Netherlands of financial undertakings with their seat in another state. However, EU-banks and EU-investment firms (as defined under the Capital Requirements Regulation) do not fall under the scope of this maximum ratio. In that event, remuneration rules (and caps) of their home country are applicable.
	The provisions in the Wbfo are applicable to all financial undertakings that are currently regulated by the Wft and which have their statutory seat in The Netherlands. The majority of the remuneration rules (including the maximum ratio) are applicable to all subsidiaries of those financial undertakings, regardless of whether they are located either inside or outside The Netherlands. If the financial undertaking is part of a group of companies, and the parent company of the group has its statutory seat in The Netherlands, the majority of the remuneration rules (including the maximum ratio) applies to all group companies (irrespective of their location or whether they qualify as financial undertakings), unless the main activities of the group do not relate to the financial sector.
	If an ultimate parent company of a bank has its statutory seat outside the Netherlands, the parent company itself does not have to comply with the Dutch remuneration rules. However, any subsidiary with its statutory seat in the Netherlands which qualifies as a bank will be subject to these rules.



1.3 Specific differences in implementation (Q4 supervisory survey)

The survey of competent authorities appointed to regulate and supervise financial firms provides a general picture of the current implementation of remuneration principles within Europe. Section 1 of the survey (O4) focussed on "Regulation and situation in your country".

Respondents represented 15 countries and supervised credit institutions (all 15), investment firms (13 out of 15), asset management companies (9 put of 15), other financial institutions (11 out of 15).

The supervisors' statements provided the following evidence.

1.3.1 Waiver granting of CRD IV remuneration provisions under the principle of proportionality

Most supervisors granted waivers of CRD IV remuneration provisions under the principle of proportionality, either automatically or only on request. 3 supervisors indicated that they use both. A few stated that they do not grant waivers at all.

Reasons for waivers were mainly linked to proportionality in terms of (ranked according to):

- low number of staff on variable pay (in absolute terms) (13)
- size (12)
- nature of activities (10)
- non-complex activities (9)
- scope of activities (8)
- internal organisation (5)
- low level of variable pay for staff (in terms of a percentage of fixed pay) (5)
- other reason (2)

Waivers enabled firms to:

- disapply pay-out rules in instruments (14)
- disapply deferral rules (13)
- disapply the maximum ratio (3)
- others (8)

In one country, all institutions were allowed to apply waivers in order to establish a 'level playing field' across the financial sector (Denmark).

In view of the low level of remuneration in the country and the fact that no cases had been observed where remuneration would have encouraged excessive risk-taking - another supervisor (Finland) stated that it had decided that neither deferral nor payout in instruments need be applied when an identified staff member is awarded variable remuneration below EUR 50,000 for one year or equivalent to below two months' fixed salary. This was considered to be an application of the proportionality principle and not a waiver. The administrative burden for the supervised entities can be eased in this way. However, during the deferral period (3 to 5 years), an organisation, or the roles and responsibilities of its identified staff members, may change significantly. The number of risk-takers has recently been increasing. Keeping



track of them is time-consuming, resource-intensive and will not serve reaching the ultimate aim of the regulation.

Proportionality is also considered to be the main criterion for differentiating the application of the provisions in the UK. Again, this should not be considered a waiver. Supervisors however expect firms not simply to apply the remuneration principles in a proportionate manner (which may include their disapplication in some cases), but also to justify why it is not appropriate for them to apply the CRD provisions to the full extent.

1.3.2 Assessment of sound remuneration practices (as mentioned in CRD Article 94)

Supervisors expressed a high level of satisfaction with regard to implementation of most requirements, and many indicated that they were having a significant effect in the following areas:

- Approval for a higher maximum ratio has required provision of a reasonable notice period to shareholders;
- Guaranteed variable pay is used exceptionally and is limited to the first year of employment;
- The percentage of variable pay does not exceed 100 % of the fixed component of total remuneration for each individual.

Conversely, less satisfaction was expressed with regard to achievement of the objectives of the regulation in the following areas:

- Variable remuneration disbursement period reflecting the business cycle of the firm and risks;
- Severance payments reflecting performance achieved over time and not rewarding failure or misconduct;
- Variable pay pools including an adjustment for all types of current and future risks, capital and liquidity rules;
- Total variable pay being paid or vesting only if it is sustainable and justified and malus and clawback applying in situations of negative firm financial performance;
- Pay-out in other instruments reflecting the credit rating of an institution as a going concern.

The Figure below shows respondent answers to the question: "To what extent do you assess that firms meet the following objectives of sound remuneration practices (as mentioned in CRD Article 94)?"

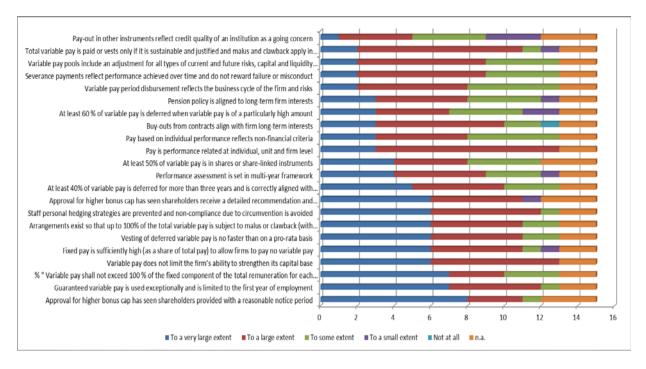


Figure 35: Assessment of sound remuneration practices

1.3.3 Governance and disclosure

All supervisors had ensured the establishment of Remuneration Committees by institutions (Art. 95) and they all believed that these Committees were sufficiently independent. On the other hand, they believed that disclosure could be enhanced (Figure 36). Only 20 % of respondents were very satisfied with information provided on the banks' websites. Large institutions disclosed their remuneration policies and provided remuneration data online.

Figure 36: Level of satisfaction regarding information on banks' websites



One supervisor saw room for improvement. On-going supervision and supervisory reviews have now led to more detailed attention being put into this area and the content has improved, but the supervisor felt that it should be deepened further.

a. Specific supervisory guidance to institutions with regards to remuneration policies and practices

Most supervisors provided specific guidance for the interpretation and implementation of CRD IV provisions. Some of them actually focussed only on certain requirements (e.g. allowances, regulation on award and pay-out of variable remuneration).

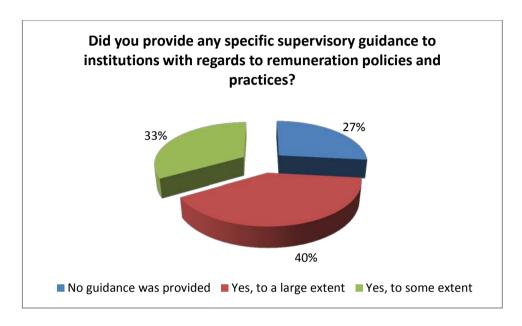


Figure 37: Provision of specific supervisory guidance to institutions

b. Supervisors' judgement on the effectiveness of EBA RTS in identifying the relevant staff whose professional activities have a material impact on the firm risk profile

The majority of respondents consider EBA RTS very clear and effective in defining the perimeter of identified staff. In general, the Standards have produced a significant increase in the number of identified staff in institutions in 2014.

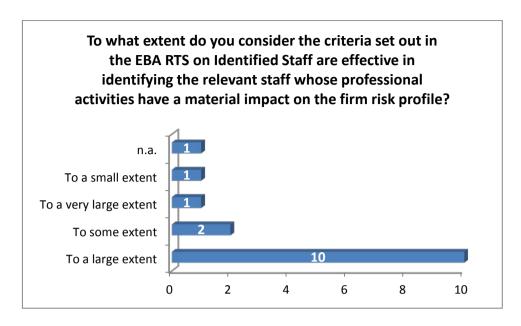


Figure 38: Supervisors' judgement on the effectiveness of EBA RTS

The quantitative criteria offer a useful backstop to the qualitative ones. One supervisor stressed that the qualitative criteria are complex. It is difficult to identify a clear difference between paragraph 3 and paragraphs 5-9 of article 3. The limit set out in Article 3 paragraph 11 and in Article 4 may be not relevant to some countries. Moreover, in countries where remuneration levels are relatively low, the criteria specified in the RTS are too detailed and complicated to be used in practice.

In the UK, from the conduct perspective, the RTS does not identify all those whose conduct may expose the firm to material risk. Some firms have said that staff who expose the firm to material risk have been captured by RTS criteria as well i.e. senior managers and those on product approval committees. However, in line CRD IV, UK supervisors require firms to treat this list as non-exhaustive and to consider other roles as well, including those who pose a material risk from a reputational, operational or wider client/customer impact perspective. In 2015 a number of large firms indicated that they have used internal criteria to capture material risk-takers.

One supervisor suggested that it would be more practical for the institutions and for supervisors to take the approach that variable remuneration is awarded for risk-taking. Setting a level of variable remuneration, and perhaps total remuneration as well, which would be specific to each Member State would better assist achievement of the goals of the remuneration. Before the introduction of the RTS, the supervisor had, for example, taken the approach that, if a member of staff were able to earn more than EUR 50,000 in variable remuneration, that person would need to be identified. When drafting the RTS, the EBA consultation included a level of EUR 75,000. For most Member States this would have been an appropriate threshold. This would, however, have been too low for the UK. Some HR professionals gave the example of a member of staff being awarded variable remuneration equivalent to four months' fixed salary or more as a less labour-intensive rule serving the same purpose.

c. Requests for exclusions on quantitative criteria and consequent authorisations



Most supervisors report no requests for exclusions on quantitative criteria. The only case of a supervisor receiving a large number of requests was regarding notification by the firm of its own recommended staff exclusion.

Requests stated to have been made with regard to staff:

- staff active in a unit which is not a material business unit;
- staff involved in an activity that does not affect a material business unit on the basis of objective criteria for identification/management/monitoring of risks; and
- prior approval for staff earning more than EUR 1,000,000 (need to specify these exceptional circumstances);
- prior approval for staff earning more than EUR 750,000 (need to specify how the firm demonstrated satisfaction of exclusion).

Figure 39 shows supervisor responses to the question: "How many requests for exclusions on quantitative criteria have you received in 2014 and what proportion of these did you authorise?"

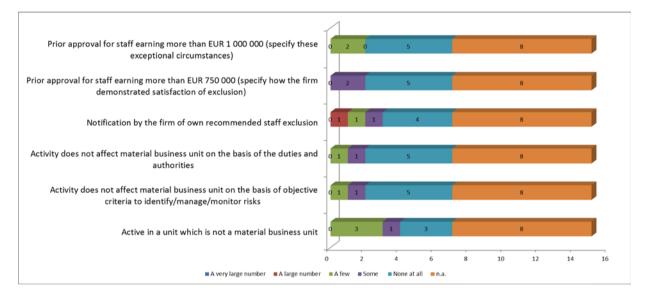


Figure 39: Requests for exclusions on quantitative criteria

d. Periodic prior approval of exclusions under Art 4 (2-5) Reg. 604/2014 and national benchmarking exercise beyond EBA guidelines

Only 5 countries require periodic prior approval for exclusions under Art 4 (2-5) Reg. 604/2014, this being on an annual basis.

In 8 countries, an extra benchmarking exercise has been conducted, one of which involved additional data. Only 4 of these have been made publicly available.

1.3.4 Malus and Clawbacks: Responses from institutions

Responses received from institutions to the question: "Did your firm exercise ex-post performance adjustments in the form of malus before 2010 and what was the actual malus applied to identified staff deferred variable pay in 2010 and 2014?" showed that the way in which clawbacks and maluses have been applied by credit institutions



varies. It is of course linked with what legislation/ restrictions may be in place at national level. However, we also noted some differences in practice between institutions based in the same Member State. By and large, maluses do not seem to be widely applied even when the mechanism is recognised at institutional level. Clawbacks were even rarer, mostly due to their illegal nature under various national systems in the period of study. When clawbacks are possible under national law, they have seldom been applied by institutions that have stated that they could use them.

Respondents were also asked: 'Did your firm exercise ex-post performance adjustments in the form of malus before 2010 and what was the actual malus applied to identified staff deferred variable pay in 2010 and 2014?'. ⁶⁹ Out of the 198 respondents to our study, less than 4 % had malus mechanisms in place in 2010. While more credit institutions now have malus mechanisms in place, only 10 % exercised this mechanism over the past years (a total of 19 institutions). Only a small proportion of staff remained affected by maluses. For example, a prominent bank in Spain stated that it had applied maluses to 2 or 3 times. One bank in Germany, which introduced them in 2010, has so far not applied a single malus. ⁷⁰ One reason for this lack of use of a malus mechanism may lie in the difficulty with which it can be applied. The problem seems particularly acute in Italy. ⁷¹

Clawbacks are even rarer, mostly due to their illegal nature under various national systems (Germany, Sweden or Poland for example) in the period of study. Before 2010, only 1 % of respondents declared having a clawback mechanism in place. When clawbacks are possible under national law, they have seldom been applied by the institutions that have stated that they could use them. Only 3 respondents (out of 198) stated that clawbacks had been exercised in past years. A small number of institutions (for example two UK and one French respondent 12) however reported having introduced clawbacks post 2014 but there is no data available as to their application to date.

Of the respondents using clawbacks and maluses, very little detail is available as to the triggers the firms have used to determine malus and/or to reclaim awards actually paid. Some have not yet expressly formalised the applicable conditions and would follow the CRD IV criteria if it had to apply a clawback or malus. ⁷³ Others simply seem to rely on fraudulent behaviour or gross negligence or other criteria along those lines (misconduct, serious error). Some adjustments were made depending on the type of employee subject to the mechanism (management or other) or the nature of their misconduct.

With regard to the malus mechanism, one German respondent explained:

⁶⁹ q1, question 11.

⁷⁰ q1_19.

⁷¹ See response q1_70 reproduced already in Annex 1.1.3.

⁷² q1_188, q1_183.

⁷³ q1_115.



"All in all, the performance criteria which might result in (partial) forfeiture include falling below a certain threshold in the CET 1 ratio, a negative group IBIT, for front office employees a negative divisional IBIT, discovery that the award initially granted was inappropriate in the light of a revenue impairment, certain breaches of policy (behaviour by the employee)". 74

One bank in France also explained:

"For executive managers taking risks, performance conditions are based on 3 criteria, which are intrinsic economic performance of [the bank] defined as growth in the operating income of [the bank], relative performance of [the bank] shares compared with a composite index of European banks, the societal performance of [the bank] as measured by the FReD index. For other risk-takers, performance conditions are determined relative to the target net income group share for the entity, which is determined during the year in which the variable remuneration under consideration is awarded."

1.3.5 Labour law restrictions in seven countries (expert survey)

Denmark

In Denmark, different rules apply depending on the type of institution the employee works for (and the information gathered only concerns credit institutions). The Financial Business Act Art. 77a(5) regulates repayment (clawback). It is complemented, albeit very succinctly, by the Guidelines issued by the Financial Authority (Finanstilsynet - FSA thereafter). The FSA Guidelines state that the company must ensure that members of the board, executive management, or other substantial risk-takers must repay the variable pay in whole or in part if the payment is made on the basis of erroneous information, and the receiver has acted in bad faith. The company must prove that the relevant information was faulty. The recovery of part or all of the variable pay will depend on an assessment of whether the employee would have received variable remuneration based on the actual results and, where appropriate, the amount. There does not seem to be any difference in the way clawbacks or other remuneration rules applies to executive managers (at different hierarchical levels) and ordinary employees involved in risk management. The FSA Guidelines also add that companies must ensure that the clawback can be applied in the given situations, e.g. by contracting with recipients, by suggesting that the application of clawback rules may trump the application of contract law and perhaps even employment law. However, note that we do not have sufficient information on employment law in Denmark to comment on its potential interaction with the legislation.

Germany

German civil law is based on the principle of party autonomy, so that contracts restricting or allowing variable remuneration are possible if and to the extent that no explicit legal provision prohibits them. However, the Federal Labour Court has ruled in

⁷⁴ q1_197.

⁷⁵ q1_195.



the context of the control of unfair contract terms (§ 307 BGB) that variable payments are to be seen as remuneration for work that has been done and thus cannot be taken away retroactively dependent on certain contingent conditions. ⁷⁶ In the literature, this decision is interpreted as meaning that "money earned cannot be taken away again" Thus, clawback clauses would be null and void (Löw, Glück 2015, 137, 140.). Similar considerations would apply to a *malus* clause if it would take away remuneration from the employee that has already been earned and paid out.

This assumed prohibition of clawback clauses under employment law may be limited in two respects. One is that the case law deals with pre-formulated employment contracts. This means that an individually-negotiated employment contract (although that may be rare in practice) would not necessarily come under this kind of scrutiny for "fairness" (§ 305 et seq. BGB). The second limitation consists in the term "employment law" itself. This term presupposes a hierarchical relationship between employer and employee. Such a relationship is not given where the person concerned is the legal representative of the company - Vorstand in the case of an AG or Geschäftsführer in the case of a GmbH. For remuneration contracts with these individuals, the protections given by employment law do not apply in the usual sense. Clawback clauses in such contracts therefore are not necessarily void under the existing case law. However, "hold back" remuneration provisions in which certain payments are deferred over several years and then adjusted (that is, possibly reduced) according to certain success criteria are possible, if the reduction of the deferred amounts is based on sufficiently defined criteria (Löw, Glück 2015, 137, 141).

Note that contracts that contain a void clawback or malus clause are still valid (§ 306 par. 1 BGB). On that basis, an employee can claim the promised remuneration without any reduction.

With regard to limitations on remuneration set out by European law and its national implementation (in Germany in particular § 25a par. 1 no. 6 and par. 6 KWG and the "Institutsvergütungsverordnung" of 16 December 2013), it should be stressed that these norms do not affect existing contracts. This derives from § 14 par. 1 InstitutsvergVO, which requires that organisations adapt their employment contracts to the new rules "insofar as this is legally possible". This shows that the InstitutsvergVO does not affect the validity of private law contracts. This conclusion is also supported in the relevant literature (Annuß 2014, 121, 126). Existing contracts will therefore not be influenced by the supervisory law provisions on remuneration. These provisions (InstitutsvergütungsVO) distinguish between three categories of people for whom different regimes apply: directors, members of control units and other employees.

It is nevertheless possible that the supervisory authority (BaFin) could order that certain remuneration payments were void under exceptional circumstances (§ 45 KWG); in such cases private law claims would indeed be affected (Löw, Glück 2015, 137, 142). In addition, note that if collective agreements are applicable they must also be observed. Where there are applicable collective agreements regarding remuneration, the supervisory law provisions of the InstitutsvergVO do not apply (§ 1 par. 3 InstitutsvergVO).

⁷⁶ BAG 13 Nov 2013, NZA 2014, 368.



With regard to employees, there is also no easy way for the employer unilaterally to vary employment contracts, as the employee can rely on the existing contract and on the principle of *pacta sunt servanda*. German employment law only allows unilateral variation of the contract, in particular a reduction in salary, under exceptional conditions such as grave disruption of the economy, but not because of changes in supervisory law (Löw, Glück 2015, 137, 141).

Again, this may be different with regard to the legal representatives of the company who have a duty of allegiance towards the company and thus may be obliged to accept a change in their contract if this is necessary to prevent significant damage to the company (Löw, Glück 2015, 137, 141).

Even with regard to new or future contracts, the restrictions on remuneration in the KWG and in the InstitutsVergVO do not necessarily influence the contractual relationship between employer and employee. In such cases, it is yet to be determined whether the fact that such contracts are in breach of the InstitutsvergVO could be interpreted as prohibiting them under private law as well (§ 134 BGB). For example, this type of effect on new private law contracts is seen in the specific provisions of § 5 par. 6 InstitutsVergVO (Annuß 2014, 121, 126). Thus, if a company enters into employment contracts that violate supervisory law, it depends on interpretation of the facts and law in a specific case whether the employees concerned can still enforce the contract. However, the violation is always relevant to the relationship between the supervisory authority and the company. In addition, entering into such contracts may also be a violation of directors' duties towards the company, which could lead to claims for damages by the company.

If the staff is the legal representative of the company, ordinary employment law does not apply, so a clawback clause may in theory be valid. It should be noted that, even in the case of directors' contracts, there will be scrutiny of any unfair terms if the contract terms are standard terms and not individually negotiated. Should they be individually negotiated, there may still be scrutiny on the basis of unconscionability (§ 138 BGB), although this would probably be relevant only in exceptional cases.

In the collective agreement between the German bankers' union Verdi and the coop banks⁷⁷, which reflects similar agreements with other banking groups (private banks,

⁷⁷ Teil H Manteltarifvertrag Ver.di Tarifvertrag zur leistungs- und/oder erfolgsorientierten Vergütung für die Volksbanken und Raiffeisenbanken sowie die genossenschaftlichen Zentralbanken abgeschlossen am: 28. Mai 2003 in der Fassung vom: 29. Oktober 2014 § 1 Variabilisierungsvolumen: Ab dem Jahr 2004 beträgt unter Berücksichtigung der Protokollnotiz Nummer 3 der Anteil der leistungs- und/oder erfolgsorientierten Vergütung maximal 8 % des sich aus den §§ 2 GTV und 10 MTV ergebenden tariflichen Jahresgehalts ohne Zulagen/Zuschläge. Die tariflichen Vergütungsansprüche gemäß Absatz 1 Satz 1, die ohne eine betriebliche Regelung zur leistungs- und/oder erfolgsorientierten Vergütung bestehen würden, ermäßigen sich ent- sprechend; die Auszahlung des variablen Anteils erfolgt nach der betrieblich zu treffenden Regelung. Arbeitnehmer/innen, auf die dieser Tarifvertrag kraft betrieblicher Regelung Anwendung findet, erhalten als garantierte Vergütung mindestens 92 % des tariflichen Jahresgehaltes. Es muss eine erreichbare Zielgröße definiert werden, die dem tariflichen Jahresgehalt entspricht. Von dieser Zielgröße kann leistungs- und/oder erfolgsbezogen nach oben und unten abgewichen werden, wobei die in Aussicht gestellten (erzielbaren) übertariflichen Entgeltbestandteile die aus dem Tarif variabilisierten Entgeltbestandteile übersteigen müssen. Auch unterhalb einer Zielerreichung von 100 % werden Teile des variabilisierten Tarifgehalts ausgezahlt. Der betrieblich variabilisierte Anteil des Jahresgehalts kann auch in den ersten sechs Monaten des Folgejahres ausgezahlt werden. § 2 Verteilungsregeln: Der variable Vergütungsanteil beruht auf einer Zielvereinbarung. Es können quantitative und/ oder qualitative Ziele vereinbart werden. Entsprechende Vergütungssysteme zur Leistungs- und/oder Erfolgsorientierung müssen regeln: - Art, Anzahl und gegebenenfalls Gewichtung der Ziele - Art der Verknüpfung zwischen dem Grad der Zielerreichung und



savings banks), the main characteristic is that variability is restricted to a maximum ratio of 8 % of the annual salary provided under the collective agreement. There must therefore be a predefined target salary and final pay must reach a minimum of 92 % of that target in the form of guaranteed pay. The pay must be set in advance in relation to a general fund defined by the employer. The goals must be objective and also set in advance.

Italy

Circular 285/2013⁷⁸ expressly states that remuneration is divided in two parts, *fixed remuneration* and *variable remuneration*. In relation to the variable part of the remuneration, it must be suitably adjusted in order to take into account all the risks undertaken by the banks, avoiding distorted incentives that could lead to regulatory violations. As a rule, a share at least equal to 40 % of the variable remuneration is subject to deferred payment for a period not less than 3-5 years, so as to take into account the risks undertaken by the bank over time ("malus mechanism"). If the variable remuneration is particularly high, the percentage to be deferred is not less than 60 % and it is postponed for at least 5 years (in relation to specific categories of personnel, such as the executive director and the general manager). In this regard, the Circular 285/2013 provides that the variable remuneration is subject to the so-called "malus and clawback mechanisms".

These mechanisms must be considered "exceptional" and apply only in specific circumstances and there must be reasons justifying their application. In this regard, the Circular 285/2013 provides that the malus and clawback mechanisms must reflect individual performance and the risks undertaken by the bank over time. These mechanisms can lead to a reduction or even to a reset ("azzeramento") of the variable remuneration concerned, in particular in the case of negative performance and/or performance not in line with the objectives and goals set by the bank.

Credit institutions must define the criteria or the rules to be observed for the application of the malus and clawback mechanisms. The following provisions must be applied:

der resultierenden Vergütung. Zielvereinbarungszeitraum ist in der Regel das Kalenderjahr. Pro Zielvereinbarungszeitraum sollen mehrere Ziele einvernehmlich vereinbart werden. Die Ziele können unterschiedlich gewichtet werden. Die Betriebsparteien können Zielerreichungsstufen festlegen. Die vereinbarten Ziele und die Kriterien der Zielerreichung müssen sich auf den Arbeitsplatz/das Team und die damit verbundenen Arbeitsaufgaben beziehen. Die Zielerreichung muss arbeitnehmerseitig beeinflussbar sein. Es besteht ein individueller An- spruch auf Vergütung nach Zielerreichung innerhalb der betrieblich vereinbarten Spanne (maximal 92 – 109 %). Die der variablen Vergütung zugrunde liegenden Ziele sind für den Vergütungszeitraum schriftlich zu fixieren. Korrekturen der Ziele bzw. Erfolgskriterien sind möglich, falls sich für die Zielvereinbarung maßgebliche Rahmenbedingungen gravierend geändert haben. Zielkorrekturen können nur einvernehmlich erfolgen. Die jeweilige Zielerreichung ist auf der Grundlage eines Soll-Ist-Vergleichs festzustellen und dem Arbeitnehmer/der Arbeitnehmerin auf Wunsch zu erläutern. Betrieblich können Zwischengespräche vorgesehen werden. (Similar in the Collective Agreement for private banks and public banks part III (Tarifvertrag für die privaten Banken und das öffentliche Bankgewerbe Teil III (Stand 1.1.2006)).

Banca d'Italia, "Disposizioni di vigilanza per le banche", Circolare n. 285 del 17 dicembre 2013, 7° Aggiornamento del 18 novembre 2014 - Parte Prima, Titolo IV. Capitolo 2 "Politiche e prassi di remunerazione e incentivazione".



- (1) the incentives granted or paid to the individual responsible for behaviour which has resulted in significant loss for the bank and/or for gross negligence and to the individuals who fail to comply with specific laws (such as the regulations regarding remuneration policies) are subject to clawback mechanisms;
- (2) malus mechanisms apply in the above circumstances and also taking into account individual performance, suitably adjusted in the light of the risks undertaken by the bank.

It should be noted that the provisions of Circular 285/2013 can be considered as mandatory rules, which must be applied to all staff employed by the banks. The relationship between the provisions contained in Circular 285/2013 and the civil and employment rules concerning the remuneration policies of employees or those in charge of specific functions within the banks, are governed by Circular 285/2013, which includes the following rules:

- (1) Banks must, to the extent permitted by the relevant collective agreements:
 - o apply the provisions of Circular 285/2013 concerning remuneration to individual contracts entered into from 1 July 2015;
 - adapt current individual contracts to the provisions of Circular 285/2013 promptly and, in any event, by 1 July 2015 for those relating to members of the bodies in charge of management, control and strategic supervisory functions, and by 31 December 2015 for those relating to other staff.
- (2) Collective agreements both at national or company level must be aligned with the provisions of Circular 285/2013 at the earliest opportunity.

It is therefore clear that the relationship between Circular 285/2013 and the collective agreements is a sort of "complementary relationship". The provisions of the collective agreements must be in accordance with the rules set out in Circular 285/2013 but, at the same time, the banks must also respect any limitations provided by the relevant collective agreements.

Circular 285/2013 does not specify which rules, whether those contained in the collective agreement or those included in the Circular, should prevail in the event of conflict. In the event that the provisions on remuneration policies contained in the collective agreements are in conflict with those of the Circular 285/2013 or vice versa, the possible solutions and thesis confirmed by case law and expert opinions, are the following:

- (1) either the collective agreements will be considered ineffective and void ("nulli"), as the provisions of the Circular 285/2013 are mandatory rules;
- (2) or the collective agreements will not be considered ineffective, but they must be adjusted in accordance with the provisions contained in the Circular 285/2013.

On this issue, it is difficult to find settled case law, although the second thesis appears preferable, because it enables both the provisions of the collective agreement and the rules contained in the Circular 285/2013 to survive and achieves a balance between the two pieces of legislation. Furthermore, it should be noted that both labour law and the provisions of Circular 285/2013 may be considered as "special laws" that prevail over general civil provisions and regulations. For this reason, there is need for collective agreements to be aligned with the rules in Circular 285/2013 and vice versa.



Netherlands

The Clawback on Bonuses Act⁷⁹ came into force only on 1 January 2014⁸⁰ (without a transitional period), despite previous attempts to control clawbacks under the Dutch Corporate Governance Code, which had been in force since 2009.⁸¹ Under articles. 2:135 (6) and 2:135 (8) of the Dutch Civil Code (hereafter 'DCC'), this Act empowers a public company (*naamloze vennootschap*) to adjust and to clawback variable remuneration paid to any director (*bestuurder*). Under these provisions, this adjustment is justified if the payment of the variable remuneration in question would violate general standards of reasonableness and fairness.⁸² The public company has the power to <u>clawback</u> the variable remuneration or part of it if this remuneration has been granted on the basis of false information as to the performance related to the payment of the variable remuneration.

Dutch legal authors have questioned whether art. 2:135 (6) DCC (which empowers a public company to adjust variable remuneration) would have any separate meaning, as a company would already be empowered to adjust any variable remuneration both under the best practice provision of the Dutch Corporate Governance Code and under art. 6:248 DCC. Art. 2:135 (8) DCC (which empowers a public company to clawback variable remuneration) is generally considered as a *lex specialis* of the rules under which contracts may be annulled because of error or fraud (arts 3:44 (3) and art. 2:228 DCC, respectively) (Grapperhaus 2012, under 5).

The Dutch Financial Supervisory Act (hereafter 'FSA') contains provisions similar to arts 2:135 (6) and 2:135 (8) DCC. On the one hand, these provisions apply specifically to financial institutions (*financiële ondernemingen*), but on the other hand, their scope has been extended so as to cover not only directors, but also daily policy makers (*dagelijkse beleidsmakers*). 83

On 26 November 2013, the Dutch government introduced a long awaited draft legislative proposal for an Act on the Remuneration Policy of Financial Undertakings (*Wet beloningsbeleid financiële ondernemingen*), which includes new provisions concerning the variable remuneration awarded to the directors of financial institutions.

⁷⁹ De Wet tot wijziging van boek 2 van het Burgerlijk Wetboek en de Wet op het financieel toezicht in verband met de bevoegdheid tot aanpassing en terugvordering van bonussen en winstdelingen van bestuurders en dagelijks beleidsbepalers, *Stb.* 2013, 563.

⁸⁰ Stb. 2013, 589.

See Best practice provisions II.2.10 and II.2.11 of the Dutch Corporate Governance Code. The supervisory board (raad van commissarissen) could use its power to claw-back the remuneration paid to directors (bestuurders) if the variable remuneration or bonus in question had initially been granted on the basis of false information. The supervisory board, however, could deviate from this best practice rule, provided it would explain why it did not comply with it. Thus, the claw-back rule had been a self-regulatory measure.

⁸² Article 2:135 (6) DCC.

⁸³ Art. 1:111.1 and 1:111.2 FSA respectively.



This Act on the Remuneration Policy of Financial Undertakings⁸⁴ entered into force on 7 February 2015. The Act applies to all financial undertakings incorporated or established under Dutch law⁸⁶ and will also apply to the Dutch and foreign subsidiaries of these financial undertakings. It widens the scope of the above adjustment and clawback provisions even further, as they now apply to any natural person employed under the responsibility of all financial undertakings incorporated or established under Dutch law and its Dutch or foreign subsidiaries. In the case of a group of companies of which the holding company has its corporate seat in the Netherlands, the provisions will apply to all natural persons employed under the responsibility of all legal and other entities of this group of companies. There is no different treatment of various levels of hierarchy.

Moreover, under art 1:127 FSA, the government has introduced, in accordance with CRD IV, ⁸⁹ more specific criteria for the application of malus and clawback arrangements. These arrangements should in particular be applied when (i) a staff member fails to meet appropriate standards of fitness and propriety; and (ii) a staff member participates in or has been responsible for conduct which resulted in significant losses to the institution. ⁹⁰ Again, there is no different treatment of various levels of hierarchy.

Portugal

'Clawback' and 'malus' clauses have been called for in Portugal since before the introduction of the CRD IV. 91 Decree-Law 157/2014 amended the Legal Framework for Credit Institutions and Financial Companies (Decree-Law 298/92) in line with Directive 2013/36/EU.

Under this new regime, variable remuneration is to be restricted to cases of negative financial performance of the credit institution or financial company, and applies to both

Wet van 28 januari 2015 tot wijziging van de Wet op het financieel toezicht houdende regels met betrekking tot het beloningsbeleid van financiële ondernemingen (Wet beloningsbeleid Financiële ondernemingen), *Stb.* 2015, 45.

⁸⁵ Stb. 2015, 46.

⁸⁶ Art. 1:112 FSA.

⁸⁷ Art. 1:113 FSA.

⁸⁸ Art. 1:126 (2) FSA.

⁸⁹ Art. 94.1 (n) CRD IV.

⁹⁰ Art. 1:127 (2) and (3) FSA respectively.

Law 28/2009, Bank of Portugal Notice 1/2010, 10/2011 and Circular Letter 2/2010) have been issued and all concern remuneration policies and indicate, one way or another, the necessity to create mechanisms in order to allow credit institutions and financial companies to narrow or even recover the variable remuneration of its corporate body members, managers or employees. In particular, Decree-Law 88/2011 has clearly subscribed the urgency of generating 'clawback' clauses, whilst the 2013 Corporate Governance Code of the CMVM (Portuguese Market Securities Authority) recommended the introduction of 'malus' clauses into remuneration policies.



ex post and ex ante remuneration. Furthermore, credit institutions and financial companies are required to provide mechanisms to reduce (malus) or revert (clawback) the variable component of remuneration, if one of the following triggering events occurs: a) If the credit institution or financial company's corporate body member, manager or employee is responsible for or has participated in actions that led to substantial losses; b) If the credit institution or financial company's corporate body member, manager or employee has failed to adhere to the suitability and good repute criteria fixed by law.

Nevertheless, the application of these new mechanisms is limited. They apply to the members of corporate bodies, internal directors, managers, and to the people who are responsible for risk policies and management, and to all staff whose salaries are similar to those of the categories defined above (naturally, in order to avoid fraud situations). However, the existence of ongoing contracts (whether employment or other) constitutes a clear obstacle to the implementation of 'clawback' or 'malus' mechanisms. In respect of the employment contracts, Portuguese employment law establishes the principle of the irreducibility of wages, whether variable or fixed remuneration. Furthermore, Portuguese civil law establishes the principle of the strict fulfilment of the contract. The application of the 'clawback' or 'malus' mechanisms would conflict directly with the contracts in force at the time the new legislation controlling clawbacks and malus mechanisms will come into force. The application of 'malus' and 'clawback' arrangements will therefore only apply to new contracts (labour or other), since those contracts contain clauses providing those mechanisms.

Poland

The legislation in place (Resolution and Regulation) provides for postponement (3 to 5 years) of or reduction in the variable part of remuneration. There are no provisions distinguishing between the hierarchical ranks of employees. Such differences may, however, be introduced by banks and brokerage houses themselves in their variable remuneration policies on the basis of the proportionality principle.

Note that there are no legal provisions that would allow claims from the employee by way of recovery of remuneration already paid. The rules which have been introduced may be in conflict with civil (contract) law and the principle of contractual freedom. The parties could therefore, in principle, agree on the requisite provisions. Employment law does not explicitly prohibit the application of malus and clawback. It embodies the principle that the employee's right to remuneration must be protected. Malus or clawback may be therefore be in conflict with this general principle. However, disapplying the new law on malus and clawback would require that it is declared unconstitutional by the Constitutional Tribunal. The scope of the new law is however limited to new contracts it seems that it in principle only applies to future employment contracts. Existing contracts would therefore fall within the scope of new legal provisions with regard to the right to variable remuneration acquired after the new law came into force.

One Supreme Court judgment (23.05.2014, ref. no II PK 273/13) is noteworthy, although it only refers to deferral, malus and clawback as a side note. In this case, the court referred to the CRD with regard to malus and clawback and to the Resolution of the Polish Financial Supervision Authority no 258/2011 of 4.10.2011 as an argument that a bonus for an employee may, in principle, be deferred and paid out in yearly instalments. In this particular case the Supreme Court did not hold that payment to a bank employee of his bonus over three years was contrary to employment law.



It appears that the answer would be the same with regard to collective agreements. Additionally, note that collective agreements are lower in the hierarchy than the universally applicable law.

Spain

CRD IV has been introduced by Act No. 10 of 2014 on the organisation, supervision and solvency of credit institutions (Ley 10/2014, de 26 de junio, de ordenación, supervisión y solvencia de entidades de crédito). The transposition of CRD IV has been a "cut and paste" exercise regarding information duties and is contained in the Royal Decree of 13 February, 2015 (Real Decreto 84/2015, de 13 de febrero, por el que se desarrolla la Ley 10/2014, de 26 de junio, de ordenación, supervisión y solvencia de entidades de crédito). The new provisions are to be regarded as special legislation and take precedence over general employment and civil contract law. Existing contracts will in all probability be treated as compliant with the new law. There does not appear to be any distinction in the rules regarding the level of seniority of staff subject to the remuneration rules. However, it should be noted that there are special rules (limits) for the staff of credit institutions subject to FROB which predate the entry into force of the CRD IV transposition.

The Fondo de reestructuración ordenada bancaria (FROB), known in English as the Fund for Orderly Bank Restructuring (FOBR), is a banking bailout and reconstruction program instituted by the Spanish government in June 2009. On 3 February 2012, the Royal Act-Decree No. 2 of 2012 on the recovery of the financial sector (Real Decreto-Ley 2/2012, de 3 de febrero, de saneamiento del sector financiero) limited the remuneration of members of the board of directors of the institutions supported by FORB, which cannot be over 60 % of fixed remuneration under Article 5 (developed by Ministerial Order on 3 August 2012 - Orden ECC/1762/2012, de 3 de agosto, por la que se desarrolla el artículo 5 del Real Decreto-Ley 2/2012, de 3 de febrero, de saneamiento del sector financiero, en materia de remuneraciones en las entidades que reciban apoyo financiero público para su saneamiento o reestructuración). It also excluded any variable remuneration for members of the board of directors of institutions with a majority participation by FROB.

On 10 February 2012, Royal Act-Decree No. 3 of 2012 on urgent measures for the reform of the labour market (Real Decreto-Ley 3/2012, de 10 de febrero, de medidas urgentes para la reforma del mercado laboral), limited the remuneration in favour of the members of the boards of directors of institutions either with a majority participation by FROB or supported by FROB.

1.4 Financial centres: USA, Hong Kong, Singapore, Switzerland, UK

The following documentation was obtained from reports on global remuneration regulation conducted by the law firm Norton Rose. 92

Robins, Hong March 11, http://www.nortonrosefulbright.com/knowledge/technical-resources/banking-reform/remuneration-requirements-for-banks---a-global-analysis.



1.4.1 USA

The United States is not attempting the kind of regulation of remuneration that is being introduced in the EU. One of the major drivers of reform in this area is the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"). More than five years after its passage, "guidance on several of the law's executive compensation provisions is still making its way through the regulatory pipeline, and regulations to guide companies in complying with another provision — the CEO pay ratio rule — have only recently been finalized." ⁹³

The executive compensation provisions, contained in Sections 951-957 of Dodd-Frank, are broadly in line with the ideas behind CRD IV but differ in their scope and specificity. Most of the sections apply to all public companies and not only to CRD IV's "credit institutions and insurance firms." Moreover, implementing the provisions has required rulemaking coordinated among as many as six other government regulators.

Section 956 of Dodd-Frank applies specifically to financial institutions with more than \$1 billion in assets and comes closest to CRD IV rules. That section, "intended to curb excessive incentive compensation at financial services organizations, is one important rule that's nowhere near finished." 94 The idea of Section 956 is prevent financial institutions from offering compensation incentives that are "excessive" compensation or that expose the institution to financial loss as the result of inappropriate risk-taking. While CRD IV does not propose rules against excessive remuneration, it focuses guite strongly on excessive risk-taking. Seven US regulatory agencies were asked to work together to develop rules implementing Section 956, including the Federal Reserve and the Securities Exchange Commission. To meet the Dodd-Frank deadline of producing draft rules within nine months of the passage of the bill, these agencies produce draft rules in March of 2011 but nothing has been published since then. The Center for Executive Compensation expects new rules in 2016. 95 When the new rules appear, they are expected to be "principles-based" rather than prescriptive in the way the CRD IV is prescriptive. They are a "codification of the principles as found in joint regulatory Guidance on Sound Incentive Compensation Policies, which stated that compensation needs to be balanced to both risk and reward over a long-term horizon, compatible with effective controls and risk management, and supported by strong corporate governance."96

A significant difference between the EU and the USA seems to be the way in which excessive risk-taking is sanctioned. The EU approach is focused on the idea of undue enrichment, meaning that no one should be paid for a short-term success which, due

⁹³ See https://www.towerswatson.com/en/Insights/Newsletters/Americas/Insider/2015/11/dodd-frank-executive-compensation-provisions-a-progress-report.

⁹⁴ See http://www.marketwatch.com/story/dodd-frank-rule-to-curb-bank-incentive-pay-likely-last-to-finish-line-2015-07-16.

⁹⁵ See http://www.execcomp.org/News/NewsStories/2016-executive-compensation-policy-outlook-new-commissioners-final-dodd-frank-rules-disclosure-buybacks-in-play.

⁹⁶ See http://www.bankdirector.com/index.php/issues/regulation/the-current-status-of-dodd-frank-act-compensation-rules/. The Guidance on Sound Incentive Compensation Policies is a 2010 document produced by the Federal Deposit Insurance Corporation available at https://www.fdic.gov/news/news/press/2010/pr10138a.pdf.



to excessive risk-taking, turns out to be a long-term failure. By contrast, the US approach seems to be rooted in the moral assumption that decent behaviour would prevent such problems so that criminal punishment and administrative fines are the better instruments to cope with them.

The following table indicates that the fines that have been imposed on banks worldwide are disproportionately generated in the US. In the US, credit institutions and investment companies and their leading personnel are aware that they will be held responsible for violating financial standards. That situation may have disadvantages in comparison to an EU-system that is less fault-based.

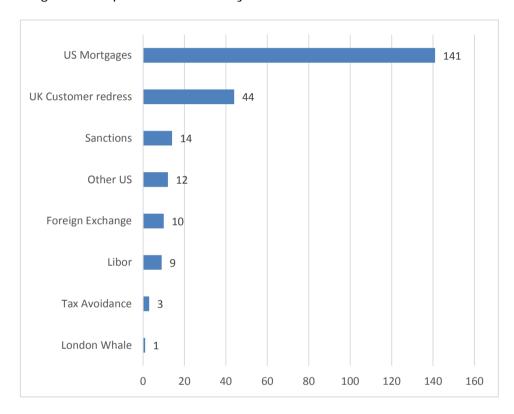


Figure 40: Total Fines, by Type, 2008-2015, 20 Largest Banks

Source: http://graphics.thomsonreuters.com/15/bankfines/

The table shows that fines imposed by US jurisdictions amounted to the majority of the USD 235 billion in fines imposed on the 20 largest banks between 2008 and 2015. Only the fines for UK customer redress and the Libor rate-rigging affair occurred outside the US. 97

As for the competitiveness of the EEA with regard to the staff employed in the US (see also Section 3.4), it is not feasible to assess the relative salaries for MRTs across countries. A 2014 Mercer webcast 98 argued that "[T]here is increasing variation in

⁹⁷ The "London Whale" refers to a particular trader whose actions violated a number of financial rules in various jurisdictions.

⁹⁸ See http://www.mercer.com/events/webcasts/executive-remuneration-in-financial-services.html.



executive compensation across the global financial services industry" with ".... regulatory differences that create an 'unlevel playing field' for attracting, motivating and retaining talent." In particular, rules about the structure and timing of variable remuneration are being implemented in North America, Europe and Asia at different speeds. But there are no clear data about differences in remuneration itself.

There are longstanding differences in executive compensation between the US and continental Europe but our sources indicate that these differences are the result of a gradual historical process and are not the result of the FSB 2009 rules.

1.4.2 Hong Kong

Hong Kong's supervisory authority, the Hong Kong Monetary Authority (HKMA) issued a guideline on a Sound Remuneration System in 2010 (2010 Guideline), applicable to all authorised banks (authorised institutions, AIs), divided into licensed banks, restricted licence banks and deposit-taking companies. This guideline reflects the FSB principles for Sound Compensation Practices and the Implementation Standards. The 2010 guideline have been superseded by an updated guideline issued in March 2015 to formally incorporate the relevant disclosure standards issued by the BCBS in its July 2011 paper on "Pillar 3 disclosure requirements for remuneration".

Although the guideline does not have statutory effect, all AIs are expected to comply with or otherwise justify any deviation by presenting alternative measures or proof of the non-applicability of respective principles. In cases of insufficient justifications, and an AI's remuneration system considered inconsistent with the principles of the Guideline, possibly posing a risk to the safety and soundness of the AI, the HKMA will expect the AI to implement measures to address and mitigate any risks identified in respect thereto. Otherwise, the HKMA may conduct any measures it deems appropriate, including the imposition of a limit on total variable remuneration.

However, as the guideline does not follow a "one size fits all" approach but takes account of size, scope and complexity of the institutions' business, deviations and their justification are generally provided for. Nonetheless, an AI e.g. conducting a large and complex business with a high numbers of employees engaging in diverse risk-taking activities, making general use of extensive variable pay instruments as incentives, will be expected to have more formalised and systematic policies and procedures with according monitoring activities and reviews. Responsibility for the design of appropriate remuneration systems rests with the board of directors.

Corresponding to that, the guideline does not prescribe particular limits or specific remuneration systems, but demands that these systems should be consistent with and promote sound and effective risk management, be in line with the AI's business strategy, objectives and long term interests, incorporate measures to avoid conflicts of interest, provide for independent internal review at least annually by the board, be responsible for overseeing the formulation and implementation of the remuneration policy and independent risk control personnel with appropriate authority and be involved in the process of designing and implementing an AI's remuneration policy.

Hong Kong Monetary Authority 2010, available at http://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/supervisory-policy-manual/CG-5.pdf.



The board should also establish a remuneration committee, with the majority consisting of independent non-executive directors.

Respective remuneration policies should be specified in a written form and contain rules applying to all employees, with special attention to those policies for employees having a material impact on the AI's risk profile and financial soundness (i.e. senior management, proprietary traders and dealers, marketing and sales, loan officers, risk management, financial control and compliance personnel).

In its supervisory function, the HKMA will nonetheless take into account the potential risks that may arise from an AI's remuneration system when assessing its overall risk environment, with its respective results feeding into the annual review of an AI's CAMEL rating (Capital adequacy, Asset quality, Management, Earnings and Liquidity). For locally incorporated AIs, the overall assessment will be taken into consideration in the determination of whether additional capital should be held by the AI under the AI's existing minimum capital requirements.

In November 2010, the HKMA issued a circular (Hong Kong Monetary Authority 2010) strongly recommending AIs to follow the disclosure provisions set out in the Basel Committee's paper on Pillar 3 disclosure requirements for remuneration, published in July 2011. As some of these requirements go beyond those provisions of Guidelines, the HKMA published a combined list of disclosure requirements under the Guidelines and the Basel Committee's paper.

Disclosure of an AI's remuneration policy and information on the AI's monitoring and review of the operation of the remuneration policy have to be provided to the HKMA upon request. The HKMA also asks for at least annual remuneration reports including the information set out in the annexes to the Guideline. The HKMA may demand additional disclosure if deemed appropriate in the circumstances. Information on remuneration policies should be disclosed to the public as well.

Remuneration

The Guideline distinguishes between fixed and variable incentive-based remuneration but does not provide for any specific recommendations in respect of bonuses. The same applies to role based allowances. However, bonuses are likely to be regarded as a type of variable remuneration, depending on the overall structure of the Al's remuneration system. Nonetheless, guaranteed minimum bonuses, awarded irrespective of an employee's performance, are not consistent with sound risk management according to the Guideline and should be subject to board approval.

The Guideline recommends that a proportionate balance be struck between fixed and variable remuneration, without designating a specific limit to the relationship between the two. Aspects to be considered are an employees' seniority, role, responsibilities and activities as well as the importance of promoting a behaviour that supports the AI's risk management framework and long-term financial soundness. The ratio of variable remuneration to total remuneration is expected to increase in accordance to an employee's seniority and responsibility, resulting in a substantial proportion of the remuneration to e.g. senior management being paid in the form of variable remuneration.

Accordingly, equity-related instruments may be effective in restraining the risk-taking incentives of key personnel whose activities could have a material impact on the overall performance of the AI.



Risk-taking and Corporate governance

As mentioned above, the Guideline focuses on governance and control arrangements in regard of appropriate risk-management.

Among the HKMA's suggestions for remuneration systems are:

- a substantial proportion of the remuneration of senior management and key personnel being paid in the form of variable remuneration;
- variable pay being granted in the form of shares or share-linked instruments subject to an appropriate share retention policy;
- guaranteed bonuses only being granted in exceptional cases and restricted to the first year of employment, new staff, or for retaining existing staff in the event of a business sale or winding-down;
- variable pay being subject to assessment of performance through predetermined criteria
- Adverse performance in non-financial factors overriding financial achievements and resulting in a reduction or elimination of any variable pay
- Deferral of a portion of variable remuneration, being subject to a minimum vesting period and pre-defined vesting conditions in respect of the future performance of the AI its relevant business units and respective employee

International Competition

The Guideline has extraterritorial effect in such regard, that it applies to officers and employees engaged in an overseas incorporated AI's business and operations conducted in Hong Kong. The guideline is also applicable to overseas branches and subsidiaries of locally-incorporated AIs, subject to HKMA's consolidated supervision. AIs conducting business in Hong Kong, on the other hand, being a subsidiary of a banking group or a branch of an overseas-incorporated bank, may adopt the group remuneration policy only if it is broadly consistent with the Guideline and can demonstrate this to the satisfaction of HKMA; thus, apart from the scope of application, the provisions applicable to locally-incorporated AIs are equally applicable to overseas-incorporated AIs.

1.4.3 Singapore

General Development

One frequently cited example of success as a financial centre is the island of Singapore. The economic success of Singapore is dramatic. In 1965 GDP per-capital stood at \$500 per-capita, about the same level as Mexico and South Africa. By 2015 GDP has risen to \$56,000 per-capita, roughly on a par with the US and Germany. Since then Singapore has experienced strong export led growth, attaining a dominant position in certain markets, such as that for hard-disk drives (Menon 2015). Within this growth the financial services sector has constituted a significant, but certainly not dominant, source of growth in recent years.



Table 54: C	Changes in	employi	ment in Si	ngapore

changes in employment in Singapore				
Year	2011	2012	2013	2014
Total Employment growth	122 600	129 100	136 200	130 100
Financial Services	10 900	6 500	4 600	9 300
% Financial Services	9 %	5 %	3 %	7 %

Source: http://www.singstat.gov.sg/statistics/browse-by-theme/labour-employment-wages-and-productivity

This tolerance of relatively strong income inequality in a City state so concerned with maintaining social stability may seem odd until one appreciates the extreme openness of the Singaporean economy and the dramatic financial flows associated with that openness.

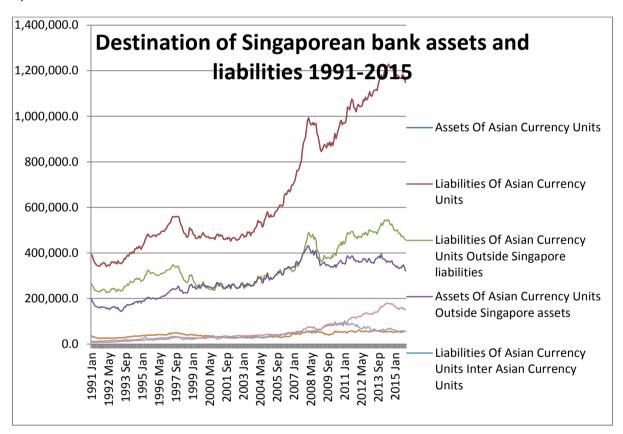


Figure 41: Destination of Singaporean bank assets and liabilities 1991-2015

Note: Asset/liability are expressed in Asian dollars. Source: http://www.tablebuilder.singstat.gov.sg/publicfacing/selectVariables.action

The most striking characteristic of asset/liability flows through Singaporean banks is the surging level of liabilities (claret line), the vast majority of which are incurred to counterparties outside the island (green line). With this degree of exposure to



international competition how are salaries within financial institutions set in Singapore and how well do they reflect the passing threats to global financial stability?

The demand for finance professionals on the island is clear from a recent salary survey (Morgan McKinley 2015) where the authors note that while average pay rises have been low (between 1 % and 8 %) (p 3)"in banking, namely audit, regulatory, risk, and compliance, where professionals in this sector have been in high demand and are limited in supply, have seen larger salary increases". Evidence on the dispersion of pay with Singaporean financial institutions can be gleaned from a recent survey (Milliken, Martins 1996) which makes clear how variable pay can be (hopefully conditional on performance) even within a given pay category. While within job pay dispersion is universally wide (16 % even for workers serving at branch counters) it becomes very widely spread in functions directly determining the bank's total risk exposure (67 % for Risk Directors, 100 % for bank senior managers). This suggests a wide discretion to reward/punish on the basis of financial performance and agility that may be required in markets subject to such intense global competition.

Table 55: Compliance and risk management

Compliance & Risk Management			
Role	Min monthly salary (\$ 000)	Max Monthly salary (\$ 000)	Dispersion %
Compliance Manager	10.0	12.5	25 %
Business & Project Analyst	2.9	3.8	31 %
Risk Director	15.0	25.0	67 %
Investment Management			
Role	Min monthly salary	Max Monthly salary	
Vice President	14.0	20.0	43 %
Analyst/Senior Analyst	4.0	11.7	193 %
Corporate Finance Manager	3.2	4.7	47 %
Senior Relationship Manager	3.2	4.0	25 %
Operations			
Role	Min monthly salary	Max Monthly salary	
Manager/Assistant Manager	7.0	8.5	21 %
Banking Senior Officer	3.0	6.0	100 %
Bank Teller	1.9	2.2	16 %
Compliance Manager	10.0	12.5	25 %

Implementing Basel III in Singapore

Given the extreme openness of the Singaporean economy it will comes as no surprise that is has an embarked on an active process of compliance with Basel III framework for banking supervision analogous to our own Capital Requirements Directive IV. These has involved many of the corporate governance changes we have recently seen in Europe (Chan, 2015), many of these derive from implementation of the Banking (Corporate Governance) Regulations 2005 henceforth the "CG regulations". The CG



regulations form part of a broader nexus of legislation summarised in the Table below (BIS 2013).

Table 56: Regulations and disclosures required by MAS implementing Basel III

Regulation	Date of Issue
Directive for Bank Holding Company	February 2000
Banking (Corporate Governance) Regulations	September 2005
MAS Notice 637 (Amendment) to	September 2012
Implement Capital Requirements	
for Bank Exposure to Central	
Counterparties	
MAS Notice 637 (Amendment 2)	November 2012
to implement Composition of	
Capital Disclosures	
Supervisory Guidelines	December 2010
Guidelines on Corporate Governance	
for Banks and Holding Companies	
and Insurers	

Source BIS (BIS 2013, p. 23, Annex 4)

Under the CG regulations each Singaporean registered bank must either comply with, or explain the failure to do $\rm so^{100}$, a number of governance mechanisms. These include establishing

- A Nominating Committee,
- A Remuneration Committee,
- An Audit Committee and
- Risk Management Committee.

Specifically the CG rules set out a series of principles for the operation of Remuneration Committees which includes guidance that "a significant proportion of executive director's remuneration should be structured to link so as to link rewards to corporate and individual performance" (see Cheng et al. 2015, p 182). Further the Monetary Authority of Singapore (MAS) in guidelines for risk management state (MAS 2014)) "in deciding on compensation for its revenue generating and management positions, the institution should take into account the individual's consistency of performance, adherence to the code of conduct, internal guidelines and regulatory requirement and longer-term performance measures, rather than just short-term results" (p. 9).

The Risk Management Committee is charged with overseeing

In a formulation not dissimilar to the UK's (FRC 2014: The UK Corporate Governance Code, London Wall, London, England: Financial Reporting Council.



- The establishment and operation of an independent risk management system for managing enterprise-wide risks.
- The adequacy of the risk management function of the bank including ensuring that it is adequately resourced to monitor risks in various categories.

The main Board is charged with

- Setting the tone from the top with regard to risk,
- Approve the risk appetite framework which should be comprehensive, actionable and consistent with bank's strategy
- Review at least annually the bank's risk profile, risk tolerance and risk strategy. (MAS 2014)

Recent evaluation of these reforms (BIS 2013) identified no deviations from the Basel III framework with regard to the supervisory process for assessing risk (see Section 2.4, p. 18). This fact may not be surprising given their finding that "the reported capital positions of these banks remained relatively resilient throughout the global financial crisis", (p. 4) suggesting that Singapore may have much to teach European banks in these matters.

International Competition

With regard to international competition between major financial places Singapore has a quite similar structure but enormous spread for the income of bankers. Since there is no maximum ratio for variable pay it could be argued that Singapore has the ability to attract with higher pay. But the situation is such that the enormous differences in pay for investment bankers within Singapore was not due to variable pay but existed in general. It is therefore questionable that Singapore has become more attractive for investment bankers after CRD IV. This is furthermore not supported by the number of employees in this sector in Singapore not having increased.

1.4.4 Switzerland

As one of the world's major financial markets, with Zurich and Geneva being two of the top 20 financial centres worldwide, ¹⁰¹ the financial system plays an outstanding role in the Swiss economy (Schiltknecht 2008).

Remuneration system in Swiss banks

Nonetheless, almost 60 % of total assets of Swiss Banks are accounted for by only two institutions: UBS and Credit Suisse. 102 As one of the ten most mentioned banks in the press during the period of 2007-2015 within the covered area (all 14 MS countries

Z/Yen (Long Finance). Top Finanzplätze weltweit im Jahr 2015 (nach dem Global Financial Centres Index; As of: September 2015). http://de.statista.com/statistik/daten/studie/166518/umfrage/top-finanzplaetze-nach-dem-global-financial-centres-index/ (accessed on 17.12.2015).

Schweizerische Nationalbank. (n.d.). Größte Banken in der Schweiz nach ihrer Bilanzsumme im Jahr 2014 (in Milliarden CHF). In Statista - Das Statistik-Portal. Zugriff am 16. Dezember 2015, von http://de.statista.com/statistik/daten/studie/299205/umfrage/banken-in-der-schweiz-nach-ihrer-bilanzsumme/.



plus Switzerland, Singapore, Hong Kong and USA), UBS ranks number 7 and Switzerland Number 8 (mentioned countries).

Table 57: Most cited companies and regions over the period 2007-2015

Ranking	Company	Number of items	Region	Number of items
1	Royal Bank of Scotland	4 651	UK	36.6k
2	Barclays	2 909	US	15.1k
3	Lloyds Banking Group	2 289	Spain	12.9k
4	Banco Santander	1 701	France	12.7k
5	HSBC	1 693	Europe	10.8k
6	The EU	1 659	Germany	10.6k
7	UBS	1 616	Australia	6 466
8	Deutsche Bank	1 471	Switzerland	5 420
9	BNP Paribas	1 377	Hong Kong	4 176
10	UK FSA	1 221	China	3 753

Source: Factiva

In 2013, a Swiss referendum rejected a proposal to cap the salaries of top executives at 12 times that of a company's lowest wage. They approved however a "say on pay" provision, requiring that – from 1.1.2014 – the Annual General Meeting votes the total remuneration (both monetary and in kind) of the board, the executive board and the advisory board.

Board members receive no compensation on departure, or any other compensation, or any compensation in advance, any premium for acquisitions or sales of companies and cannot act as consultants or work for another company in the group. The management of the company cannot be delegated to a legal entity. Violation of the provisions set out in letters a to c above shall be sanctioned by imprisonment for up to three years and a fine of up to six years' remuneration.

The ordinance does not cap remuneration but requires (inter alia) the following: - an (annual) shareholder vote on the remuneration of the members of the board and the executive committee; - maximum term and notice period for employment agreements of one year; - prohibition of certain forms of remuneration, (i.e. severance payments; advance payments; payments/premiums related to the acquisition or disposal of businesses; loans/credits/pension benefits or performance based remuneration not provided for in the articles of incorporation, and; allocation of shares/other equity security and options or conversion rights not provided for in the articles of incorporation).

These rules apply to corporations under Swiss law whose shares are listed on a stock exchange in Switzerland or abroad (foreign companies listed on a Swiss stock exchange or having a tax residence in Switzerland are not affected).

FSB report (FSB 2015b) registered an effective alignment of banks' remuneration policies with risk-taking. Even though there is no formal guidance, the Standard concerning no hedging in respect of remuneration is addressed by larger institutions through internal compliance processes. The adherence by larger institutions to this Standard is confirmed by supervisory evidence.



Core elements of this initiative were say-on-pay measures, requiring an annual binding shareholder vote on total aggregate remuneration of the board of directors, executive management and the advisory board, prohibition the payment of certain bonuses, advance payments and premiums ("golden parachutes" and signing-on bonuses) and provisions on the election of a remuneration committee. ¹⁰³ Noteworthy are envisaged criminal sanctions in cases of violation.

Accordingly, although not binding for Swiss banks, the CRD IV directive was expected having a major impact on remuneration structures regarding the composition of base salary, fixed and deferred remuneration for Swiss banks (Mercer LLC 2014). Following the presentation of the FSB Principles for Sound Compensation Practices (P&S) in 2009, FINMA pursued coordination efforts with other supervisory authorities and engaged in international working groups to foster an international consensus in the implementation of rules according to those principles (FINMA 2010, p. 18).

In 2009, FINMA issued a draft circular on minimum standards for remuneration schemes for the codification of the FSB Principles, followed by an extensive consultation phase with more than 50 responses by financial institutions, industry associations, audit and consultancy firms, employee representatives, political parties as well as individuals (FINMA 2010, p. 19). Although criticised as being too restrictive or demanding by respondents (FINMA 2010, p. 19), the final circular, entering into force in 2010, provided for partly stricter rules regarding responsibilities for remuneration policies within applicable institutions.

A tendency in adopting stricter rules than the agreed international consensus can also be seen in Switzerland's announcement to apply tighter capital requirement rules at national level than envisaged by the Basel III accords (Vitols, Kluge 2011, p. 237), applicable to its two systemically important financial institutions (EC 2011, p. 46, Fn. 92). With UBS and Crédit Suisse exceeding the annual Swiss GDP by more than four times, Switzerland deemed it necessary to accelerate the implementation of Basel III provisions as well as the introduction of caps on leverage (Vitols, Kluge 2011).

FINMA's circular on minimum standards for remuneration schemes devised ten principles with detailed additional provisions regarding the structure of supervised institutions' remuneration systems (Hausmann, Bechtold-Orth 2010, p. 205), some of them being equivalent to those of the FSB.

In the circular, FINMA "identified the need to increase risk awareness, to structure variable remuneration as a share in success, to establish long-term oriented award criteria, to increase transparency of the remuneration policy, and to consider remuneration in terms of liquidity as key points to be addressed in this Circular" (Hausmann, Bechtold-Orth 2010, p. 206).

Regarding effective alignment with risk-taking (Standard 14), according to the FSB implementation report (FSB 2014), an implementation gap remains:

"Even though there is no formal guidance, the Standard concerning no hedging in respect of remuneration is addressed by larger institutions through internal

¹⁰³ http://www.lexology.com/library/detail.aspx?g=c82d510c-cd4b-41aa-a941-8312628ee7bf .



compliance processes. The adherence by larger institutions to this Standard is confirmed by supervisory evidence." (FSB 2014: Annex B.)

However, Switzerland reports that respective standard is met in substance by significant banks (FSB 2014, p. 7).

Corporate Governance: Say-on-pay mechanism

Following a successful public referendum¹⁰⁴ against the excessive remuneration of executives (Minder initiative/"Ordinance against Excessive Compensation with respect to Listed Stock Corporations"), the Federal Council adopted an interim ordinance, aimed at the improvement of corporate governance, including the requirement of shareholders' votes on executive compensation (say-on-pay) and penal provisions in the case of breaches of its rules (Kienbaum 2014, p. 1).

- "Shareholders are mandatorily required to vote on aggregate compensation of the board of directors and of senior management;
- Payments of golden parachutes and signing-on bonuses for members of the corporate governing bodies are prohibited;
- Requirement for a mandatory annual shareholders' vote for the election of the chairman of the board and of the members of the board;
- Disclosure of pension funds' vote;
- Shareholders cannot be represented at shareholders' meetings by corporate bodies or by proxies for deposited shares;
- Mandatory provisions in the articles of association on credits, loans or pensions granted to members of corporate bodies, as well as bonus and participation plans;
- Criminal sanctions, including prison sentence, in case of violations against the above provisions." (Deloitte 2013, p. 1)

In summary, Switzerland's approach to promoting stability of financial markets through the regulation of inappropriate risk-taking behaviour is in close accordance with the international consensus, aiming at the removal of harmful incentives and aligning risk takers' behaviour with long-term perspectives of various stakeholders (Afme 2012, p. 227). However, compared to the European tendency in implementing the FSB principles through a 'comply-or-explain' corporate governance concept, Switzerland's supplementing provisions provide for a tighter regime, coming closer to prescriptive rules (FSB 2014, p. 1). Annex: Regulations.

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¹⁰⁴ Eidgenössische Volksinitiative 'gegen die Abzockerei' ("Ordinance against Excessive Compensation with respect to Listed Stock Corporations"), https://www.admin.ch/ch/d/pore/vi/vis348t.html.



Table 58: Finma Circula 2010/01 on Remuneration schemes

Principles	Explanation
Principle 4: The structure and level of total remuneration is aligned with the firm's risk policies and designed so as to enhance risk awareness	Risks are inappropriate, in particular, if they: are not consistent with the strategic or operational objectives and risk capacity of the firm; cannot be properly managed or controlled with the existing organization, procedures and employees; may unfairly disadvantage the firm's stakeholders, including its customers
Principle 5: Variable remuneration is funded through the long-term economic performance of the company	Variable remuneration is to be incorporated into capital and liquidity planning. It must not be allowed to jeopardize the attainment of capital targets.
	The size of the total pool shall depend on the long-term performance of the firm. For this purpose, the profit sustainability as well as the risks borne are to be taken into account. The entirety of any capital costs, including the costs of equity capital, is to be considered in a comprehensive manner. The capital costs shall reflect the risk profile of the firm.
	If results are poor, the total pool is to be reduced or omitted completely.
	The models and processes which a firm uses to determine variable remuneration at the level of the firm as a whole or at the level of its units shall be in accordance with the business strategy and risk policies of the firm.
Principle 6: Variable remuneration is granted according to sustainable criteria	The allocation of variable remuneration to individual units and persons shall depend on sustainable and justifiable criteria that reflect the firm's business and risk policies.
	A serious violation of internal rules or external provisions shall result in a reduction or forfeiture of variable remuneration.
	Sign-on and severance payments are only to be granted in justified cases. They must be governed by the remuneration rules of the firm. Those payments above an amount set in the remuneration rules are to be approved by the Board of Directors.
Principle 7: Deferrals link remuneration with the future development of performance and risk	To the extent required in light of its risk profile, a firm shall defer payment of part of the remuneration.
	Deferred remuneration is remuneration that the beneficiary is entitled to freely dispose of only after expiry of a certain time period and the value of which is subject to change during this time period.
	Deferred remuneration is to be designed in such a way that it takes into account the business strategy and risk policies of the firm. It shall be structured in such a way so as promote optimally the risk awareness of the beneficiaries and encourage them to operate the business in a sustainable manner.



Principles	Explanation	
	The time period should be based on the time horizon of the risks the beneficiary is responsible for. For members of senior management and persons with relatively high total remuneration, as well as persons whose activities have a significant influence on the risk profile of the firm, the time period should last at least three years. Any definitive vesting of the remuneration within the time period in question shall take place, at most, on a pro-rata basis.	
	The greater the responsibility of a beneficiary and the greater her/his total remuneration, the greater the percentage of her/his remuneration that shall be deferred. For members of senior management, for persons with relatively high total remuneration and for persons whose activities have a significant influence on the risk profile of the firm, a significant percentage of remuneration is to be subject to deferred payment. A person may receive remuneration without deferral to the extent a deferral is not appropriate or reasonable in light of such person's function or amount of total remuneration.	
	Any changes in value of deferred remuneration during the time period in question shall be symmetrical to the development of clearly defined and objective assessment criteria, which shall take ample account of earnings, expenditures and capital costs or shall depend on the value of the company. Negative developments of such assessment criteria must lead to a considerable reduction in value of the deferred remuneration up to a total forfeiture. If positive developments of the assessment criteria lead to an increase in value of the deferred remuneration, such increase must not be disproportional to the potential reduction in value or the assessment criteria themselves.	
	Where this promotes risk awareness and sustainability and is appropriate, the company should structure its remuneration policy and rules so as to make it possible to cancel deferred remuneration in whole or in part where losses have been generated in the area of responsibility of the person concerned.	
	In the event of poor business performance, in particular in the case of losses recorded in the annual financial reporting, the allocation of variable remuneration which is not subject to deferral shall be reduced to a minimum.	
Other principles (without explanations): Principle 1: The Board of Directors is responsible for the de-sign and implementation of a remuneration policy and issues the rules relating thereto; Principle 2: The remuneration scheme is simple, transparent, enforceable, and oriented towards the long term: Principle 3:		

Other principles (without explanations): Principle 1: The Board of Directors is responsible for the de-sign and implementation of a remuneration policy and issues the rules relating thereto; Principle 2: The remuneration scheme is simple, transparent, enforceable, and oriented towards the long term; Principle 3: The firm's independent control functions and experts are involved in designing and applying the remuneration scheme; Principle 8: Control functions are remunerated in a way so as to avoid conflicts of interest; Principle 9: The Board of Directors shall report annually on the implementation of the remuneration policy; Principle 10: Any deviation from these principles is permissible only in justified exceptional circumstances and must be disclosed.

1.4.5 United Kingdom

The Remuneration Code

The Remuneration Code has been issued in 2009 and subsequently revised to meet the requirements of CRD III and CRD IV. It contains specific rules for "identified staff".



This group may include those who are senior managers, "material risk takers", individuals engaged in control functions and any individual whose total remuneration takes them into the same remuneration bracket as senior managers. The impact of the EBA RTS published on 6 June 2014 is that more individuals have been classified as Identified staff for UK purposes.

If an individual is classified as "identified staff" but satisfies a de minimis concession, certain requirements of the Remuneration Code can be relaxed.

An individual satisfies the de minimis concession for a performance year if both of the following conditions are satisfied:

- his or her total remuneration for that performance year does not exceed £500.000; and
- his or her variable pay for that performance year is not more than 33 % of his or her total remuneration.

UK corporate groups must apply the Remuneration Code to all their regulated and unregulated entities wherever they are situated. UK subsidiaries of third country groups also must apply the Remuneration Code to all entities within their subgroup, including those based outside the UK.

The Remuneration Code contains **12 Remuneration Principles** which are based on related articles in the CRD IV and related standards in the Financial Stability Board's Principles for Sound Compensation Practices.

Such Remuneration Principles include:

- Principle 1: A firm must ensure that its remuneration policy is consistent with and promotes sound and effective risk management and does not encourage risk-taking that exceeds the level of tolerated risk of the firm;
- Principle 2: A firm must ensure that its remuneration policy is in line with the business strategy, objectives, values and long-term interests of the firm;
- Principle 3: A firm must ensure that its remuneration policy includes measures to avoid conflicts of interest;
- Principle 4: A firm must ensure that its management body in its supervisory function adopts and periodically reviews the general principles of the remuneration policy and is responsible for overseeing its implementation;
- Principle 8: A firm must ensure that its remuneration is principally based on profits and may be adjusted to take into account current and future risks; and
- Principle 11: A firm must ensure that variable remuneration is not paid through vehicles or methods that facilitate non-compliance with the Remuneration Code.

The requirements in the Remuneration Code are subject to a proportionality rule. This rule provides that when establishing and applying the total remuneration policies for its Code staff, a firm must comply with the requirements in a way and to the extent that is appropriate to its size, internal organisation and the nature, scope and complexity of its activities.

Firms are categorised into three levels based on their "relevant total assets":

level 1 – total assets exceeding £50 billion (averaged over three years). Firms
in this level will need to apply all the Remuneration Code's rules and are



- subject to an annual supervisory process which involves pre-approval of remuneration awards:
- level 2 total assets exceeding £15 billion, but not exceeding £50 billion (averaged over three years). Firms in this level will need to apply all the Remuneration Code's rules, but are reviewed at supervisory discretion; and
- level 3 firms with total assets not exceeding £15 billion (averaged over three years). Firms in this level may dis-apply the 'pay-out process rules' and the maximum ratio.

The new Remuneration Code contains rules implementing the CRD IV requirements regarding variable remuneration (bonuses) that is the limits to the relationship between the variable component of remuneration and the fixed component. All firms within proportionality levels 1 and 2 are required to implement the cap on variable pay. Firms in proportionality level 3 should be able to dis-apply the cap but they may be asked formally to justify their decision to the regulator. Where a level 3 firm disapplies the maximum ratio it is still required to ensure that it maintains an appropriate balance between fixed and variable remuneration.

In addition to the maximum ratio, the Remuneration Code includes specific "pay-out process rules" which govern how bonuses are paid. Under these rules firms are required to structure bonuses so that at least 40 % is deferred over a period of not less than three to five years, at least 50 % is paid in shares and there is an ability to adjust past awards. In June 2015, the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA) published new remuneration rules, which included changes to deferral and clawback of variable remuneration. With regard to payout, deferral was extended to seven years for senior managers, five years for PRA designated risk managers with senior, managerial or supervisory roles, and three to five years for all other staff whose actions could have a material impact on a firm (material risk takers). See the overview table at the end of this section.

With reference to **malus and clawback** arrangements, since 1 January 2015 regulated firms have to apply clawback in instances of misconduct or failures of risk management up to seven years following the date of the award. Any variable remuneration awarded to "identified staff" on or after 1 January 2015 is subject to clawback. Firms must make all reasonable efforts to recover an appropriate amount corresponding to some or all vested variable remuneration where either of the following circumstances arises during the period in which clawback applies: (a) there is reasonable evidence of employee misbehaviour or material error; or (b) the firm or the relevant business unit suffers a material failure of risk management. The firm must take into account all relevant factors (including, where the circumstances described in (b) arise, the proximity of the employee to the failure of risk-management in question and the employee's level of responsibility) in deciding whether and to what extent it is reasonable to seek recovery of any or all of their vested variable remuneration.

Special provisions apply to senior managers and to Material Risk Takers (see below, Table), starting on 1 January 2016 in respect of remuneration awarded on or after 1 January 2016.

In terms of **disclosure** of remuneration policies and practices, the previous CRD III introduced requirements for Member States to collect data on remuneration practices and remit it to the EBA. In the UK, these requirements were implemented by the Capital Requirements (Amendment) Regulations 2012. Policy Statement 12/18 - Data collection on remuneration practices - set out the FSA's rules for remuneration data



reporting requirements. In general, firms that are subject to the Remuneration Code are required to ensure that their remuneration policies, practices and procedures are clear and documented. They are also required to complete an annual remuneration policy statement which records those policies, practices and procedures and assesses compliance with the Remuneration Code. However, how much detail an annual remuneration policy statement should cover varies depending on the proportionality level of the firm. Firms are also required to keep a record of their identified staff for each performance year. Firms that are within proportionality level 1 are also required to undertake certain specific steps prior to awarding any bonuses. There are also certain requirements to make public disclosures in relation to remuneration as required in Article 450 of CRD IV.

The main characteristics of the new senior managers and certification regimes

In March 2016, the new Senior Managers and Certification Regime is due to be implemented by the two authorities – the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). This new regime will overhaul the current approved persons regime and will result in significant changes to the way in which individuals working in financial institutions are regulated. ¹⁰⁵

While the Senior Managers Regime will ensure that senior managers can be held accountable for any misconduct that falls within their areas of responsibilities, the new Certification Regime and Conduct Rules aim to hold individuals working at all levels in banking to appropriate standards of conduct.

In publishing the final rules, the Authorities provided information needed by firms as they make progress with their preparations for the new regime. In particular:

The Senior Managers Regime

- focuses on individuals who hold key roles and responsibilities in relevant firms;
- applies to individuals performing a senior management function (SMF). An SMF is a function that requires the person performing it to be responsible for managing one or more aspects of the relevant firm's affairs (so far as relating to regulated activities) and those aspects involve, or might involve, a risk of serious consequences for the relevant firm, or for business or other interests in the LIK
- FSMA, as amended by the Act, states that, for definition purposes of an SMF, "managing" can include taking decisions or participating in the taking of decisions on how a relevant firm's affairs should be run. Therefore non-executive directors and directors in other group entities that participate in the taking of decisions about the relevant firm can be specified as SMFs.
- Preparations for the new regime will involve allocating and mapping out responsibilities and preparing Statements of Responsibilities for individuals carrying out Senior Management Functions (SMFs). While individuals who fall under this regime will continue to be pre-approved by regulators, firms will also be legally required to ensure that they have procedures in place to assess their

¹⁰⁵ See also Allen & Overy LLP 2015.



fitness and propriety before applying for approval and at least annually afterwards.

The Certification Regime provides that:

- firms will have to certify certain employees as being fit and proper to perform certain functions. These functions are known as significant harm functions. A function will be a significant harm function if the person performing it will be involved in aspects of the firm's affairs (so far as relating to a regulated activity carried on by the firm) that might involve a risk of significant harm to the firm or any of its customers.
- It applies to other staff who could pose a risk of significant harm to the firm or any of its customers (for example, staff who give investment advice or submit to benchmarks). These staff will not be pre-approved by regulators and firms' preparations will need to include putting in place procedures for assessing for themselves the fitness and propriety of staff, for which they will be accountable to the regulators. These preparations will be important not only when recruiting for roles that come under the Certification Regime but when reassessing each year the fitness and propriety of staff who are subject to the regime.

The Conduct Rules set out a basic standard for behaviour that all those covered by the new regimes will be expected meet. Firms' preparations will need to include ensuring that staff who will be subject to the new rules are aware of the conduct rules and how they apply to them. Individuals subject to either the SMR or the Certification Regime will be subject to Conduct Rules from the commencement of the new regime on 7th March 2016, while firms will have a year after commencement to prepare for the wider application of the Conduct Rules to other staff.



Table 59: Main changes under the new regime in the UK¹⁰⁶

Tonic	Provision
Topic	
Structure	The remuneration regulation is split into a PRA Rulebook and four separate FCA Codes, applicable depending on the firms' regulatory permission and status.
	There are now five separate remuneration regimes in force in the UK: the Remuneration part of the PRA Rulebook and four separate Remuneration Codes in the Systems and Controls Sourcebook (SYSC) of the FCA Handbook. The FCA Codes are:
	SYSC 19A for "IFPRU" firms (generally more complex FCA solo-regulated investment firms subject to CRD IV);
	SYSC 19B for "AIFMs" (Alternative Investment Fund Managers solo-regulated by the FCA);
	SYSC 19C for "BIPRU" firms (smaller and/or less complex FCA solo-regulated investment firms); and
	A new SYSC 19D, which applies to dual-regulated firms, i.e., banks, building societies and PRA-designated investment firms.
Deferral lengths	Deferral requirements were significantly extended:
	Senior Managers:
	No less than 7 years with no vesting prior to the third anniversary and vesting no faster than on a pro-rata basis thereafter
	Risk Managers (excluding those under SMR):
	Members of the management body
	Risk managers and direct reports, except those identified solely due to committee membership
	Heads of material business units and their direct reports
	Head of functions
	Managers of risk-taking MRTs
	No less than 5 years with vesting no faster than pro-rata from year one
	All other MRTs:
	Individual exposing firm to credit risk
	Individual exposing firm to book/market risk
	Individual approving introduction of new products
	Individual on local risk committee MRTs identified solely under quantitative criteria if subject to managerial oversight
	No less than 3 to 5 years with vesting no faster than pro-rata from year one.
	Retention requirements remain unchanged (when employees reach retirement,

¹⁰⁶ PWC 2015; Ashurst 2015; EY 2015; Davis Polk 2015.

Topic	Provision
	discretionary pension benefits are paid to the employee in the form of instruments in and subject to a five-year retention period)
Malus and clawback	More flexibility to increase clawback lengths from seven to ten years for Senior Managers (with seven years in place for other material risk-takers, MRTs).
	The seven-year clawback period should be extendable by three years for MRTs who perform a 'PRA senior management function' (the FCA will adopt a new definition of this term later this year) where there are outstanding internal or regulatory investigations at the end of the normal seven-year clawback period.
	The "Senior Manager Function 18 Other responsibility" (SMF18) - has been redefined as the "other overall responsibility function" to enable the capture of Senior Managers for areas not caught under other Senior Manager roles such as IT, HR and Senior Managers responsible for growing business lines that do not meet the quantitative thresholds. The definition of the CASS-prescribed responsibility has also been revised, suggesting an extension of the associated responsibility.
Risk adjustment	The rules provide further guidance on calculating profit for the purposes of awarding remuneration based on prudent valuation principles, in order to exclude unrealised profits from thinly traded or illiquid markets from being counted as profit for the purposes of remuneration calculations. That is to say, profit for the purpose of determining the initial size of the pre-risk adjusted bonus pool has to be calculated by adjusting the fair value accounting profit with the year-on-year change in the prudent valuation adjustment (PVA) figure.
	All UK PRA-regulated firms, when determining the size of their annual bonus pools, to calculate profit for this purpose by deducting a "prudential valuation adjustment" (PVA) figure from the fair value accounting profit.
	For UK subsidiaries of international firms where there is a global bonus pool rather than a separate UK bonus pool, the firm must provide evidence that the change in the PVA for the UK subsidiary has been applied to the profits of the UK regulated entity that feeds into the global pool.
	Branches of overseas firms will not be required to complete this exercise, but the PRA will expect those firms to apply an appropriate adjustment to profit based on comparable principles to the extent that it is achievable.
	Simple revenue or profit-based measures may not be relied upon to determine bonuses at aggregate or individual level except as part of a balanced and riskadjusted scorecard.
Bailed-out banks	In line with EU requirements, no firm in receipt of exceptional government intervention should pay bonuses to the management body unless justified. The presumption against payment or vesting in a bailed-out bank extends to all discretionary payments, including payment for loss of office or discretionary pension benefits. This will not apply to firms who have been subject to government intervention prior to the introduction of the new regime.
NED	Non-executive directors (NED) cannot receive variable remuneration in respect of activity carried out in their role as NEDs. The final rules confirm the reduced number of Senior Management function (SMF)-NEDs and the limitation of prescribed responsibility to their role as chair of a relevant committee. However, all their chairman roles should be included in their statement of responsibility.



Topic		Provision
		Under the revised approach the PRA and FCA will only make the following NEDs
		subject to approval and inclusion in the Senior Managers Regime (SMR) for relevant authorised persons:
		Chairman
		Chair of the Risk Committee
		Chair of the Audit Committee
		Chair of the Remuneration Committee
		Chair of the Nomination Committee
		Senior Independent Director
		Non-SMF NEDs are now referred to as "notified" NEDs for whom the Certification
		Regime and Conduct Rules do not apply. No NEDs should be identified as "Senior
		Manager Function 18 Other responsibility" (SMF18). The regulators note the
		concern over two-tier board, but consider that overarching statutory
		responsibilities and the need for collective decision-making should override this.
		Indeed, outside acting as Chair, all NEDs should have the same level of interest in
		the allocation of responsibilities and the delivery of reasonable steps within firms



2 Economic Literature

2.1 Remuneration policies, risk appetite and excessive risk

Optimal risk-taking and risk appetite

To assess the links between remuneration policies, risk appetite and excessive risktaking, it is necessary to define excessive vs. appropriate risk-taking. Optimal risktaking depends on the investor's risk aversion or risk appetite, and higher risk-taking is value-creating as long as it makes possible profitable investment projects, which would otherwise not been realized by risk-averse investors. According to portfolio theory, optimal risk-taking means choosing a portfolio on the efficient risk-return frontier which maximizes expected utility depending on the investor's risk appetite. Within this framework, excessive risk means choosing an inefficient portfolio, i.e. one where the same expected return could be achieved with a lower level of risk, at a given risk appetite. It may be measured by the percentage reduction in the risk of the portfolio that the investor could have exhibited had the portfolio been efficient (Podpiera, Weill 2010). If the investor is a financial institution, the view on excessive risk may conflict between its stakeholders, which hold different claims on the investment returns. In the case of commercial (and universal) banks, the key stakeholders are depositors, bondholders, shareholders and the public, while the key stakeholders of investment banks and asset management firms are the ultimate asset holders, respectively investors. The definition of excessive risk therefore depends on the level of the risk appetite and the type of the institution or business area.

Excessive risk in commercial banking

In commercial banking, excessive risk-taking is more likely at shareholder-oriented banks which use equity-based compensation to align the incentives of managers with those of the shareholders, than at stakeholder-oriented banks which use non-equity-based compensation, because shareholders may shift the downside risk of their investments to depositors and the deposit insurance or public. This is illustrated in Figure 42, which shows the efficient risk-return frontier of an individual bank.

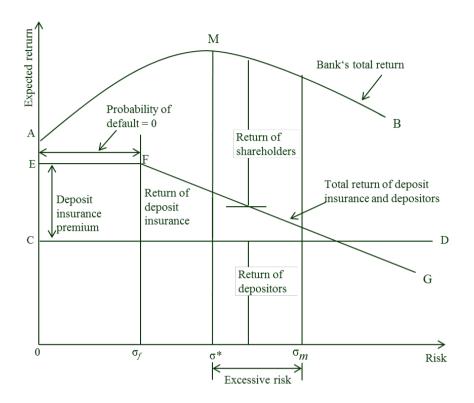


Figure 42: Excessive risk of a bank through shareholder value maximization under deposit insurance Source: Own composition, based on (Greenbaum, Thakor 1995), p. 481.

Line AB describes the bank's total expected return which is maximized at point M at risk level σ^* . Any risk-return combination along this line would be efficient, and the optimal portfolio depends on the firm's risk appetite (A in the case of high risk aversion, M in the case of low risk aversion). From the perspective of the whole firm or all of its stakeholders, it may be optimal to choose point M, i.e. maximize expected return on assets or the total value of the firm. Increasing risk beyond σ^* is inefficient because it would reduce expected total return. The efficient frontier is given by the line AM, and excessive risk by a risk level above σ^* . If depositors are completely insured, their expected return is constant, described by the horizontal line CD. Line EFG describes the total return of the depositors and deposit insurance institution, given by the sum of the depositors' returns and a fixed deposit insurance premium, minus the expected payments of the deposit insurance if the risk exceeds σ_f , where probability of default would be zero. The bank's shareholders profit from an increase in risk beyond σ^* , because they can claim deposit insurance services in case of default. The expected shareholder value is maximized at risk level σ_m , where the difference between the bank's total return and the total return of depositors and deposit insurance is maximized. Since the upside benefits of increasing risk accrue to shareholders and in the case of equity-based compensation, also to managers, while the downside costs are borne by the government, the public provision of guarantees to secure deposits generates the moral hazard of increasing risk beyond the efficient frontier. This moral hazard also applies in the case of an implicit government guarantee to 'bail out' financial institutions near default, as given by the too-big-to-fail guarantee of large, systematically important institutions.

As firms get closer to default this sort of risk shifting increases because managers, often on behalf of shareholders, tend to 'gamble for resurrection', hoping to recover



solvency by taking large risks that are in their own interests but not those of the depositors or bondholders. Their risk appetite increases because shareholders and managers have less to lose from failure and more to gain from success as their stake in the firm loses value when the firms get closer to default. To the extent that compensation structures align incentives between managers and shareholders, they increase the managers' risk-taking appetite when the bank is close to default, against the interests of depositors or bondholders, who would prefer less risk (IMF 2014).

From a systemic or macroprudential view, the main conflicting interests are between shareholders, managers, and debt holders on one side, and society at large on the other side, which arise from externalities related to systemic risk (IMF 2014). An individual bank's optimal level of risk-taking would exceed the socially optimal level, if the external or social costs of its contribution to systemic risk and hence its effect on other institutions and taxpayers are not taken into account. This is the case, if systematically important banks do not control their contribution to systemic risk. This market failure is the justification for macroprudential regulation for example, through higher capital requirements for systematically important banks.

An institution's contribution to systemic risk has been measured as its systemic expected shortfall (SES), i.e., its propensity to be undercapitalized when the whole system is undercapitalized. SES is positively correlated with a bank's leverage and its expected loss in the tail of the system's loss distribution (Acharya, Pedersen 2010). Socially excessive risk-taking depends on the institution's size and business strategy: large shareholder-oriented banks tend to be more highly leveraged (Reifner et al. 2011, Sachverständigenrat 2013), especially if they are too-big-to fail, than small stakeholder-oriented banks which tend to maximize the value for their members or stakeholders. More leverage (debt D/ equity E) means higher return on equity (r_E) given that the return on total assets r_A is higher than the interest rate on debt (r_D) :

$$r_E = r_A + (D/E)(r_A - r_D)$$

If variable remuneration is based on the bank's return on equity there is a strong incentive for the bank manager to grow the bank via leveraging. Therefore systemic risk and the too big to fail problem are connected to variable remuneration that is depending on return on equity. If however, variable remuneration is based on risk-adjusted return on assets or the total value of the firm, the incentives of bank managers would be aligned to the interests of all stakeholders.

Excessive risk in investment banking

In investment banking, systemic risk externalities which create excessive risk for the society as a whole arise from risks created and spread across the society through origination and trade in securities. This important problem is not addressed by the current remuneration policy, which seeks to reduce the probability of default of individual banks (e.g. by deferred remuneration subject to malus and clawback) within a microprudential framework. "Even if the current policy would lower the probability of default of individual banks, it does not deal with the aspects of financial sector that represent a "lemon plantation" – a space where low quality assets are not only traded, as in the "market for lemons" in Akerlof (Akerlof 1970), but also originated in the first place, as often pointed out in the context of securitization and underwriting" (Levina 2014, p.17). An optimal pay structure internalizes the interests of outside stakeholders into the insiders' incentive structure. Since investment banks have different stakeholders than commercial banks (ultimate asset holders vs. depositors) a uniform pay structure is unlikely to curb excessive risk-taking. To reduce the risk of



incentivising securitization and increased risk externalities in commercial banks and address the risks created and spread through origination and trade in securities by investment banks it may be optimal to separate remuneration policies between investment and commercial banking. As suggested by Levina (2014), pay of investment bankers should be linked to performance of securities originated, floated and traded, while employees in commercial banking should be incentivised by pay linked to leverage-adjusted ROA of commercial banking. Remuneration policy may thus be used as a tool of countercyclical macro-prudential regulation. The proposed measures could supplement and strengthen the maximum ratio and deferred remuneration.

Excessive risk in the asset management industry

In the asset management industry, investors are the key stakeholders, who bear the full benefit and burden of market risk and the profits and losses of investments made by the managers on their behalf, according to their individual risk appetite. Systemic risk creation tends to be less important, because asset managers invest as agents on behalf of their clients, without generally holding significant amounts of assets on their own balance sheets. Asset managers are compensated by a percentage fee based income stream, based on the net asset value of the managed portfolio. Thus, they share directly in the appreciation or depreciation in the value of a fund. The interests of the employees of asset managers are aligned to those of the investors also by own investments in fund units (AIMA 2015). However, large investment firms (so-called non-bank non-insurer (NBNI) financial entities), which are systemically important, may contribute significantly to systemic risk. "The failure of an NBNI financial entity would affect its creditors, counterparties, investors, or other market participants through their exposures to the failing entity. As a result of the failing entity, effects may materialise in a cascading manner, leading to broader financial system instability if their exposures and linkages are significant." (FSB 2015b) In their paper "Who is afraid of BlackRock?" Massa and Schumacher (Massa et al. 2016) show that large asset managers may have systemic risk implications. They examine the effects of the merger of BlackRock and Barclays Global Investors (BGI) in 2009, a deal which created the biggest fund-management group in the world, with \$2.7 trillion of assets under management and stakes in some 60 % of listed global firms, by value. They argue that concentrated ownership may reduce stock volatility at the expense of lowering liquidity. There may be strong strategic complementarities associated with large, global asset management firms that create financial fragility, which is driven by fear of future, possibly idiosyncratic firm events rather than actual firm events per se. The results suggest that, "were a large fund manager to suffer a future hit to its reputation that caused clients to lose confidence, the impact on the market could be big" (The Economist 2015).

Measurement of excessive risk

Whereas the above framework of excessive risk-taking is theoretically straight forward, it will be difficult to come up with empirical proof for or against excessive risk-taking using that methodology: the required set of information is – if at all – not publicly available. Therefore, the approach taken focuses, firstly, on bank level data (where possible broken down by risk category) and, secondly, on comparing indicators of risk-taking across different institutions with differing remuneration systems / features to measure deviations of risk-taking as a function of the remuneration scheme, interpreting increased levels of risk indicators – controlled for remuneration features – as (relative) excessive risk-taking. Key measures indicating potentially excessive risk-taking of an individual bank include: its default probability, volatility of



return on assets, volatility of equity returns, volatility of bank earnings, and capital asset ratio (Balachandran et al. 2010; Laeven, Levine 2009). Useful risk indicators, main risk drivers and measurements of risk in credit institutions and investment firms are listed Table 60.



Table 60: Banking risk indicators, drivers and measures

Risk indicators	Risk drivers	Measurement
Solvency	Business model (business areas), structure of incentive schemes, risk appetite framework (target / communicated ROE), risk control and governance mechanisms	Tier 1 capital ratio CET1 ratio Leverage ratio
Earnings and earnings volatility	Margins, further cost reduction, potential bank mergers	Return on equity (ROE) Return on assets (ROA) Return on risk-weighted assets (RORWA) cost-income-ratio volatility of ROA and ROE beta of stock
Credit risk	Asset quality, emerging markets, asset growth vs. deleveraging, covenants, portfolio mix of debtors' creditworthiness, market / region / sector concentrations, collateral	Impaired loans and Past due (>90 days) loans to total loans Coverage ratio (all allowances for loans and debt instruments to total gross impaired loans and debt instruments) Accumulated impairments on financial assets to total (gross) assets Impairments on financial assets to total operating income Equity underpinning for credit risk
Market risk	Risk of decreasing trading market liquidity, volatility, interest rates, size of warehouse held for market making, proprietary trading activity	Value at Risk of trading book positions, Equity underpinning for market risk Number of rejected trades relative to all to- be-approved trades size of warehouse held for market making proprietary trading activity
Operational risk	IT risk, cost reduction, potential bank mergers, damage to physical assets, business disruption system failures, IT systems, Complexity of business model / products sold	Equity underpinning for Operational Risk
Reputational and legal risk	Mis-conduct: Internal fraud (unauthorized activity, theft and fraud) External fraud	Number of exception to policies Number of overrulings by business (CEO), Number of legal actions against the bank / third parties, Volume of legal actions against the bank / third parties, Number of regulatory enquires / legislation breaches, Volume of penalties, imposed by regulators Fines paid Reserves for lawsuits Number of rejected trades relative to all to-



Risk indicators	Risk drivers	Measurement
		be-approved trades
Liquidity and funding risk	Primary and secondary market liquidity, Funding structure: reliance on central bank and secured funding	Interbank ratio maturity profile of debt own credit standing Structure of liability side
Systemic risk		Categorised as G-SIB, D-SIB, Non-SIB?
Environment: Fragmentatio n and Sovereign risk	Asset growth, asset quality, sovereign / bank link, funding, supervisory fragmentation, debt overhang	Revenue shares by region / country Credit exposure by country

Source: own composition, based on EBA (EBA 2015a Q1) and IFC (IFC 2012).

While solvency and earnings volatility are the most important risk indicators at the level of the institution, credit risk results from commercial banking and market risk from investment banking activities. Reputational and legal risk may arise from misconduct or excessive risk-taking relative to internal risk limits in all business areas, while systemic risk measures the macroeconomic dimension of risk-taking by systemically important institutions. Solvency measured by the leverage ratio is the key indicator of excessive risk also for Non-Bank Non-Insurer financial entities (finance companies, market intermediaries, investment firms and asset managers) (FSB 2015a).

Risk culture

On top of these hard facts of risk-taking, which can be easily measured and quantified, the "tone-from-the-top" and, ultimately, compliance with internal guidelines – which are a reflection of the risk-taking culture within a financial institution – are crucially important: state-of-the-art risk management methodologies and techniques are ubiquitous, so are the people implementing them. Unfortunately, this is not true for the people having to ensure compliance with external and internal risk management guidelines. Having the right people with the right mind-set at the right positions in the risk management organisation is key. Since the financial crisis of 2007/2008, industry experts agree that the importance of risk culture has by far outpaced technical and scientific rigor and sophistication of techniques applied. The probably most important and unifying dimension driving a company's risk culture is the remuneration system: wrong incentives can undermine and completely reverse the technological progress. These aspects – the soft factors of risk management – are covered by corresponding questions in the questionnaire to the respective groups.

2.2 Development of risk-taking, misconduct and financial stability

Financial stability

According to EBA's Risk Dashboard Q3 2015, EU banks' solvency (measured by CET1 ratio, Tier 1 ratio, total capital ratio) has increased further, due to an increase in capital and decrease in risk-weighted assets. However, the quality of banks' loan



portfolios improved only slightly, and remains weak on average. Dispersion among countries and banks of different sizes is significant. Profitability (RoE, cost-to-income ratio) increased compared to last year, but remains low. This is due to litigation costs, high levels of non-performing loans and low interest margins in a low interest rate environment. Market risk driven by market price volatility, market liquidity and interest rates is rising (EBA 2015a).

The ECB's Financial Stability Review of November 2015 (FSB 2015b) shows that financial institutions in the Euro area have steadily strengthened their balance sheets and built up their resilience to adverse shocks. However, they still face challenges due to legacy issues from the financial crisis, a strengthened regulatory and prudential environment, and weak economic growth prospects. Profitability is low in an environment of low nominal macroeconomic growth prospects and low interest rates. Average return on equity remains below the cost of equity. Low interest rates have contributed to a decrease in net interest margins. Banks still have to resolve a large stock of legacy problem assets, mainly in those countries most affected by the financial crisis.

The probability of distress of Euro area banks within the next two years remains well below the peaks reached during 2007. Banks' solvency ratios (Core Tier 1/common equity Tier 1 capital ratios, risk-weighted capital ratios, leverage ratios) continued to improve, but large and complex banking groups still lag behind. Remaining fragilities are mainly linked to bank-specific and country-level banking sector factors. There is only moderate progress in removing non-performing loans from balance sheets, when measured against the stock of such loans. This restricts banks providing new credit to the real economy. A scenario analysis shows that a materialisation of key risks to financial stability could significantly affect banks in the euro area.

Non-bank financial institutions continue to grow in size and become more central to the financial system. In the investment fund sector in particular, rapidly growing exposures seem to be accompanied by increased risk-taking (FSB 2015b).

The regulatory framework to foster financial system resilience and facilitate economic growth over the whole financial cycle still has to be completed. This includes a comprehensive regulatory overhaul for both the global and EU banking sector as well as complementary regulatory initiatives for non-bank financial entities in the wake of the global financial crisis. Various new macroprudential initiatives in euro area countries mostly focus on mitigating risks originating from significant size, high concentration and interconnectedness in the banking sector. Supervisors could benefit from paying increased attention to systemic risk rankings (FSB 2015b).

Misconduct

Remuneration structures may affect financial stability by affecting incentives for both risk-taking and (mis-)conduct. Penalties imposed to punish firms for misconduct have impaired the stability of EU financial institutions. Over the past five years the amount of misconduct costs (fines, settlements and redress costs) have been increasing, reaching a cumulative total of around EUR 50 billion for EU banks, compared to around EUR 200 billion for all banks in December 2014. In EU, the majority of fines are related to mis-selling of guaranteed investment products and market manipulation, involving several large banks in a number of jurisdictions. Fines are highly concentrated among the global systemically important banks (G-SIBs), which emphasises the systemic relevance of the issue. The total accumulated profits of EU G-SIBs in the last five years would have been a third higher without past litigation



costs and provisioning for future litigation costs, and all the capital issued by these banks in the last five years has been erased by these costs. The Common Equity Tier 1 ratio of these banks, an indicator of solvency, would be, on average, around 2 percentage points higher without such fines (ESRB 2015).

Risk appetite and risk-taking

Indicators of a high risk appetite are a high leverage ratio (total assets/equity capital) or a low equity capital ratio (equity capital/total risk-weighted assets). The Tier 1 Ratio (core equity capital/total risk-weighted assets) is negatively related to bank size. Large banks have a higher risk appetite than small banks because they hold less equity capital to absorb losses. In general banks hold significantly more capital (economic capital) than the minimum required by bank regulators¹⁰⁷ because the banks' management determines the capital from a market perspective by using their internal value at risk measures, rather than regulatory constraints (Reifner et al. 2011). In the case of the small savings banks in Germany (average total assets: EUR 2.6 billion), the Tier 1 Ratio increased from 14.7 % in 2009 to 16.4 % in 2013 (DSGV 2015), which indicates a comparatively low and decreasing risk appetite.

Another indicator of a high risk appetite is an institution's target return on equity, as for example, communicated by Deutsche Bank's former CEO Ackermann: "Even after the turmoil created by the Lehman Brothers bankruptcy, Ackermann still said that "a return on equity of 25 % is achievable for the bank, and more than 20 % is quite realistic" ... When actual return were lower, Ackermann opined that they would come back soon.... In March 2011, Ackermann was quoted as saying that "the investment bank's ROE, a key measure of profitability, should be as high as 25 per cent in two years' time... later in the year, the targets were lowered (see "Deutsche Bank Eyes 15 % Return on Equity", Wall Street Journal, December 5, 2011)" (Admati, Hellwig 2013, p. 282). Such high shareholder returns can hardly be achieved by investments in the real economy, but may be possible only by taking additional large risks.

Even the target ROE of 13 % set by Barclays in April 2011 "seems daunting when market interest rates are low and banks are facing many challenges." In announcing this ROE, Barclay's CEO Diamond "said that the bank was ready to increase its "risk appetite" in order to achieve the target. He did not discuss whether the increase in returns that he would achieve by taking the additional risks would be sufficient to compensate his shareholders for the additional risks they would have to bear." (Admati, Hellwig 2013, p. 122).

The increased focus of investment banks on measures such as ROE in the 1980s and 1990s can partly be explained by their transformation from privately held partnerships to public corporations (Admati, Hellwig 2013, p. 281). Listed firms face higher market pressure to achieve short-term shareholder returns than unlisted ones. In particular, smaller unlisted banks with a focus on regional/local rather than international markets tend to have a lower risk appetite, because they are oriented towards their local stakeholders rather than shareholders and follow also non-profit goals. Cooperative banks follow the non-profit mission to support the business of their members. Public savings banks in Germany have the public mission to provide safe and interest-bearing investment opportunities and serve local customers. Small regional banks

¹⁰⁷ The minimum Tier 1 capital ratio was 4% under Basel II and is 6% under Basel III/CRD IV since 2015.



stabilized the German economy during the financial crisis by increasing their long-term lending (Sachverständigenrat 2008; The Economist 2012; Ferri, Neuberger 2015). The largest losses during the great financial crisis of 2007/2008 accrue to large, systematically important credit institutions and investment firms and internationally active government-owned banks (such as the German Landesbanken). Their comparatively high risk appetite or imprudent behaviour may be explained by a large part by implicit or explicit bail-out guarantees. This has to be taken into account when linking remuneration to risk appetite and justifies the application of the proportionality principle.

The EU Business Model Monitor, covering 147 banking groups that account for 80 % of the EU banking assets shows that an institution's risk-taking behaviour is closely related to its business model, differentiating between four broad categories: investment, wholesale, diversified retail and focused retail banks.

- (1) Investment-oriented banks: This group comprises the largest and most internationally oriented banks as well as the highest share of shareholder-value banks. These banks, which engage extensively in trading activities and rely on debt securities and derivatives for funding show a comparatively high risk appetite, measured by high leverage (low ratio of tangible common equity to total assets).
- (2) Wholesale banks: This group comprises the smallest and most domestically oriented banks which mainly engage in interbank lending and borrowing and can be categorized as stakeholder-value banks. It includes, among others, central institutions of cooperative and savings banks which provide liquidity and other services to local banks. These wholesale banks showed high losses during the financial crisis, but the lowest median risk-costs.
- (3) Diversified retail banks: This group comprises internationally oriented banks of modest size, which fund themselves primarily by debt liabilities and customer deposits. Compared to the other business models, they are the least risky measured by various reporting and market risk indicators.
- (4) Focused retail banks: This group comprises small domestically oriented institutions which provide traditional services such as customer loans funded by deposits. These banks seem to have the lowest risk-appetite measured by leverage, but suffered the highest risk-costs during the Eurozone crisis (Ayadi et al. 2015).

2.3 Performance-based pay and risk-taking

Excessive risk-taking is particularly acute in banks, which are highly levered and where the remuneration does not reflect the interests of all the different stakeholders involved (see Section 2.1). Structuring executives' incentives to maximize shareholder value (return on equity RoE) in a levered firm encourages excessive risk-taking. The value of the levered firm's stock is like the value of a call option, which is increasing in the volatility (riskiness) of the assets held by the firm (Bolton et al. 2015, forthcoming).

Therefore, "directors and officers of banks should be charged with a heightened duty to ensure the safety and soundness of these enterprises. Their duties should not run exclusively to shareholders. . . and to include creditors. In particular, we call on bank directors to take solvency risk explicitly and systematically into account when making decisions, or else face personal liability for failure to do so" (Macey, O'Hara 2003, p. 92). Bank executive compensation should take into account the interest of creditors



and tax payers, beyond that of equity holders, and therefore should be linked to the whole value of the firm - equity and debt value - and not just the value of equity (Adams, Mehran 2003; Bebchuk, Spamann 2010, Bolton et al. 2015, forthcoming.). This is particularly important because of the deposit insurance subsidy or implicit bailout guarantee, which provides incentives for high leverage by reducing the bank's borrowing rate.

Many empirical studies show that variable remuneration based on return on equity (RoE) as a performance-measurement metric and in pay-out in equity or stock options (reviewed above in below Section 3.1.2) encourages short-term strategic horizons and risk-taking in the banking industry (for a recent review of the literature see Cullen, Johnsen 2015). RoE was increasingly used as a performance-measurement metric before the outbreak of the Great Financial Crisis, which translated into significant shareholder returns. "For example, RoE increased at large UK banks from 1 % in 1989, to 38 % by 2007 (Haldane 2012). This environment was characterised by, amongst other things, much increased leverage and a large expansion in the size of executive remuneration packages. However, whilst a focus on RoE incentivises leverage for the reasons just discussed, RoE used in isolation is a poor proxy for long-term performance, as it may mask longer-term risks (Haldane 2012), as it does not take into account operational, credit or liquidity risks" (Cullen, Johnsen 2015, p. 6).

To reduce risk-taking incentives, variable pay may be linked to:

- the institution's risk-adjusted total return, measured e.g. by leverage-adjusted RoA (return on assets) in the case of commercial banks (Levina 2014). Linking senior executives' pay to RoA provides incentives to concentrate on the returns generated by assets under management rather than only shareholder returns. This ensures a more efficient use of capital than remuneration linked to RoE or shareholder value, because it prevents excessive leverage. The use of RoA has advantages over the use of RoRWA (Return on Risk-weighted Assets), which would provide incentives to engage in risk-weighting manipulation. However, remuneration should only partly be based on RoA, because pay linked to RoA alone is likely to encourage excessive asset risk-taking or securitization of assets (Cullen, Johnsen 2015);
- the firm's leverage or Beta, a backwards-looking measurement of the volatility of a firm's excess return relative to some index, such as the S&P 500 (Gossett 2014, p. 76);
- market estimates of asset or default risk, such as the firm's CDS spread (Bolton et al. 2015, forthcoming.). However, market indices may provide wrong incentives, because they are likely to be biased due to markets inefficiencies. Therefore, remuneration should not be market-based (Cullen, Johnsen 2015);
- performance of securities originated, floated and traded in investment banking to reduce risks created and spread through origination and trade in securities (Levina 2014);
- individual performance: for risk takers "much lower down the food chain...more precise measurements may be more appropriate such as volatility, tracking risk, various variations of Value at Risk (VaR or MVaR), kurtosis (fat-tail) risk, stress testing, Monte Carlo simulation, and leverage, to name a few. In practice, some combination of several risk measurements should be employed and steps taken to develop new ones that better capture the day-to-day risks a fund manager and other employees take" (Gossett 2014, p. 81).



Since such incentive contracts which seek to limit risk-taking are not in the interest of the shareholders, they should be mandated by regulation, at least for large banks (Bolton et al. 2015, forthcoming.).

If the bank is subject to an explicit or implicit government guarantee (due to too-bigto fail TBTF), linking pay partly to the value of equity (with deferral to align the executive's interests with those of the shareholders) and partly to the value of debt (to align the executive's interests with those of the creditors) does not solve the problem of excessive risk-taking from the perspective of the whole society, because the price of debt does not reflect the total social risk. The executive remains incentivized to choose riskier projects and shift the excessive risk to taxpayers to raise the equity-linked part of the bonus. For an optimal ex ante risk adjustment that would internalize the social costs of excessive risk-taking, the value of the deposit insurance or implicit bail-out guarantee would have to be subtracted from the equity value before bonuses are calculated. But the value of these guarantees is difficult to quantify. It has been estimated to range from 10 % of the equity value to multiples of this figure (Thanassoulis, Tanaka 2015).

Summing up, linking the bonus to ex ante risk-adjusted performance in credit institutions or investment firms can reduce incentives to shift risks to creditors, but not incentives to shift risks to taxpayers if the institution can rely on a deposit insurance or public bail-out guarantee due to too-big-to-fail. Therefore, ex-post risk adjustment by malus or clawback is necessary and may be more effective in reducing excessive risk-taking. In the investment banking industry, the social costs arising from excessive risks created and spread across the society through origination and trade in securities may be internalized by linking pay to the performance of securities originated, floated and traded.

2.4 Pay-out in instruments and risk-taking

Pay-out in shares or share-linked instruments is a measure to align the interests of the managers with those of the shareholders. However, this may encourage short-term risk-taking and creates incentives to shift risk to depositors, bondholders and taxpayers (see Section 2.1.1). To focus managers' attention on the long-term and better align a manager's incentives with creditors, and society at large, the following instruments have been proposed:

- An equity / cash sliding scale according to the level of risk to determine the composition of the bonus: Only firms with lower leverage should pay their managers predominantly in equity-linked securities, while firms with higher leverage should pay their managers mostly in cash, because in the latter case, the creditors may bear most of the risk while the potential for the upside from the risk accrues to the shareholders in the form of higher dividends and stock prices. For risk takers below the CEO or senior management level, a portion of the ratio between cash and equity-linked securities "should include an investment (or tracking security) in the underlying portfolio the trader or manager is responsible for. This ensures that some portion (e.g., 20 %) of this manager's bonus is subject to the specific risks to which he or she is subjecting the firm in addition to the risk that exists in the firm's stock options (or other equity-linked securities)." (Gossett 2014, p. 81);
- Tying executive pay to the aggregate value of a basket of securities (including common shares, preferred shares and bonds) issued by a credit institution or



- investment firm, and not to the value of shares only (Bebchuk, Spamann 2010);
- Including debt (bonds or inside debt in the form of pension pay) or linking pay to default probabilities extracted from credit default swaps to reduce risk shifting to creditors (Edmans, Liu 2011, Bolton et al. 2015, forthcoming.);
- Use of subordinated debt as pay-out instrument (Tung 2011);
- Compensation of senior executives by convertible equity-based pay, i.e. "equity that will convert into subordinated debt upon certain external triggering events, such as a downgrade by the regulators to a "high risk category," a specific deterioration in the firm's book-to-equity ratio (or some other critical ratio), or perhaps a stock price drop of a specified percentage over a limited time period." (Gordon, Jeffrey N. 2012, p. 11);
- Compensation of senior executives by restricted stock and restricted stock options, "restricted in the sense that the executive cannot sell the shares or exercise the options for two to four years after his or her last day in office." (Bhagata, Bolton 2014, p. 313);
- Use of contingent convertible debt (CoCos) as pay-out instrument: Equity-based instruments loose effectiveness when the bank's equity value approaches zero, because shareholders tend to prefer extreme risks when approaching insolvency. This insolvency-related moral hazard problem could be reduced by higher regulatory capital requirements supplemented with contingent convertible debt (CoCos). (Ferrarini 2015);
- Use of hybrid instruments, "such as debt instruments which are held back by the financial institution for a period of say five years and can be forfeited if the institution's capital ratio falls below a given ratio, such as 7 percent." (Ferrarini 2015, p. 16).
- The idea of debt-based pay ("bail-inable" debt) has been featured in the recommendations of the Liikanen Commission (Liikanen 2011) and has been implemented first in practice by Swiss banks (e.g. UBS and Credit Suisse) who have been using remuneration in the form of contingent convertible (CoCo) bonds for over 2 years already. Other supporters of CoCo bond based solutions include researchers of the *Squam Lake Report* (French et al, 2010) who argue its relevance to the most systemically important financial institutions which are also often complex multi-national firms that are the targets for such pay-out instruments (Small 2013).

The use of equity awards, share-linked instruments or equivalent non-cash instruments (upfront, without deferral or ex post risk adjustment) tend to increase risk-taking behaviour, while bonds and debt-linked instruments tend to reduce it. Empirical studies on remuneration in credit institutions and non-financial firms show that incentive remuneration using stock options and earnings-based performance bonuses increase risk in several ways. For example, it seems to induce manipulation of earnings and/or other benchmarks, and earnings-based bonus plans incentivize earnings management (Cullen, Johnsen 2015, p. 4). CEOs paid in equity use projects which are not long-term efficiency-increasing in order to enhance short-term equity valuations (Benmelech et al. 2010, Cullen, Johnsen 2015, p. 4). "Where top-level compensation is structured to quard against market risk, and not idiosyncratic risk, CEOs have incentives to favour projects with high levels of market risk, leading to herding in investment behaviour and consequently excessive aggregate risk levels across the economy (Acharya, Bisin 2009)" (Cullen, Johnsen 2015, p. 4). In the banking industry, "the risks inherent in compensation contracts may lead to particularly destabilising trends, due mainly to their high leverage, and the interaction between equity-based compensation awards and capital structure" (Cullen, Johnsen 2015, p. 5). In the absence of any downside risk or deferral/clawback mechanisms in



remuneration, bank managers rewarded through stock options have strong incentives to expand the balance sheet of their institutions by increasing leverage (Blair 2010-2011). In contrast, bankers who receive a greater portion of their remuneration in salary and bonuses rather than stock options are less likely to take high risks (Cullen, Johnsen 2015, p. 5).

Most studies on performance-based pay in the banking sector focus on the remuneration of top executives at large banks. For a sample of ninety-eight large banks across the world, Fahlenbrach and Stulz (Fahlenbrach, Stulz 2011, p. 12) find that banks led by executives whose interests were better aligned with those of their shareholders had lower stock returns and a lower return on equity. "CEOs had substantial wealth invested in their banks, with the median CEO portfolio including stocks and options in the relevant bank worth more than eight times the value of the CEO's total compensation in 2006. Similar equity holdings should have led CEOs to focus on the long term, voiding too much risk and excessive leverage for their banks. Instead, the study shows that a bank's stock return performance in 2007-2008 was negatively related to the dollar value of its CEO's holdings of shares in 2006, and that a bank's return on equity in 2008 was negatively related to its CEO's holdings in shares in 2006." (Ferrarini 2015, p. 6).

Bebchuk et al. (Bebchuk et al. 2010) examined executive compensation at the investment banks Bear Stearns and Lehman Brothers in the pre-crisis period 2000-2008 and found that short-term incentives induced executives to take excessive risks although they held large equity investments in their firms (like Richard Fuld at Lehman Brothers who owned USD 1 billion worth of his firm's stock). Relevant executives received large amounts of cash bonus compensation and "regularly took large amounts of money off the table by unloading shares and options." The performance-based compensation did not align their interests with long-term shareholder value, but provided executives with substantial opportunities "to take large amounts of compensation based on short-term gains off the table and retain it even after the drastic reversal of the two companies' fortunes" (Bebchuk et al. 2010, p. 274).

CEOs seem to compete "for prestige by making more profits in the short-term or by heading league tables for underwriting or lending, regardless of the longer-term risk involved" (Rajan 2010, p. 142). Some banks had a culture of risk-taking and of very short-term compensation, which negatively influenced their performance (Cheng et al., 2014; Ferrarini 2015, p. 7). Chen et al. (Chen et al. 2006) examine the relation between option-based executive compensation and several market measures of risk (total, systematic, idiosyncratic, and interest rate risks) for a sample of commercial banks during the period of 1992-2000. They find that following deregulation, banks have increasingly employed stock option-based remuneration, and that both the structure of executive remuneration (proxied by stock options as a percentage of total remuneration) and the stock of option-based wealth induces risk-taking in the banking industry. "Although both managerial stock ownership and option-based compensation are equity ownership, the former represents current ownership and the latter future ownership. While the current ownership may increase or decrease in value, the future ownership (stock options) can experience more dramatic outcomes with exercise values that may reasonably fluctuate from zero to several million dollars due to the leverage effect. This possibly makes stock options a more powerful variable for investigating risk related principal-agent problems in banking. ...we provide limited evidence that executive option-based wealth enhances shareholder wealth (Chen et al. 2006, p. 917).



Balachandran et al. (Balachandran et al. 2010) examined executive remuneration in 117 financial firms (including depository institutions (banks), non-depository credit institutions (credit and mortgage companies), and security brokers, dealers and exchanges (investment bankers)) in the U.S. during the period 1995-2008. They find that equity-based pay (i.e. restricted stock and options) increases firm-level risk, measured by the probability of default, while non-equity pay (i.e. cash bonuses) decreases it. "Cash incentives based on metrics of firm performance are less risky than equity-based compensation, as these are derived from historically delivered results and not forward looking market values" (Balachandran et al. 2010, p. 3).

For other risk-takers, such as high earners, empirical studies are lacking. However, "it is well known that many of these employees were paid short-term incentives in amounts much greater than that of their fixed salaries" (Ferrarini 2015, p. 8). In the case of traders, "many of the compensation schemes paid for short-term risk-adjusted performance. This gave traders an incentive to take risks that were not recognized by the system, so they could generate income that appeared to stem from their superior abilities, even though it was in fact only a market-risk premium." (Diamond, Rajan 2009, p. 607).

We conclude that the use of instruments should be balanced to take into account the interests of shareholders, creditors, bondholders and other stakeholders. Stock options, but also the use of shares has induced excessive risk-taking. Thus, there are clearly benefits of prohibiting remuneration through share-linked instruments in listed institutions. The use of bonds or equivalent instruments which reflect the credit quality of the institution as a going concern or which can be converted to equity in adverse circumstances (such as contingent convertible bonds) as required by CRD IV align the interests of the managers with those of shareholders. However, the use of shares is less suitable than cash based on risk-adjusted performance because it may be exposed to manipulation or market tendencies which do not adequately reflect the risk.

To align managers also with creditors or bondholders and prevent risk-shifting to creditors, non-equity instruments such as bonds or debt-linked instruments should be used in addition. However, this does not apply to financial institutions with an implicit or explicit bail-out guarantee, such as large, systematically important institutions that are considered as too-big-to fail (TBTF). "Indeed, bondholders of a number of large banks that failed during the recent financial crisis – for example Bear Stearns, Northern Rock, RBS and Lloyds – did not suffer any losses thanks to government support. In the presence of the TBTF effect, systemic banks and other financial institutions benefit from an ambiguous government guarantee on their debt, which lowers their interest costs for any given level of asset risk." (Thanassoulis, Tanaka 2015, p 15). The reduction of interest costs below the socially optimal level by the public guarantee induces excessive risk-taking aligned with shareholders' interests.

2.5 Deferred remuneration and risk-taking

Regarding the benefits of deferral, it has been argued that:

Deferral of remuneration is beneficial, because it aligns management with creditors. It "...places the CEO in the exact same position as every other general creditor of the firm for the time period of the compensation delay (of course, in the case of recurring annual bonuses this places the CEO in the position of permanent creditor)" (Gossett 2014, p.80).



- The benefit of deferral is positively related to the institution's level of risk. Therefore, a delay period may be assigned to each of the ex-ante risk measurements. "For example, a modest leverage rate for a bank would be 8. At this rate a manager would experience no delay in receiving his bonus. Between 8 and 10 a manager would have to wait 1 year. Leverage rates from 10 11, 2 years, etc." Gosset (Gossett 2014, p.77).
- Mandatory deferral periods of 3-5 years are not long enough to prevent shorttermism and excessive risk-taking, because the length of financial cycles is typically much longer. "In the context of credit cycles, which are naturally intertwined with the performance of banks and which may persist for a decade or more, three years does not seem a long-term horizon...'short-term' financial cycles may last for up to nine years..., whilst 'medium-term' cycles may last anything up to 30 years... it is clear that certain risks may take many years to manifest - certainly over timeframes longer than three years. Furthermore, there are inconsistencies in relation to whether a deferred equity plan which does not cover a significant period of time would increase a focus on the longterm, because there would remain a large period of time under which the incentives of senior executives would be the same as with a non-deferred plan. On this basis, we recommend that mandatory deferral periods of 7-10 years are implemented. ...because this strikes the appropriate balance between reigning in risk and allowing the financial cycle to 'smooth out' equity and asset prices and financial performance measurements. Whilst investment risks may take years to emerge, arguably most would become apparent within a timeframe of a decade or so. This lengthened time horizon therefore ought to capture tail-risk and prevent managers from profiting from the effects of a major credit boom, or from short-term accounting manipulation. It would also reduce the need for clawback which, as we have noted, poses many practical difficulties if invoked." (Cullen, Johnsen 2015), p. 17).
- An extension of deferral periods has been also recommended by Europe Economics for the remuneration regulation in the UK: "An extended deferral period for variable remuneration should allow the impact of senior decision making and risk-taking to be evaluated over a longer portion of the financial cycle. This would increase the probability of the regulator or firm identifying conduct failures and may also allow more time in which to collect evidence and determine the individual(s) responsible for misconduct. This, in turn, could increase individuals' perceived likelihood of sanction and better align the downside risk of their behaviour with the upside risk." (Europe Economics, 2014, p. 66). "By extending the deferral period, the regulator can investigate a new product or service's performance over a longer portion of the financial cycle (although it will still fall short of the 16 year, or more, financial cycle estimated by (Drehmann, M., Borio, C. E. V., Tsatsaronis, K 2012)." (Europe Economics 2014 p.52).
- The benefits of deferred pay depend on the form of pay-out: while deferral of cash payments is beneficial because it reduces incentives to take risk, deferred pay-out in equity-linked instruments or stock options may even be harmful, because it would create incentives to increase risk: "Typically, if a manager's compensation is in the form of restricted (time-delayed) equity-linked securities the incentive for the manager is to maximize the value of those securities. This implies a perverse double risk incentive. First, it encourages the manager to take on excessive risk to maximize the amount of the bonus in the first place. Second, it perpetuates (or even increases) that excessive risk in order to maximize the value of these bonus shares. However, if excessive risk-taking is rewarded with cash there is no incentive to perpetuate that risk-taking because it would put the CEO, as a general creditor, at even greater risk of



loss." Therefore, deferral should be combined with a cash / equity sliding-scale bonus system based on ex ante risk assessment (Gossett 2014, p.81).

Recent literature on executive compensation in the U.S. shows that firm managers hold significant amounts of debt claims against their own firms, so-called inside debt, in the form of deferred remuneration and pensions. CEOs holding these claims, which are typically unfunded and unsecured, face the same default risk as outside creditors. Several studies find a negative influence of the proportion of CEO wealth held in the form of inside debt relative to CEO equity holdings on risk-taking (Edmans, Liu 2011; Sundaram, Yermack 2007; Wei, Yermack 2011; Bolton et al. 2015, forthcoming.).

Evidence for U.S. banks shows that increased CEO financial exposure to bank risk, measured by deferred remuneration and pension payments in 2007, is perceived by the market to reduce risk-taking, indicated by lower CDS spreads. The market seems to believe that CEOs that would lose more financially if the bank fails take lower risks (Bolton et al. 2015, forthcoming.). A benefit of this approach is that deferred remuneration creates a built-in stabilizer. When banks are performing well, bonuses will be paid out, while when their performance deteriorates and their credit quality weakens (which would increase their CDS spread), they will be forced to conserve capital through the automatic bonus adjustment. This is analogous to cutting dividends to protect the bank and its creditors. However, cutting dividends imposes a cost on equity holders, while cutting bonuses imposes a cost on risk takers (Mehran et al. 2011, p. 9), thus internalizing the social costs of excessive risk-taking. Further evidence for U.S. banks shows that aligning CEO remuneration with the value of the firm, measured by higher ratios of deferred remuneration and pension payments to equity, reduces risk-taking, measured by idiosyncratic risk and risky loans, which resulted in better performance during the crisis (Tung, Wang 2011).

We conclude that the use of deferral in remuneration creates benefits by reducing risk-taking and should be higher in institutions with a high level of risk. However, executives' excessive risk-taking incentives caused by the too-big-to fail distortion cannot be corrected by deferral of equity-linked bonuses (Thanassoulis, Tanaka 2015). Therefore, ex post risk-adjustment by malus or clawback is required in particular in large, systemically important institutions.

2.6 Ex-post risk-adjustment (malus and clawback) and risk-taking

Gosset (Gossett 2014, p. 87) argues that the executive's interests can be better aligned with those of shareholders, creditors, and society as a whole, by using ex ante systemic risk assessments with deferral of the bonus funds along with a cash / equity sliding-scale bonus system. However, ex ante risk adjustment measures (equity-linked bonus subject to deferral and pay in debt or debt-linked instruments) cannot solve the problem of socially excessive risk-taking (risk-shifting from shareholders to taxpayers) caused by an implicit or explicit bailout guarantee. Such guarantees artificially inflate the equity value, which is not taken into account when calculating equity-linked bonuses (Thanassoulis, Tanaka 2015). This distortion can be corrected by ensuring that the managers suffer a financial penalty ex post when the bank fails, independent from whether its creditors are bailed out or not. Therefore, malus or clawback tend to have the highest benefits in large, systemically important or government-owned institutions. However, to perfectly correct the too-big-to-fail distortion, malus and clawback would have to be conditioned fully on the ex-ante risks taken by the manager. "Moreover, the impact of malus and clawback could be diluted, for example



if the bank's shareholders choose to offer highly convex bonus schedules to risk takers", i.e. allowing the bonus to rise disproportionately with the final equity returns. Therefore, "active monitoring of gaming of remuneration regulation" is needed, along with policy efforts to end the too-big-to-fail problem, such as a credible resolution regime which forces shareholders and debtholders to bear the losses (Thanassoulis, Tanaka 2015, p. 33).

In the United States, there are four major problems of clawback rules which may make them ineffective: applicability, ability to manipulate, who it seeks to regulate, and enforcement. Clawback rules already existed before the Great Recession, but did nothing to prevent it. In particular, they are susceptible to manipulation. Financial measurements that are used to calculate an executive's remuneration can be "massaged" by management to prevent that the clawback is triggered. "For example, if a compensation plan rewards high net earnings, the manager can simply instruct the accounting department to use a higher (but not high enough to gather too much attention) assumed rate of return ("ARR") for pension assets. This higher ARR has the effect of lowering the current amount needed to fund the plan. If less firm income is needed to currently fund the plan then more can be kept as earnings. Of course, eventually this money will be needed in the plan (actually, more will be needed because those funds were not invested in the plan earning a return); but in the meantime, the executive has boosted near-term earnings and scored a big bonus. So long as the executive can keep this hidden for at least three years he or she is in the clear in terms of escaping a Dodd-Frank clawback" (Gossett 2014, p. 67). An even greater weakness of the U.S. clawback rules seem to be enforceability: "If a restatement triggers a clawback, the law makes no provision for actually securing that the money is indeed paid by the executive back to the firm.... the clawed-back money owed by the officer to the company is essentially a debt of the officer. As with any debt, it can be avoided by personal bankruptcy" (Gossett 2014, p. 69). If this is anticipated by the staff, the incentive effects of clawback are low.

2.7 Discretionary pension benefits and risk-taking

Discretionary pension benefits are a form of variable remuneration and should not be paid without considering the institution's economic situation or the risks that have been taken by identified staff. "The full amount of discretionary pension benefits must be awarded, in accordance with Article 94(1)(o) of CRD, in instruments referred to in point (I) of this Article and: a. where identified staff leaves the institution before retirement, the institution must hold the full amount of discretionary pension benefits in instruments at least for a period of five years without the application of pro rata vesting; where identified staff reaches retirement, a five-year retention period must be applied to the full amount paid in instruments. Institutions should ensure that malus and clawback arrangements are applied in the same way to discretionary pension benefits as to other elements of variable remuneration" (EBA 2015d, p. 51). These provisions are justified by evidence about effects of pension benefits on risk-taking:

Executives' or other staff's pensions are often not transparent and therefore a form of "camouflaged" pay (Bebchuk, Fried 2015)This aspect of remuneration is of particular interest because it constitutes a form of "inside debt", offsetting the equity incentives so intensely discussed in recent research by financial economists into the effect of stock options on managerial incentives. Inside debt is the accumulation of fixed payments payable to corporate insiders, be they executives, market risk-takers or just ordinary employees. While an executive solely motivated by equity may be motivated



to "gamble for resurrection" in the face of a liquidation threat because in extremis he/she, like other equity-holders, will lose all anyway an executive holding a portfolio of debt and equity incentives may be more risk-averse (Sundaram, Yermack 2007, Wei, Yermack 2011). While pensions may be a relatively small proportion of total pay for younger traders, actively managing risk, it is unlikely to be so for older executives managing the overall portfolio of risks to which a financial institution is exposed.

Even before the financial meltdown of 2008 concern had already been raised about the pension rights of executives being used as a form of "camouflaged pay". Bebchuk and Fried (Bebchuk, Fried 2015) outline the way in which hidden elements of CEO pay, both pensions and deferred remuneration, were used to ensure both Franklin Raines. the CEO of Fannie Mae, and Timothy Howard, its CFO, were ensured a "soft-landing" almost regardless of how they served shareholders. This was particularly unfortunate because they were ultimately pushed out of office, via early "retirements", following an enforced re-statement of earnings resulting from an SEC investigation. Incredibly, given the threat posed to Raines and Howard that they would be dismissed for "good cause", rather than retired, the Board agreed to boost Raines pay by \$6 million dollars in the event of him being terminated for "good cause". This amount was chosen to fully offset the 25 % reduction in his pension entitlement if he was dismissed rather than retired. This misplaced largesse of Fannie Mae's Board, who are charged to protect shareholders', not managers', interests reflects one aspect of a raft of what Bebchuk and Fried (Bebchuk, Fried 2015, p. 12) call "gratuitous goodbye" benefits offered to failed executives, others being the forgiveness of debts owed to the company/bank and promises of well-paid, but undemanding, consulting contracts.

Such hidden remuneration designed specifically to uncouple executive pay from performance and grant "soft-landings" to underperforming executives was clearly displayed by the case of the UK's most reviled bank executive Fred, former executive of RBS now in State hands. While publicly disgraced Fred Goodwin had his £16.9million¹⁰⁸ pension pot sharply reduced this did not stop the RBS board showing similar misplaced generosity to his successor. After failing to meet a series of government imposed performance targets Stephen Hester departed RBS only to be paid a £3 million bonus for failing to meet agreed targets¹⁰⁹ Clearly "gratuitous goodbye" payments have clearly crossed the Atlantic unimpaired.

But if bankers are very well paid, relative to academics or state regulators it may not matter too much and to dwell too much on such matters may be the politics of envy. But if the creation of such "inside debt" claims can adversely affect the risk management of systemically important financial institutions we cannot be so sanguine about their presence. That such "inside debt" claims do indeed make (older) executives more risk-averse is shown by Chenyang and Yermack (Wei, Yermack 2011) who also show that tilting towards a more risk-averse management style is reflected in rising bond prices and declining equity values. As might be imagined this decision-calculus each manager must face, given the balance of inside debt and equity faces, is not always resolved in favour of their shareholders. Edmans and Liu (Edmans, Liu 2011) have given theoretical conditions for the presence and level of inside debt, often created by either deferred remuneration or pensions provision, to enhance

¹⁰⁸ See: http://www.ft.com/intl/cms/s/0/1b8b1792-3a02-11e5-8613-07d16aad2152.html#axzz3j0eVjAWx.

¹⁰⁹ See: http://www.theguardian.com/business/2014/nov/17/rbs-row-3m-payout-stephen-hester.



shareholder wealth and their satisfaction is by means trivial. While these authors find that an equity bias in executives' pay is usually optimal this may not be the case where a company is subject to substantial liquidation risk. Here the risk-aversion induced by forcing Board members to hold inside debt may be optimal. For systemically important financial institutions this might suggest the composition of executive pay might be varied over time to reflect the perceived variations in institutional liquidation risk.

2.8 Managerial power and executive pay

In outlining the case for the presence of a "loyalty bias" exhibited by board members to incumbent CEOs Randall Morck states (Morck 2008).

"Misplaced loyalty lies at the heart of virtually every recent scandal in corporate governance. Corporate officers and directors, who should have known better, put loyalty to a dynamic Chief Executive Officer above duty to shareholders and obedience to the law. The officers and directors of Enron, WorldCom, Hollinger, and almost every other allegedly misgoverned firm could have asked questions, demanded answers, and blown whistles, but did not. Ultimately they sacrificed their whole careers and reputations on the pyres of their CEOs."

Almost the whole debate surrounding the level and structure of executive pay adopts an "agency problem" perspective on aligning CEO/MRTs pay with shareholders' interests. But could it be "loyalty bias", the "type II agency problem" (Morck 2008) means merely reforming CEO/MRT pay is not enough if this leaves in place the motivations/forces that structured that pay contract it the first place. This is indeed the concern expressed by Weisbach (Weisbach et al. 2007) in reviewing the seminal contribution of Bebchuk and Fried (Bebchuk, Fried 2004). While Bebchuk and Fried suggest the "managerial power" CEOs/MRTs use to set their own pay can be constrained they ignore the willingness with which shareholders and subordinates grant them this power. Weisbach (2007, p. 427) states the problem thus

"I think we must think about governance from the same equilibrium perspective as other economic institutions. Managements having control over the board is one element of the governance equilibrium that has appeared to prevail over time."

This suggests at least two issues have not been given sufficient attention in discussing CEO/MRT pay. Firstly, while much has been said about CEO's greed for excessive pay, little is said about why they are granted their wishes by remuneration committees and shareholder's meetings. Secondly, are all companies/financial institutions the same with respect to the "problem of executive pay" or do we need to confine our censure, call for regulatory intervention to a narrower target.

While the "managerial power" perspective rightly draws attention to unjustified rewards of CEOs who sometimes bankrupted the financial institutions they lead (Richard Fuuld, Fred Goodwin or Hank Greenberg) they say little about why the supine Boards they headed up allowed this to happen. Padilla et al (2007) points out that a dysfunctional CEO stands at the apex of a "toxic" triangle of susceptible followers and conducive conditions. The reason for such complicity of Boards in the unjustified rewards of CEOs/MRTs is undoubtedly the identification they feel with his (and it is usually his) success and consequent blame/shame they feel upon his failure. Langevoort (2004) states the evolutionary path thus



"A streak of good fortune for the firm – which may be managerial skill, but may be just as much the state of the economy – creates a psychological dynamic that works to the CEO's favour. First, the CEO has ample opportunity and resources to expand the board's external influence, thereby making ingratiation tactics more effective. The social ties grow, which makes the inclination to monitor diminish. Not far under the surface here are cognitive dissonance and a related set of commitment biases: the longer the streak of positive information flows, the more board members attribute that success to the person they've put in place and hence develop mental schemata that credit the CEO with skill. Once these schemata are fixed, they become increasingly hard to disconfirm. Any negative information that subsequently appears tends to be dismissed until the threat is undeniable, partly because of simple cognitive conservatism, partly because the board – having committed itself to the CEO by virtue of both selection and generous compensation – is averse to acknowledging that it may have made an error." (p. 310) "

Almost regardless of the moral fibre of the CEO Board members have a profound interest in both how much and in what form the CEO is paid because it almost invariably forms the background to their own pay settlement. While a CEO, or primary MRT, has their pay set by a remuneration committee they themselves set the pay of their subordinates (Core, Guay 2010). So a CEO whose own wealth is strongly allied with that of his shareholders will be keen to ensure his subordinates share the pain of failing to deliver shareholder value.

The degree to which "managerial power" can flourish is also a very much a function of the scale of the enterprise over which the CEO/MRT exercises power. Examining the financial services sector as a whole in the US Core and Guay (2010) find CEOs of financial firms received about 35 % less remuneration than a CEO in a similar size firm/length of tenure CEO in a non-financial sector company. But the reverse is true for CEOs entering the elite of the 24 largest banks (Core, Guay 2010, p. 8). To some degree this makes sense and reflects the stylised fact that the most reliable determinant of relative CEO pay in the cross-section is company size, however measured. So in the recent intervention by the US government to remedy the problems giving rise to the TARP, the "Special Master" appointed to oversee the reform of pay, Kenneth Feinberg, issued guidance on only the seven firms who received "exceptional assistance". While Feinberg suggested his remuneration guidance might form a template for all financial services companies it suggested with great financial power concomitant responsibilities arise.

But company size is not the only determinant of "managerial power" another is the broader form of the governance settlement. Here, at least, two distinct models can be observed (Conyon, Schwalbach 2000). The first format is the UK/US shareholder dominated, active market managerial labour market, style market in which hostile takeovers are not uncommon. The second is the Continental model in which banks and longer term shareholding, often family, owners predominate, and recruitment to the most senior roles from outside the company is rare. Pressures of globalisation have increasingly challenged the discreteness of these borders. As the market for CEO talent has become global the opportunities for their unjustified engorgement have grown.



3 Methodology

3.1 Survey

3.1.1 Questionnaires and responses

The study and its findings have been developed on the basis of empirical data collection, desk research of subject literature, and analysis of both own and third-party data. The main research tools for gathering the necessary information to answer the questions demanded from this project were questionnaires and targeted interviews. The need to collect information from various stakeholders, resulted in the development of five distinct survey questionnaires. These were addressed to institutions, asset management companies, regulators, individual employees, and other general stakeholders and experts.

In developing the questionnaires, each relevant CRD IV provision was addressed by drawing hypotheses for the research questions. These were also answered with a thorough overview of existing literature (described in detail in the Annex 2.2) and own assessments aided by analysis of the data collected from EBA and from our surveys and interviews.

The largest and most informative survey was the one for **institutions** as main source of firm specific remuneration and risk information. As a reminder, the analysis in this report rests on two different datasets collected and constructed through various means and sources. The first is a combination of the EBA remuneration benchmarking data together with primarily Bankscope data on institution specific financial and risk data (EBA data), the former covering data for a sample of 140 of the most significant EU banks¹¹⁰ for the years 2013 and 2014, and the later data collected for the corresponding sample but available over a much longer time period (used from 2006 to 2014). (see next section on EBA/Bankscope data)

The second dataset used for statistical analysis is one composed of the raw data collected directly from credit institutions and investment firms from our survey of them. The sample was a much more heterogenic one than the first EBA dataset as it was comprised of CRD-regulated entities ranging from small cooperative banks to large global investment-oriented and diversified retail banks. The sample size it its entirety was comprised of 188 credit institutions and 6 investment firms Table 61 shows how the 194 survey respondents taken into account for our analysis break down by size and type of organisation. ¹¹¹

The sample size of the EBA remuneration benchmarking reports has increased from year to year. The Benchmarking report published in 2014 states: "The EBA has received the data for 2012 for 137 groups of institutions, for 2011 for 124 groups and for 2010 for 1 13 groups" and the data for 2014 is for 143 entities.

¹¹¹ Note that in some *iff*-firm survey response overview tables, a slightly different number of total responses are shown. While naturally not all institutional survey respondents answered all questions in the questionnaire, some additional data checks have resulted in some responses being discarded. This was also the case for some specific answers that were not deemed correct i.e. by a misunderstanding of the question (e.g. some respondents provided data for all employees in fields asking for only data on the regulated population of their identified staff). Some discrepancies may also still appear in one or two tables in terms of the classification by size of the respondent institution (due to later corrections to the



Table 61: iff-firm survey: Breakdown of respondents by size and type of organisation

Breakdown of respondents (N=194)	Respondent number
By size	
Large	25
Medium	26
Small	137
Not classified	6
By form	
Bank standalone	144
Bank as part of a banking group	40
Bank as part of a non-banking group	4
Investment firm as part of a non-banking group	3
Investment firm standalone	3
for Banks and Holding Companies	
and Insurers	

The surveys were launched at slightly different times but ran between October and December 2015. The timing of the firm-survey for participation was challenged by the end of year reporting period which meant that some HR departments were under strain. Nevertheless we are grateful for those firms that took the time to provide their answers. The banking trade associations, especially the AFME and EBF, were very helpful in this regard. The survey questions for the firms were time consuming for respondent organisations because a number of different units needed to be consulted in order to collect the information needed. In the majority of cases the HR department of the firm was the lead contact for answers.

As the table above suggests, interpretation of the firm-survey data is heavily influenced by credit institutions and care should be taken when extrapolating these findings on to the weaker coverage of investment firms. Our analysis has tried to focus on different types of entities that are covered by the CRD provisions on remuneration, including credit institutions and investment firms, as well as subsidiaries to which provisions of remuneration apply because they are part of a banking group. Seeing the time constraints of the project and wide scope of investigation, it was difficult to obtain a representative sample of the industry to be covered by our analysis. This was despite a letter request from the European Commission sent to trade associations inviting them to help us to identify from amongst their member organisations examples of companies, which would fall within different categories. 112 Such a list was not provided, however one trade association

data). In addition, a number of additional responses received were not taken into account either because these were provided in a non-useable form (e.g. fax instead of in the form of the PDF questionnaire provided), or received too late to be able to be integrated in the analysis.

Namely: 1) Asset management companies operating within a banking group (which are covered by Directive 2011/61/EU (AIFMD) or covered by Directive 2014/91/EU (UCITS); 2) Asset management companies operating on a stand-alone basis (which are covered by AIFMD or UCITS; and 3) Investment firms (as defined in Art. 4(1)(2) CRR).



EFAMA did provide a list of potential members that would be willing to complete our survey, although not all of these organisations did so when the survey was sent to them. As such the views of the non-credit institutions may be underrepresented in our findings and no conclusions were possible that would take account of differences between firms of different sizes, and activities in different geographical areas.

In order to collect their views a separate questionnaire was developed and addressed to **asset management companies**. See Annex 5.3 for details of the answers provided from these 7 respondents.

The number of responses used from the other four questionnaire responses is provided below.

Iff-surveys	Qu no.	Responses
Firms (credit institutions and investment firms)	Q1	194 (used for analysis)
Individuals (identified staff/MRT)	Q2	36
Asset management companies	Q3	7
Financial supervisors	Q4	16
Other stakeholders (e.g. academics, remuneration consultants)	Q5	9

Table 62: Surveys: Number of responses to the five iff questionnaires

The survey of identified staff (MRT survey) was used to collect am insight into behaviour of individuals with regards to remuneration structure, risk-taking, as well as to collect their opinions of the measures. The survey was designed online and subsequently as a PDF when problems with firewalls prevented access to the online survey in some banks. The 36 survey responses taken into account (an extra 10 were received too late for the analysis) came from individuals working for 12 different organisations (not all specified their current employer) with just over a third coming from one organisation. Three quarters were working for a bank as part of a banking group, were active in different business units (over a third were on their respective management boards) and in top level management position in their firm (71%) and only 2% of respondents had less than 5 years of experience. Almost half of the respondents were awarded a total remuneration of between EUR 250-500 thousand in 2014, and almost a third (the largest group) had a mix of variable pay as a share of total remuneration of between 26-40%. Individuals that responded stated that they effectively and physically worked in the following countries: France, Ireland, Italy, Romania, Spain, USA (N=2) and another country not in the EU/EEA (N=4). This indicative survey suggests that further research at the individual level would be worthwhile to understand the effect of the remuneration rules on behaviour and risktaking and motivation.

The survey of **financial supervisors** was completed by 16 authorities from 14 Member States (15 authorities excluding the survey contributed by the Monetary Authority of Singapore). These were: the National Bank of Belgium, Financial Supervisory Authority of Finland, De Nederlandsche Bank N.V., la Commission de Surveillance du Secteur Financier (CSSF Luxembourg), the Financial Market Authority of Austria, l'Autorité de Contrôle Prudentiel et de Résolution (ACPR France), Banco de España, Banca D'Italia, Finansinspektionen (the Swedish FSA), Bank of Greece, Danish Financial Supervisory Authority, the BaFin (together with the Bundesbank), the Polish



Financial Supervision Authority, and the UK'S Financial Conduct Authority and Bank of England Prudential Regulation Authority.

Lastly, a survey with opinion questions was addressed to **other stakeholders** representing a range of organisations and individuals: Civil society organisations, academia, trade unions and remuneration consultancies.



3.1.2 Level of information

Table 63: Latent variables and indicators at the firm, business area and individual level

Latent variable	Indicators	Firm level	Business area level *	Individual level	Obtained from questionnaire**
Remuneration	Size	Χ	X	X	Q1, Q2, Q3
	variable/fixed	Χ	Х	X	Q1, Q2, Q3
	form of pay-out	Χ	Х	X	Q1, Q2, Q3
	deferral		Х		Q1, Q2, Q3
	malus	Χ	Х	X	Q1, Q2, Q3
	clawback	Χ	X	X	Q1, Q2, Q3
	performance measures for variable pay	Х	X	X	Q1, Q2, Q3
Risk-taking	Type of firm	Χ			Q1, Q3
behaviour	Business activities	Χ			Q1, Q3
	Risk appetite framework	Χ			Q1: 5.2
	credit risk activities: revenue shares of loan origination, loan securitization		СВ		Q1: 4.1
	market risk activities: revenue shares of derivatives trading, proprietary trading, market making		IB		Q1: 4.1
	Asset management risk/activities: asset amount under management, type of fund managed, major investment segment, leverage, Counterparty credit exposure to the in-vestment fund, etc., investment strategy		AM		Q3: 1.7, 1.9, 1.10, 4.4
	Activities exercised, personal risk behaviour			X	Q2
Risk control/ corporate	Revisions of firm remuneration policy	Х			Q1: 5.5 Q3: 4.11
governance 113	Risk management (e.g. influence of CRO, control staff/total staff, training on risk appetite)	Х			Q1: 5.4 Q3: 3.1, 4.10

¹¹³ Eling, Marek 2011.



Latent variable	Indicators	Firm level	Business area level *	Individual level	Obtained from questionnaire**
	Control measures (e.g. dismissal of senior management staff as a result of excessive risk-taking)	X			Q1: 5.8
	Ownership structure: presence of institutional investors, shareholder concentration (10 % blockholder exists), public control ¹¹⁴	X			
	Board structure: % of independent board members, presence of CRO on the board 115	Х			
	Monistic vs dualistic system/separation of CEO vs Chairman	Х			
	Corporate transparency	Χ			
Performance	Earnings: ROE, ROA, RORWA, cost-income-ratio, volatility of ROA and ROE, beta of stock	X			
	Solvency: Tier 1 capital ratio, CET1 ratio	Х			
	Credit risk and asset quality: Impaired loans and Past due (>90 days) loans to total loans, Coverage ratio (all allowances for loans and debt instruments to total gross impaired loans and debt instruments), Accumulated impairments on financial assets to 1) total (gross) assets, 2) to total operating income, EQ underpinning for Credit Risk		СВ		Q1: 4.2

¹¹⁴ García-Marco, Robles-Fernández 2008.

¹¹⁵ IMF 2014.

Latent variable	Indicators	Firm level	Business area level *	Individual level	Obtained from questionnaire**
	Market risk: Value at Risk of trading book positions, EQ underpinning for market risk, size of warehouse held for market making		IB		Q1: 4.2
	Asset management risk: insolvency ratio/ratio of ailing investments in portfolio, number of margin calls, leverage, fund level risk, management company level risk		AM		Q1: 4.3 Q3: 4.2, 4.3, 4.5
	Operational risk: EQ underpinning for OpsRisk	X			
	Misconduct/reputational and legal risk: number of exception to policies, number of overrulings by business (CEO), Number of legal actions against the bank / third parties, Volume of legal actions against the bank / third parties, Number of regulatory enquires / legislation breaches, Volume of penalties imposed by regulators, Fines paid, Reserves for lawsuits, Number of rejected trades relative to all to-be-approved trades	X			Q1: 5.7
	Balance sheet structure: Loan-to-deposit ratio, Tier 1 capital to (total assets - intangible assets), Debt-to- equity ratio, Off-balance sheet items to total assets	X			
	Liquidity and Funding: Interbank ratio, maturity profile of debt, own credit standing, Structure of liability side	X			



Latent variable	Indicators	Firm level	Business area level *	Individual level	Obtained from questionnaire**
External environment	Bail-out guarantee: measures of government support 116, too-big-to fail: Categorised as G-SIB, D-SIB, Non-SIB?	Х			
	Revenue shares by region / country	X			Q1

Memo: * (CB = commercial banking, IB = Investment Banking, AM = Asset Management); ** (Q1: credit institutions and investment firms, Q2: Identified staff, Q3: Asset Management Companies)

3.2 EBA/Bankscope data

3.2.1 Sample and data set

To examine the development of remuneration and firm risk we match data on remuneration policies of 138 banks selected for 2013 and 2014 by EBA with data on bank type, risk and performance from Bankscope (BS), FSB (2015) and the EU Business Model Monitor (Ayadi et al. 2015). EBA data for both years and Bankscope data are only available for 112 entities. In addition, missing values for some of the variable remuneration variables lead partly to a further decrease in the number of evaluable firms. The variables and data sources are explained in Table 64. The data set covers 60 % of the banking activity in each Member State.

¹¹⁶ Brandao Marques et al. 2013.



Table 64: Description of variables used for remuneration in EBA and Bankscope data (for 2014)

Variable name	Source	Explanation
(Indicator: Remuneration)		
Z_EBA_E_VarTotalRem_Ratio_14	EBA	Ratio of total variable remuneration to total remuneration for all staff 2014
Z_EBA_E_VarFixRem_Ratio_14	EBA	Ratio of total variable remuneration to total fixed remuneration for all staff 2014
Z_EBA_E_VarRem_N_Ratio_14	EBA	Total variable remuneration per total persons 2014
Z_EBA_E_IS_VarFixRem_Ratio_14	EBA	Ratio of variable remuneration to fixed remuneration for identified staff 2014
Z_EBA_E_IS_VarTotalRem_Ratio_14	EBA	Ratio of variable remuneration to total remuneration for identified staff 2014
Z_EBA_E_IS_VarRem_Deferred_Ratio_ 14	EBA	Ratio of deferred variable remuneration to total variable remuneration for identified staff 2014
Z_EBA_E_IS_VarRem_N_Ratio_14	EBA	Variable remuneration per person for identified staff 2014
Z_EBA_E_IS_CashVarRem_Ratio_14	EBA	Ratio of cash variable remuneration to total variable remuneration for identified staff 2014
Z_EBA_E_IS_OTIVarRem_Ratio_14	EBA	Ratio of Other type instruments variable remuneration to total variable remuneration for identified staff 2014
Z_EBA_E_IS_SharesVarRem_Ratio_14	EBA	Ratio of share variable remuneration to total variable remuneration for identified staff 2014
Z_EBA_E_IS_ExpostadjustVarRem_Rati o_14	EBA	Ratio of ex-post adjusted variable remuneration to total variable remuneration for identified staff 2014
Z_EBA_E_IS_GuaranteedVarRem_Ratio14	EBA	Ratio of guaranteed variable remuneration to total variable remuneration for identified staff 2014
Z_EBA_E_IS_SeveranceVarRem_Ratio_ 14	EBA	Ratio of severance variable remuneration to total variable remuneration for identified staff 2014
Z_EBA_E_IS_PensionbenefitsVarRem_R atio_14	EBA	Ratio of pension benefits variable remuneration to total variable remuneration for identified staff 2014
Z_EBA_E_RemlStotalRem_Ratio_14	EBA	Ratio of remuneration identified staff to total remuneration 2014
Z_EBA_E_VarlSVarRem_Ratio_14	EBA	Ratio of variable remuneration identified staff to total variable remuneration 2014
Z_EBA_E_IStotalPersons_Ratio_14	EBA	Ratio of identified staff to total staff 2014
BS_Tier1_Ratio_14	BS	Tier 1 regulatory capital ratio 2014
BS_Equity_TotalAssets_14	BS	Ratio of equity to total assets 2014
Z_BS_ImpairedGrossLoans_Ratio_14	BS	Ratio of impaired loans to gross loans 2014
BS_Assets_14	BS	Total assets 2014
BS_ROAA_14	BS	Return on Average Assets 2014



Variable name (Indicator: Remuneration)	Source	Explanation
BS_ROAE_14	BS	Return on Average Equity 2014
BS_Cost_Income_Ratio_14	BS	Cost-income ratio 2014
Marker_Listed	BS	Listed 2015 = 1/ unlisted = 0 /delisted = 2
FSB_Marker_GSIB	FSB	Marker Global systemically important banks (FSB 2015) = 1
Marker_BANK_OWNERSHIP	Ayadi/ De Groen (2015)	Marker Bank Ownership 2014: Commercial bank, Nationalised bank, Savings bank, Cooperative bank
Marker_BANK_BUSINESS_MODEL	Ayadi/ De Groen (2015)	Marker Bank Business Model 2014: Investment- oriented banks, Wholesale banks, Diversified retail banks, Focused retail banks 117

Table 65 shows the used statistical methods to measure the interdependences between variable remuneration and risk-taking in the banking sector. We calculated means and quartiles (e.g. median) for the performance, risk, and remuneration variables in the table above on the one hand for all banks and one hand other hand grouped by bank size, bank ownership, business model, country, listed, systemic importance, and state aid. We generated scatter plots to examine the bivariate relationships between variable remuneration and risk-taking behaviour visually. Regression analyses are applied to quantify theses interactions.

¹¹⁷ For a description of these four categories see end of Annex 2.2.



Table 65: Applied statistics for Bankscope and EBA data

Variables	Grouped by	Statistics
Banks	country, bank size, bank ownership, business model, listed, GSIB, state aid	frequencies
Assets	country	mean, standard error, median, sum
Assets	all	Lorenz curve and Gini coefficient
Variable remuneration, risk and performance variables	all	Mean, median, graphs
Variable remuneration variables	all, bank size	sum
Variable remuneration variables (all employees, identified staff)	country	mean, standard error, median, sum
Variable remuneration variables	bank size, bank ownership, business model, listed, GSIB, state aid	mean, standard error, quartiles, graphs
Risk variables	bank size, bank ownership, business model, listed, GSIB, state aid	mean, standard error, quartiles, graphs
Performance variables	bank size, bank ownership, business model, listed, GSIB, state aid	mean, standard error, quartiles, graphs
Variable remuneration, risk and performance variables	bank size, bank ownership, business model, listed, GSIB, state aid	graphs without outliers
Variable remuneration ratios	all	quartiles, number of outliers
Variable remuneration, risk and performance variables	all	scatter plots
Variable remuneration, risk and performance variables	all	Pearson correlation
Risk variables	bank size, bank ownership, business model, listed, GSIB	analysis of variance
Variable remuneration variables = f(risk variables)	all	regression
Risk variables = f(variable remuneration variables)	all	regression

Table 66 shows the frequency of the different bank types. Bank size is defined as small for assets below EUR 100 billion, medium for assets between EUR 100 billion and EUR 500 billion and large for assets more than EUR 500 billion. Most banks are small (56 %), non-globally systemic important (79 %) and listed (51 %). The most frequent ownership type is the commercial bank, and the most frequent business model is the focused retail bank.



Table 66: Distribution of bank types

		Percent	Cumulative Percent
Bank size	small banks	55.9	55.9
	medium size	27.6	83.5
	large	16.5	100.0
GSIB	0	79.0	79.0
	1	21.0	100.0
Legal form	listed	51.1	51.1
	unlisted	44.4	95.5
	delisted	4.5	100.0
State aid	0	88.4	88.4
	1	11.6	100.0
Bank ownership	Commercial bank	37.0	37.0
	Cooperative bank	16.7	53.6
	n.a.	24.6	78.3
	Nationalised bank	8.7	87.0
	Savings bank	13.0	100.0
Bank business model	Diversified retail bank	10.9	10.9
	Focused retail bank	39.1	50.0
	Investment bank	9.4	59.4
	n.a.	32.6	92.0
	Wholesale bank	8.0	100.0

3.2.2 Relationship between executive pay and shareholder value

Estimates for executive pay–performance elasticities show that the interests of banks' shareholders and their senior executives have become more closely aligned in the last fifteen years in the United States. What is the comparable situation in the European Union? A number of studies already discuss the contrast between UK and US executive pay incentives (Kyriacou et al. 2010, Conyon et al. 2011). Here the availability of data makes any confident analysis far more difficult but here an attempt is made to study the relationship between executive pay and shareholder value for the above described sample of 140 banks covered by the remit of the European Banking Authority. Many of these banks do not have listed quotations for traded equity invalidating an analysis of how much CEOs get in extra pay for every \$ 1000 of market value they return to shareholders (Jensen, Murphy 1990). In our analysis we focus on just 13 banks for which executive remuneration and market capitalization data are available for the years 2013-14.

Table 67 gives the raw data for our sample. Here changes in market value are calculated from June 2013 to June 2014 to allow for a lag in reporting remuneration levels.



Table 67: Changes in elements of executive pay and market capitalization in 2013-2014

Bank	Δ Variable Pay	Δ Fix Pay	Δ Total Pay	Δ ΜV
Nomura Europe Holdings PLC	0 %	0 %	0 %	-8 %
Deutsche Bank AG	7 %	232 %	239 %	-8 %
State Street Bank Luxembourg	231 %	175 %	406 %	-3 %
HSBC Holdings Plc	60 %	417 %	476 %	-2 %
Mitsubishi UFJ Securities PLC	37 %	275 %	312 %	-1 %
National Bank of Greece SA	-19 %	29 %	11 %	7 %
Credit Suisse AG	-1 %	167 %	166 %	7 %
UBS (Luxembourg) S.A.	40 %	63 %	103 %	8 %
Barclays Plc	2 %	271 %	273 %	12 %
Lloyds Banking Group Plc	51 %	99 %	150 %	34 %
BBVA	114 %	145 %	259 %	52 %
ING Groep N.V.	5 %	53 %	58 %	55 %
The Royal Bank of Scotland PLC	34 %	228 %	263 %	98 %

The most obvious characteristic of the data is the huge spread of both changes in pay and changes in market capitalization (from a decline of 8 % for Nomura to a rise of nearly 100 % of RBS, the UK bank bailed out by the British tax-payer). Secondly is the weak relationship between pay rises in the period 2013-2014 and changes in elements of executive pay. HSBC raised total pay almost fivefold, despite a small 2 % decline in shareholder wealth. By contrast RBS nearly doubled the return to its shareholders but increased total executive pay by just over two-and-a-half times. Thirdly there is a marked difference between changes in variable and fixed elements of executive pay, with increases in the fixed element of executive pay. While variable pay rose on average by 43 % for this sample of banks total pay rose by some 165 %, this certainly reduced the proportionate effect of variable pay in bank executives' remuneration packages it did so by more than doubling total bank executive pay on average (209 % average rise). This rather banks boards made bank executives to accept lower performance bonuses by "stuffing their mouths with gold".

A brief examination of Table 67 alerts us to the presence of extreme values in our data. So for the purpose of the statistical analysis conducted we winsorize pay and market values not to exceed the 99.5 % confidence interval of the normal distribution. Having done this we plot the relationship between changes in variable, fixed and total pay and changes in market value for our sample of banks under the EBA's remit (see Figure 43).

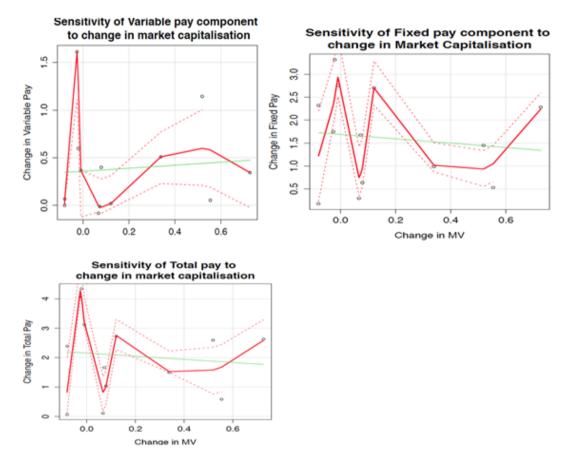


Figure 43: Relationship between changes in variable, fixed and total pay and changes in market value

Examining the plots of the two elements of bank executives' pay for our EBA bank sample it is clear that while the variable pay element of executive pay is indeed positively related to changes in shareholder value its effect is swamped in total executive pay by the negative relation between changes in shareholder wealth and the fixed element of bank executive pay. So it appears the incentivizing effect of increases in variable component of pay in response to increased shareholder value is completely negated by fixed pay being increased regardless of the ability of the bank to return value to shareholders. Given the variability in the sample data, even after it has been constrained by winsorising, we might ask if these underlying relations, while present, have a statistically reliable impact on executive pay changes.

To understand this we report the spearman rank correlations between variable, fixed and total pay and changes in market capitalization for our sample of 13 EBA banks in Table 68 below.

Table 68: Correlation between elements of EBA banker's pay and changes in market value (2013-2014)

Correlation between elements of EBA banker's pay and changes in market value				
Element of pay	Correlation with market value	p-value		
Variable	0.066	0.834		
Fixed	-0.1	0.737		
Total	-0.066	0.835		



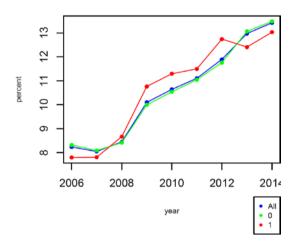
The way in which the positive correlation between increases in variable pay and shareholder value is offset by a negative correlation between the fixed element of pay and shareholder wealth is clear. But what is also clear that there is no statistically significant relationship between changes in shareholder value and any element of European banker's pay. It appears that whatever drives banker's pay increases (and on average there are large increases) it is not increases in shareholder value. The primary difference between the US and Europe is that in the US pay does at least reward good shareholder performance on average, even if this relationship is weak, while growing, on average. In Europe it appears that pay increases and rewards to shareholders are negatively related and the reason for this seems to be the large increases in the fixed element of banker's remuneration regardless of poor shareholder returns.



4 Tables and figures

4.1 Development of risk and performance (2006-2014) (Bankscope)

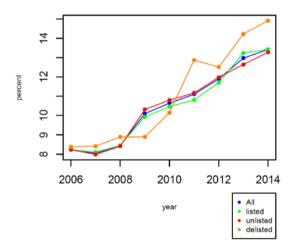
Bank stability and systemic importance and legal form



2006 2008 2010 2012 2014 year | All | 0 | 1

Figure 44: Solvency (Tier 1 ratio) and systemic important banks (GSIB)

Figure 45: Solvency (equity/total assets) and systemic important banks (GSIB)



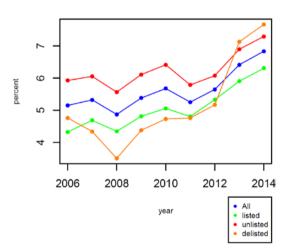
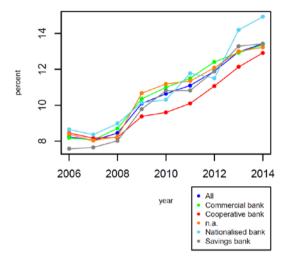


Figure 46: Solvency (Tier 1 ratio) and legal form: listed vs. unlisted banks

Figure 47: Solvency (equity/total assets) and legal form: listed vs. unlisted banks



Bank stability and bank ownership



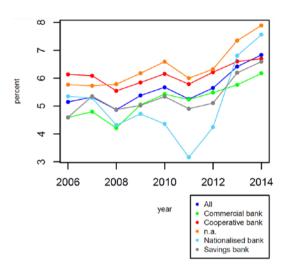


Figure 48: Solvency (Tier 1 ratio) and bank ownership

Figure 49: Solvency (equity/total assets) and bank ownership

Bank stability and bank business models

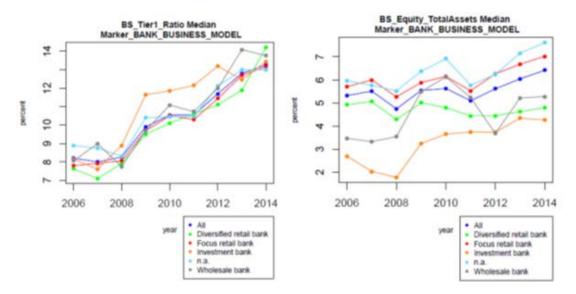


Figure 50: Solvency (Tier 1 ratio, equity/total assets) and bank business models



4.2 Corporate governance characteristics, remuneration and risk-taking

Table 69: Relationship between internal governance and risk-taking

		Impaired loans	Coverage ratio	Accumulated impairments
		Global sample		
CRO has significant input to performance reviews of	Pearson correlation	-0.309 [*]	-0.237	-0.362
business heads	Sign. (2 tails)	0.024	0.082	0.054
	N	53	55	29
CRO has significant input to performance reviews of	Pearson correlation	-0.269	0.027	0.000
identified staff	Sign. (2 tails)	0.059	0.846	1.000
	N	50	55	28
Review of identified staff has received effective	Pearson correlation	-0.438*	0.043	-0.109
added value from the remuneration committee	Sign. (2 tails)	0.025	0.823	0.700
remuneration committee	N	26	29	15
Review of identified staff has received effective	Pearson correlation	-0.472 [*]	0.206	-0.173
added value from the	Sign. (2 tails)	0.020	0.303	0.538
nomination committee	N	24	27	15
The supervisory function is effectively challenging	Pearson correlation	-0.268	0.137	0.195
risk related decisions of	Sign. (2 tails)	0.072	0.359	0.311
the executive directors	N	46	47	29
There are effective controls at the business	Pearson correlation	-0.236	0.094	-0.049
level	Sign. (2 tails)	0.062	0.445	0.785
	N	63	68	34
There are effective controls at the control	Pearson correlation	-0.263*	0.186	0.004
function level	Sign. (2 tails)	0.036	0.127	0.983
	N	64	69	34
We use sophisticated models to measure risk	Pearson correlation	-0.464**	0.281*	-0.071
	Sign. (2 tails)	0.000	0.034	0.721
	N	55	57	28
There is significant training on risk appetite	Pearson correlation	-0.207	-0.075	-0.272
and the implications for	Sign. (2 tails)	0.110	0.551	0.125
non-compliance	N	61	66	33



The board and senior managers specify what risk level is acceptable to the firm	Pearson correlation	-0.169	0.179	-0.111
	Sign. (2 tails)	0.185	0.148	0.537
the min	N	63	67	33

^{*} Significant correlation at the 0.05 level (2-tailed).

Table 70: Internal governance and credit risk-taking (small banks / medium and large banks)

		Impaired loans	Coverage ratio	Accumula ted impairme nts	Impaired loans	Coverage ratio	Accumul ated impairm ents
		Small banks	;		Medium and	l large banks	
CRO has significant input to	Pearson correlati on	-0.176	-0.448**	-0.115	-0.325	-0.204	-0.592 [*]
performance reviews of business	Sign. (2 tails)	0.320	0.005	0.709	0.175	0.433	0.016
heads	N	34	38	13	19	17	16
CRO has significant input to	Pearson correlati on	0.002	-0.246	0.450	-0.140	0.144	-0.557*
performance reviews of identified	Sign. (2 tails)	0.991	0.131	0.106	0.592	0.594	0.039
staff	N	33	39	14	17	16	14
Review of identified staff has	Pearson correlati on	-0.201	0.275	-0.132	0.166	-0.605 [*]	-0.249
received effective	Sign. (2 tails)	0.491	0.285	0.868	0.606	0.037	0.460
added value from the remuneration committee	N	14	17	4	12	12	11
Review of identified staff has	Pearson correlati on	-0.216	0.314	0.000	-0.451	-0.349	-0.323
received effective	Sign. (2 tails)	0.478	0.237	1.000	0.164	0.293	0.333
added value from the nomination committee	N	13	16	4	11	11	11
The supervisory function is	Pearson correlati on	-0.097	-0.249	0.245	-0.111	0.452	0.146

^{**} Significant correlation at the 0.01 level (2-tailed).



		Impaired loans	Coverage ratio	Accumula ted impairme nts	Impaired loans	Coverage ratio	Accumul ated impairm ents
effectively challenging	Sign. (2 tails)	0.639	0.185	0.419	0.643	0.068	0.590
risk related decisions of the executive directors	N	26	30	13	20	17	16
There are effective controls at	Pearson correlati on	-0.337*	-0.123	0.072	-0.136	0.206	-0.210
the business level	Sign. (2 tails)	0.027	0.395	0.783	0.569	0.413	0.418
	N	43	50	17	20	18	17
There are effective controls at	Pearson correlati on	-0.090	0.015	0.072	-0.351	0.297	-0.128
the control function level	Sign. (2 tails)	0.560	0.916	0.783	0.129	0.232	0.625
	N	44	51	17	20	18	17
We use sophisticated models to	Pearson correlati on	-0.246	0.097	0.185	-0.438	0.301	-0.395
measure risk	Sign. (2 tails)	0.149	0.551	0.564	0.061	0.241	0.130
	N	36	40	12	19	17	16
There is significant training on	Pearson correlati on	-0.134	-0.085	-0.200	-0.393	-0.122	-0.377
risk appetite and the	Sign. (2 tails)	0.397	0.560	0.442	0.096	0.641	0.150
implications for non- compliance	N	42	49	17	19	17	16
The board and senior managers	Pearson correlati on	-0.031	0.064	0.102	-0.506 [*]	0.280	-0.492
specify what risk level is	Sign. (2 tails)	0.841	0.661	0.696	0.027	0.276	0.053
acceptable to the firm	N	44	50	17	19	17	16

^{*} Significant correlation at the 0.05 level (2-tailed).

^{**} Significant correlation at the 0.01 level (2-tailed).



4.3 Variable Remuneration in Bank Reports of four major banks

Banks describe their governance and monitoring system over remuneration policies either in separate Remuneration Reports or within the Annual Report. A first analysis of the information contained in those documents for 2014 highlights similarities and differences in remuneration schemes and in particular in the identification of the "regulated population" subject to the new maximum ratio, deferral and other provisions.

In 2013, the methodology for the identification of the regulated population was adjusted in order to take into account the EBA draft regulatory technical standards, combined with internal criteria which took into account the internal organisational structure of the Group.

In 2014, following the publication of Regulation (EU) 604/2014 on 6 June 2014, the scope of the regulated population was reviewed in order to take into account the final version of the EBA technical standards.

In the following boxes (Case Study 1 to 4) we show the relevance of the affected population in four major European banks: BNP Paribas, Société Générale, Deutsche Bank and Unicredit, as outlined in their 2014 Reports.

Box 1: Case Study 1 - BNP Paribas

BNP Paribas

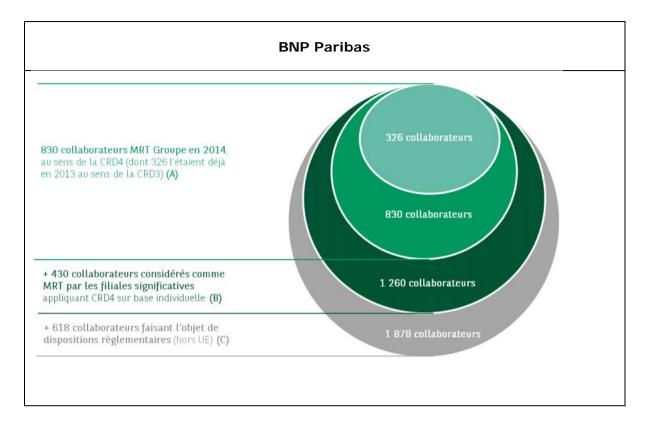
Total employees in 2014: 187 900.

Regulated population in 2014: 1 878 (1 % of the total population).

The new regulatory provisions cause a doubling of the MRT-population, because the new definition included staff from the retail bank and the control functions. As a consequence, in 2014 the Bank revised the composition of MRTs' remuneration in order to get to a better balance between fixed and variable parts. In 2014 and 2015, the General Meeting has been called to vote on the upper limit of the variable portion of compensation payable to senior managers and certain categories of personnel - article L.511-78 of the French Monetary and Financial Code (1), that is a ratio of 200:100 between fixed and variable. In the General Meeting held on May 14 2015 the votes in favour of a higher ratio were more than 80 %. Only 35 % of MRTs were affected by this decision.

(1) In order to be valid, this resolution must be approved by at least two thirds of the votes making up the quorum if this is equal to or over 50 %, by 75 % if lower.

Figure – Composition of regulated staff in 2014



Box 2: Case Study 2 - Société Générale

Société Générale

Total employees in 2014: 148 300.

Regulated population in 2014: 550 (0, 37 % of the total population).

In 2013, the methodology for the identification of the regulated population was adjusted in order to take into account the EBA draft regulatory technical standards, combined with internal criteria which took into account the internal organisational structure of the Group.

This led to the identification of 360 staff members (excluding Chief Executive Officers). In 2014, following the publication of Regulation (EU) 604/2014 on 6 June 2014, the scope of the regulated population was reviewed in order to take into account the final version of the EBA technical standards.

The regulated population for 2014 comprised 550 staff members (in addition to the Chief Executive Officers), all identified due to their material risk impact as individuals.

On this basis, the perimeter of the 2014 regulated population therefore includes:

- the Group's four Chief Executive Officers 4 persons;
- the members of the Board of Directors 14 persons;
- the members of the Group executive Committee and management Committee, which includes the heads of the main business lines and subsidiaries of the group, as well as the heads of control and support functions for the Group (risks,



Société Générale

- compliance, internal audit, finance, legal and taxation, human resources, information technology) 54 persons;
- key staff members in charge of control functions or support functions at Group level and which are not members of the aforementioned bodies 19 persons
- within the "material business units" the main operational managers (members of the executive committees) and managers responsible for control functions, who are not already identified by the above criteria – 204 persons;
- staff having credit authorisations and/or responsible for market risk limits exceeding materiality thresholds at Group level and who are not already identified by the above criteria – 82 persons;
- material risk takers whose total remuneration for 2013 exceeds the 500 K€ threshold defined by the EBA and who are not already identified by the above criteria, which concerns a limited number of profiles having essential skills for the development of certain Group activities and some key employees on the financial markets who achieved exceptional performance during the last financial year 177 persons.

Table - Regulated population and remuneration scheme

2014	Group Total
Regulated population	550
Total Remuneration	389,6
of which Fixed remuneration	184,3
of which Variable remuneration	205,2
% of instruments	54%
% of deferred	50%
average ratio of variable / fixed	111%

Data excluding Executive Officers

Box 3: Case Study 3 - Deutsche Bank

Deutsche Bank

Remuneration Report included in Annual Report

Our Group variable compensation ("VC") pool in respect of financial year 2014 was € 2.7 billion. In keeping with our historic approach, 45 % of the pool was deferred over three to five years and made subject to a combination of behavioural and performance based forfeiture provisions. The scope of the forfeiture provisions was significantly extended in 2013, and the Bank has maintained these provisions for performance year 2014.

The Bank has identified 2,903 MRTs in respect of 2014, representing a 124 % increase from 2013.



Deutsche Bank

In prior years, the number of our MRTs has been significantly higher than many of the Bank's principal competitors, both from an absolute level and as a percentage of total employee population. However, and as intended, it is expected that the application of the EBA RTS will result in a much more level playing field.

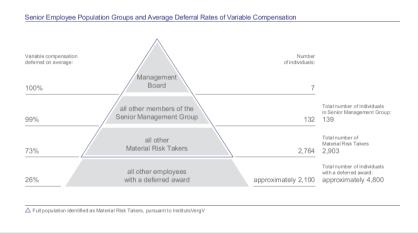
Approximately 44 % of the MRT group are based in the European Union (EU). From the MRT population, we again identified a core senior management group consisting of 139 employees. As the leaders and stewards of the Bank, it is prudent that the majority of their compensation should be linked to the long-term success of the Group. As such, their deferred equity awards are subject to a combined deferral and retention period of five years and the average deferral rate of variable compensation across this group was 99 %.

Total compensation will continue to be performance and market driven. To ensure that total compensation levels remain competitive, the application of a 1:1 and 1:2 ratio has required an adjustment to the compensation structure of a number of employees.

In order to support attracting and retaining the right people in the various country locations and business models, market competitive fixed pay levels have an important part to play in ensuring the Bank has the critical competence required to meet its strategic objectives.

Of those employees who received a fixed pay adjustment, certain employees received an Additional Fixed Pay Supplement ("AFPS"). The Management Board approved the introduction of the AFPS, primarily for benefits and pensions cost management purposes. Together, monthly fixed pay and the Additional Fixed Pay Supplement form 'total fixed pay'. All things being equal, employees who received a fixed pay increase will see a reduction in their VC.

At the time of adjustment in July 2014, approximately 1.100 employees, or about 1 % of the Bank's global employee population, were identified as being eligible to receive fixed pay increases, at a 2014 fiscal year cost impact of \in 0.3 billion.





Box 4: Case Study 4 - Unicredit group

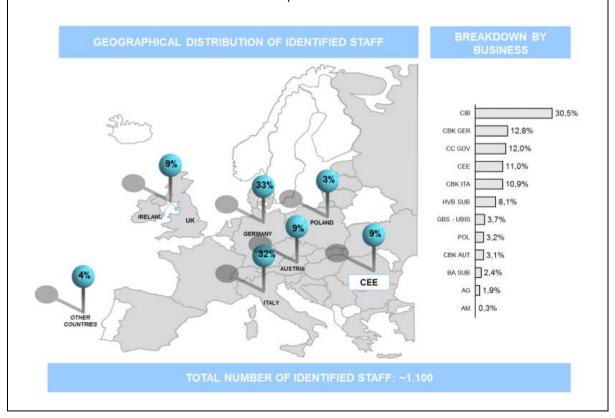
Unicredit Group

For 2014, the assessment process performed pursuant to the European Banking Authority Regulatory Technical Standard (RTS) and documented into 2014 Compensation Policy, brought to the identification of ca. 900 resources. After the Annual General Meeting of May, 13th 2014, the ex post adjustment brought to the identification of ca. 1 100 Material Risk Takers, to include the following factors:

- regulatory update in some countries in which the Group operates;
- further risk assessment performed for below executive population;
- alignment to the outcome of 2014 banding review and 2013 bonus pay-out.

In 2015, Identified Staff population has been reviewed guaranteeing full compliance with the abovementioned regulatory requirements and taking into consideration the latest Bank of Italy "Disposizioni di Vigilanza per le banche", issued on November 18th, 2014 (7th update of Bank of Italy Circular Nr. 285 of 17 December 2013)

Target population represents approximately 0.7 % of the Group employee population, outcome in line with the results of 2014 process.



After the publication of the remuneration reports by the two largest French banks, containing details on their highest paid employees and the material risk takers, an



article published on the website www.efinancialcareers.com proposed a comparison between the two in terms of attractiveness of their remuneration schemes. ¹¹⁸ The results are summarised in Table 71 and offer a clear representation of existing differences among banks' practices.

Table 71: Benchmarking BNP Paribas and Société Générale 2014 remuneration policies

Characteristics	"Best bank"	Comments
Salaries equal or higher than 1 Mill €	BNP Paribas (149 vs.109 of Société Générale)	The difference is due to the fact that BNP Paribas employs more staff in the investment banking business.
Total remuneration	Société Générale	Although the overall level of remuneration has decreased by 15 % at Société Générale and increased by 2.1 % at BNP Paribas, Société Générale offers on average a more generous overall remuneration to its employees, that is 708.4k € per employee on average against 625.6k € at BNP Paribas.
Best bank for total remuneration in CIB (Corporate and Investment Banking)	BNP Paribas	The populations of CIB make up the largest share of regulated professionals. BNP Paribas takes the lead with an average remuneration per employee of € 833k in 2014 against € 795k at Société Générale. It is also interesting to note that in these activities, the average remuneration per employee has increased very significantly compared to last year is about 22 % in the two banks.
Best bank for the fixed salary paid to CIB staff	BNP Paribas	There is about 10 % difference between the two banks' fixed remuneration. Regulated CIB employees have an average fixed salary of €416k at BNP Paribas and of €375k at Société Générale.
Best bank for the bonus paid to CIB staff	Société Générale	In the CIB business, the variable remuneration represented 112 % of the fixed at Société Générale against 100 % at BNP Paribas. The average bonus is actually quite similar in the two banks but slightly higher at Société Générale (€ 420k) than at BNP Paribas (€ 417k).

Source: http://news.efinancialcareers.com/fr-fr/205522/remunerations-bnp-paribas-versus-societe-generale/ 7 April 2015.



Characteristics	"Best bank"	Comments
The bank who defer less the payment of variable remuneration	BNP Paribas	The deferred variable component should be particularly important when the bonus is high. But Société Générale is more stringent than BNP Paribas in this respect. BNP indicates a delayed rate of 40 % to 60 % when Société Générale informs that for the highest variable remuneration deferred rate can exceed 70 %. Since 2012, the deferred rate was increased to 100 % for the portion of the variable remuneration exceeding € 2 million.
The bank which spreads the less its deferred payments	Société Générale	At Société Générale, the acquisition of the deferred part of the bonus performs faster: one third each year in three years, with the first due in cash and the last two in equity. BNP Paribas, in turn, pays the bonus subject to delayed maturity in 8 tranches, with a final payment in September 2018, that is to say three years and nine months after the reference year.



5 Responses from surveys and interviews

5.1 Institutions, identified staff, consultants and supervisory

Table 72: Comments of institutions (q: "Which of the following performance criteria were used to determine staff variable pay for awards for 2014?")

Bank size	Comment
Big, listed banks	"The bonus pool determination and consideration of performance criteria was based on a variety of metrics which include, but are not limited to, CET 1 capital ratio, liquidity, risk bearing capacity, cost income ratio, compensation ratio, IBIT and net income. Further measures are above that intended to facilitate effective risk management processes are embedded addressing an appropriate risk adjustment using an economic capital model. On an individual level, the individual accountability for risk excessive behaviour and misconduct was increased and further strengthened over the last years and those aspects are much more part of the variable compensation decision now." "For variable remuneration the following principles are applied (please note that for members of Senior Management, remuneration is only paid in form of fixed salary). It must be in harmony with the Bank's goals and how it achieves these goals, It must be designed in such a way that it does not encourage unsound risk-taking, It must be within the scope of the Bank's risk tolerance, It must be based on a profit result that has been risk-adjusted before allocation is made, A payment that has been deferred but not yet disbursed may be risk-adjusted where necessary, It must be based on both financial and non-financial criteria, It must take into account a reasonable balance between fixed and variable remuneration, and not exceed 100 per cent of the fixed remuneration, It must be based on sustainably good financial performance, It must be partly deferred in terms of the amount and in terms of time, It must be subject to good administrative order and compliance, and It must be reducible in full or in part, if the circumstances require this. The Bank's assessment regarding provision for and allocation of variable remuneration must be based on risk-adjusted performance measurements, and both present and future risks must be taken into account. The result must be offset by the actual costs of capital and liquidity. Profit allocation among units or interna



Bank size C

Big, listed banks (cont.)

Comment

"For Capital markets activities within our corporate and investment banking department, the bonus pool is calculated by the application of a participation rate (p %) set each year on the basis of:- the performance results of the business line as compared with expectations and competitors (positive correlation),- the portfolio's risk level (negative correlation) and-market conditions and benchmark, to a basis representative of the results including:- direct income, net of direct costs,- indirect costs allocated to the business line,- refinancing cost invoiced internally (including actual cost of liquidity),- the cost of risk generated by the business line,- the cost of equity capital allocated during the year, ratio (c %) aimed at taking into account the return on capital used in the concerned business lines; it is set each year by General Management after consultation with the CRIF committee and presentation to the Compensation Committee of the Board according to the formula: B = (R - c % x K) x p %) where K is the amount of capital allocated and R is the net result after cost of liquidity, direct and allocated costs, and cost of risk. For the other Group Entities, the variable compensation envelopes are determined by the application of a variation rate from the preceding fiscal year, set notably on the basis of the Group's performance profile or the performance profile of the business line as a whole after taking into account risk (in particular for Retail and Corporate Banking), as well as on the basis of market practices. Individual allocations are made in a discretionary manner on the basis of:- the performance of the team to which the concerned party belongs and his or her individual performance (performance is measured on the basis of results achieved and the risk level associated with these results),- assessments (a mandatory annual individual assessment performed by the line manager), which simultaneously evaluates: qualitative achievements in relation to fixed objectives, professional behaviour with regard to values, professional code of ethics and the Group's procedures, Contribution to risk management, including operational risk and the managerial behaviour of the concerned party, where applicable. For support and control functions, the variable remuneration bonuses are determined independently of the performance of the business that they validate or whose operations they verify, but taking into account the situations of the specific labour market, to a limited extent. The variable remuneration envelopes of the Group functions are determined by taking into account the Group's performance profile, while smoothing over upward or downward fluctuations. The variable remuneration envelopes of the activities and businesses functions are defined with respect to the Group functions envelopes. For Senior Management, 75 % of the variable portion of remuneration is based on quantitative performance indicators (business and group results, profitability, etc....). The variable portion of remuneration linked to personal qualitative assessment by the Board of Directors is capped at 25 % of the target variable remuneration. In performing its qualitative assessment, the Board takes into consideration foresight, decisionmaking, management skills and exemplary qualities."

"Other measures for Senior Managers include "Profit before tax", "Jaws" (defined as revenue growth less operating expense, on an adjusted basis), "Grow dividends" (defined as dividend per ordinary share (USD) in respect of the year, measured year on year; consistent with the growth of the overall profitability of the Group, predicted on the continued ability to meet with regulatory capital requirements), "Strategy execution" and "Global Standards including risk and compliance". The performance objectives for Other Identified Staff are aligned to the bank's strategic priorities: grow business and dividends, implement and adherence to Global Standards and streamline processes and procedures. These objectives include a mix of financial and non-financial measures depending on the individual's role." "As of 2011 clear guidelines have been defined on how to set performance objectives: quantitative, qualitative and risk related objectives, linked to the business activities, are used to evaluate performance. Risk awareness measures are integrated through the risk gateway and part of the variable is determined by Risk Adjusted Profit." "Relative net profit against peers"



Bank size	Comment
Big, listed investment bank	"Other: Liquidity coverage ratio; Adherence to Board approved and lower level risk limits; Asset gathering (specific to Investment Management and Wealth Management). - Return on Equity (calculated to ensure equity sufficient for all future capital requirements), adherence to risk limits, and capital & liquidity coverage ratios have become more prominent measures of performance for the purpose of evaluating performance and sizing the discretionary bonus pool."
Big, non- listed banks	"Additional for Senior Management: RORAC at the firm and business unit level, where possible. DB I of the business unit. Qualitative objectives on an individual level" "Prerequisites for pay out or vesting of variable remuneration are an adequate capital and liquidity base, risk capacity and revenue. The individual variable remuneration results from the achievement of performance criteria on bank level (financial and qualitative criteria) which are multiplied with the achievement of quantitative and qualitative performance criteria on business unit and individual level. Minimum target achievement and bonus caps are applied."
Medium, listed banks	"Loan to deposit ratio, Tier Total ratio, cost level." "Cost to Income; Level of Capital adequacy ratio; Risk indicators related to liquidity" "Cost/income ratio for the Senior management level staff" "RWA, Risk costs, Cost/Income, Total Cost, Strategic initiatives, Income of the specific client's segment, Operational excellence"
Medium non-listed banks	"In determining the variable remuneration, the bank mainly uses qualitative targets." "Leadership and personal development" "Other variables include: number of customers, growth in deposits, number of customer meetings with existing customers and fee income growth." "Our variable pay consists of two components: 1) A profit-sharing system (based on net profit), which is not linked to individual performance, 2) Bonuses (which may be based on a target bonus model, or purely discretionary), which are awarded based on individual and/or team and/or business objectives. Evaluation criteria systematically include "soft" elements, including compliance and conduct." "implementation of tasks and projects"
Medium, non-listed investment firm	"Objectives include: contribution to the success of the firm as a whole, prudent/risk aware behaviour, training juniors, improving systems, contributing time or talent to other/non-trading departments (e.g. software development, risk, compliance, HR/recruitment), etc."
Small, listed banks	"Our organisation (<160 persons) is small enough to allow management assess the performance of each and every individual without the need for setting targets of any type. At the beginning of each financial year high level KPIs are set as broad objectives and these are generally speaking transmitted to the whole staff complement. However no individual targets or budgets are set to individual managers. The risks of doing so have been recognised by Management since many years." "Company projects (e.g. implementation of a software system, banking system), market growth, customer experience, employee satisfaction/engagement, cost savings, et cetera" "Total Shareholder Return used only for 3 senior managers. EVA was replaced in 2014 by RORAC"



Bank size	Comment
Small cooperative banks	"Variable remuneration components exclusively refer to national collective labour agreements (e.g.: the annual bonus for senior management and productivity bonus for middle management and employees). The productivity bonus for middle management and employees (which represents the main part of the variable remuneration) is linked to indicators - set out by the collective agreement - that take into account profitability, risks, productivity and efficiency in order to measure the economic performance of the bank, and it is allocated to the staff on the basis of their placement. Only senior management earn variable pay forwards. Other identified staff have productivity and individual bonus, if they are middle management, whereas don't earn any variable remuneration, if they are members of the supervisory board or of the management board. Operating Profit, Net Profit, Total Capital Ratio, RORAC and Free Capital Ratio are gates that determine if variable remuneration can be paid. If those entire index aren't above identified threshold values variable remuneration cannot be awarded. However they aren't used to determine variable remuneration amount."
Small and medium sized, unlisted savings banks	"Variable remuneration components/performance criteria according to the rules of the collective labour agreement. Deposits, personnel costs, administrative costs, Cost-Income-Ratio."



Table 73: Comments on malus and clawback

Respondent	Comments
Institutions	Most firms anticipate difficulties with the introduction of both malus and clawback, but there seems to be unanimous acceptance among our interview respondents that malus is a more effective tool than clawback in achieving financial stability. The Association of Financial Management Europe (AFME) argues that clawback is difficult to implement, especially when there are cross-jurisdictional contracts in place, as was the case of the global firms. Malus is seen as the preferred option, although this is still a complicated process: one UK bank. In operating malus, it introduced an accountability review which included the establishment of steering committees for incidences that require disciplinary action. This was costly in terms of resources. There was also a need to estimate and calculate complex scenarios to appropriate apply the penalty. A German bank stated that the "implementation of malus rules and annual process of possible malus identifications lead to higher costs", while two of the biggest global banks felt that there was little benefit to the bank in terms of cost savings in situations where malus was applied. A French bank, when interviewed, stated that they applied a simpler mechanism where there was no need to identify which of prior instalments needed to be reduced or cancelled: rather, the preference was to reduce the member of staff's awarded variable pay in the current year and, if necessary, in future years as well. This, however, may need to change if variable pay begins to become a less significant part of the remuneration package, as reducing contracted fixed pay is bound to be problematic.
Identified staff	Clawback was seen to be more of a political response rather than an effective and enforceable policy. This view was underlined in the interview with one bank who stated that while they are ahead of the game in terms of malus, clawback has not been implemented anywhere in the industry. Indigo
Remuneration consultants/ headhunters	Remuneration consultants McLagan AonHewitt argued that malus is good for top executives, although it works more efficiently when there is more variable pay at stake. This is a view shared by both Mercer and a large investment bank. Another large bank, in a free text response component of the survey, adamantly stated that malus was "useless under any scenario", a comment that they also provided when asked a similar question on clawback. Headhunters indicated that they are aware of some – albeit very few – clawback incidences occurring in Germany. Malus and its associated conditions on unvested remuneration were seen by remuneration consultants as being an effective tool if applied in practice. These adjustments should be made on the basis of either revised scenarios or individual behaviour (risk, compliance, conduct). There has been improvement in laying the conditions for malus at a more granular level resulting in more firms creating conditions at the business unit level. Expert interview (17.12.2015)



Table 74: Comments of supervisors to "How have firms improved in their measurements of risk adjustment of performance?"

Comments of supervisors

"So far there is too little evidence of this in order to point out any tendencies."

"The institutions have introduced a more granular approach regarding performance indicators. They are now differentiated between business lines and functions and of course include criteria on behaviour. Some indicators now include the ratios of own funds (CET1 for example) or measures of underlying risk."

"In 2013, 15 on-site inspections were conducted. In this context, the performance measurement process was also reviewed. In most institutions the cascading of the targets has been non-transparent and not comprehensible. Furthermore, the institutions often implemented remuneration parameters only referring to profit but not taking into account the institution's risks. Meanwhile, institutions have progressed. However, progress differs significantly between institutions."

"Some institutions have introduced risk adjustments mechanisms applicable to bonus pools. In general they have been making progresses in order to use relevant parameters to measure risk adjusted performance (RORAC, RARORAC) in order to align risk and remuneration. Some of these metrics are still burdensome requirement for small and medium and less sophisticated institutions."

"We are content that in most cases, firms do consider an appropriately wide range of risk and performance factors. However, the complexity and discretionary nature of these models often limits transparency around the decision making process."

"Since the implementation of the Remuneration rules, firms have made significant improvements to their measurements of risk adjustment, with some using a combined formulaic and discretionary approach when determining aggregate bonus pool levels."



Table 75: Interview responses on performance-based pay

Interview responses

Key attention needs to be placed on the metrics used by institutions to measure performance. Banks maintain sophisticated evaluation systems and these will continue to undergo change in order for metrics to better measure performance and risk. Bonus pool allocation down to the individual via divisions and desks could be scrutinised more closely by regulators but whereas greater level of granularity can be good, it can also be too detailed and the main factor is to ensure that there is a link between pay and performance. The KPIs (key performance indicators), values, cultures vary between institutions. The levels of prescriptiveness vary and interviews for appraisals allow more judgment on pay based on performance (where non-financial measures may be emphasised). Provider association interview (16.11.2015)

The details of the performance conditions applied to deferred variable remuneration can be found in certain bank remuneration report publications. In the case of one large global bank, three main areas are noted as influencing the deferral amount received by staff): 1) whether the person is still in employment (presence condition), 2) the extent to which KPIs and targets have been met; 3) Malus/clawback adjustments (mostly behavioural factors resulting from team actions, overreaching limits, lack of compliance and asymmetry with the risk department authorisation). The specificity of the performance reward allocation criteria doesn't change much and is 50 % determined by the business line performance (e.g. capital markets) and 50 % the core business (i.e. the whole of investment banking arm). The operational result receives a score and if the bonus bracket is positive, a progressive allocation of bonus will be distributed to the staff member. Big listed bank interview (1.12.2015)

Balanced score card approach is predominantly used in the EU. There are two main reasons for this and these include the faster changing environment (that requires banks to sell non-core assets, change their model mix, and create a better capital buffer etc.) and to have a more balanced view moving away from purely financial results. With such non-financial metrics making their way to the top executives and even find their way to disclosure documents and published in their annual reports (the EU compares favourably versus the US in the use of scorecards at least publicly but overall as well. The transparency with regard to the s-t/l-t, internal/external views is communicated to stakeholders. These stakeholders appear to struggle with some of these disclosures but the 60-70 % financial measures versus 40-30 % non-financial measure son the balances scorecard). Expert interview (30.11.2015)

There is a strong differentiation between performance measures across business units and industry. Evan across investment banking there are different models that thus necessitate different performance metrics. For example, M&A on Capital markets rely on fee earning models (so they focus on interest spread, the relation between cost and return on capital), whereas retail banking staff performance is measured more in terms of its cash-flow and deposits. All these banking divisions have their own set of financial and non-financial measures e.g., in M&A it is about long-term client relationships (for repeated custom over the next ten years), retail banking is more about measuring customer satisfaction and trust (Know your Customer). Banks appear to have done a great deal in moving towards those balanced performance metrics. It is difficult to know whether the banks would have moved in this direction anyway without the CRD IV. Some firms say that they were already doing these things and are now only actually being forced to write these down and documenting them to regulators, whereas others e.g. a universal bank that has acquired an investment bank has found the regulation helpful to improve the performance measurement side of the performance and risk-reward assessment. Regulation has helped to substantiate what should have been happening from the beginning. Expert interview (30.11.2015)



Table 76: Responses of supervisors to the question "Have you observed any particular difficulties for firms in paying out variable pay in instruments?"

Responses of supervisors

"Payment in instruments is not required if the institution has not issued any instruments. Issuing instruments just to comply with remuneration requirements would be burdensome for any institution."

"Non-listed institutions have difficulties in properly valuating equity linked instruments."

"Non-listed institutions and e.g. savings banks and cooperatives that do not have shares have a big problem with this. If regulation requires something like this, such an instrument should be defined in detail in regulation, so that institutions could apply it easily. They would know that this instrument would meet the requirements. However, such an instrument should be perceived as remuneration by the member of staff, which is very difficult if the instrument is something else than a share that one knows how to convert to cash and one can follow the fluctuation of the value."

"Most firms find there is no need to require paying out in actual instruments when they can replicate the value of these instruments with cash (share-linked instruments). This issue has been flagged by many institutions and the EBA intends to take it into account. Moreover, for very small institutions or very small amounts of variable, it does not make much sense to require the issuance of instruments for remuneration purposes only."

"For all institutions which are not listed stock companies. They have problems to find instruments or indicators which adequately reflect the credit quality of the institution."

"..with reference to the non-significant institutions, it must be noted that the use of instruments different from shares and other share-linked instruments (i.e., instruments under article 94(1)(I)(II) of the CRD) may experience some difficulties also in significant and listed institutions."

"Listed institutions usually pay in shares, not in instruments. Small non listed institutions find it difficult and very burdensome the implementation of such instruments."

"For non-listed firms that do not have access to shares such as building societies, we have observed difficulties in devising suitable equivalent non-cash instruments that are capable of effectively tracking firm performance. Asset management firms that are caught by sector specific requirements such as AIFMD have also found it difficult to reconcile the need to pay shares under CRD IV and units in the fund under AIFMD. It would be helpful to expressly allow for the use of units in the fund for asset managers in scope of CRD IV."

"Upon the introduction of CRD III, building societies initially had difficulties with payment in instruments, given they do not issue shares. However, this has largely been resolved through the issuance of alternative instruments."

"According to the banks it is very difficult to issue shares or other instruments that can adequately reflect the credit quality of the group under the current economic conditions in Greece. Moreover, the majority of the credit institutions' group subsidiaries (with limited exceptions) are not listed in a regulated market."



Table 77: Interview responses for the use of deferred remuneration

Responses of credit institutions and investment firms

An impact of the CRD3 was that banks started to have completely different pay schemes, some with deferrals of 3 years, some 5 years and various cash amounts. Expert interview (23.11.2015)

The deferral structure has been in place for a long time and CRD III has constrained them since 2009.

Banks like deferrals because they constitute a protecting mechanism, however banks say that staff discount deferral amounts when they are small and thus these no longer represent incentivisation pay methods. Deferral was seen as most problematic for mid-level staff that may have more easily transferable skills. These staff members need to be controlled more closely and should ideally be rewarded more when they perform well. Provider association interview (16.11.2015)

Deferral and Malus are not a bad thing, but consultant was of the view that the jobs that are exposed to malus is still a bit wide at present and excessive but for people leading the firm this is especially a good thing. The top executives have historically had a long-term vision and equity ownership due to deferral, however the regulation has now expanded this deeper into the organisation by including a wider group of risk-taking staff. One concern was with overreach and that application of deferrals largely depends on the national supervisors and their frame of reference with some interpretations applying deferral starting at €10,000 because they see this amount as being a significant bonus. This interpretation discrepancy was seen by the consultant as having gone too far and is in part due to remuneration levels being very different across the EU leading to overreach in terms of the regulations impact with regard to its efficiency.

The consultant found the capital rules are very efficient as they stabilise the firm and create a buffer against future downturn in the economy, and by nature the remuneration rules are less efficient because they regulate at a very individual market level e.g. interfering in private contracts create inefficiencies in that portion of the labour market and is creating an own eco-system around it that then loses touch with the other environments around it and becomes an isolated market place. Efficiency is greatest at the governance side measures (especially in the hands of an appropriately trained and adequate regulator who will test and make banks look at their systems, approaches, the sustainability of those polices etc.), the deferrals and malus are not bad and widely accepted as effective in the industry particularly if they would be done on the basis of a tiered MRT system, where you give more room to lower deferrals at the lower income end to be more competitive to the market place beyond just banking. The consultant saw the maximum ratio as ineffective and pointed out that the motives behind the cap are clearly the result of a politically led discussion not a regulatory led one.

Many firms have been refining the language in their mandatory deferral plan to put more definition around what would trigger a forfeiture event. The large majority of firms have now incorporated language into their plans that mandates all or a portion of unvested awards can be forfeited in the event that the individual is found to have engaged in fraudulent or malicious activities (misconduct) or engaged in hedging activity of the firms common stock. While most firms have incorporated similar criteria to define what would trigger a forfeiture event, there are differences across firms in regards to how the forfeiture process is administered. Roughly a third of firms have a formulaic process to determine if and how much of an unvested award is forfeited in the event a forfeiture event, such as a loss, is triggered. In these cases, the size of the loss would generally determine how much of the unvested awards should be forfeited. More prevalent, however, is a discretionary review in order to determine if / how much of the unvested awards should be forfeited based on the circumstances of the event. Two thirds of firms use this process. Expert interview (30.11.2015)



Responses of credit institutions and investment firms

One limitation affecting deferrals is that they still fail to reflect long-term performance and are not multi-timeframe based arrangements. Most banks use a consistent deferral table for all employees and the length of time of the deferrals is not adjusted for the length of the risk horizon of the individual's performance period. Because these tables are fixed there is not a lot of flexibility to align the deferral period with the risk as such mechanisms would call for very different deferral periods based on employee characteristics with such deviations of deferral leading to greater management complexity of the system. The EU 3 year minimum deferral could be potentially lengthened for annual bonuses. In the US there is considerably less use of mandatory deferral however when these are used, they are usually over a similar 3 year period. As opposed to annual bonuses, the US banks prefer to use variable pay in the form of long-term incentive plans (LTIP) as these are seen as more forward looking programmes not based on annual bonus arrangements. The preferred LTIP vehicles include performance shares (shares awarded based on obtaining certain performance targets set over several years with criteria set at the time the opportunity is given to the employee at the beginning with measurement over 3 to 5 years of the plan). The added advantage is that employees could still receive variable pay despite cases (seen in the past years) where top management has received no annual bonus due to firm performance and thus receives no deferred payments in the subsequent years. Expert interview (17.12.2015)

Table 78: Interview responses on the impact and relative effectiveness of the different remuneration measures

Comments by credit institutions and remuneration consultants

The most significant factor improving financial stability of the banks was seen by remuneration consultants as the changes to risk management and its linkage with remuneration deliberations. These changes have fostered a stronger risk culture in banks. While EU banks were already ahead in terms of risk management and remuneration compared to US banks, EU banks have also improved in their setting of goals, the amount of pay linked to performance and risk ratings of individuals etc.. Banks now review remuneration from risk perspective and factors such as leverage, caps on programmes, inclusion of risk metrics in measurement of performance and malus. Supervision has also been effective as highlighted in the US jurisdiction. In the US banks there was a large need for greater simplification of incentive plans and remuneration programmes as these had proliferated in organisations with divisions having their own plans making control and oversight difficult. The internal governance processes have improved for US banks as a result of simplification and oversight. This was less necessary in the EU. Risk management was seen by a leading consultant as the biggest beneficial impact of the reform both in terms of monitoring but also in terms of involvement of risk in remuneration design. Malus has also had an impact on aligning pay with risk and performance. Expert interview (17.12.2015)

In terms of recommendations for further improvement in sound remuneration practices, one leading remuneration consultancy said that if regulatory attention could be focused somewhere it should be away from structures towards governance, culture and performance measurement. An alternative view is that pay structures are there for punishment and that more should be done for incentives and promoting the right performance i.e. rewarding staff for right behaviour rather than only punishing them for the wrong ones. Greater focus is needed on what staff is doing and not what firms are paying them for this work. Expert interview (30.11.2015)



In the specific case of the UK for example, the regulator the PRA has been very active in prescribing stricter requirements for senior managers. In their consultation the prudential regulator looked at regulating further in two areas:1) Longer deferral periods (7 years for senior managers) (Some justification for these requirements were described in their consultation paper even if no complete impact assessment of these measures was undertaken (See supervisory statement CP 15:14 for reasons why the UK saw longer deferrals as necessary)) and 2) It requires a prudent evaluation of bonus pools (one consequence of which is that firms are now risk-adjusting pools in a more comparable way using the same calculation methods. This was seen as a positive regulatory measure that could be extended to the EU. Provider association interview (16.11.2015)

While the EBA can be praised for encouraging long-term equity pay as a tool of alignment between employees and shareholders (as employees are the ultimate drivers of the wealth), one suggestion for improvement and area of greatest efficiency improvements is seen to be in extending the payment of deferral and in shares in the calculation of the discount factor for calculating the variable remuneration to be taken into account for the maximum ratio. The discount factor could be used more strongly as a tool in conjunction with the maximum ratio. It is currently far too complicated and while it can make a material difference many banks are not believed to be making use of it as much as they could. If the discount factor could include in the calculation the proportion of deferral over say 5 years, this could incentivise more deferrals and lessen the negative consequences of the maximum ratio. If pay-out in equity could be used in the calculation this would reinforce the use of variable remuneration, deferral etc. Big listed bank interview (22.12.2015)

Banks and one in particular specified that staff working in functional positions (compliance, risk, control - areas where there is more competition for attracting these staff from other areas) are the most susceptible to creating difficulties since rebalancing pay for those staff in those areas has been made more difficult from the regulation. EU most regulated when it comes to pay and global peers (persons with similar roles and levels of responsibility) their pay has to be structured in different ways. Big listed bank interview (13.11.2015)

In principle the industry has broadly accepted that variable remuneration should be regulated. The remuneration rules need to better balance prudential objectives Big listed bank interview (22.12.2015)

Impact of CRD IV Remuneration provisions have limited impact in the context of other capital and conduct related regulatory changes. In terms of prudential stability, the impact is limited. Other CRD IV measures such as capital buffer requirements have had a significantly greater impact on cost, revenues and pay determination. When looking at the remuneration levels and the ability to compete with adjacent sectors such as the asset management firms, boutiques or tech firms, the greatest factor was the capital requirements. These made the cost of capital become more visible and thus made banks make greater changes to their business activities. This is also the case with US rules such as the additions restrictions on activities under the Volker provisions that have affected previously low economic profit but high accounting profit activities. This impact has been felt over the past few years. E.g. Chart 10 that shows total remuneration per capita for the capital markets space (excl. Retail etc.) for the largest banks has continued to decline since the crisis and further since 2009. 2014 expectations are the same for 2015 but marginally lower levels still, thus prolonging the trend yet further. This is attributable to the capital buffer rules, the economic development levels trending downwards but also due to heightened competition from the asset management firms (in common categories or areas such as infrastructure, private equity) and boutiques that are much more lightly regulated (unlevel playing field issue) and tech firms (apple, yahoo etc..). The level of competition varies by position and while the MD level pay can be similar, the pay for VP and associate level staff banks cannot compete with such high remuneration. Capital structures that affect the impact to the economy are seen as fair and shadow bank entities that have less of an impact on the economy do not have the same capital requirements (although some firms like Blackrock, who own 40% of the economy, would create huge repercussions should something happen to them). In the longer term banks are likely to either concentrate on their retail side or they break up into smaller entities and thus will be less systemically. Expert interview (30.11.2015)



Limitations of the regulation and avenues for further work: The structural changes have had limited impact on staff behaviour in respect of risk taking to date. It punishes behaviour but doesn't incentivise performance or a change in the culture. Risk and reward are increasingly aligned. Risk functions now have a substantially more significant and [wider ranging] role. Further work required on culture change and incentivising good conduct/behaviours, in addition to 'punishing' poor conduct/behaviours. Culture/behavior/attitudes towards risk and governance are not influenced by pay. Performance is affected and reinforced by pay. The current measures tend to be punishments which negatively affect motivation and performance as well as the ability to attract top talent Expert interview (30.11.2015)

Table 79: Responses on pay-out in instruments

Interviews with credit institutions

One bank especially sees a problem with payment in shares as opposed to share-linked in jurisdictions where this is not possible. In some countries there are also limits on payment in shares. The objective is the same but one is less complicated to put in place. Same incentivising power of the share. Big listed bank interview (13.11.2015)

The majority of international banks and all large UK banks had a well-balanced policy of payment in shares. This alignment of management and staff generally with shareholder interests was an established and consensus of governance best practice in the UK. The 1:1 maximum ratio made the introduction of role based allowances in shares necessary because they did not want to lose the previous level of shareholder alignment (reducing payment in shares would have reduced this alignment). This policy seems to have been recommended by the leading remuneration consultants used by the leading banks (on the basis of reward best practice guidelines across industries not just financial services and the objective of having "skin in the game"). In the form of an example, total remuneration of 1000 units before and after the cap has a direct impact on the payment portion in shares.

- Before: Fixed 200, Variable 800 (of which cash and shares 50 %: 400, 400)
- After rebalancing due to cap: Fixed 500, Variable 500 (of which 250, 250)

Result: payment in shares (alignment) was reduced from 40 % to a weak 25 % (i.e. the need for a role-based allowance in shares) Big listed bank interview (3.12.2015)

Alignment function which shares inhibit can be seen because the crisis of 2008/09 caused certain bank shares to drop considerably and staff lost considerable money they had thought had been saved (with large staff distress and shortfalls). In banks where the policy is to offer its entire staff (not just the identified staff) the possibility to be paid in shares (made attractive due to tax advantages), the powerful (and detrimental) tool was demonstrated. Big listed bank interview (3.12.2015)

With regard to deferral and pay-out in shares, the UK banking industry is today very familiar with these mechanisms, they understand deferral and they are comfortable with the concept of delivery of pay in shares. However, one aspect relevant for competiveness issues is that the use of deferral is less advanced in other industries (this would suggest that deferral policies should be part of a wider public policy governance agenda if financial services are not to be disproportionately affected). While share pay-out has been an established practice for over decades, deferrals are only around since 2010, but in the 5 years of their existence, they have clearly become established (and initial injustice felt by staff is no longer a strong factor). One lesson is the importance of education effort surrounding these reforms (e.g. training on these and similar new issues could be made mandatory to improve acceptance faster) especially for the font line staff. Big listed bank interview (3.12.2015)



In some locations of their international activities (especially in Asia: India and Singapore) pay was not actually possible in the form of shares, and there phantom shares (linked) were used. At the time they had a large investment banking activity in the US and across Asia. The costs of administering share based schemes are significant. Usually the administration and organisation is undertaken by third party share scheme administrators. These providers (e.g. Computershare and Eccrinity) are used to distribute shares to employees. They offer a portal through which employees can log in and monitor and trade their shares. As a result there are a number of cost elements that are incurred behind the scenes by the bank running these schemes in terms of the manpower to run the mechanism. The main difficulty with creating debt linked instruments as a form of pay e.g. Convertible bond type instruments is the employees' difficulty in understanding them and what they mean for their wealth and income. While this can be minimal for the top executives who are savvy in financial matters, many of the other staff would have difficulty understanding what they mean and there is currently a haze of understanding among the regulated population as to what they would be worth if things go wrong. Creation of such instruments would be new and would mean the following costs: 1) Costs of creating the instrument, 2) Administration the delivery of these and the applicability of collapse clauses, 3) the secretariat would have to expand its team to manage these and communicate about them. The most pertinent business case against these is that while shares are offered to all staff, these would only be for a small proportion of the population (especially in a bank with relatively few MRTs) Big listed bank interview (3.12.2015).

Comments in the questionnaire

Big, listed bank: "In 2010, the identification of Regulated staff was based on broadly defined criteria (e.g., all employees in Markets function were identified); therefore the 2010 scope includes many employees with low variables, for whom the restrictions were waived."

Big, listed bank: "Small difference in increased variable pay in shares is due to higher number of individuals eligible for our long-term incentive award, awarded fully in shares. Please note the individuals who were identified staff in 2010 and 2014 are quite different. Therefore, the above details will not demonstrate the increase in fixed pay and the consequent decrease in portion of variable pay for the same individual between 2010 and 2014." Big, listed bank: "Other types of instruments is a fully deferred three-and-a-half-year loyalty scheme in the form of a contingent capital instrument whose payment is subject to the absence of regulatory resolution measures and keeping the Group's CET1 ratio under 7 %."

Big, non-listed bank: "In 2014 the number of identified staff increased. From 2015 on variable remuneration is paid in equity-linked instruments for all identified staff because a new works council agreement was necessary to adapt the existing remuneration system."

Medium, non-listed bank: "We did not have any identified staff in 2010. Generally, the cash part for risk takers is 20 %, 80 % is paid in "other equity". We inserted 43 %, because most Risk Takers have a variable pay less than € 50,000."

Table 80: Interviews on Ex-post adjustment (malus and clawback)

Interview extracts

One global bank especially stressed that clawback is costly and adds an extra level of disparity between firms and jurisdictions. Costly exercise to have legal opinions on clawback when a firm is active in many countries. Contracts may have been changed as required but it remains to be seen if these will occur in practice. As a result it may be more efficient to rely on malus rather than clawback. Use malus by reducing remuneration that has not yet vested rather than try and take back what has already been spent and may no longer be there. The costs (court fees etc..) means that going through the whole process may often have a net disbenefit as no money will be recovered at the end. Malus works better when the amount of variable pay is larger (so it can bite). In addition, the maximum ratio does create an extra cost of reduced efficiency of malus naturally (the tool becomes less efficient) Big listed bank interview (13.11.2015)



Interview extracts

The nature of shareholder ownership is also important in determining the extent of reform. A bank that considers itself ahead of the pack when it comes to malus and adjustment of awarded bonus has a formal structure in place whereby an accountability review investigates conduct issues whereby steering committees decide upon incidences and disciplinary action is applied. The spectrum of cases range from less high profile cases to the most media reported ones where staff has seen malus (and these adjustments are not limited to senior managers). Malus is typically targeted on individuals (and not on firm level ex-post performance) but a more blanket approach was applied recently. The bank went through calculations to establish what would have been the bonus pool had they had known about the misconduct and bonuses were thus retroactively calculated and adjusted. Below a short description to help understand the accountability framework for malus at this specific bank: Incident occurs (event or performance management issue) => Control function gets involved (HR and Risk work with the line manager to sort out the issue) => the legal team is included and issue is discussed with the business committee (monthly basis) =>If the issue is escalated, it reaches the Bank side Committee (which decides and ensures that the level of incidence is consistent with the level of treatment, and suspension of the awards occurs if found guilty and in addition bonus awards in following years can be reduced) => these details are sent to RemCo (oversight on a quarterly basis). In addition, there is an annual submission of all incidences to the regulator PRA. Big listed bank interview (3.12.2015)

It was pointed out that malus is not the only risk adjustment mechanism. The assessment of performance is being conducted all the time. The importance of having significant variable pay for malus to bite was not always mentioned by providers and few have commented on the effects on risk-taking but the greater attention and punishment of misconduct implies that staff must be more careful in respecting risk tolerance of the bank. Big listed bank interview (1.12.2015)

In some banks, for example one large global bank, malus was not used as a mechanism for adjustment. Instead, the preferred adjustment is made by reducing the staff's awarded variable pay in the current year (and if necessary in future years as well). Adjustments via malus are made difficult because it is complicated to identify which instalments should be reduced or cancelled. The chosen adjustment method is a simpler mechanism than adjusting deferrals but it makes the link with past awards for poor performance less explicit and the measurement of malus no longer reflects the reality of ex-post adjustment (and is misleading in implying a perfect ex-ante risk performance. In some jurisdictions, malus is not lawful. In addition, it appears that malus linked to past events are only applied in extreme cases of misconduct. Big listed bank interview (1.12.2015)

With regard to efficiency of measures, more pay deferred is seen as a good tool for incentivising behaviour and it is seen to work with greater attention being paid to longer term horizon of risk by staff. There are now broader circumstances for adjustment of pay based on equity valuation changes. The ability to reduce or forfeit employee remuneration in certain circumstances is a powerful deterrent factor for driving risk conscious employee behaviour. The deterrent factor associated with forfeiture will not be captured in data on firms' application of malus. As one global investment bank specified: "The purpose of malus and clawback is only partly to ensure that ex-post adjustments can be made. More importantly, these provisions drive accountability for risk-taking, rebalance incentives and deter employees from engaging in misconduct. The firm's malus and clawback triggers include the following (but are not limited to): 1) The firm or the relevant business unit suffering a material downturn in financial performance; 2) A material failure of risk management, or serious employee misconduct; 3) "Cause" (including any material violation of any firm policy, any act or statement that negatively reflects on the firm's name, reputation or business interests and any conduct detrimental to the firm); 4) The bank being "in default" or "in danger of default" (as determined by the regulators) or failing to maintain for 90 consecutive business days, the required minimum tier 1 capital ratio. Big listed bank interview (22.12.2015)



Interview extracts

Views from remuneration consultants were that clawback is intervention of private contracts but going further back than the deferral period starts being too complicated and most countries in order to allow the implementation of the clawback specific to the financial sector require legal system changes and this is a category that is a more a political agenda than a sensible appropriate change. It is not effective. Malus can be sufficient as a tool to hold staff accountable. In the UK clawback exists and in effect it extends the malus period of deferral by extending the vesting periods to the same extent as the clawback rather than recoup already distributed pay (i.e. pay back). Malus better than clawback. The FSB and EBA appear to be questioning why clawback is needed if malus can be applied over longer time. Why have a clawback when you can cover it with a malus. What still exists today is the legal clawback still exists if the cause of the malus was fraud, misconduct or intent then obviously there is always the legal action of clawback. There have been 1 or 2 cases in the past two years (e.g. the CIO incident with JP Morgan (Whale), CIO was asked to leave and to guarantee a quick closure of the situation, she was asked to pay back the amount received already vested back to JPM). They have their own legal environments that don't require legal changes. More about treating misconduct than risk-taking. Most firms have implemented true clawback provisions - the right to take back an already delivered award. These provisions are almost always based on activities that would be grounds for termination for cause. They may also be used in instances when it was determined that previous bonuses were awarded based on inaccurate / incorrect information that an employee had knowingly hidden from management. Prevalence of clawback language is common, but the use of clawback has been limited due to the difficulty and complexity caused by the issues in logistics, cost and legal ramifications. In the UK, the PRA are focused on strengthening the conditions in which vested remuneration can be clawed back if: 1) There is evidence of misdemeanour of error; 2) the firm or business unit suffers a material downturn in performance; or 3) the firm or business unit suffers a material failure of risk management. Many deferral plans have already had forfeiture provisions for cause, so the most significant changes is the ability for firms to now revoke already delivered awards. Expert interview (30.11.2015)

There is also FSB thinking of how to make fixed pay at risk in order to strengthen the risk alignment. Expert interview (23.11.2015)

Staff are generally believed to accept that individual and firm achievement are interlinked and though a high performing member of staff maybe frustrated, a bad firm performance may mean he is not eligible for a high bonus. Staff have a very good understanding of malus. In Germany very few clawback incidences have been recorded. Expert interview (23.11.2015)

One further problem raised is one of staff comprehension and overview of their pay. Staff members that are in their 50s often have difficulty knowing their future awards as a result of the remuneration rules. Even malus which is useful in terms of incentivising staff in the right direction, consists of more than just one-off costs because if the population changes, malus mechanisms become more difficult to manage. Clawback on the other hand is a relatively new concept that has not been tested for robustness yet. It is also a lot costlier to implement and is likely to result in little net gain for the bank. Provider association interview (16.11.2015)



Table 81: Responses on the maximum ratio rule and its effects

Interview extracts

The Banks most focused on investment banking and where variable pay orientated people was the greatest have been those firms most affected by the bonus cap. This has led to a 5 or 6% increase in fixed remuneration costs. The change in the mix of pay has not really affected risk taking and the job hasn't changed. But there are lots of other measures that have impacted risk taking and risk alignment such as the ex-post adjustment measures and the performance measurement improvements. Some profitable risk-reward trade-offs have become less favourable than before and risk appetites have been revised downward. Lowering the incentives affects motivation much more than risk taking because risk-taking is affected by a range of other factors. Top performers are not that happy with a higher fixed pay because on a performance basis they would have received more pay under the previous unrestricted bonus system. Governance and oversight is seen as more important in influencing risk behaviour than remuneration. In addition, on the back of discussions by the FSB etc. around culture there is an added change in terms of thinking that could have an impact on excessive risk taking. Expert interview (30.11.2015)

The staff sitting in London offices find the maximum ratio unfair and prevents treating all employees irrespective of location in the same way. While there is no more attrition of staff in the EU than in other years, there is greater reluctance for staff to move over to the EU and this affects the bank's strategy of encouraging mobility and grooming the management talent of the future. While the staff is partly affected by a mix of pay that represents an unfamiliar structure to them it is mainly the psychological issue that may lead staff to seek employment in Asia and the US rather than in the EU. Especially for global firms, in a downturn, greater job losses will be felt in the EU offices because the fixed pay means these staff would have to be subsidised by their colleagues in other parts pf the world that will see their total remuneration fall further as a result of the greater portion of variable pay that is dependent on performance. The EU offices have less flexibility in a downturn than offices elsewhere in the world. Furthermore, the unlevel playing field between asset managers as part of a banking group and those that aren't is seen as a significant competitiveness issue. Differences in use of deferrals etc.. (e.g. non-EU asset management companies that may have lower deferral rates), are a factor but it was the maximum ratio that was seen as most impactful. The lack of encumbrances faced by some firms purely based on how the firm happens to be in a certain organisational structure is not good for competition. However, it was not possible to confirm loss of bank group asset managers' market share as a result of the maximum ratio and it is too early to say if this is actually occurring. Big listed bank interview (22.12.2015)

There is a Catch 22 situation whereby risk, time horizon, variable pay and ability to retain good staff elements is being weakened by the maximum ratio which limits the variable pay. The balance of 2:1 could be extended to 5:1 to allow more flexibility to firms in terms of alignment of pay with shareholder interest and to give firms more cost flexibility. Third country staff are the most vulnerable to the maximum ratio because often these persons are active in labour markets where the bonus culture is greatest and thus are the most subject to a shock if the variable portion of their pay is reduced. The risk of such staff leaving the EU exists but it is difficult to quantify. Not all staff can easily move to a foreign country or start working for a foreign based firm. Asset managers are the most able to move away from banking to non-CRD IV regulated companies, both in terms of their skill set and their ability to simply move across the street to a new employer (without geographical consequences to their private lives). Staff working in business areas such as corporate treasury, compliance or risk, may find employment elsewhere more lucrative, even if only so many are able to find employment in other sectors. Provider association interview (16.11.2015)



The maximum ratio is not the most effective tool and the shift from variable to fixed pay is counter prudential as variable pay acts as a function that allows firm's a loss absorbing capacity. As a result of the maximum ratio, this capacity is reduced and banks can no longer adjust to market changes as they previously could. The FSB has made statements that having enough variable remuneration in the system is important for financial stability. The difficulties with large fixed salaries are that removing allowances as an intermediate form of pay (where roles of staff can be changed in times of a crisis) means that fixed pay cannot be reduced with performance and cannot be reduced for bad conduct. This is seen as a significant market disruption. A scenario similar to that of 2008 where variable pay was reduced significantly with 40% to 90% reductions in variable pay for senior staff, would not be possible with today's level of variable pay. A more prudential mechanism was suggested whereby a specific form of fixed pay (allowances) should be at-risk when capital levels fall below a certain threshold thus allowing the bank to reduce these fixed pay by 20% or 30% depending on the extent of the capital shortfall (the capital level below which adjustments would kick in would be set at the start of the year by the bank with approval of the supervisor. It is difficult to attribute turnover in top management to any one cause. The longer term impact on the level of talent attracted to financial services as a result of the Regulations is, as yet, unknown. Macro-economic conditions and change in strategy have both reduced head count for many firms. EU offers limited advantages versus non-EU employers or locations. Big listed bank interview (22.12.2015)

The effects of larger fixed salaries and reduced flexibility need to be assessed over a longer time period e.g. including downturns. Staff cuts have been noticed in the industry over past years e.g. Some EU banks have reduced front-end staff by 20% since 2008. These are the easiest and cheapest way to reduce costs. Because of both reduced revenue and higher costs, the FICC (fixed income, currencies & commodities) trading businesses now needs more money to produce deals. The team sizes are much smaller than they were in the past. The remuneration consultant confirmed the very large movement from investment banking to asset management both as a result of poaching by hedge funds etc.. and the searching for employees has become more difficult for banks. The movement is not only linked to pay. Employees switch for reduced salaries for a number of reasons including the perception that asset management companies are more stable or reliable employers and the prospects are seen as less vulnerable than in investment banking where the sector is undergoing change and where the work culture can be less appealing to new recruits. There is considerable uncertainty in investment banking as a result of the industry undergoing a crunch period. The digital age has opened new alternatives for the bright individuals outside of banking. Because banks have become less attractive employers generally with smaller teams meaning more work and more administrative work. Managing Directors clearly have very high levels of responsibility and are paid accordingly, however the middle management jobs for those in ages over 45 who are no longer in the prime of their career, motivation levels are lower as a result of greater fixed pay and they can focus on their usual sales job Young talent is still largely entering the investment banking jobs for the money and desired lifestyles, but there is a noticeable shift in staff being more prepared to defend their work-life balance. Expert interview (23.11.2015)



The maximum ratio has had a very limited impact on total remuneration. Only the share mix has changed with the loss of variable pay at risk due to smaller amounts of variable pay. While banks have seen necessary adjustment to respect the maximum ratio and thus see it as a greater issue for them, employees may generally have gained from the situation although there is a mixed reaction to the maximum ratio's effects depending on individual risk appetite. The majority may be more attracted to larger fixed pay percentages but those employees that have higher potential up-sides see these developments less favourably. There is an inconsistency with regard to control functions as on the one hand they may prefer being able to benefit from their own and the firm's performance while on the other they may find the new pay arrangements more attractive to them seeing as total remuneration levels are generally less predictable for these groups of employees. The key issue which is still too early to assess, is the impact the maximum ratio will have on the dynamics of the market for talent in the US and elsewhere outside the EU. Will the move to greater mix of fixed pay become the norm in US bank practices as well through time? This could be likely even if trends to date cannot confirm this yet. The argument that fixed costs have increased and are problematic is not backed up by and knowledge of bank own calculations and scenarios analyses about forced redundancies in a downturn. While it is obviously difficult for banks to reduce fixed pay in bad years across the entire industry, we do not know to what extent employees would be prepared to accept smaller salaries. When asked if the maximum ratio rule could be improved in any way, the consultant said that 200% was pretty much the norm already and that this should be further increased to minimise the unintended consequences of banks having to manage their organisation with greater shares of fixed costs. Specific EU Member State options for greater limitations should be analysed more closely since they may not be useful e.g. the Dutch 20% maximum ratio is extremely limitative and the Italian provision that limits specifically to identified staff in control functions as these persons face a strict 100% maximum ratio and cannot enjoy the widespread 200% maximum ratio extension granted to all other identified staff. Expert interview (17.12.2015)



Some of these problems with recruitment, such as with greater deferrals that are not welcome by staff, existed before the CRD IV however, the maximum ratio has contributed significantly to the ability to recruit the right talent for future performance of the banking sector. Trends observed up to 2013 have been continued to 2016 with the CRD IV adding a burden of adjustment to pay structure due to the need to comply with the maximum ratio. The mobility of bankers to move employer or industry depends on what they are able to sell. Experienced investment bankers are able to move to boutique firms (more specialised or in sectors) when they have developed a valuable network of contacts and business partners, this is their main competency for recruitment into alternative non CRD but finance related industry competitors. This should not represent a loss of competitiveness for the EU as the added value of such talent is still likely to be operating from the EU financial centres as a result of the change in job. In contrast to these experienced professionals, the young bright career starters are attractive to employers because they are able to sell their potential and their human capital. This young talent pool is joining the EU banking sector to a much smaller degree than in the past. They are attracted to better paying jobs which come from the non-EU banks, the non-banks and the non-financial firms. Banks are having difficulties recruiting graduates and MBA students. There are some geographical differences with EU banks feeling this more pronounced difficulty in recruiting but competition from alternative sector is felt in both US and EU in the same way. The Volker rule has had an even greater impact in the US than the CRD IV in Europe. Mobility of senior bankers does not appear to be as much of an imminent threat as sometimes presented in public media reports and in industry fears of large outflow of talented staff to less strictly regulated jurisdictions. It does not appear that key staff can simply migrate to Singapore, Dubai, the US or elsewhere simply because of remuneration regulation. The medium term threat to a competitive EU industry exists but it is overlooked that banking is often a relationship based service industry and that client bases are regional. This limits the flexibility of staff to leave the EU and their client base. Senior banker mobility in the short-term there are fewer propensities for moving geographically (with family considerations and social contacts, cities you like living in whether the US or EU etc.). The effects of the CRD IV remuneration rules on labour market quality will only be visible over the medium term. For the younger population, US is still taking in new hires, whereas EU banks are having more difficulty. This will have repercussions in 5-10 years' time when these persons reach Managing Director level we will see an impact on where they are based. The EU banks are shrinking faster than the US and thus recruiting less but the fewer additions to their talent pool compared to the US means that there will be effects in the medium term (young graduates are not really vacancies). Basically bankers are not mobile despite their potential threat to leave due to vested interests in clients and family consideration. The pool of talent will gradually over time move away from the EU. Expert interview (30.11.2015)

Regarding mobility of staff, it is important to remember that there are a set of reasons for staff to leave to go to another bank or another employer. While the pay level and structure play a role, HR have indicated that there are personal private reasons as well as relational difficulties with managers that are often determining as well. HR is not always cognisant of the reasons why some employees leave since they are not always involved in the process of trying to retain them by offering counter offers. Resignations are often for more than just one reason. Turnover rates (voluntary resignations i.e. number of resigned staff/ total number of employees) have increased in 2013 and 2014. For banks that are not among the bulge bracket banks, they cannot compete in either level or structure of pay offered by the leading best of class banks that have an attractive power for the best talent. The competitiveness issue is not just affected by the level of variable pay but also by the fact that Asian and US banks have smaller deferral and less constraints on cash payouts. The bank has seen difficulty in especially recruiting in local markets where variable pay is more culturally expected or desired. Negotiations are more work because of the differences. Recruitment is also made harder due to competition for job offers from the oil and gas industry who are no subject to CRD requirements (e.g. for project finance and trading jobs), whereas staff working in central functions (compliance and legal) are attracted by legal firms instead. The IT and support specialists are less regulated but they too may be enticed elsewhere. Asset managers operating on advisory services and not credit are direct competitors that have an advantage. In addition to attracting new staff, retaining those in investment banking has been more difficult especially those able to work in US culture and Japan and Korea. Big listed bank interview (1.12.2015)



A report shows that while staffing levels are still similar to before the maximum ratio, industry survey respondents said hat 20% of them had faced a decrease in the ability to attract new staff and 25% decreased ability to retain existing staff. Other factors may be behind these answers but the respondents assumed the cap had contributed. The issue is more specifically felt in terms of the young persons that could potentially join the banks. Banking jobs have become less attractive for them (e.g. due to reputational factors) and the general industry and high tech firms are more attractive propositions to many. The most mobile staff in terms of the applicability of their skill set means that staff in control functions may be most likely to consider seeking employment outside of banking. These jobs have however seen a raise in their pay. The staff preference for being awarded large proportions of variable pay is cultural and dependent on personal attitudes to risk and own belief in one's ability to perform exceptionally well and thus be paid according to performance (e.g. this is more likely to be the case for top talent and thus top potential performers). A higher proportion of fixed pay is seen by employees as generally a better outcome since they have a greater stability/predictability in income. People elevate their cost of living based on what they earn and thus smaller portions of variable pay (that are discretionary and thus more volatile) may reduce the risk of lifestyle difficulties in more difficult economic environments. With total remuneration levels having remained stable, the employees have actually gained on a risk adjusted basis since they now earn more in that regard. Expert interview (17.12.2015)

Comments from the questionnaire

Large, listed bank: "Introduction of the maximum ratio has detrimental impact on the financial stability of the firm, as it tends to increase the relative part of the fixed component of remuneration vs. the variable part, which is contradictory with the objective of CRDIV to align the remuneration policies with the risk profile, values and long term interests of the bank in order to contribute to the financial stability. The loss of flexibility generated by a rebalancing between variable and fixed remuneration may contribute to undermine the financial stability of institutions. Indeed, according to feedbacks provided in particular by our local entities in Asia, there is a significant increase of fixed remuneration which weakens the concept of pay for performance when shifting more pay on the fixed to appropriately balance the remuneration. Only the variable part of remuneration is determined on the basis of risk-adjusted performance, its payment is spread over minimum 3 years and subject to performance and behavioural conditions, and it provides a lot of flexibility with the possibility to reduce individually or collectively the amount awarded to zero, in case of underperformance and/or misconduct. Finally, the relative increase in the fixed component of remuneration tended to increase the weight of fixed staff costs for institutions established in EEA as well outside EEA (reported by subsidiaries in US and Asia), leading to a rise in their general staff expenses."

Large, listed bank: "Effects are even stronger in countries that apply legislation that even goes further than the (minimum) CRD requirements. This has a negative impact on level playing field.

Large, listed bank: The introduction of the bonus cap has reduced the firm's flexibility to adjust costs. However, with shareholder approval to increase the bonus cap from 100% of fixed pay to 200% of fixed pay, we have been able to restrict this impact to some extent by having sufficient portion of individual's compensation in variable pay. This enables us to restrict issues for maintaining a sound capital base."



Large, listed bank: "Financial services is a global business, with banks in Europe competing to attract talent from a global pool of mobile workers. Firms unwilling to increase their fixed costs beyond what is prudent will lose talent to non-EU markets, with consequent impact on the standing of Europe's financial services industry and tax revenues, and with EU governments, companies and investors being deprived of the best advisors. While it is difficult to determine the precise reasons for specific instances of individuals leaving the firm, and in many cases it may be due to a number of factors, we believe the fixed/variable remuneration ratio is a key factor in employees' decision making. By way of example, we have seen employees request moves to the US and Asia, others not take up offers in Europe from elsewhere, as well as senior individuals moving to firms not captured by the requirements, which may at least in part, be as a result of the fixed/variable remuneration ratio."

Large, listed bank: "The two major issues with the bonus cap are from our experience a substantial competitive disadvantage in non-EU countries as well as against non CRD regulated firms."

Medium, non-listed bank: "We are strongly regionally working, recruiting and performing, the EU/EEA aspects have hardly/very little effect; the variable remuneration is too marginal to have a view."

Medium, non-bank: "Principal trading is a global industry and not limited to presence in any specific country. It already was very attractive for talent to work in Asia (e.g. Singapore, Hong Kong) or the US, while nothing prevents firms in such jurisdictions to still trade anywhere: no EU presence is required at all. Remuneration and the regulatory and tax environment in many of such jurisdictions are already much friendlier than in the EU. The remuneration rules do not make the EU a more attractive place to work for young and highly mobile talent. In addition, we strongly believe that imposing a bonus cap is detrimental to many firms rather than beneficial: modern investment firms need to keep their fixed costs under strict control in order to move back and forth with the economic cycle. Variable pay serves as an important means to control risks and the financial condition of the firm, because, unlike fixed remuneration, variable pay moves in line with actual business performance: no profit, no bonus. In addition, unlike fixed pay, unpaid instalments of variable remuneration can legally be held 'at risk' for deductions or forfeiture if the firm would incur a loss or require additional capital."

Medium, listed bank: "Regarding recruitment - the Identified Staff positions were filled by the internal staff."



5.2 MRT Survey - effects on individual risk taking behaviour

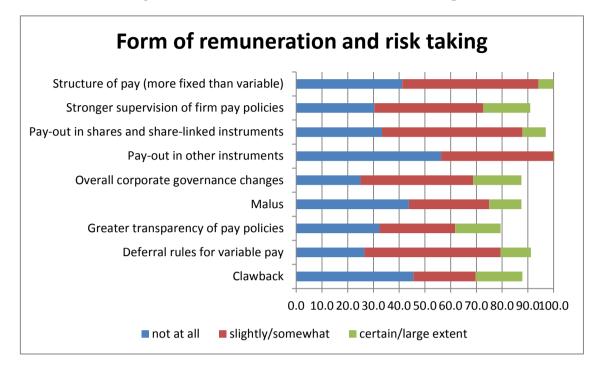


Figure 51: To what extent have the following affected your risk-taking behaviour?

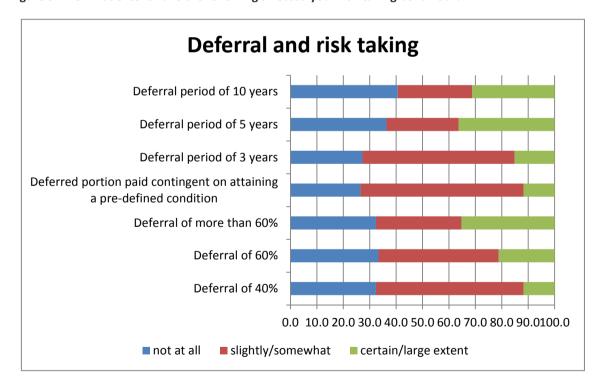


Figure 52: To what extent do the following deferral options discourage you from taking higher risk?

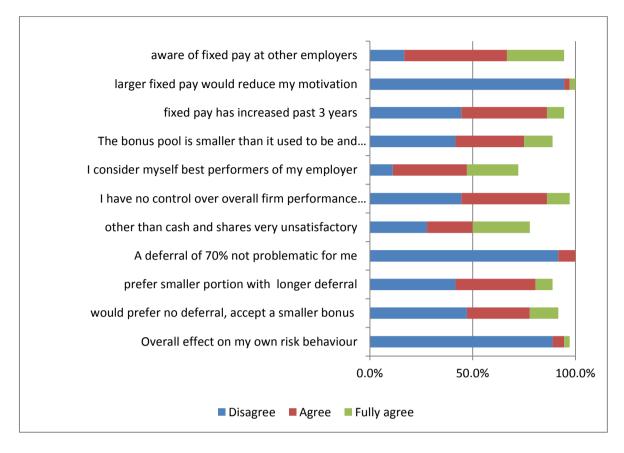


Figure 53: To what extent do you agree with the following statements?

5.3 Asset management company survey - results

Legal situation

The Maximum Ratio Rule applies to credit institutions and investment firms as defined in CRD in the EEA, as well as (indirectly) to their subsidiaries within the scope of prudential consolidation (including subsidiaries outside the EEA and asset management subsidiaries). Whether directly or indirectly subject to the Maximum Ratio Rule, this means that the rules could have a potential impact on:

- Credit institutions established in the EEA (directly)
- Non-EEA subsidiaries of EEA parent covered by the CRD (indirectly through the application at group level)
- EEA subsidiaries of EEA parent covered by CRD (indirectly through the application at group level to e.g. asset management companies or other types of financial institutions)

Database

The survey of asset managers did not receive a large number of responses. Conversations with EU and national trade associations complemented the findings from these entities that are not explicitly regulated by the CRD IV unless they operate as part of a banking or investment firm group. Of the 7 questionnaires received from asset management companies, 6 were asset management companies (UCITS, AIFs) as



part of a CRD-group and one was an asset management company (UCITS, AIFs) as part of a non-CRD-group. Four of the 6 entities contributed in addition to the answers received through a separate questionnaire from their consolidated banking group level. Of the 7, all except one were non-listed, and one of which was in the form of a non-listed partnership. 4 of the 7 are regulated under the CRD (2 of which have not availed itself of a waiver, one due to the nature of its activities and the other because of the non-materiality of variable pay ratio).

Costs/difficulties

With regard to the difficulties encountered when having to apply multiple remuneration regimes to their remuneration policies, AMCs replied:

- "Acknowledging the specificities of the activities performed by the management companies and of the managed products, we would appreciate if ESMA will reconsider the discipline on the application of remuneration policies to AIFMD and UCITS subsidiaries within a "CRD Group". Indeed, it is important that the Group remuneration policies recognise the existing sectorial disciplines. In that regard, given the existence of sectorial remuneration requirements for AIFMD and UCITS subsidiaries and in the light of their specificities, those sectorial disciplines shall prevail over the CRD IV provisions. This should not be true just for those provisions which are deemed to be "in conflict". In any case, we do not believe that AIFMs and UCITS management companies should be excluded from the application of Group remuneration principles altogether. The Parent company should elaborate Group policies and ensure an overall coherence, without prejudice for sectorial remuneration discipline to prevail. In fact, it should be recalled that if different remuneration policies exist between credit institutions and asset management companies is because, due to the differences of the activities they perform, different underlying rationales are put as the basis of the regimes." (Q3 respondent 4)
- Practical implementation problems but also fairness problems for people performing connected activities, and risks of blockage for career evolution. (Q3 respondent 5)
- The main difficulty resides in applying different regimes to the regulated and non-regulated populations. (Q3 respondent 7)

Waivers are reported as necessary otherwise, costs would result in a very unlevel playing field would be created for asset managers in non EU markets. Compliance cost is difficult to calculate; it regards e.g. competitiveness, attractiveness for talented employees, hedging cost etc.

All AMCs that responded stated that the remuneration provisions common to CRD, AIFMD and UCITS (deferral, pay-out in instruments, malus, clawback) had increased costs for their company (25 % significantly and 17 % to a very large extent). These were mainly in legal fees, governance costs (administration of ad-hoc committees, and governance bodies at local and group levels), administration costs and recruitment of adequate resources to manage deferral and pay-outs etc. With regard to the CRD specific provision limiting the maximum ratio variable to fixed remuneration, one AMC stated that the costs associated with bonus cap were moderate since it did not have to apply for a 100 %/200 % waiver from its shareholders, whereas another respondent said that the cap has translated into increased fixed salaries in the markets in general, which affects their costs when sourcing talents.



From assessment answers provided, overall, the cost of implementation of the measures was generally seen as equal to or greater than the compliance costs of maintaining the respective requirement. The most expensive measure was the pay-out in instruments followed by implementing malus, followed by costs of deferral and to a lesser extent clawback. Whereas some AMCs as part of Groups found it difficult to estimate the costs due to Group affiliation, one AMC estimated the total cost of application of these requirements (deferral, pay-out in instruments, malus and clawback) as approximately totalling \in 1250 per employee, whereas another AMC with far greater assets under management but far fewer employees stated implementation costs at approx. \in 1800 per employees (excluding the cost of the remuneration committees estimated at: \in 2.5 million)

Deferral

Only 2 of the 7 already deferred variable remuneration before the CRD and 1 already paid out in instruments. 3 of the 7 had maximum deferral periods of 5 years in 2014 when only 1 had this in 2010.

The large banks and asset management companies part of banks appear to have already applied a deferral scheme and a payment in instruments before the passing of regulation (whether CRD or AIFM) so the cost implications were limited to actions that meant changing both since the publication of the respective remuneration guidelines, in order to be compliant.

Malus

Only 2 of the AMCs that responded to the survey, both part of bank groups said that they already voluntarily applied malus before they were obliged to apply it. 71 % of respondents said that malus would apply in cases of severe AMC or managed fund underperformance. 2 AMCs said that they had actually applied malus in 2014 (a small and one large AMC) and the smaller AMC specified that 1 staff member forfeited €3500 or 33 % of their outstanding deferred variable pay. Respondents did not state any significant difficulties with malus introduction especially if a voluntary deferral program on which a malus applies already existed. One AMC specified that the introduction of malus conditions certainly reduces short-termism but that the Asset Management Company has to face the connected compliance costs in terms of defining the appropriate clauses and monitoring them. One large AMC specified that malus is applied on deferred variable remuneration in case of severe firm financial underperformance (global clause), or in case of severe breach of risk / compliance quidelines (individual malus clause).

In contrast, no clawback was undertaken by an AMC and it was stressed that in practice, labour and tax laws appear not compatible with clawback.

Effectiveness of measures

Linking of individual variable pay to firm, fund and individual level criteria was seen to reduce both fund risk and AMC risk by two thirds of the respondents. No such consensus was visible from answers about assessing the beneficial effects of either pay-out in instruments, deferrals (portions or periods) on risk levels of the fund and AMC with some strong disagreement for pay-out forms other than cash and mixed views on large deferral portions other than agreement that 3 years deferral period is sufficient to change risk-taking. One large AMC stated the following: "Pay-out in instruments involves many possibilities for conflict of interest to arise between the



fund manager & client interest. Deferral of 40-60 % of bonus over 3 year can be virtuous but in practice difficult to defend in a global competitive landscape."

All except for one respondent that was ambivalent adhered to the view that malus will reduce both risk-taking and especially misconduct at both fund and AMC level. The same consensus was not found regarding clawback with an even split between responses saying it would not affect risk levels and those that said it would (and which would be greater at reducing misconduct than risk-taking per se). A strong majority (over 2 thirds) of respondents felt that a higher share of variable pay do not lead to higher amounts of either applied malus or clawback. On the other hand, AMC respondents overall almost all found that transparency (and to a slightly lesser degree strong supervisory oversight) of remuneration policies would have the desired effect of enabling risk-taking to better follow the fund or AMC's target risk appetite. Two large AMCs have provided the following details: "Risk-taking within set risk appetite is part of our core business and constantly monitored. Improper risk-taking mitigating by using malus or clawback tools is a last line of defence" and "We believe remuneration is not the right vehicle to align risk appetite in the asset management environment except in limited cases, with the risk of creating a number of new misalignment situations. Alignment is best ensured by implementing effective risk & compliance policies and controls in the fund management and sales process of the AMC".

Views from the AMC regarding the bonus cap (with answers needing to be understood in a conditional way as these have companies are not being subject to the constraints of the cap until now) indicate that asset managers are 60 % ambivalent or unsure and equally agree and disagree with the view that the cap lowers variable pay and thus lowers staff incentive to take excessive risks at the level of the fund or company. There is more agreement that the cap has increased fixed pay and 80 % either agree or strongly agree that the introduction of the bonus cap has made working in AMCs subject to the CRD less attractive for talent (and 80 % disagree that it has made working in AMCs not subject to CRD less attractive for talent). 40 % of AMC respondents agree and 20 % disagree that the cap has reduced the AMC's ability to adjust costs in case of downside events or financial distress to an extent that it endangers the soundness of the capital base or has a significant effect on the ROE.

The AMC respondents have also almost unanimously sated that staff leaving the AMC after the implementation of the bonus cap is likely to go to either an AMC not regulated by CRD or go join other companies within the financial sector but not regulated by CRD. In contrast, half of respondents were ambivalent and 25 % did not believe that these staff members would go join other companies outside the financial sector. However 60 % either agree or strongly agree that EU AMCs operating in non-EU countries are disadvantaged in recruitment and retention of staff as a result of potential restrictions of the cap.

When asked to rank the remuneration requirements in order of greatest impact on their own AMC, several respondents found that all of the prompted measures have an impact and that it was difficult to prioritize between them. Nevertheless, answers varied and no clear trend could be observed from the answers provided. Three respondents placed deferrals, pay-out in instruments and risk adjustment ex-post as most impactful, followed by either the measures linking of pay to the AMC's financial condition and future prospects or those strengthening governance arrangements. Measures enhancing disclosure on remuneration, supervision of policies were given mixed but generally lower impact scores as was the measure of better involving risk management functions in remuneration policies. One respondent stated their belief that their practice of deferral in cash since 2008 has had a good impact on its



business, and generally deferral and instruments, more stringent management & governance of potential conflicts of interests, transparency and disclosure were seen as the driving factors, notably in terms of culture.

Governance/Control functions: Control staff in independent units ranged between 5 to 12 % of total number of AMC employees. In some cases, the internal audit function is outsourced to the Group.

Earning volatility and Remuneration / Trend

When asked to what extent the AMC earnings fluctuate from year to year, all except one replied that these are somewhat volatile with some reporting regular increases and significant inflows recorded in the last 3 year period. One large AMC specified that given that the income for an asset manager fluctuates with the assets under management - which in turn are highly susceptible to market movements - and costs are mostly fixed, the P&L can certainly fluctuate from year to year. With others specifying that the management fees are dependent on the asset mix, which is influenced by the market movements and sentiment, or stating that dependence on the markets can be mitigated by having a very diversified range of asset class capabilities.

The incentive structures employed by the AMCs that responded to remunerate their staff did not include a salary paid out of management fee in their fund but mostly a profit share and in one case share of carried interest, and a couple sating both mandatory and voluntary co-investment based schemes (one AMC specifying that these were defined at Group level). For one AMC discretionary awards with indexation (respectively on pre-tax profits and fund investments were specified, while another emphasised that they did not mix management fees with the remuneration of fund managers and that bonuses are funded as a percentage of the firm risk adjusted profits. Lastly, one large AMC that did not apply any of the previous incentive schemes, preferred to choose an instrument for variable remuneration that is cash indexed on the performance of a fund index created especially for this purpose. The majority confirmed that there had been no cases where variable pay was paid out to identified staff before investors received their principal and agreed return.

Risk

In the opinion of the AMC respondents, remuneration were generally judged to be linked to a large extent to both the risk at the level of the managed fund (performance) and at the level of the company managing the fund. One respondent sated that both the fund and the AMC level risk appetites are defined to which the AMC and fund managers have to live up to. Performance is input for remuneration schemes for these managers. However, these is never a hard link between performance and remuneration, there is always a discretionary layer enabling the manager to take into account (correct for) among other things the level of risk (used to achieve the performance). A further respondent specified that the remuneration of funds managers is adjusted at both funds/AMC level but not for other functions. In terms of the level of risk of the fund, this is dependent on the type of fund. One respondent stated that risk is not associated with leverage rather with the resulting VaR or tracking error of a fund and noted that liquidity risk is a rising concern for AMCs.

When AMCs operating within a CRD-group were asked what kind and extent of risk their company poses for the group they belong to, their assessment was equally split



between 'to some extent' and 'to a little extent'. One respondent specified that their incentive system for the personnel of the AMC subsidiary is financed by a structured bonus pool mechanism that requires the implementation of specific conditions at both the Company and Group level, and that the funding mechanism is adjusted according to a "top down" approach as to take into account the exceeding of specific performance conditions, primarily at the Parent level and, subsequently, at the Company level. Another specified that because the identified staff of the Group includes the head of the asset management business line, they can be considered "by default" to have some impact (mainly reputational).

When asked how staff remuneration is affected when returns are lower than expected by the client, it was said that lower variable remuneration would generally ensue and that this affects the bonus-pool available for all employees. In addition, for individual fund managers and discussion makers of the AMCs this was said to be an integral and important part of the remuneration process.

The extent to which staff behaviour is constrained varies from company to company but generally explicit investment constraints, performance measures, in-house decision-making processes and to a lesser extend asset size, were all relevant to a large or very large extent. One respondent said: "Every portfolio is governed by a limit and control structure which is measured monitored and controlled by an independent department. The LCS's house explicit investment constraints and are geared towards our clients risk appetite. Performance is implicitly constrained by the LCS structures as they limit the risk-taking in the funds." One large AMC said that for performance measures, it uses behavioural ratings in the staff's annual performance review as input with potential impact on remuneration, and it also rates individuals through risk and compliance criteria, with a direct impact on remuneration.

Regarding company level risk management, one small AMC was the opinion that the CRO did not have input to performance reviews of staff but all who replied agreed or strongly agreed that review of staff performance and pay has received effective added value from the remuneration committee, that the supervisory function is effectively challenging risk-related decisions of the executive directors, that there are effective controls at the business and control function level, that there is significant training on risk appetite and the implications for non-compliance and that the board and senior managers specify what risk level is acceptable to the AMC. One respondent specified that effective risk management and compliance is central to delivering sound and quality investment performance.



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7 Glossary

To facilitate the reading of this report, some of the main terms are defined in the table below. Some of these definitions were provided to the respondents of our surveys and largely come from EBA such as from its RTS on identified staff, its guidelines on sound remuneration policies and its guidelines on remuneration benchmarking. While these may have the same meaning, please refer to the legal terms used and defined in Directive 2013/36/EU and Regulation (EU) 575/2013 where necessary.

Table 82: Definition of terms

Term	Definition
Award	The granting of variable remuneration for a specific accrual period, independently of the actual point in time where the awarded amount is paid.
Bonus pool	The maximum amount of variable remuneration which can be awarded in the award process set at the level of the institution or an institution's business unit.
Clawback	An arrangement under which the staff member has to return ownership of an amount of variable remuneration paid in the past or which has already vested to the institution under certain conditions.
Consolidating institution	The institution which is required to abide by the prudential requirements on the basis of the consolidated situation of the banking group, in accordance with Part 1, Title 2, Chapter 2 of Regulation (EU) 575/2013.
Deferral period	The period of time between the award and the vesting of the variable remuneration during which staff is not the legal owner of the remuneration awarded.
Deferred remuneration	In accordance with CRD Article 94(1)(m): Amounts should be reported gross, without any reduction due to the application of the discount rate for deferred variable remuneration for the categories of total deferred variable remuneration, deferred variable in cash, deferred variable in shares and share-linked instruments, and deferred variable in other types of instruments- instruments referred to in CRD Article 94(1)(I)(II).
Fixed remuneration	Non-discretionary payments or benefits which do not depend on performance or other contractual criteria, unless they form part of routine employment packages for staff - includes payments, proportionate regular (non-discretionary) pension contributions, or benefits (where they are without consideration of any performance criteria).
Identified staff	Staff whose professional activities have a material impact on the institution's risk profile in accordance with the criteria set out in the Commission Delegated Regulation (EU) 604/201410 and where appropriate in addition based on institutions' criteria (the regulated population). Note: Identification criteria for risk materiality (based on EBA RTS on identified staff): Risk managers: Management body (Articles 3(1)–(3)); Risk manager and direct reports, except those identified solely due to committee membership (Art. 3(4)–(5),(7), (10); Heads of material business units and their direct reports Art.3(6), 3(8); Heads of functions Art. 3(9); Managers of risk-taking MRTs Art. 3(13), 3(15); All other Material Risk Takers (not listed above), individuals exposing firm to credit risk Art.3(11); exposing firm to trading book/market risk Art.3(12); approving introduction of new products Art 3(14); on local risk committee Art.3(10); identified solely under quantitative criteria if subject to managerial oversight Art.4(1).
Identified staff: Asset management:	Including portfolio management, managing of UCITS and other forms of asset management.



Term	Definition
Identified staff: Corporate functions	All functions that have responsibilities for the whole institution at the consolidated level and for subsidiaries with such functions at the solo level, e.g. Human Resources, IT.
Identified staff: Independent control functions	Staff active in the independent risk management, compliance and internal audit functions.
Identified staff: Investment banking	Including corporate finance advice services, private equity, capital markets, trading and sales.
Identified staff: MB Management function	Members of the management body in its management function according to CRD Art 3(1)(7) who have executive functions within the management body; this includes all executive directors of any board in the scope of consolidation.
Identified staff: MB Supervisory function	Members of the management body in its supervisory function; this includes non-executive directors of any board in the scope of consolidation, according to CRD Art 3(1)(8) and includes attendance fees as remuneration.
Identified staff: Retail banking	Including total lending activity (to individuals and enterprises)
Instruments	Those financial instruments or other contracts that fall within one of the two categories referred to in Article 94(1)(I) of Directive 2013/36/EU.
Malus	An arrangement that permits the institution to reduce the value of all or part of deferred variable remuneration based on ex post risk adjustments before it has vested (i.e. prevent the vesting).
Prudential consolidation	The application of the banking prudential rules set out in Directive 2013/36/EU and Regulation (EU) 575/20132 on a consolidated or sub-consolidated basis, in accordance with Part 1, Title 2, Chapter 2 of Regulation (EU) 575/2013. The prudential consolidation includes all subsidiaries that are institutions or financial institutions and may include also ancillary services undertakings in and outside the EU.
Remuneration	All forms of fixed and variable remuneration and includes payments and benefits, monetary or non-monetary, awarded directly to staff by or on behalf of institutions in exchange for professional services rendered by staff, carried interest payments within the meaning of Article 4(1)(d) of Directive 2011/61/EU8, and other payments made via methods and vehicles which, if they were not considered as remuneration, would lead to a circumvention9 of the remuneration requirements of Directive 2013/36/EU.
Remuneration provisions (CRD/CRR)	Refers to the rules on remuneration contained in Articles 74 to 76, Articles 92 to 96, Article 104, Article 109, Article 141(8)(d)(iv), Article 162(3) and in recitals 62 to 69 of the CRD (Directive 2013/36/EU), as well as the those rules contained in CRR, Article 450 and recital 97.
Retention bonus	Variable remuneration awarded on the condition that staff stay in the institution for a predefined period of time.
Retention period	A period of time after the vesting of instruments which have been awarded as variable remuneration during which they cannot be sold or accessed.
Risk appetite	The aggregate level and types of risk a firm is willing to assume within its risk capacity (the maximum level of risk the firm can assume before breaching constraints) to achieve its strategic objectives and business plan.
Severance payments	Payments relating to the early termination of a contract.



Term	Definition
Shareholders	A person who owns shares in an institution or, depending on the legal form of an institution, other owners or members of the institution.
Share-linked instruments	Those instruments whose value is based on the value of the stock and that have the share value as a reference point, e.g. stock appreciation rights, types of synthetic shares.
Significant institutions	Institutions referred to in Article 131 of Directive 2013/36/EU (global systemically important institutions or 'G-SIIs', and other systemically important institutions or 'O-SIIs'), and, as appropriate, other institutions determined by the competent authority or national law, based on an assessment of the institutions' size, internal organisation and the nature, the scope and the complexity of their activities.
Staff/Employee	All employees of an institution and its subsidiaries, including subsidiaries not subject to the CRD and all members of their respective management bodies.
Variable remuneration	All remuneration which is not fixed (monetary and non-monetary benefits) – it includes additional payments or benefits depending on performance or, in exceptional circumstances, other contractual elements but not those which form part of routine employment packages. Amounts should be reported gross, without any reduction due to the application of the discount rate for variable remuneration.
Vesting	The effect by which the staff member becomes the legal owner of the variable remuneration awarded, independent of the instrument which is used for the payment or if the payment is subject to additional retention periods or clawback arrangements.



8 List of national experts that contributed to the study

In addition to the core team of staff involved in this study, the table below indicates the national experts from EU Member States that have contributed their additional legal expertise to the research.

Table 83: National Partners

Country	Name of national partner
Denmark	Ass. Prof. Tanja Jorgensen (Aarhus University)
Germany	Prof. Axel Halfmeier (iff, Leuphania University)
Italy	Prof. Diana Cerini (University of Milan Bicocca)
Netherlands	Prof. Matthias Haentjens and Tom Dijkhuizen (Leiden University)
Poland	Michał Brach (bnt Neupert Zamorska & Partnerzy sp. j.)
Portugal	João Espanha and Nuno Nogueira Pinto (Espanha Espanha associados)
Spain	Prof. Pedro-José Bueso Guillén (Universidad de Zaragoza)