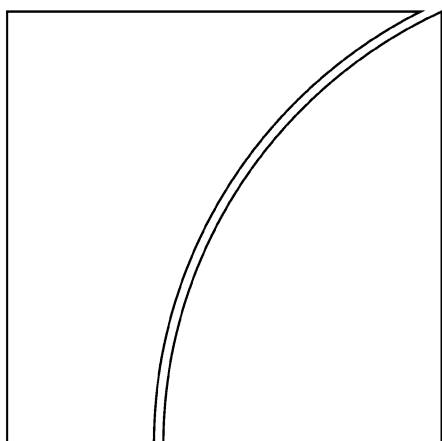


Basel Committee on Banking Supervision



Range of Methodologies for Risk and Performance Alignment of Remuneration

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Range of Methodologies for Risk and Performance Alignment of Remuneration

Executive summary

A. Background and mandate

1. In April 2009 the Financial Stability Board (FSB)¹ published nine principles for the achievement of sound compensation practices for financial institutions, the aim of which were to ensure effective governance of compensation practices, alignment of compensation with prudent risk-taking, effective supervisory oversight and stakeholder engagement. The principles also aim to redress deficiencies in compensation practices that contributed to the global financial crisis that began in 2007. The FSB called for urgent action to address unsound compensation practices. Subsequently, in September 2009 the FSB introduced a set of standards that were designed to support the implementation of the principles. These were supplemented in January 2010 by an assessment methodology prepared by the Basel Committee on Banking Supervision² to assist prudential supervisors in taking action.
2. Following a Peer Review of the implementation of its *Principles for Sound Compensation Practices and Implementation Standards*³ conducted in the first quarter of 2010, the FSB noted that good progress had been made in areas related to governance, oversight and disclosure, but that further work was needed to raise the standard of risk adjustment to remuneration. Ensuring that performance-based compensation is adjusted to account for potential risks is essential to the successful implementation of the FSB remuneration principles and standards.
3. Given the competitive challenges in the industry and also the practical issues faced by institutions, the FSB noted in its peer review report that “supervisors (...) should support at the technical level the development of sound practices on risk adjustment” and accordingly made the following recommendation:

Recommendation 7: “The Basel Committee should develop for consultation by the end of October 2010 a report on the range of methodologies for risk and performance alignment of compensation schemes and their effectiveness in light of experience to date. It should cover the following areas:

- (i) *methods for incorporating risk and performance into bonus pool and individual compensation;*

¹ Then known as the Financial Stability Forum.

² The Basel Committee on Banking Supervision provides a forum for regular cooperation on banking supervisory matters. It seeks to promote and strengthen supervisory and risk management practices globally. The Committee comprises representatives from Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Committee’s Secretariat is based at the Bank for International Settlements in Basel, Switzerland.

³ Financial Stability Board *Thematic Review on Compensation – Peer Review Report* (30 March 2010)

- (ii) *the design of deferred compensation, such as adequate performance measures; the relation between performance measures and ultimate value of deferred compensation instruments; malus triggers; the sensitivity of payout schedules to the time horizon of risks; and the funding of deferrals; and*
- (iii) *proportionality in the application of rules, taking into account the size and complexity of the institutions, business models and risk tolerance.*

This report could be used as a basis for guidance.”

B. Nature and objective of this report

4. This report responds to recommendation 7 of the FSB Peer Review Report on compensation. Accordingly, it analyses and discusses the methodologies used by institutions to adjust remuneration to risk and performance.⁴ In line with the FSB Principles on Sound Compensation Practices and their related implementation standards, the adjustment of remuneration to risk and performance is a key element to reduce incentives for excessive risk-taking in banks. Therefore, the main objectives of this report are to present (i) some remuneration practices and methodologies that support sound incentives and (ii) the challenges or elements influencing the effectiveness of risk alignment that should be considered by banks, when developing their methodologies, and supervisors, when reviewing and assessing banks’ practices.

5. This report is primarily of a technical nature and is not intended to be prescriptive. It intends to enhance banks’ and supervisors’ understanding of risk-adjusted remuneration. The Committee expects that this report, by providing some clarification on the design of risk-adjusted remuneration schemes, could support and facilitate the greater adoption of sound practices in the banking sector and eventually, the convergence towards best practices in line with the objectives of the Basel Committee.

6. The main inputs for this report are the observations recently made by supervisors within their review of banks’ remuneration practices. The range of methodologies presented in this report thus reflects supervisory experience to date and helps to provide a representative, though perhaps still incomplete, picture of the current state of remuneration practices.

7. Examples of banks’ practices are included to illustrate possible approaches to aligning remuneration and risk, as well as to focus on particular issues that deserve attention as they may reduce the effectiveness of the risk adjustment process. The examples presented should not be considered as models that could simply be copied by other institutions as any methodology which is adopted needs to be tailored to the firm’s specific characteristics and nature.

8. A sound methodology for adjusting remuneration relies on several complementary components and involves a process with multiple and often complex steps. These various elements (design of the remuneration scheme, performance measurement, ex ante and ex post adjustments, deferral, award process) are analysed separately in this report to better link the identified technical and detailed issues with practices.

⁴ While not always explicitly mentioned, this report focuses in practice on the adjustments to the variable part of the remuneration paid to employees.

9. The report uses a specific terminology concerning remuneration, which is detailed in Annex 2. For the sake of consistency and to facilitate the comprehension of this report, please refer to that annex.

C. Key findings/observations on practices to align risk and remuneration as of mid-2010

10. The following elements present an overview of current practices on the main dimension of risk alignment that is further detailed in the report. This overview reflects the diversity of practices and the fact that they are often at an early stage and evolving.

Performance measurement and award process

11. Most firms have performance measurement frameworks in place to assess the achievements of the firm as a whole, its business lines and organisational units as well as individual employees. In order to maximise the incentive to deliver adequate performance and to take into account any risks of the business activities, some firms closely link remuneration outcomes with performance and risk outcomes. Firms also have made progress in tailoring performance and risk measures to the specific activities and roles of the organisational units and the responsibilities of employees aiming for a performance and risk capture that is as complete as possible.

12. Firms often use a wide combination of financial and non-financial metrics to assess employee performance, and construct highly tailored “indices” to reflect unique individual or corporate activities. The extent to which the performance measures used are appropriate to capture the risks taken and the risks outcome varies across institutions.

13. Measures of financial performance, such as targets based on revenue, profit or income, cash flow or return on equity, are still frequently used for performance measurement. Measures used are often accounting-based and retrospective. Virtually all firms employ a “management accounting” framework which maps firm-wide financial measures to internal organisational units. Many firms also rely on market based performance measures such as share price, particularly in the case of senior management. Such measures rarely capture the full range (or any) of risks that employees’ activities pose for the firm.

14. More and more firms tend to use economic efficiency measures in their performance measurement process, such as risk-adjusted return on capital (RAROC). Other frequently used measures include economic profit, risk-adjusted cost of funding (where the risks of a specific activity are directly priced into the cost of capital) or pure accounting adjustments (such as provisioning for future expense). These measures might be used directly to assess risk-adjusted performance or as driver to apply risk adjustment in the award process.

15. In addition, performance is also measured using non-financial measures such as compliance with internal controls, teamwork or other more qualitative criteria aimed at assessing the non-financial contributions of the employee.

16. For the operational implementation of a performance and risk aligned remuneration process, most firms use “bonus pools” that represent one or more intermediary steps between the employee’s individual remuneration and the total remuneration at the level of the institution. Therefore, performance measures and risk adjustment may be considered and applied at various levels, when determining remuneration pools and/or allocations to the employees.

Ex ante risk adjustments

17. Ex ante adjustments are applied before a remuneration package is awarded and “discount” an award for risk. Ex ante risk adjustments to remuneration can be quantitative or qualitative. Quantitative risk adjustments often address funds transfer pricing and valuation. Increasingly, firms are implementing specific adjustment measures, often capital-related (such as RAROC) as well as charges related to liquidity usage. To a large extent, institutions use metrics and risk measures already existing in the institution and previously developed for other internal purposes.

18. A critical issue, in addition to the quality of the risk measure and adjustment process, is the comprehensiveness and scope of risk adjustments. Some firms use more than one quantitative measure to reflect the risks incurred in their overall business model as a variety of quantitative measures considered together may be required to address the many risks undertaken by a business.

19. Banks also often make qualitative risk adjustments, in particular where difficulties are experienced in finding reliable quantitative measures to cover all types of risk and activities. When discretionary adjustments are made, an appropriate governance structure tends to play a significant role.

Deferral and ex post adjustments

20. As of mid-2010, most large international banks continued to feature a deferral period and vesting schedule that is the same for all or almost all employees of the firm who receive deferred remuneration, especially for employees below the senior executive level. That is, the duration of deferral periods and details of vesting schedules vary somewhat across firms, but not much within firms. Moreover, the fraction of bonuses that is deferred tends to depend formulaically on the employee’s total pay. Though deferred remuneration is often described as helping to align risk-taking incentives, standardising the features in ways that do not depend on risk calls into question whether firms are really paying attention to risk incentive alignment.⁵

21. Over the past couple of years, an increasing number of firms have instituted clawbacks, but most clawbacks are triggered only when the firm learns that information previously provided by an employee was misstated, or when the firm learns that the employee had violated internal policies. Several firms are implementing explicit ex post risk adjustments that make vesting dependent upon risk outcomes that occur during the deferral period (sometimes known as “performance based vesting”). The details of the triggers that cancel vesting vary quite a bit, but in the majority of cases the adjustments apply only to senior executives, not to employees more broadly.

D. Identified issues affecting the effectiveness of risk alignment methodologies

22. The elements below summarise the main supervisory considerations expressed in the report, corresponding to issues that could reduce the effectiveness of the remuneration scheme or to criteria and factors that should be considered by banks, when developing their methodologies, and supervisors, when reviewing and assessing banks’ practices.

⁵ Some exceptions exist. For example, some firms have separate “long term” and “short term” incentive plans, and the details of deferrals often differ across the two types of plans within the same firm. However, at many firms, “long term” plans are used only for a relatively small number of senior executives.

General considerations

23. Variable remuneration serves several different purposes within banking organisations and is notably used to attract and retain staff as well as to promote better employee performance. It is important for supervisors to be aware of these other objectives and to understand how they relate to the actual remuneration scheme used in a given institution and how they have influenced its design.

24. In order for incentives-based remuneration to work, the variable part of remuneration should be truly and effectively variable and can even be reduced to zero, in line with the symmetry principle defined by the FSB. In that respect, the balance between base pay (fixed remuneration) and performance-based pay (variable remuneration), along with the actual level of the remuneration, appears to play a key role. For instance, for employees with average and lower remuneration, an excessive reliance on variable remuneration might in practice prevent large downward adjustments of remuneration because the resulting total might be too small to support living expenses.

25. While most of the attention in the wake of the crisis has been devoted to highly paid employees, such as senior executives or traders, it is important to extend risk-adjusted remuneration to all material risk-takers. These could be either individual employees or groups of employees who may not pose a risk to the financial soundness of an institution on an individual basis, but may present a material risk on a collective basis.

Proportionality

26. In many jurisdictions, the FSB principles and standards have been applied more widely than simply to systemically important financial institutions as initially envisaged by the FSB. Proportionality applies both in the treatment of risk between institutions and also across different areas or employees within an institution as different business lines and activities might warrant different methods of risk adjustments and performance measurement.

27. By definition, proportionality implies case-by-case implementation and no standardisation, so its application will necessitate judgements by banks, when applying the rules and adapting them to their specific characteristics and risk, and from supervisors, when reviewing and assessing remuneration practices according to a risk-based approach. A key element that supervisors expect is the ability for banks to demonstrate that the methodologies they have developed to adjust variable remuneration to risk and performance are appropriate to their specific circumstances.

Corporate governance and risk management

28. To be effective, the risk adjustment process needs to be supported by strong corporate governance and a culture of prudent risk-taking. The role and importance of the board, and/or relevant board committees, to develop and implement *remuneration policies* – which produce a reasonable alignment between the risk faced by various parts of the institution – and the *practical remuneration arrangements* – which provide adequate and effective incentives to its employees, are not the main focus of this report but should nevertheless be considered as a key pre-condition for effective implementation.

29. The performance measures and risk adjustments adopted by a firm should be linked to the firm's long-term risk appetite to ensure consistency of the remuneration process with the firm.

30. The methodologies for adjusting remuneration to risk and performance should also be consistent with the general risk management framework and with the corporate governance framework. For instance, embedding risk and performance measures in existing

accounting, risk and control frameworks result in more robust measurement and facilitate a greater role for internal control functions. However, the existing frameworks should also be adequate to the task.

Risk and performance measurement

31. Performance measures and their relation to remuneration packages should be clearly defined at the beginning of the performance measurement period to ensure the employees perceive the incentives mechanism. The usual annual determination of bonuses should be based on rules, process and objectives known in advance, recognising that some discretion will always be needed.

32. Firms should use a combination of financial and non-financial measures to assess employee performance and adapt the measurement to each employee's specific situation. Qualitative factors (like knowledge, skills or abilities), might play an important role when it comes to judging and rewarding some activities – particularly when these serve to reinforce the firm's risk management goals.

33. The more measures used to assess performance do not include consideration of risks taken, the greater the need for risk adjustment. Several limitations have been observed in relation to the use of financial performance measures. These include the extent to which future outcomes are captured, the integration and proper allocation of costs or losses, and the use of income versus revenues.

34. When measuring performance, a number of factors might contribute to make the performance measurement system and the incentives it creates less likely to motivate employees to take inappropriate risks. In this regard, the following issues have been noted:

- The use of indicators like share prices (or similar external measures) may be influenced particularly in the short term by various factors like market sentiment or general economic conditions, not specifically related to firms' or employees' actions;
- Relative performance measures may increase incentives to take more risk or may, under certain circumstances, reward failure by decoupling remuneration from absolute value generation;
- To have the greatest impact on employee incentives, the variables used to measure risk and performance should relate as closely as possible to the level of the decisions made by the employee. High level variables that measure the performance of the firm as a whole may have limited impact on the risk-taking decisions of individual employees;
- However, high-level variables might be useful, at least until practices further develop, to avoid current shortcomings or challenges associated with the allocation of risk and performance between business lines or for the measurement of new business;
- Relying fully on controls and risk mitigants when assessing risk might create inappropriate incentives. An inherent measure of risk is probably preferable, at least when it comes to identifying the risk takers; and
- Discretion or judgement is often necessary when measuring risk and performance, particularly for more qualitative assessments or hard to measure risks. Transparency towards employees about how such discretion will be exercised would help to strengthen the impact on incentives.

Adjusting remuneration for risks

35. The nature and extent to which risk adjustments are needed depends first on the extent to which performance measures capture risks, but in all cases, some form of risk adjustment is needed as remuneration is often awarded before the final outcome of an activity is known. Risks taken need to be estimated (ex ante) and risk outcomes observed (ex post), and both ex ante estimates and ex post outcomes should affect payoffs.

36. Risk adjustments need to take into account the nature of the risks involved and the time horizons over which they could emerge. The impact of remuneration adjustments should be linked to actions taken by employees and/or business units, and their impact on the level of risk taken on by the firm.

37. In practice, a mix of ex ante and ex post adjustments will typically be needed as it appears that one or the other better address some situations or risks. In particular:

- For many activities, bad-tail risk (low frequency, high impact risk) is difficult to measure ex ante. Deferral could help reduce incentives to take such risks.
- In the case of risks which are difficult to measure, to model or are simply not known at the time of the award, deferral can be particularly useful because ex ante risk adjustment is less likely to work effectively.
- Deferral may not be fully effective in constraining the incentives of employees who have the ability to expose the firm to extremely long-term risks, as these risks are unlikely to be realised during a reasonable deferral period. In such cases, ex ante risk adjustments become more important.
- The effectiveness of deferral and ex post adjustments might vary according to an employee's role and seniority. Where the link between the individual actions of the employee and the performance of the firm is greater, deferral is likely to be more effective than for employees where the link is weaker. An effective malus linked to the actions of the employee can increase the effectiveness of deferral for all employees.

38. Most of the challenges or limitations associated with ex ante risk adjustment relate to the difficulty of measuring risk and of ensuring that risk adjustments are not overwhelmed by other considerations, such as a perceived need to pay bonuses at market levels regardless of performance or risks taken. This difficulty is less important for ex post adjustments because of the opportunity to observe actual risk outcomes. Nevertheless, even ex post adjustment poses challenges in identifying reliable risk measures and in applying these over an adequate deferral period. In particular:

- Adequate time is needed to allow a proper observation and measurement of risk outcomes. It is also important to ensure that deferred remuneration amounts relate to business outcomes which may still be subject to uncertainty. As a result, deferred remuneration needs to be sufficiently delayed before vesting (for example 12 months). If there is a need to vest parts of the deferred amount before the end of the deferral period, such gradual vesting should occur slowly (ie at a yearly frequency).
- The use of long term incentives may not be effective in cases where the employee leaves a firm prior to the end of the performance measurement period. The same applies to deferral if the unvested deferred remuneration is lost upon leaving the firm and the new employer compensates the employee for such losses (a "golden handshake"). This is because the employee escapes the effect of any performance adjustments or ex post risk adjustments that would have occurred had the employee stayed at the firm.

- Tax and legal issues impact the design of deferral plans and ex post adjustment, and notably the use of clawbacks. While this makes remuneration models highly specific to a certain jurisdiction, practice has shown that the underlying principles can be achieved in most tax, legal and regulatory environments.
- Deferral is more effective when deferred remuneration can only be adjusted downward. Methodologies that allow increases of deferred remuneration, to reflect for instance a lower level of losses observed than expected, may undo some or all of the effect on incentives of risk adjustment.

39. When designing a remuneration package, the question of the relative proportion in cash and equity instruments (like shares or options) is an important parameter. A key question is the extent to which shares and similar instruments contribute to create appropriate incentives. For purposes of affecting incentives, shares should be subject to a transfer restriction since they differ from cash only during the period when they are subject to transfer restrictions (given that unrestricted shares can be sold and converted to cash). Also, the transfer restriction period should be sufficiently long, to ensure that appropriate incentives are built and to truly differentiate it from a cash payment. However, transfer restriction should not be seen as a substitute for deferral, as deferral permits malus to be applied.

Award process

40. The nature of the award process, which links the variable remuneration of each individual employee with bonus pools and the total amount of variable remuneration at a firm's level, is also an area that should be carefully considered by banks and supervisors, as it directly influences how and when performance and risk adjustment are or can be used.

41. The way bonus pools are determined and funded can have significant consequences for employee incentives and also, more broadly, for the firm's financial soundness and its capital base. For example, under a top-down approach, the size of the employee's variable remuneration is dependent on his/her performance but also on the performance of all superior levels and ultimately, on the overall firm's performance.

E. Conclusion

42. As shown in this report, work is still in progress. Remuneration practices and methodologies continue to evolve. Although there is a substantial degree of diversity in current practices, some common trends have been identified. This report therefore presents some initial supervisory considerations that correspond to issues that may hamper the effectiveness of a remuneration scheme. It lists some factors that should be considered by banks, when developing their methodologies, and by supervisors, when reviewing them. In this way the report is intended to help promote the adoption by banks of sound remuneration practices and to achieve a greater degree of consistency in the implementation of the FSB principles.

1. General issues

43. Risk adjustment of performance-based remuneration⁶ is the cornerstone of the FSB *Principles for Sound Compensation Practices* and aims at limiting incentives for excessive risk taking. To do this, financial institutions must ensure that their remuneration schemes are consistent with their risk management and governance processes and, accordingly, incorporate appropriate performance hurdles designed to reflect their risk management and governance objectives. When creating remuneration plans, a financial institution should ensure that incentives to take risk are constrained by incentives to manage risk. The best way to achieve this outcome is to vary performance-based remuneration according to risks taken and risks realised.

1.1. Role of prudential regulation in risk alignment of remuneration

44. Financial institutions have long made extensive use of incentive-based remuneration schemes to attract, retain and motivate staff. In addition, most financial institutions make also use of their remuneration schemes to provide incentives to deliver greater levels of performance. This has affected both the level and design of remuneration schemes offered by financial institutions.

45. In particular, many financial institutions make extensive use of variable, or performance-based, remuneration schemes. Better performance by an employee against predetermined objectives equates to greater financial rewards for the employee. Conversely, mediocre or substandard performance by an employee will often deny the employee access to a substantial proportion of the potential remuneration available to the employee.

46. The way in which a remuneration scheme is designed can have a material impact on prudent risk management. Indeed, where there is a misalignment between remuneration hurdles and the risks taken on by an institution, this can severely undermine effective risk management within a firm and put in place incentives for excessive risk-taking which have the potential to materially impact financial soundness, as illustrated by several examples during the recent financial crisis.

47. It is the ability of remuneration arrangements to affect risk-taking behaviours that is of interest to prudential regulators. Matters which deserve close attention from prudential regulators include: the manner in which remuneration arrangements are determined; the incentives these create; and the impact they have upon risk-taking behaviours and the capital situation of a financial institution. The quantum of remuneration paid by a financial institution to its staff is not normally an issue for prudential regulators; as long as remuneration practices do not encourage imprudent risk taking and the firm can “afford” its remuneration expenses in the long term from a capital and liquidity perspective, supervisors have, in general, no particular position on the distribution of profits of a financial firm.

1.2. Conditions for effective risk alignment methodologies

48. In order to be effective, the various methodologies and techniques for adjusting remuneration to risk and performance discussed in this report need to be supported by a

⁶ Remuneration, for this purpose, includes all kinds of benefits: not only fixed salary and bonus awards (either in cash or share-linked instruments) but also all sorts of fringe benefits (including health insurance, pension contributions, car, housing, education).

strong culture of risk alignment and effective corporate governance. They also need to be consistent and integrated with risk management.⁷

Embedding a culture of prudent risk taking

49. The culture of an organisation sets an overarching framework for behaviours within that institution by establishing – both implicitly and explicitly – expectations about what is acceptable. Remuneration and reward arrangements within a firm play a predominant role in setting and reinforcing its cultural norms.⁸

Governing remuneration effectively

50. The adoption of sound risk management policies and practices within a financial institution is ultimately the responsibility of its board. An effective governance framework, set by the board, is critical to achieving a risk-focussed culture within a financial institution. This, in turn, provides the foundation for the successful implementation of sound remuneration practices across the firm.

51. A well-functioning board will review and approve business strategies and significant policies of an institution, including its remuneration arrangements. It will also satisfy itself that an effective system of risk management and internal controls has been established and maintained, and that senior management monitors the implementation of the risk management framework. In keeping with this philosophy, while the board itself may only be directly responsible for senior executive employment contracts, it should ensure that an appropriate system of oversight exists to ensure that performance-based remuneration of subordinate employees is in line with the institution's board approved remuneration policies.

52. The board should be supported in the design and operation of remuneration policies and structures by a Remuneration Committee. The Remuneration Committee should be responsible for making recommendations to the board on remuneration arrangements and ensuring that the behavioural incentives associated with performance-based remuneration are aligned with long term financial soundness and the risk management framework. Further, the Remuneration Committee (or the RemCo) should also be responsible for deciding on the most appropriate technique for adjusting the performance measures for risk.

Aligning individual incentives with firms' objectives

53. Ultimately, the remuneration practices adopted by a firm should be integrally related to its strategy and objectives – and these will cascade into individual business line objectives and to objectives for individual employees. Ideally, the performance incentives adopted by a firm to further these objectives should be linked to the firm's long-term appetite (or tolerance) for risk.

54. In establishing a risk-based remuneration framework, the starting point should be an assessment of the firm's risk profile and its risk appetite (or tolerance). This assessment should take into account all material risks and should differentiate between risks which affect the institution as a whole and those which affect individual business lines. It should identify the risk characteristics of the firm's main business lines and the risk "bandwidths" within

⁷ In order to assess the adequacy of the governance structure with the remuneration adjustment process, supervisors could refer to the scorecard 1 in Annex 3.

⁸ Supervisors should also not lose sight of other employment practices, such as promotion practices, which can also have a material impact on risk-taking behaviour.

which various categories of employees are to operate. Performance hurdles should be designed to reflect the risk-taking behaviours the firm seeks to encourage and dissuade employees from taking actions outside the firm's risk appetite/ tolerance.

Integrating the remuneration process in risk management

55. The accuracy and reliability of the measures of performance and risks used play a key role in the risk adjustment of remuneration and benefits from being developed with suitable inputs from the risk management functions. More broadly, the methodology used for adjusting remuneration benefits from being consistent with the general risk management framework. This would notably facilitate the validation and/or the control of the measures used and of the remuneration process as a whole.

1.3. Main components of risk adjusted remuneration

56. The process leading to the determination of risk-based remuneration for an employee requires several components, which closely interact. These elements are introduced below, in order to clarify their links, and are further discussed in the various parts of this report.

1.3.1. Performance measures

57. Performance measures play an important role for the variable part of remuneration packages as the value of remuneration depends on some kind of performance. Ultimately, performance can be defined as the degree to which the employee has achieved his objectives. Because of that, performance measures are an essential tool to link remuneration policies with both corporate strategy and the broader risk management framework.

58. Both qualitative and quantitative performance measures should be considered. While performance measures are normally focused on financial metrics, it is also important that financial institutions include non-financial metrics in developing the risk-based remuneration hurdles.

59. Finally, performance measures play a vital role in risk adjustment as they deliver the input for such a correction, regardless if they are applied *ex ante* or *ex post*. In the case of *ex post* application, performance measures can serve not only as clawback or malus triggers, but are also embedded in the design of deferred remuneration plans. Incorporating risk considerations in performance measurement can be achieved both by using risk metrics to correct measures which are not risk adjusted measures and also by employing metrics which are adjusted for risk in the first place.

1.3.2. Risk adjustments

60. When creating remuneration plans, a financial institution should ensure that incentives to take risk are constrained by incentives to manage risk. The best way to achieve this outcome is to vary incentive-based remuneration according to risks taken (*ex ante*) and risks realised (*ex post*). There are two points at which this can be done:

- *ex ante* - by adjusting remuneration for risk as it is accrued and awarded, to take into account potential adverse developments in the future; or
- *ex post* – by adjusting accrued remuneration during (eg through a malus clause) or after (eg through a clawback clause) a deferral period in the light of experience and observations of risk and performance outcome made.

61. Ex ante risk adjustments to remuneration are designed to reflect the level of risk exposure being taken on by the firm at the time of underwriting, whereas *ex post* risk adjustments are designed to incorporate risk outcomes after a reasonable deferral period that allows risks to materialise. Both methods rely on firms having in place reliable processes to measure potential risk exposures and/or risk experience, and which are capable of “arm’s length” verification.

62. A main assumption underlying the principle of risk alignment of remuneration and more broadly incentives-based remuneration, is that changes (and expected changes) in the value of the variable remuneration have an influence on the employee behaviour and his decisions. In practice, this means that the variable remuneration is supposed to be truly variable, that its amount is flexible and can even be reduced to zero in line with the symmetry principle defined by the FSB. However, remuneration practices (ie the mix of base pay and performance based pay) adopted for each category of employee can vary significantly. The balance between base pay (ie fixed pay) and performance-based pay (ie variable pay) might contribute to reduce the effectiveness of incentives schemes when for instance the base pay is not sufficient to make the variable remuneration genuinely discretionary or when the variable part is too small. An appropriate pay mix is a key condition for ensuring that risk adjustments can fully operate and influence risk-taking.

1.3.3. Award process

63. The award process is the determination of the individual variable remuneration for each employee. Its design has a significant impact on how and when performance measures and risk adjustments could be applied, as the remuneration process involves different level of layers of assessment and management. A main challenge related to the design of the award process is articulating the individual remunerations and the total remuneration at firm’s level. This usually involves “bonus pools” on several levels of the firm’s organisation.

1.4. Scope of application

1.4.1. Institutions

64. The FSB principles “are intended to apply to significant financial institutions, but they are especially critical for large, systemically important firms”.⁹ In practice, in many jurisdictions, the FSB Principles and Standards are being applied more widely and may therefore be applied to banks, insurance companies, fund managers and other institutions. They can cover a wide range of smaller institutions, which are not necessarily internationally active.¹⁰ While this report focuses on the application of the principles to banks, the question of the application of the principles to very diverse banking institutions raise some proportionality questions.

1.4.2. Employees

65. The FSB principles apply to those categories of staff whose professional activities have a material impact on the bank’s risk profile, with the possibility of expansion to other staff where appropriate. These categories of staff should at least include:

⁹ See the introduction of the FSB principles document.

¹⁰ Refer to Appendix 1 for a summary of the institutional coverage adopted by different countries in applying the FSB principles and standards.

- Responsible persons (senior executives)
- Risk and financial control personnel
- Material risk-takers (individual or collective)

66. The first category of persons – ie the responsible persons – is meant to include all persons who, because of their roles, have the capacity to make decisions that could materially affect the interests of other stakeholders of an institution.

67. Senior risk and financial control executives (eg the Chief Financial Officer and the Chief Risk Officer) come within the category of “responsible persons” and should be treated as above. However, other risk and financial control personnel also have a critical role to play in maintaining the financial soundness of an institution. They act as “gatekeepers” to ensure that the business which is being written by the employees of an institution is in line with the risk appetite set by the board of the institution. Therefore, it is important that institutions ensure that variable remuneration policies for persons in these roles do not compromise their independence.

68. The third category of persons captures those persons who receive a significant portion of pay as performance-based remuneration. Even though these persons may not pose a risk to the financial soundness of an institution on an individual basis, they can present a material risk on a collective basis. Indeed, relatively low paid staff may pose just as great a threat to prudent risk management, for example where the business line is organised on a commission basis or where profit generation is the key performance metric, without any offsetting risk mitigation requirements. Financial institutions need to have in place policies and procedures to identify such arrangements, as well as control procedures to reduce and mitigate the risks arising from them.

Illustrative example of materiality considerations

Supervisors may decide to apply certain thresholds (eg annual bonus are less than a certain percentage, eg 10% or 20%, of total remuneration or bonus under X Euros), under which it is presumed that the employee’s decisions do not have a material impact on the bank’s risk profile. Under those cases the supervisor may decide not to apply all FSB principles and standards or only some of them (the latter being a case of proportionality). Similarly, supervisors can leave the door open to institutions to explain why certain risk takers (employees belonging to the previous three categories) are not considered as “material” by the institution. For example, certain senior managers may indeed have a very limited degree of discretion in the credit granting process (the approval process is highly automated and the decisions are taken at higher levels). If the supervisor feels comfortable with the explanations, they may decide not to require the accomplishment of all or some FSB Principles and standards.

1.5. Proportionality in the application of the rules

69. Proportionality is a key principle to consider for the implementation and supervision of the FSB Principles and Standards on Sound Compensation Practices.

1.5.1. General observations

70. A key rationale for proportionality is a proportionate relation between the benefit in terms of the regulatory objective to the costs caused coming with regulatory requirements

and supervisory action. To the extent that the implementation remains in line with the objectives and substance of the principles, the details can be adjusted.

71. From the firms' perspective, the implementation of the rules can be tailored to the institutions' specific characteristics. From the supervisors' perspective, proportionality implies that the intensity of supervision will vary according to the particular risk characteristics of those institutions. This corresponds in practice to risk-based supervision. It relies on supervisors' judgement and underlying knowledge of the risk profiles of the institutions they supervise. Proportionality was in fact already identified by the Basel Committee as a key principle to be applied when conducting supervisory reviews in its *Compensation Principles and Standards Assessment Methodology* (see paragraph 6 of the methodology). As it relates to the conduct of supervisory review and not directly to the design and operation of methodologies to adjust remuneration to risk and performance, this issue of the proportionality of the supervision is not further discussed in this report but it is expected that supervisors will adopt such an approach when assessing banks' methodologies.

72. Proportionality is a general principle which, for the reasons mentioned above (broad scope of application and principle-based regulation), is expected to apply to all aspects of the FSB principles, including the methodologies used by institutions to adjust remunerations to risk. In practice, it implies that the extent of risk-adjustment that needs to be incorporated into remuneration plans should vary in accordance with the extent and significance of the risks involved. It even appears to be particularly relevant for this as the methodologies developed and used by institutions cannot generally be separated – and in fact should not be separated – from the risk management framework and the governance framework of institutions. It is thus closely related to the existing internal organisation, procedures, tools and indicators.

73. It is also important to consider that proportionality might also justify different implementation of the rules within institutions/groups, as different business lines or activities might require tailored implementation.

74. Proportionality is a case-by-case situation, which will require judgements by banks and supervisors. Institutions should be able to explain/justify choices made. Financial institutions need to demonstrate that the practices they adopt to adjust variable remuneration for relative risks are appropriate to the size and risk profile of their businesses.

1.5.2. Proportionality between institutions

75. Proportionality in the application of prudential standards and risk-based supervision are related concepts that are determined by the application of similar factors. The following factors need to be taken into account when considering proportionality:

- Size and complexity of the institution
- Business models
- Risk tolerance

76. The extent of risk-adjustment that needs to be incorporated into remuneration plans should vary in accordance with the extent and significance of the risks involved. A small institution involved in a risky business might not be expected to have as sophisticated a process as a large institution, which would be expected to have a process that is stronger than a small institution engaged in less risky business.

Size and complexity of the institution

77. Size and complexity of institutions is a key factor to apply the rules differently across institutions. Expectations of the level of risk adjustment, and the relative sophistication of the methods required to achieve it, should vary to fit the degree of risk involved.

Illustrative example

A large, internationally active bank offers a full range of financial services from retail banking business through to a complete suite of wholesale banking services and funds management. Variable remuneration is determined on the basis of an economic capital model. Further, the bank is expected to adopt both ex ante and explicit ex post risk adjustments that are appropriately aligned to risks. There must be a clear methodology for allocating variable remuneration from group level to business units and individuals. Variable remuneration should include a substantial deferred component.

A small retail bank operates within the same jurisdiction and variable remuneration is determined by the bank's return on equity. Some ex ante adjustments are applied at the pool level in the event of material adverse outcomes.

Observation: in both cases, the approach taken is adequate and commensurate with the bank's size, complexity and risk profile.

78. Examples of some implications of applying proportionality:

- The performance and risk measures used will generally reflect the tools available within the institution. This allows for embedding remuneration considerations into the firm's management framework. Adjustments based on economic capital measures can of course only be expected from institutions which have or should have in place such frameworks.
- The composition (mix of cash and shares or share-linked instruments) of variable remuneration might be influenced by the nature of the institution, independent of risk and incentives consideration. This may be notably applicable for mutual/cooperative banks or for publicly owned institutions.
- The size and relative complexity of some institutions might not warrant a remuneration committee. Here, alternative arrangements may be in place to ensure a sound governance process on compensation matters.

Business models

Different business models may justify different implementation across institutions as well as within institutions.

(i) Level of risks

79. The potential impact and frequency of risks to which banks are exposed varies from business line and by bank. The way in which employees of a particular business line are remunerated can have a significant bearing on the level of risk that is ultimately taken on by that business. For example, direct off- or on-balance sheet exposures written on a commission basis will typically give rise to a much greater degree of risk than a fee-for-service business, such as the provision of financial advice. It is essential that risk adjustments to remuneration be tailored to match the risk profile and risk appetite of individual financial institutions. These adjustments need to take into account the nature of the risks involved and the time horizons over which they could emerge.

(ii) *Measurability of risks*

80. In addition to the level of risk, the type of business also influences the measurability of risk. This in turn affects the ease with which risk adjustments may be made to performance measures and variable remuneration. Appropriate risk adjustments depend on the ability to develop quantifiable performance measures as a first step. In some businesses, such as traded market risk, these measures are more readily available and the next step – appropriate risk adjustments – can be undertaken. However, for businesses which rely more heavily on qualitative measures, such as a risk management unit, the process of quantification and therefore risk adjustment becomes more difficult. Nevertheless, this should not dissuade businesses from adopting a qualitative approach when this is the most reliable method available.

81. Incentive-based remuneration schemes should be adapted to fit the time horizons associated with risks in each business line so as to allow the performance which generates the bonus payment to be validated. The scheme should make clear how incentive payments will be managed from their calculation through to their accrual, validation and pay-out.

Example of a mid-sized bank

A mid-sized bank has separate business units for its corporate and retail credit products. A profit share pool is allocated to both business units based on group performance. In allocating variable remuneration to staff originating corporate loans, the bank considers the performance of individual loans in addition to the overall performance of the loan portfolio and the new business generated. For staff within retail loan origination, variable remuneration is adjusted only on the basis of portfolio performance. Variable remuneration for both divisions incorporates elements of deferral – up to three years for retail credit and three to five years for corporate credit.

Observation: The performance measures and risk adjustments to variable remuneration are different for each unit and have been tailored to reflect the differences in risk between the business units.

Risk tolerance

82. The overall objective of the FSB principles and standards is to reduce incentives for excessive risk taking by aligning risk and remuneration. However, to the extent that it remains prudent, the actual level of risk-taking deemed acceptable will vary across institutions, depending on the overall risk tolerance of those firms. As a result, there could be some differences between two institutions having similar activities in the design of their remuneration schemes as they could pursue different strategies and objectives.

1.5.3. Proportionality within institutions

83. Risk adjustments applied to each category of employee should be proportionate to their overall responsibilities within the firm and their capacity to effect risk decisions within the firm.

Illustrative example

The Chief Executive Officer of a bank is eligible to receive variable remuneration equal to approximately 50% of total remuneration. Performance measures are based on after tax profits and earnings over and above the estimated cost of capital and other specific indicators such as risk management and strategic performance. Variable remuneration is deferred for a period of three to seven years.

Within the same bank, employees whose primary role is risk and financial control are also eligible to receive some variable remuneration, equal to approximately 10% of total remuneration. Performance measures are based on the quality and integrity of controls and decisions and the extent to which risk management is embedded within the bank.

Observation: The bank's remuneration practices align variable remuneration with overall responsibilities and the capacity to take risks that affect the bank as a whole.

2. Inputs for the determination of remuneration

84. This chapter discusses key considerations in identifying and applying appropriate performance measures and considers the risk adjustments and the award process.

2.1. Performance measurement

85. Performance measures are metrics and benchmarks which help assess progress toward pre-determined goals, reflecting the efficiency with which resources are deployed, the quality of outputs (both quantitative and qualitative) and the outcomes that result. Properly designed, performance measures can help align the interests of various stakeholders in financial firms by translating strategic objectives into operational outcomes. Badly defined, such measures can just as easily motivate undesirable behaviour, and ultimately contribute to the misalignment of risk and reward.

2.1.1. Types of performance measures

86. Different metrics provide different lenses through which performance is measured, each with unique costs and benefits. Measures can broadly be described based on the following elements: quantitative and qualitative measures, absolute and relative measures and internal and external measures.

Quantitative and qualitative performance measures

(i) Operating efficiency measures

87. Operating efficiency measures are those related to targets for profit, revenue, productivity, earnings or cost ratios. When used in isolation, they can expose firms to significant un-captured risk. For example, short-run measured profit can differ significantly from actual long-run results where risk outcomes become clear only over time. The quality and volatility of revenues as well as the likelihood and timing of their receipt can vary over wide time horizons. Likewise, performance might be measured by gross revenues or by volume figures, such as mortgages sold, which do not take into account operational costs or costs of capital and may only be loosely linked to net profitability. The use of such measures can result in severe distortion between short-term profitability and long-term (risk-adjusted) outcomes and the performance assessment which is relevant for determining the remuneration award. For example, an employee that is paid a commission based on the number of mortgage loans made, where each loan is priced the same, could increase unit sales (and the employee's remuneration) simply by making a greater number of riskier loans. While this might be desirable from the employee's perspective, it exposes financial institutions to a high degree of "un-costed" risk.

88. In general, firms should exercise caution when using operating efficiency measures to benchmark performance as such measures rarely capture the full range of risks which employees' activities pose for the firm. However, depending on the actual role and responsibilities of an employee, they may be adequate as part of the firm-wide performance measurement framework.

(ii) Economic efficiency measures

89. Economic efficiency measures assess revenue and earnings against the capital such activities absorb and hence have the potential to take into account at least on a partial basis the extent of risk such activities pose. Economic capital is a component of other well-known measures such as internal economic risk capital, net economic contribution or risk-adjusted return on capital which are often used in practice. Other frequently used economic

efficiency measures include economic profit, risk-adjusted cost of funding (where cost of capital results in a direct charge in a risk adjusted performance income statement) or pure accounting adjustments (such as provisioning for future expense).

90. When quantitative measures are based on future outcomes or projections, model errors and false assumptions may severely impact the quality of such assessments. It may therefore be necessary to include discretionary corrections. For example, if a firm uses quantitative cost-of-capital and liquidity measures to risk adjust a profit-and-loss measure, it may also apply discretion to compensate for model error. However, while such corrections may be subjective to a certain degree, they must not be arbitrary. It is generally expected that in cases where discretion is utilised, it should be accompanied by a set of policies and procedures. In any case, firms should be able to explain the rationale behind such discretionary adjustments.

(iii) Qualitative Performance Measures

91. For some work functions (such as back office), quantitative output measures may be less appropriate and qualitative performance indicators such as compliance with risk control measures or skills such as teamwork may take on more significance. Such measures may only be weakly related to risk outcomes, but many businesses emphasise what is sometimes called “the how” in performance measurement schemes as an additional element to differentiate performance. Whether employees are able to work across business lines, or demonstrate leadership can be as important to corporate success and future profitability as retrospective measures of financial performance. Qualitative measures can also address issues related to compliance (such as adherence to limits, audit results or self-assessments), or intangible factors such as use of judgment (eg provision of information or identification and escalation of material risks to relevant personnel). To ensure qualitative factors are used effectively in measuring performance, they need to be clearly defined and communicated.

Examples of qualitative factors used by the industry

- The franchise nature of the employee's business (client oriented businesses are favoured over proprietary trading);
- Quality of Revenues (businesses with large illiquid risks appear to be discounted qualitatively in addition to the quantitative liquidity charges);
- Performance appraisals from managers and colleagues;
- Resources and behaviours used to achieve the results;
- Teamwork
- Individual employee compliance with controls or adherence to the rules
- Track record / multiple years of performance

Absolute and relative measures

92. Absolute performance measures take into account only the firm's own indicators of performance, based on the firm's risk profile and strategy. Consequently, they are adequate for assessing long term performance of the employee, since they ensure there is an alignment with the firm's long term incentives. However, they may prove less effective for new entrant firms, since no guidance exist to what absolute level they should be set in order to provide the right incentives (ie there is a need to calibrate with peers in these cases).

93. Relative performance measures compare performance with a benchmark. Examples include an “internal” one (ie other internal business lines or co-workers), an internal budget or “external peers” (ie more on a firm wide or business line level). Relative performance measures produce incentives to outperform peers and motivate higher performance. They are therefore often used for management and human resources purposes to differentiate between employees. However, relative benchmarks may result in sub-optimal absolute performance, if the only standard is that peers perform worse. It is also possible that relative performance measures may encourage “herd mentality”, in which firms and/or employees have an undue tendency to mirror peers’ behaviour to stay close to their benchmark. If the same relative measures are widely used, this could have procyclical consequences for the global financial system.

Internal and external measures

94. Besides internal measures (like operating or financial measures), firms frequently rely on market measures like market capitalisation (eg share price), especially in the upper levels of the firm’s hierarchy. Such external measures may be adequately linked with the firm’s objectives (eg to boost the firm’s market capitalisation and shareholder return), but they are also often significantly driven by market sentiment as well as other external factors, particularly in the short term. They are as such not necessarily correlated with the internal value generation of a firm. Hence, such external measures have to be used with care as they may be not suitable to provide effective incentives. Furthermore, lower hierarchy levels are even less involved to direct their efforts towards external performance measures that they cannot influence by their own behaviour, therefore weakening the linkage between incentives and remuneration.

2.1.2 Framework for assessment of performance

Linking performance measures and objectives

95. The definition of performance measures is closely linked with the strategy and objectives for the firm as a whole, its business lines and, eventually, all employees. Ideally, performance measures can be derived directly from these objectives, as they measure to which degree an objective has been met. The measures and their relation to the ultimate value of remuneration packages should be clearly defined at the beginning of the performance measurement period, as well as the extent to which discretion in the allocation process can be used. Indeed, not being clear about the performance measurement and having to adapt already determined approaches within or at the end of the assessment period can break the link between objectives and remuneration and lead to inappropriate incentives or, worse, to rewarding failure.

Combining performance measures

96. As mentioned above, performance metrics can take the form of either financial or quantitative measures or non-financial or qualitative measures. In many cases, accounting-based measures of financial performance serve as the starting point of the performance assessment. However, such metrics are rarely used in isolation. Firms often complement quantitative benchmarks with inputs that are more qualitative in nature, using a wide combination of financial and non-financial metrics to assess employee performance, and construct highly tailored “indices” or “scorecards” to reflect unique individual or corporate activities. Measures can utilise overlapping time periods (to reduce incentives to maximise performance in any one period), or be weighted to allow for differential prioritisation of outcomes. They can be long or short-term in focus. The combination of different metrics might also contribute to reduce the risks of fraud or gaming of the measures.

Consistent design and implementation across the firm

97. The actual performance measures may differ widely within a firm. A measure (or set of measures) suitable for assessing the results of the overall firm or its top management may not be appropriate to evaluate an employee at lower or middle levels of the hierarchy (ie one who has a narrower perspective and only a relatively small influence on the firm's overall performance). Hence, performance measures need to be tailored to match the objectives of the unit to be assessed. This has to happen in a way that ensures consistency across the whole firm. Otherwise, single business lines and employees have incentives to pursue goals not in line with the firm's business and risk strategy. The design of the award process is key to ensure the consistency of the various firm's remuneration decisions.

2.2. Incorporating risks in the remuneration process

98. In general, but particularly when performance measures are not risk-based, risk-adjustments are necessary to ensure that appropriate incentives are created.

2.2.1. Completeness of risk capture

Capturing all types of risks

99. Risk measurement should be comprehensive and address known financial risks (eg market, credit and liquidity), as well as non-financial risks (eg legal, reputational and compliance risks) and other operational risks.¹¹

Capturing risk within institutions

100. All complex institutions operate in frameworks where transfer of risk between business lines is common. When assessing the performance of business lines, the firm has to make sure that the risks are appropriately captured at the relevant level of hierarchy and that risk transfer mechanisms do not let risks "vanish" out of the scope of the responsible units. This issue might be dealt with using appropriate measures or risk adjustments, taking into account the nature of the award process.

Examples of risk capture issues within groups

All material risks created by and inherent to a business are expected to be appropriately captured in the performance measurement scheme applied to the business. Examples of failures to do so:

- A division of a large company routinely sells credit insurance in the form of credit default swaps (CDS) on fixed income securities. However, the internal performance measurement process for the division excludes the revaluation of the CDS but includes the premium income received. As a result, the division is effectively paid to sell CDS and the firm is exposed to material risk on these contracts - but no one is accountable for managing that risk.
- A large financial firm measures the performance of its capital markets division using a fair value total return function. However, it decomposes the numerator of that

¹¹ In order to assess the comprehensiveness of the risk capture and of corresponding measures and risk adjustments, supervisors could refer to the scorecard 2 in Annex 3.

return into the portions driven by the key risk factors of the business – interest rates, interest rate volatility, credit spread risk and net interest income. It then removes credit spread risk from the return calculation. As a result, the firm is exposed to significant credit spread risk and the business unit is motivated to assume more of this risk to maximise net interest income. However, no one is incentivised to manage the credit performance of the assets.

Measure of inherent vs actual risks

101. In considering risk, it is important to utilise measures of inherent, rather than residual risk, where inherent is meant to indicate the magnitude of risk prior to the application of corporate controls, at least when it comes to identifying risk takers.

2.2.2 Level of risk measurement within the firm

102. To have the greatest impact on employee behaviour, the variables used to measure risk and performance should be as close as possible to the level of the decisions made by the employee that is subject to the risk adjustment. For example, for senior executives, it is good practice for institutions to design the remuneration schemes to include financial metrics based on the performance of the entire firm, or for performance and risks of units or decisions that were determined by senior executive strategy. In contrast, variables for a lending officer could be the performance of loans originated or monitored by that person. Variables for the leader of a business unit ideally would be for performance and risk of that unit.

103. It is an open question whether high-level variables, like the performance of the firm as a whole, should be among the drivers of risk adjustments for lower level employees. Firms may wish to include such variables among determinants of bonus awards in order to promote teamwork. However, it is not clear how effective such variables will be in changing risk-taking behaviour when they are part of risk adjustments.

104. A number of practical problems with variables are likely to confront designers of risk adjustments. For example, where a business involves cooperation from several units, how should performance and risk variables be used in adjustments for employees of the different units? What if these variables are difficult to measure, for example in cases where the business is new? It may be difficult to distinguish the extent to which individual business units have contributed to a firm's overall risk profile. Keeping track of performance and risk tied closely to each employee's decisions to ensure that appropriate incentives exist may involve large IT expenses. One way to reduce such problems is to use higher-level outcome variables, for example business-line level variables for all employees of all business units in the line. This reduces costs and complexity, but is also weakens the link between employee incentives and outcomes because, for a large business line, most employees may feel their own actions are not likely to affect outcomes for the line as a whole. Overall, a balance needs to be struck between taking a practical approach and achieving a clear assignment of responsibility for risk. Practice in this area is at an early stage, and designing risk adjustments is likely to involve a lot of tradeoffs and experimentation over the next few years.

2.2.3. Balance between performance and risk adjustments

105. There is no point in time when all final outcomes related to firm performance are known with certainty given the nature of ongoing operation of the firm. Risk has therefore to be included in remuneration systems on an ongoing basis as well through either ex ante and/or ex post adjustment to remuneration awards, depending on the kind of risks. The

necessity to risk-adjust remuneration is thus due to the fact that at the time the remuneration award is granted, ultimate performance cannot be assessed without uncertainty.

106. In addition, from a human resources or management point of view, performance-based remuneration is to a certain degree awarded to promote future performance, ie as incentive to perform in future, and not only to compensate past performance, which could be reflected in the performance measures being used. It is thus important to know the extent to which they are geared towards future developments as the usage of such measures implies that ex post risk adjustments are required. The mix of backward- and forward-looking performance measures also influences the mix of instruments and deferral decisions, as some instruments are more suited for ex post adjustments than others.

2.2.4. Balance between ex ante and ex post adjustments

107. Ex ante risk adjustments have the advantage of timeliness, having an immediate effect on risk-taking behaviour. But, in the absence of sufficient time for the extent of risks assumed to emerge, these measures often prove to be unreliable and their impact can often be overwhelmed by short-term measures of performance.

108. Ex post risk adjustments, on the other hand, have the advantage of enabling firms to reassess employee performance in the light of risk experience. Information about risk outcomes can be used. This could include losses realised or errors in performance and risk assessments during the accrual period (eg errors due to employee misstatements of risk as such errors usually are discovered when risk outcomes are not as expected). By delaying remuneration adjustments, the impact on risk-taking behaviours of ex post adjustments will be less immediate than with ex ante adjustment, as employees may tend to discount the value of deferred remuneration. However, delay is a critical component of deferral and ex post adjustments.

109. Indeed, in order to be effective and clearly different from ex ante adjustments, deferred remuneration needs to be sufficiently delayed before the start of the vesting period. A 12 month delay before vesting the deferred remuneration is started and then a yearly or longer frequency for the vesting of the remaining amounts, as done by most institutions, should create appropriate incentives and ensure in most cases that risk outcomes can be effectively observed.

110. The effectiveness of deferral and ex post adjustments might vary according to the employee's role and seniority. Where it is already difficult for employees to see how they can influence the short term performance of the firm as a whole, it is even more challenging for them to see how they can impact long term performance of the firm as a whole. Still, for some employees, this link is so clear that it can be individually expressed. For example, because of their forward looking strategic role in the firm, long term performance measures and deferral over a multiyear period are mostly seen for senior executives.

111. For some business activities, risks do not generally persist beyond the current period, thus reducing the potential need for ex post adjustment (or deferral). One example of this might be a spot foreign exchange trader who typically closes positions at the end of each day, so end-year net profit is largely known. However, the long term impact of such activities may be hidden, but should still be taken into account. For example, a foreign exchange trader with no end-of-day positions could cause a loss on a single day which offsets the profit of several months, but it could also, in the long run, have a material impact on the firm's market risk position and use of liquidity resources and some operational, reputational or compliance risks may still remain.

112. When designing risk adjustments, attention should also be paid to the capture and treatment of bad-tail risks. For example, many firms use a cost of capital framework to translate economic capital into its cost equivalent, adding a “surcharge” for estimated bad-tail risk associated with given activities or positions. Such methods are a way to assess, ex ante, a surcharge for tail risks. However, for many activities, bad-tail risk is difficult to measure ex ante, so reliable formulaic risk adjustments may be difficult to implement. Stress testing or stressed measures might be used by banks in that context to help ex ante risk adjustments take into account severe but plausible scenarios. However, since bad tail risk can be caused by a wide variety of highly improbable scenarios, stress-based ex ante risk adjustments are likely to fail to capture all such scenarios. Deferral methods with ex post risk adjustments should in theory more accurately and comprehensively capture the true cost of such risks. However, deferral methods may also fail to fully adjust for all such scenarios because employees may expect that most such scenarios will not occur. It is therefore probably the case that ex ante risk adjustments and deferral with ex post risk adjustments are complementary means of adjusting for bad-tail risks.

113. Deferral practices can be used to address incentives associated with two kinds of risks. In the case of “ordinary” risks, meaning those that are reasonably well understood and for which severity and time horizon can be assessed, the deferral period and vesting schedule should match the time profile of risk outcomes of the business or have a longer profile, and ideally the ex post adjustments should be tightly linked to the risk outcomes. In the case of unmeasured and unmodeled risks, the time profile of risk outcomes and the precise nature of the outcomes may not be well understood. Deferral can be particularly useful for such risks because ex ante risk adjustment is less likely to work well. However, the deferral period should be relatively long and the vesting schedule should be back-loaded. It may be necessary to make ex post risk adjustments depend on less granular measures of risk outcomes, such as the accounting results of the firm for senior executives or the results of the business unit for other employees.

114. Ideally, the length of the time horizon of deferral should match the risks’ time horizon, in order to ensure the effectiveness of the risk adjustment process (the outcomes need to be observed and measured). However, such a situation is not always feasible. For instance, deferral may not be effective in constraining the incentives of employees who have the ability to expose the firm to extremely long-term risks, as these risks are unlikely to be realised during a reasonable deferral period. In such cases, ex ante risk adjustments would be more important. For instance, for long-term loans like mortgage, it is unlikely that the deferral period could extend up to the end of the loans, hence ex ante adjustments, like taking into account the expected loss of the loans, might be appropriate.

115. Clearly the better the quality of ex ante risk adjustments, the less will be the need for ex post risk adjustment.¹² However, to date, ex ante risk adjustments have relied heavily on subjective assessments of potential risks. Moreover, due to the uncertainty of payoffs, there will always be a need for ex post adjustment so as to back-test actual performance against risk assumptions. This suggests strongly that a mix of both approaches will typically be needed. In either case, the impact of remuneration adjustments should be linked to actions taken by employees and/or business units, and their impact on the level of risk taken on by the firm.

¹² When designing and applying ex post risk adjustments, the ex ante risk adjustments already applied have to be considered to avoid any double counting of risks.

2.3. The award process

116. The award process ultimately results in the determination of the remuneration for each employee. A key challenge of the award process is translating performance measures to actual remuneration awards and defining at what level performance can be accurately assessed and risk adjustment could be applied. Indeed, some performance measures and risk adjustments cannot be directly attributed to a single employee. Furthermore, qualitative performance criteria need to be mapped to the financial value of a remuneration package. Finally, this must be done in a consistent manner throughout the whole firm.

2.3.1. Top-down vs. bottom-up

117. This section discusses two variations of the award process. While in practice the process is quite complex and includes various checks and balances as well as iterative feedback and reconciliation steps, the award process can be classified into either a top-down or a bottom-up process. Most firms employ a combination of a top-down and a bottom up method. While primarily distributing the top-down performance of the company down the lines, a bottom-up approach is used to mitigate perceived imbalances and different remuneration between business lines.

Top-down approach

118. Under the top-down approach, the remuneration process starts at the top of the organisation. In practice, this means “funding” the whole company’s bonus pool using the performance criteria tied to the firm’s overall performance. This firm-wide pool is then distributed to the first-level units according to their own performance. The process continues down the line to individual employee’s award. On each level, a different set of performance measures may be applied, considering the responsibilities and objectives of the units evaluated. However, the size of the unit’s pool is not only determined by the unit’s performance. Since the amount to be distributed is itself dependent on the allocations on superior levels, performance at those levels and, ultimately, the overall company’s development, both performance and risk-wise, is indirectly taken into account. In turn, the approach allows using more operational performance criteria on lower levels of the hierarchy without losing the link to the overall performance. This is important especially for units whose direct contribution to the company’s value added cannot be easily determined (eg risk management, back-office functions).

Bottom-up approach

119. In a bottom-up approach, the bonus process starts at single employee level. Depending on the performance criteria against which the employee is assessed, a bonus allocation is made. The remuneration “pool” of an organisational unit is determined by the sum of remuneration awards on subordinated levels. A pure bottom-up approach has some potential weaknesses. As it is only based on an individual’s achievements, the approach will only consider overall corporate performance if the individual assessments adequately capture overall performance when taken together and this is likely to be difficult to achieve. As a practical matter, pure bottom up approaches are rare or non-existent, because virtually every major bank must limit the overall amount of remuneration that is paid to a level to take into account the related net revenues.

120. A bottom-up approach may lead to incentive pay awards that are overly influenced by the pay levels of competitors, leaving the determination of remuneration levels primarily to market forces. In such cases, the influence of risks taken is too weak.

121. The bottom-up component of an award process often leads to cross-subsidisation between business lines. This can be acceptable as long as it does not lead to improper incentives and is appropriately governed. However, if the company's overall performance falls short, the bottom-up component may lead to a situation where there is more remuneration distributed than is justified. In this case, the shareholders (and probably other stakeholders) subsidise the employees of the firm. The recent crisis can serve as an example of such a situation. Some banks, even those heavily supported by the national governments and central banks, awarded remuneration packages that were not covered by their economic success, leading to substantial capital drains at the wrong time.

2.3.2. Funding

122. "Funding" describes the process of "filling" bonus pools. While this process normally takes place at the end of the business year, preparation starts usually much earlier, as bonus expenses are accrued throughout the year. The criteria employed to determine the funding are a vital part of a remuneration system. Usually, a mix of pre-defined criteria is applied. However, management discretion also plays an important role.

Performance-based funding

123. Under a performance-based funding approach, performance criteria serve as a basis to determine the funding amount, ie to translate the performance assessment into a remuneration value. This transformation may be more easily carried out for performance measures based on financials. As an example, the financial performance of a company or business line can be shared between its shareholders and the employees applying a pre-defined distribution quota ("sharing percentage"). For non-financial performance measures, the transformation process is less obvious and mostly relies on management discretion. It is therefore important to understand the interaction between funding criteria for different levels of the firm.

Discretionary funding

124. Discretionary funding is applied if the bonus pools funded by pre-defined performance criteria are not sufficient to match the bonus level as desired by management. There can be many reasons for such a mismatch. In most cases, the management deems the relation between the "market value" of their employees and the bonus payments strictly based on a result driven, performance-based approach as not appropriate and decides to match the market remuneration level by subsidising its performance-based bonus pools by an additional market-based funding.

125. Again, it is important to assess on which level such discretionary funding occurs. If it takes place at the top level, it shows that the bonus payments are not covered by the performance of the company, leading to a subsidisation of the employees by the owners of the firm. While this might not be avoided in exceptional circumstances, discretionary funding for an overall firm level should be applied as conservatively as possible and be fully transparent to the owners of the company. Even below the top level of the firm, a prevailing need for discretionary funding would show poor profitability of certain business units and should prompt mid-term management action.

126. In addition, discretionary funding should influence the remuneration mix, as it is mostly founded on the need to "invest" in the turn-around or build-up of business activities. Here, deferred remuneration linked to the future outcome of these initiatives is more appropriate than short-term payouts, as deferred remuneration may convert market-based into performance-based funding in the long-term. Discretionary funding of short-term

remuneration instruments may result in rewarding performance which neither has been achieved in the past nor will be achieved in future.

127. It should be mentioned that discretionary funding can also result in reducing the size of the bonus pools. This is for instance the case if performance-based funding criteria (ideally defined at the beginning of the performance measurement process) lead to pools regarded as too big.

2.3.3. Allocation

128. “Allocation” refers to the system or mechanism used for distributing a bonus pool to employees. The allocation process can be classified into two extremes.

(a) Formula-based allocation

129. A formula-based allocation relies on quantitative variables to calculate the bonus amount to be allocated to an employee. The result of that calculation may lead to an absolute amount to be paid out (corresponding to a bottom-up approach) or a relative share of the bonus pool that is allocated. The process is deterministic and, once established does not allow for additional management discretion.

130. This type of process can lead to clear incentives, as the employee knows in advance all factors that influence his bonus award. However, a formula can never include all job objectives of an employee. In addition, it is difficult to incorporate qualitative performance measures. Having formula-based allocation alone may therefore lead to undesired incentives every time the formula is not able to capture all objectives the employee has to meet.

131. Even if a performance measure gives a quantitative output, there often is no linear relation between that output and the resulting remuneration value. Often, caps and floors are applied, and the relation between performance measure and remuneration value may not be linear. This may be the case if the performance is evaluated against a predefined budget.

132. Both caps and floors come with caveats. Floors break the relation between performance and remuneration in the case of unsatisfactory results. Floors also impose a limit on downward risk adjustments, hence weakening the symmetry between risk outcomes and remuneration outcomes. On the other hand, caps may diminish incentives to perform, as performance exceeding the cap is not reflected by additional remuneration and therefore does not “pay off” for the employee. However, the absence of caps may animate to growth beyond sustainable limits and encourage inadequate risk taking. It is therefore important that firms define the link between performance measures and remuneration outcomes wisely and consider the effects of inappropriate relations, caps and floors.

(b) Discretionary allocation

133. The discretionary approach leaves the determination of a bonus award solely to the management or to the remuneration committee. Usually, discretion is exercised in a way which is mostly not transparent to the employee. However, even under a discretionary approach, most employers have agreed objectives with their employees and have, at least informally, linked the bonus awards to be made at the end of a performance period to the achievements of the employee. This is done to give the employee a clear impression on what kind of behaviour gets rewarded, while at the same time keeping some degree of managerial flexibility. If employees perceive remuneration decisions as arbitrary, the incentive effect of performance based remuneration is weakened or even tainted.

134. In reality, most firms use a combined approach. While there are “near-deterministic” elements in the allocation process, there is a discretionary override, which is used in order to capture all expectations the employee has to meet. Also, discretion is exercised to achieve recruiting and retention goals. However, such factors should not dominate.

3. Ex ante risk adjustments

135. Ex ante risk adjustments represent the firm's initial attempt to risk adjust remuneration pools and/or individual awards made to employees. They can be quantitative or qualitative in nature and can be applied throughout the remuneration process.

3.1. General comments

136. In determining remuneration pools / individual awards, firms should consider the full range of current and potential (unexpected) risks associated with the activities undertaken. Historically, performance measures used in setting the remuneration pool or individual awards frequently contained embedded risk adjustments. Nevertheless, they may not fully or adequately capture risks undertaken (particularly in stressed environments). Thus, ex ante adjustments should be applied to ensure that the remuneration is fully aligned with the risks undertaken.

137. Industry participants may use a variety of ex ante risk adjustments according to the business line, activity of the employee, and the nature of the performance measure and the award process. In doing so, it is important for the RemCo and the firm to understand the nature of the risks been undertaken by business lines or employees to ensure that the ex ante risk adjustment adequately captures both magnitude and duration of the risk. As a result, a combination of different ex ante risk adjustments may be applicable.

138. Quantitative measures allow for an explicit adjustment to remuneration based on the risk and risk outcomes and are useful as a first step in adjusting the amount of incentive remuneration awards for the firm, a business unit or an employee. Significant firms in particular should consider using more than one quantitative measure to reflect the risks incurred in their overall business model. Furthermore, it is important that the RemCo understand the assumptions built into the ex ante risk adjustment in assessing the range of remuneration outcomes that can occur in expected and unexpected scenarios.

139. Where a firm experiences difficulties in finding reliable quantitative measures to cover all types of risk undertaken, most likely there will be a need for the firm to rely on informed judgments to estimate risks and risk outcomes. Most firms have or are in the process of incorporating risk-based judgment as a critical input to remuneration determination, hereafter referred to as qualitative risk adjustments.

140. Most firms have implemented, or are taking steps to implement, some ex ante adjustments in determining variable remuneration. Ex ante adjustments are generally first applied at the pool level on the basis of performance against selected financial measures. Better practice firms incorporate risk in these adjustments by using some risk-adjusted measure, such as risk-adjusted return on capital. A qualitative overlay is then imposed which considers risk management and compliance objectives. Discretionary adjustments by the board sit as an overarching adjustment tool. A similar approach is then adopted for the allocation of the variable remuneration pool to business units within the firm, with further ex ante adjustments made as necessary. Allocation to individuals is then determined against specific performance objectives which will include targeted financial and risk management measures, appropriate to the role and responsibilities.

3.2. Quantitative risk adjustments

141. Remuneration pools and individual awards typically incorporate funds transfer pricing and valuation adjustments. Increasingly, firms are implementing specific adjustment

measures, often capital-related. Firms should have a clear rationale for their choice of measure, including why that measure is appropriate for their business.

3.2.1. Funds transfer pricing adjustments

142. Treasury units transfer funds to business units at a cost and term consistent with the mandate of the business to assume interest rate risk and liquidity risk. This is a fundamental mechanism to control these risks in the firm. The assumptions upon which pricing is determined are critical to the effectiveness of this mechanism. A failure to accurately reflect the price of funds for differing risk profiles, including a stressed environment, can expose the firm to interest rate and/or liquidity risk.

Example of funds transfer pricing adjustment used by an universal bank

Net carrying costs (interest on positions adjusted for cost of funds) are differentiated by asset class, calculated daily using a stressed methodology framework that attempts to capture funding conditions in stressed markets. Costs are allocated to business units based on their daily inventory balances. Treasury distinguishes between assets that can be funded on a secured/unsecured basis. Charges for assets funded on unsecured basis are based on the firm's weighted average cost of long-term unsecured funding. Assets funded on secured basis are charged a weighted average cost of funds that incorporates overnight benchmark rate, LTD Spread and Funding Ladder (which accounts for asset liquidity).

Observation: The advantage of this approach is that the cost of funding is driven down to the business level daily differentiated by asset class to reflect the transactional liquidity of the positions funded in both normal and stressed markets.

Funds transfer pricing adjustments for interest rate risk

143. The cost of funds provided by Treasury units is adjusted to reflect the corresponding interest rate risk.

Illustrative example

Lending units obtain funds from Treasury on a matched funded cost of funds basis. This effectively immunises the lending department from interest rate risk, leaving the department with credit risk, their core expertise.

Observation: This ensures that Treasury staff receive a variable remuneration that is aligned to the bank's interest rate risk and that lending staff receive variable remuneration that is aligned to the bank's credit risk – both within their areas of control and responsibility.

Funds transfer pricing adjustments for liquidity risk

144. The cost of funds provided by Treasury units is adjusted for the cost of obtaining funds in the marketplace for terms consistent with the transactional market liquidity of the positions funded.

Illustrative example

A firm may add liquidity surcharges to the cost of funds based upon a classification of the positions funded into one of three classes:

- Highly liquid – using short term funding costs
- Intermediate liquidity – using intermediate term funding costs
- Illiquid – using long term debt costs or cost of equity.

Observation: This aligns remuneration to the potential liquidity risk a position may generate. Excessive liquidity risks will be penalised through higher costs and variable remuneration can be adjusted accordingly. However, additional focus is needed to ensure the classification assumptions used are appropriate based on differing risk profiles.

3.2.2. Valuation Adjustments

145. Valuation adjustments are a key tool in risk adjusting performance, and indirectly remuneration if applied appropriately. “Mark to middle” or “mark to model” do not reflect true liquidation values, model risks or counterparty risk. Some firms adjust the valuation of individual positions or cohorts of positions for characteristics that would likely motivate a discounted price if transferred to a third party in a market transaction. Such characteristics include, but are not limited to: counterparty credit risk (leading to credit valuation adjustments), discounts for model structuring risks and model parameter uncertainty, and discounts for liquidity.

3.2.3. Specific quantitative risk adjustments

146. It is increasingly common for firms to use specific measures (often capital-related) as part of their quantitative risk adjustments when assessing and calculating remuneration. Examples include Economic Capital, Economic Profit, Return on Risk Weighted Assets and Return on Allocated Equity. Ex ante adjustments are then determined by considering the firm’s performance against these measures. These measures can provide a more transparent picture of the firm’s performance, compared to pure accounting-based measures.

Examples of specific quantitative adjustments to remuneration pools

Case 1 (major universal bank)

Remuneration calculations are driven mainly by three metrics: Pre-tax Profit, Economic Profit (after-tax profit minus an economic capital charge) and Return on Risk Weighted Assets. The advantage of this approach is that it takes account of a range of key factors (profit, capital and risk) which in turn supports the effectiveness of the firm’s risk management.

Observation: The approach could be improved by taking greater account of the cost of liquidity, though this is implicitly recognised in profit.

Case 2 (large bank with traditional retail activity)

Remuneration calculation is based on profits before taxes, adjusted by risks and extraordinary profits (PBT), taking also into account the efficient use of capital (RORAC) and the comparison with competitors.

Observation: This approach could be useful as incentives are generated by a simple quantitative measure (pre tax profit), which will be later adjusted to obtain a better qualitative measure that takes into account the incurred risk.

Case 3 (universal bank)

Remuneration pool calculations are driven by a risk adjusted net income metric that includes a charge for Economic Capital. The Economic Capital calculation is a function of VaR, unused VaR, and includes an added stress component. It also reflects market, credit, operational, reputational, liquidity and legal risks. The resulting Economic Value Added metric is then used to size and distribute the accrued incentive remuneration pool.

Observations: The advantage of this approach is that profit, capital and risk have a direct impact on the business line remuneration pool. However, this method is highly dependent on the accuracy and integrity of the firm's economic capital model. Inaccurate estimates of risk or the inability to capture all risks can severely compromise the effectiveness of this mechanism in providing incentives to prudently manage risk and capital. Additionally, the presence of this metric may create adverse incentives for employees to minimise the economic capital attributed to their business.

147. Although not as common, there are also examples of quantitative adjustments made when allocating or determining individuals' variable remuneration, such as through the use of a risk-adjusted profit figure for every customer segment. Ex ante adjustments should be aligned to risk and encourage appropriate behaviour throughout the firm as a whole. In practice, this may mean that a number of ex ante adjustments are used throughout the different levels of the firm.

Example of specific adjustment used in the allocation for individual remuneration used by a medium size retail bank

Risk adjustment is made at a very low level: market segments within a given street branch. The bank uses its internal capital models for Basel II to estimate the expected loss (EL) of each customer/deal. This EL is subtracted from the profit before taxes (PBT) generated by that customer, obtaining a risk-adjusted profit, so that a figure for risk-adjusted profit is obtained for every group of customers (customer segment) within a given street branch.

The economic value added adjusted by risk (something similar to economic profit) is computed for each customer/deal by subtracting the cost of capital from the PBT. The cost of capital of a given unit is estimated as the product of (a) the participation percentage of the unit on the overall economic capital; (b) the regulatory capital allocated to the unit; (c) the cost of capital of the firm.

Business unit P&L includes a rate to be charged or paid for the difference between investment and funds collected. This rate includes both the bank's funding costs (Euribor) and a liquidity premium.

Observation: This could be a good example of a bottom-up approach. It is important to highlight that under this approach the firm should also take into account its overall profit when calculating its remuneration pool.

3.2.4. Soundness of the quantitative risk adjustments

148. The quantitative ex ante risk adjustments made by firms largely rely on existing measures within the firms, generally used for other risk management purposes or for accounting purposes. As a result, the limitations and potential issues related to these measures are also relevant for the remuneration process. The risk adjustments used should benefit from the experience gained when dealing with these risks in other contexts and should be challenged like any other component of the risk management process.

149. For example, when fund transfer pricing adjustments for liquidity risks are made, it is critically important to determine whether the classification is based upon asset liquidity in normal market conditions or stressed market conditions. Many firms are gravitating to using stressed market condition liquidity, resulting in longer term costs of funds transferred to the business. What constitutes stress, however, may differ by firm. Firms are hesitant to base liquidity surcharges on the conditions experienced in 2008 as they regard the cost of doing so too high relative to the likelihood of such conditions re-occurring. It is important for firms to establish realistic and timely liquidity transfer costs and use them as intended. If they choose not to use their existing liquidity transfer cost methodology, the rationale should be documented. Furthermore, it would be prudent for firms to frequently refresh the stress factors to reflect knowledge gained from market experience.

150. Also, the set of valuation adjustments employed should be complete and well calibrated to properly reflect the valuation discount the positions would encounter if sold into the market. Because valuation discounts can vary due to market conditions, thus firms should regularly update and adjust their assumptions as appropriate. Firms should obtain the necessary input from their Risk function to ensure that valuations are impartial and independent.

151. In Annex 4, a Case Study is presented that illustrates how a fictitious wholesale bank establishes its variable remuneration and uses quantitative risk adjustments.

3.3. Specific qualitative risk adjustments

152. It is important that qualitative risk elements are considered. These ex ante adjustment could take place while setting firm-wide and business unit remuneration pools or when determining or allocating individuals' remuneration. Qualitative ex ante risk adjustments are common at both levels, contrary to quantitative adjustments which tend to be mostly observed at the pool level.

3.3.1 Specific qualitative risk adjustments

153. A common practice that firms have recently introduced in making qualitative risk adjustments to remuneration pools is for the RemCo to actively engage the Risk Management group in assessing the risk taken by the firm (both risk taken within the financial period vs. related risk appetite, as well as emerging risks).

154. A common good practice observed where firms make qualitative risk adjustments when allocating/determining individuals' remuneration is through the use of balanced scorecards that explicitly include risk and control considerations such as compliance breaches, risk limit breaches and internal control breakdowns (eg based on internal audit results).

Examples of qualitative adjustments at remuneration pools level

Case 1 (major universal bank):

After remuneration pools have been assessed quantitatively, the Remuneration Committee examines reports from the Finance committee (including quality of earnings and business line performance) and Risk committee (review of risk performance vs risk appetite, risk trends/concentrations). The Remuneration Committee may then adjust remuneration pools to align with the reports' findings.

Case 2 (large wholesale bank):

The Chief Risk Officer and the RemCo are involved in qualitative ex ante risk adjustments at the firm-wide and business unit pool level:

Chief Risk Officer performs a year-end review of pool payout accrual. A comparison of risks undertaken against the bank's board-approved risk appetite statement is presented to the RemCo in addition to the Risk Committee.

The RemCo has discretion to use the risk adjustment to reduce the variable remuneration award pool to zero if warranted given circumstances.

Observations: These examples demonstrate the ability to consider an array of factors when the Remuneration Committee is involved, but the rationale and decisions taken need to be documented.

Example of qualitative adjustments at individual level used by a large wholesale bank

Judgment is used in allocating the business pool as well as individual remuneration:

- CEO allocates the pool to the senior business leaders at his/her discretion. Discretionary factors include achievement of results and alignment to the Bank's risk appetite among others.
- Chief Auditor provides audit views in performance appraisals of senior executive team regarding control issues and tone set by them.
- Senior business leaders allocate awards to individuals based on discretion (there is no established formula). The current individual scorecard measures are:
 - o Regulatory – no significant breach of compliance policies attributable to the individual.
 - o Audit – No overdue, unsatisfactory, or requires improvement audit findings attributable to the individual.
 - o Risk – No significant breach of risk policies attributable to the individual.
 - o Control/Governance – No significant breaches or ongoing pattern pertaining to relevant control and governance processes attributable to the individual.
 - o Other strategic priority – consistently demonstrates behaviours in the best long-term interest of the firm, irrespective of departmental boundaries.

Observation: These examples demonstrate that there is discretion from various sources used to adjust the business pool and individual award; however, there is a risk that the discretion exercised may not be fully transparent. Furthermore, control functions may face significant pressure from stakeholders to minimise or downplay their findings.

155. Please refer to the second part of the Case Study presented in Annex 4 which illustrates how a wholesale bank introduces the qualitative risk adjustments in its remuneration system.

3.3.2. Soundness of the qualitative ex ante risk adjustments

156. There are inherent risks in relying on judgment, including lack of transparency in decision-making from employee and other stakeholders' perspectives, and poor judgments being made. To offset these risks it is important that whenever judgment is the source of a risk adjustment there should be:

- clearly written policies outlining parameters and key considerations to which the judgment will be based,
- clear and complete documentation of the final decision regarding the risk adjustment,
- relevant control function experts involved in the ex ante risk adjustment determination,
- appropriate levels of approval obtained eg for adjustments made to senior executive or firm-wide remuneration the board or the RemCo should provide approval.

157. Firms should maintain, and be prepared to disclose to supervisors, detailed records of how qualitative factors have been applied. In particular, firms should be prepared to provide further details if the final outcome after applying qualitative factors is significantly different from the initial outcome using quantitative measures.

4. Deferral and ex post risk adjustments

158. Deferred remuneration, especially with ex post risk adjustments, is a useful tool for improving risk-taking incentives because the amount ultimately received by employees can be made to depend on risk outcomes. Conceptually this is a simplification relative to ex ante risk adjustment, which depends on the ability of the banking organisation to measure risks before risk outcomes occur and to make awards of remuneration depend on such ex ante risk assessments. However, deferral has its own complications. For instance, sometimes risk outcomes are difficult to measure, and some of the most worrisome risk outcomes occur only infrequently (“tail risk” outcomes), so an employee or firm might take high levels of tail risk for some time without any impact on deferred remuneration.

4.1. Overview of the deferred remuneration process

4.1.1. *Supervisory and Regulatory Interest in Deferred Remuneration*

159. The main interest of supervisory and regulatory entities in deferred remuneration is prudential. To the extent it can work to reduce imprudent or excessive risk-taking, without choking off appropriate risk-taking or other socially desirable aspects of financial institution behaviour, deferred remuneration is a practice to be encouraged. The historical role of deferred remuneration in promoting employee retention or alignment of employees’ interests with shareholders (see box below) differs from its role in shaping risk-taking incentives.

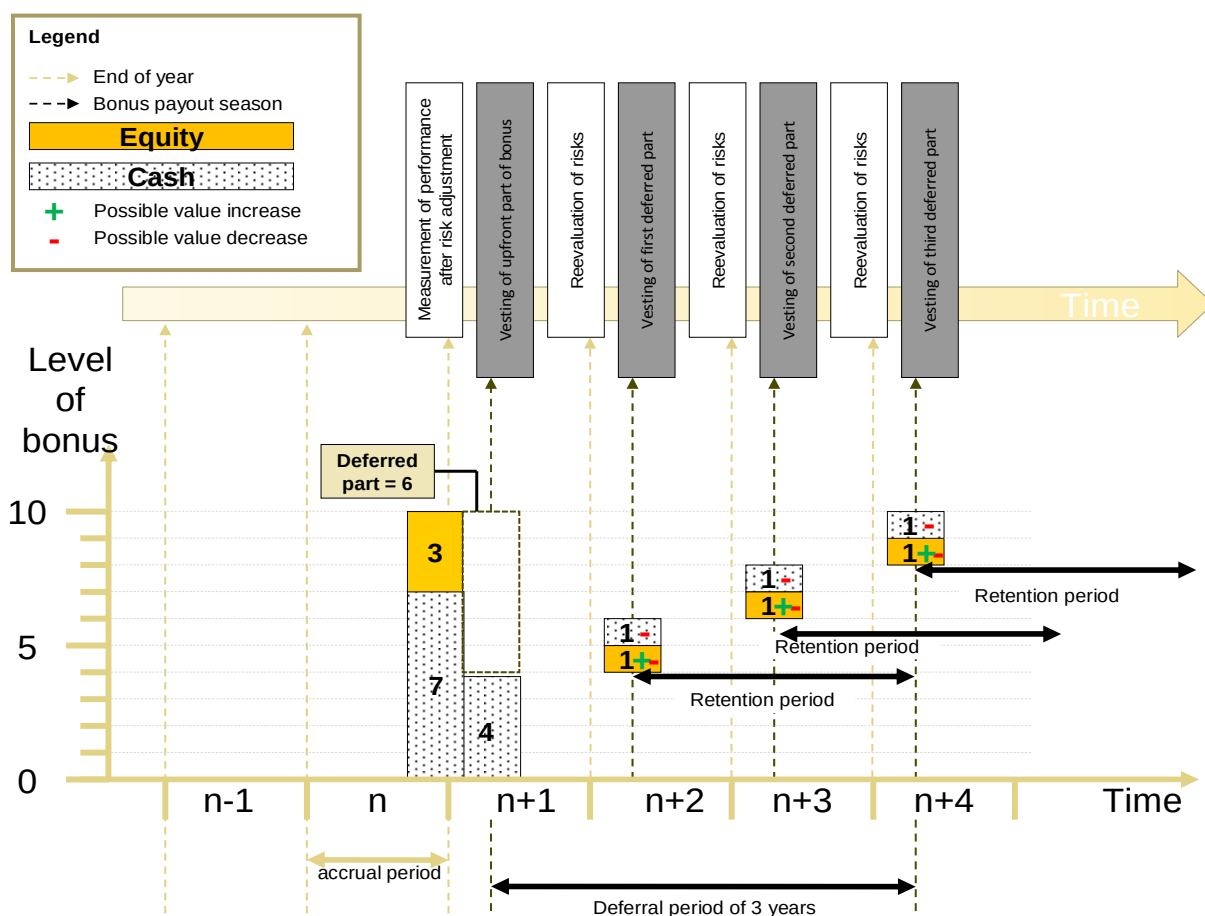
Background: the origins of deferred remuneration

Current deferred remuneration practices at major universal banks often have their roots in (and may closely resemble in the details) remuneration schemes developed in the 1980s (or earlier). Some schemes were developed by firms that converted from a partnership form to a publicly held company. Annual remuneration awards that were the analogue of a partner’s share of profit were not paid immediately to employees, but remained in the hands of the bank for a period of time in the form of the firm’s stock or other equity-linked instruments. Payouts occurred on a schedule, but an employee forfeited remaining payouts if he or she left the firm. This structure was designed to (imperfectly) simulate two aspects of the former partnership arrangement:

- 1) Employees’ wealth would be tied up in the firm and would grow or shrink with the fortunes of the firm, and
- 2) Moving from the firm to a rival firm was difficult or impossible (partnership agreements often involved agreed-to limitations on a partner’s labour mobility).

4.1.2. *A stylised example of a deferral scheme*

160. Deferred remuneration involves a number of building blocks, some of which are discussed individually for simplicity of exposition. The diagram below illustrates the main concepts and dimension of a deferred remuneration process, focusing on the time dimension of the process. The wording used in the draft corresponds to the terminology defined in Annex 2.



161. It can be said that the deferral period starts right after the accrual period. It ends on the day of the last vesting event. The dates when remuneration vests to employees are always on or before the dates of pay out of the respective remuneration share. If the employee takes ownership of all of an award of incentive remuneration at the time the award is made (or very soon after), with no possibility for implicit or explicit adjustments to the amount of the award, then no deferral occurs and there is no deferral period. Otherwise, that portion of the award that does not vest at the time the award is made is deferred, which allows for ex post risk adjustments by malus or implicit adjustment.

4.2. Methods to adjust remuneration to outcomes

4.2.1. The types of ex post risk adjustment

Implicit and explicit ex post risk adjustments

162. A first distinction needs to be made between implicit and explicit risk adjustment. An implicit risk adjustment simply is the result of the changes in the value of the remuneration over time that are not directly influenced by the bank. It corresponds in practice to the change of the value of shares or share-linked instruments during the deferral period or the

retention period and is not relevant for cash payout.¹³ Explicit risk adjustments, on the contrary, require a formal decision (or process) from the banks to reduce the amount of the remuneration that has already been accrued and awarded. Such a decision can only be taken based on risk outcomes or other aspects of employee performance that become clearer over time. It generally needs to clear pre-determined objectives or triggers.

163. Implicit ex post risk adjustments are not likely to be effective tools on their own for providing appropriate risk-taking incentives to most employees because market prices may move due to many different reasons unrelated to the actions taken by the employee (for example, the market-wide price of equity-market risk may change) and because for most employees the value of the firm is not likely to be much affected by their individual decisions or performance. It is possible that implicit adjustments may be somewhat more effective for very senior executives because their actions affect the entire firm. Thus, in principle, their actions should affect the market price of the firm's stock. Whether the link between their actions and the stock price is strong enough is an open question.

164. Transfer restrictions, such as share retention policies, affect employee risk-taking incentives only by extending the period during which implicit adjustments operate. If implicit adjustments are not effective tools for aligning risk taking incentives of a given employee, then share retention policies also will not be effective. For this reason, and as described in the definitions in the Annex 2, transfer restrictions should not be viewed as a substitute for a longer deferral period.

Malus and clawbacks

165. Malus and clawbacks are both methods for implementing explicit ex post risk adjustments. Malus operate by affecting vesting (reduction of the amount due but not paid). Clawbacks operate by requiring the employee to return a specified amount of money to the firm. In practice, malus are more feasible to implement or enforce in many jurisdictions, but do not operate after the end of the deferral period. Clawbacks are often more difficult to enforce, but in principle could operate over a very long period of time.

Malus:

Example of a malus scheme used by a large retail bank

For the most senior executives, bonuses are deferred for three years, and vesting occurs only if none of the following events occur:

- The employee leaves the firm.
- Bad financial performance of firm (specific indicators are used)
- Breach of code of conduct and other internal rules, especially concerning risks
- Material restatement of the firm's financial statements
- Significant changes in the firm's economic capital and qualitative assessment of risks.

¹³ Implicit risk adjustments might also be possible when the vesting of awarded remuneration in cash is linked to the observed performance of shares or other similar instruments, or to the outcomes of predetermined indicators. This could notably be observed for firms not willing or not able to use shares to pay their employees.

No malus for other employees of the firm.

Observations: This example shows that a combination of triggers can be used to apply malus.

Example of a malus scheme used by a large investment bank

For senior executives, 75% of senior executive bonuses are deferred over three years and 75% of equity awards are subject to a retention requirement. Senior executives' deferred stock is subject to a malus that depends on return-on-equity excluding debt value adjustments (applies to half of the deferred amount) and relative total shareholder return (applies to the other half), with unvested amounts zeroed out if targets are not met.

The fraction deferred for other employees and vests over three years. A portion of such deferrals is in restricted stock that is subject to malus for malfeasance but not for losses or poor ex post performance. The remainder is cash awards that are deferred over three years and are subject to a malus that depends on losses on positions where the employee operated outside risk management parameters and revenue from the positions was a factor in determining the award. In most cases, half vests after two years and the remainder at the end of the third year.

Observations: This example shows how malus can vary according to employees' types and to the composition of the deferred remuneration.

Clawback:

Example of a clawback scheme used by a large universal bank

All remuneration awards for the year 2009 are subject to three claw-back conditions:

1. The first condition is based on the group earnings (only relevant for the most senior executives).
2. The second condition refers to the case of a violation of internal rules or external regulations (relevant for all employees).
3. The third condition is based on "substantial decreases" in the value of specific positions on an individual level (relevant for all employees).

Observations: This shows that different triggers could be combined (or added).

4.2.2. Designing a risk adjusted deferred remuneration scheme

166. It is important to note that the remuneration payout structure and schedule are likely to differ across firms (especially firms in different businesses). They may also differ across employees within a firm, depending on the role of such elements of deferral practices in adjusting employees' risk-taking incentives.

167. Indeed, while remaining in line with the FSB Principles and Standards, the deferral and ex post schemes can be designed and implemented very differently, based on the decisions made with respect to the various components of the schemes and in particular:

- The proportion of variable remuneration that is deferred,
- The time aspects of the schemes (duration of the deferral periods and details of vesting schedules),

- The composition of the deferred remuneration (mix of cash and shares or share-linked instruments),
- The nature of the possible ex post adjustments (implicit and/or explicit, malus and/or clawback) and their conditions/triggers,
- The existence and duration of transfer restrictions.

The following examples show the diversity and complexity of the remuneration payout structure and schedule, which combine and adapt several of the parameters mentioned above.

<i>Used by a large universal bank</i> With regard to individual thresholds, 50% of executives' variable remuneration are transformed into so-called "Share Awards" (virtual stocks) and deferred for not less than three years, whereas there is only one vesting and payout date at the end of the deferral period. The ultimate value of the Share Awards at the end of the deferral period is tied to the stock price of the institution, calculated on the basis of the average stock price of the previous quarter (implicit adjustment). In addition, the amount of the Shares Awards depends on predefined (malus) criteria (explicit adjustment). In the case of individual misconduct, the individual remuneration claims maybe decreased or completely revoked by the institution. At the payment date, the value of the Share Awards is paid in the form of cash to the executive.
<i>Used by a large universal bank</i> For the senior executives, roughly 60% of the variable remuneration is deferred. The deferred part of the variable remuneration consists of two components: A stock based "Equity Award" (75%) and a cash-based "Incentive Award" (25%) (1) Stock based Equity Award: • Deferred for 3 $\frac{3}{4}$ years • Value tied to the sustained performance of the institution (stock price under the additional condition of a non-negative net income before tax of the institution) • Pro-rata vesting and payment in shares, starting at the end of first year of the deferral period (9 tranches) (2) Cash-based Incentive Award: • Deferred for 3 years • Value tied to the sustained performance of the institution (based on the ROE less Cost of Funds under the additional condition of a non-negative net income before tax of the institution) Pro-rata vesting and payment in cash, annual payments starting at the end of first year of the deferral period (3 tranches)
<i>Used by a large universal bank</i> Depending on the level of the employee, and for middle- and senior-level people, the fraction of bonuses that is deferred ranges from 30 to 60%, and is in the form of restricted stock vesting over three years. For trading and investment banking employees, the fraction deferred depends on the level of pay rather than rank and ranges up to 66%, with an average of 50%. For all employees, unvested amounts can be cancelled for "detrimental conduct." The firm also has a newly introduced performance-based vesting feature, where

performance measures depend on the level of the employee (firm-wide performance for senior executives, unit performance for unit leaders, and desk or individual performance for lower level people). Prior to each vesting date, when a loss has occurred, a committee determines whether each relevant employee was accountable for the loss and how much of the unvested remuneration to cancel.

Used by a large universal bank

The holding company determines the variable remuneration of the first 200 positions across the entire banking group ("risk taker").

These executives are awarded both in shares or share-linked instruments and cash.

Equity-based incentives consist of performance stock options and performance share with a performance period of three years.

Cash remuneration is based on:

- "group gates", that are minimum conditions to get the bonuses, related to targets of profitability and capital of the group (adjusted ROE, Core tier One ratio and Net Profit). Since 2010 "group gates" are related to the exposure to liquidity risk as well (Cash Horizon).
- Assessment of the performances depending on operative targets (Net Operating Profit on Tangible Assets) and qualitative measures (Reputation of the group for CEO and customer satisfaction for the executives);

The deferral period of the assignment, subject to the conservation of the "group gate" during the 2 years following the first year payout (in 2009 payout of up to two thirds of annual incentives was deferred. Such proportion has been reduced for 2010, up to 40%).

Used by a large universal bank

Around 850-900 employees benefit from the incentive-based remuneration scheme.

These employees are awarded either in share-linked instruments or cash.

Top and Senior Management are awarded in equity-related instruments. In particular, they are awarded a deferred one-off bonus whose amount is related to the difference between the Total Shareholder Return earned on the bank's ordinary share and the TSR of the peer group (taking into account a considerable sample of competitors). However, a gate is in place to ensure that such incentive-based scheme is implemented only if 95% of the set objectives are reached over the three-year period.

The amount of the bonus changes according to three performance-based classes depending on the degree to which the stated objectives are reached over the three-year period.

The accrual period is three years. At the end of the third financial year, the objectives set over the three-year period are assessed and the bonus due is awarded to the manager accordingly.

The bonus is vested over the two following financial years. At the end of the first financial year, the difference between the TSR earned on the bank's ordinary share and that of the bank's peer group is determined and on the basis of such difference, the first half of the bonus is paid. At the end of the second financial year, the same evaluation is carried out.

168. Please refer to the third part of the Case Study presented in Annex 4 which illustrates how the fictitious wholesale bank introduces ex post risk adjustments in its remuneration system.

4.3. Specific issues

169. Supervisors and banks should pay particular attention to the following issues which may reduce the effectiveness of deferral schemes and ex post adjustments.

4.3.1. Upward adjustments of deferred remuneration

170. Upward adjustments of deferred remuneration may undo some or all of the effect on incentives of downward adjustments. This might especially be the case where upward adjustments depend on the actions of the employee. The primary interest of supervisors is in the effectiveness of downward adjustments. Though upward adjustments should be discouraged because they tend to weaken the effectiveness of downward adjustments, an important open issue is the ability of supervisors to discourage their use. Because of the popularity of equity-linked instruments as a vehicle for deferred remuneration awards and the presumption that such a practice tends to align the interests of shareholders and employees, it is likely to be difficult to discourage the use of implicit upward adjustments, and thus firms may argue that it would be inconsistent on the part of supervisors to allow implicit upward adjustments but not explicit upward adjustments. A possible resolution of the problem would be to require much stronger explicit downward adjustments in cases where upward adjustments are present.

4.3.2. Golden “handshakes”

171. The use of long term incentives may lead to conflict of interest between employee and employer in cases where the employee leaves a firm prior to the end of the performance measurement period. When an employee leaves the firm, the most common practice is to end the deferral period by cancelling the employee's right to ever receive any unvested deferred remuneration. Thus, in order to attract an employee to leave his or her old firm, another firm may have to compensate the employee for the unvested remuneration that is lost at the old firm (a “golden handshake”). This “buy out” practice, which is common, reduces the effectiveness of deferral arrangements in improving risk-taking incentives for employees who believe they are mobile and who frequently move from one firm to another (since they can escape the effect of ex post risk adjustments). Ideally, this problem would be solved by allowing deferral and vesting arrangements to continue to run after an employee leaves the firm. The employee would still be subject to ex post adjustment, and the new firm would not have an incentive to buy out unvested remuneration. Such continuation occurs in some cases at some firms, such as when an employee retires. However, in some jurisdictions, continuing the deferral arrangement may cause conflicts of interest between the employee and the new or old employer, or may pose other problems.¹⁴ The best feasible way to deal with the incentive problems associated with golden handshakes remains an open question.

4.3.3. Tax and legal frameworks

172. These vary across jurisdictions. They are not, per se, of interest to supervisors. However, depending on the economic impact of such issues, they may place constraints on

¹⁴ For example, if the employee goes to work for a competitor, the existence of deferred remuneration from the previous employer may give the employee incentives to compete less vigorously with the former employer than with other firms. On the other hand, to the extent that the former employer has discretion in making decisions about vesting of deferred remuneration, once the employee leaves the former employer has incentives not to vest remaining deferred remuneration.

the practical effectiveness of deferral methods or on the details of their implementation. For instance, some fiscal treatments can pose serious difficulties on the use of clawback clauses since some governments do not refund taxes paid on previously paid bonuses after such bonuses are clawed back. However, practice has shown that the underlying principles of risk adjustment of remuneration can be achieved in most tax, legal and regulatory environments.

Annex 1

Institutional coverage of FSB principles

Country	Applied to	Size thresholds
Argentina	Banks	Market share of deposits over 2%
Australia	Banks, insurers	No
Belgium	Banks, investment firms, asset managers, insurers	No
Brazil	Banks	Covered if publicly traded or regulatory capital > R\$1 bn or third party assets > R\$1 bn
Canada	Banks, insurers	FSB principles are applicable to all banks and insurers. FSB Implementation standards are applicable to 6 large banking and 3 large insurance conglomerates
China	Banks	No
France	Banks, investment firms	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
India	Banks, insurers	No
Indonesia	Banks	No
Italy	Banks, insurers	6 large banking groups
Japan	Banks, insurers	Major banking groups & internationally active financial institutions
Korea	Banks, insurers	Banks – domestic banks Insurers – Total assets > KRW 5 trillion
Luxembourg	Banks, investment firms, asset managers	No
Mexico	Banks	No
Netherlands	Banks, insurers, pension funds	No
Russia	Banks	No
Saudi Arabia	Banks	No
Singapore	Banks, insurers	Applied to locally incorporated banks. Applied to locally incorporated life insurers with total assets > S\$5 billion
South Africa	Banks	No

Spain	Banks	No
Sweden	Banks, investment firms, asset managers, insurers	No
Switzerland	Banks, insurers	6 banks and 5 insurers with capital over CHF 2 bn
Turkey	Banks, insurers	No - regulation for insurers is currently under development
UK	Banks, building societies, broker dealers	Banks & building societies with regulatory capital > £ 1 billion; broker dealers with regulatory capital > £ 750 million.
USA	Banking organisations supervised by Fed Reserve	Policy decision on application to insurers has not been made as yet.

Annex 2

Terminology

Accrual or performance measurement period: *the point at which employee remuneration has been earned (but not yet paid)*

An employee works for a certain time period (most commonly a year, but the period may be longer or shorter), during which performance is assessed and the employee may be granted an “award” of variable remuneration.

Practical considerations: some of the award may be paid immediately after the grant is made, and some may be paid later (“deferral”). The period is sometimes called the “accrual period” and sometimes the “performance period” or “performance measurement period.” However, “accrual period” is also used by banks to refer to a period for which they calculate an expected amount of remuneration to be paid. Sometimes the accrued amount is for purposes of financial reporting, so accrual periods of this type of a quarter or half-year are common. Sometimes the accrual amount is allocated informally to business units for purposes of internal cost-accounting. Thus, different users of “accrual period” may be talking about matters that are conceptually quite different. For the purposes of the FSB Principles and Standards, the accrual period refers to the period for which the performance assessment is based.

Clawback: *a clawback arrangement is a contractual agreement between the employee and the bank in which the employee agrees to return previously paid or vested remuneration to the bank under certain circumstances.*

Clawbacks may operate beyond the end of a deferral period (ie after vesting is complete) but may also be effective during the vesting period depending on how the clawback is designed. Like a malus adjustment, the clawback may be controlled by a formula or may be at the bank’s discretion. In many cases the bank agrees to exercise the clawback only under certain circumstances, such as a discovery that the employee misrepresented financial results or other information. Legal feasibility and practicality of enforcement of clawback arrangements differs across jurisdictions.

Deferred remuneration: *that portion of remuneration that is withheld following the end of the accrual period.*

Some risks may take not fully emerge until well after the accrual period. It is therefore appropriate that a proportion of variable remuneration be withheld until such time that material risks are evident and appropriate risk adjustments made to variable remuneration. This period, in which the initial evaluation of performance is being confirmed and variable remuneration withheld, is the *deferral* period. The two essential features of deferred remuneration are that it has not yet vested and is subject to malus adjustments. The deferral period begins when deferred remuneration is awarded, and ends when the last part vests with the employee.

Practical considerations the total amount of an award may be divided into parts, with the transfer of ownership of each part occurring at different points in time (“vesting”). The deferral period ends when the last part becomes the employee’s property.

However, the bank may still reclaim ownership under some circumstances (“clawback”). Additionally, the employee may not be able to spend a given part until additional time has passed (“transfer restriction period”).

Ex ante adjustment: *an adjustment to remuneration for risk as remuneration is accrued and awarded, to take into account potential adverse developments in the future.*

Explicit ex post adjustment: *an adjustment by the bank to remuneration that has already been accrued and awarded made in light of observed risk and performance outcomes.*

Explicit ex post adjustments generally take the form of malus or clawback clauses (eg by lowering the value of deferred cash remuneration or by reducing the number of shares that the employee ultimately receives). These adjustments can be determined using a pre-determined formula, qualitatively or as a combination of both approaches. Ex post adjustments can also be achieved through other mechanisms set by the bank.

Implicit ex post adjustment: *changes that are not directly influenced by the bank in the value of remuneration that has already been accrued and awarded.*

Malus: *a malus arrangement permits the bank to prevent vesting of all or part of the amount of a deferred remuneration*

Malus adjustments to remuneration may be done at the bank’s discretion, or may be controlled by a pre-set formula. Malus arrangements do not reverse vesting after it has already occurred, so they have no force after the end of the deferral period.

Pay out: *actual payment or legal transfer*

The remuneration that vested to the employee is actually received by the employee and may be spent.

Practical considerations: this marks the actual physical receipt of financial benefits by the employee. For shares subject to a transfer restriction, the pay out will occur later than vesting and at the end of the transfer restriction period.

Share transfer restrictions: *any limitation on the sale of shares, often defined in the share retention policy*

Transfer restriction period: *the period of time during which transfer restrictions apply*

Practical considerations: the transfer restriction period (or retention period) is independent of the deferral period. This implies that share retention periods do not extend the deferral period for purposes of interpreting FSB Standards, including in particular the requirement of a minimum length of 3 years as defined in FSB standard 7.

Vesting: *the point at which an employee becomes entitled to receive payment or title*

Practical considerations: this usually involves the pay out of variable remuneration, however, in some jurisdictions this may be the point at which part or all of the variable remuneration is no longer adjusted. The time over which the employee becomes entitled to receive risk-adjusted variable remuneration is the *vesting* period. When remuneration is vested, explicit (by the bank) ex post adjustments to the amount can no longer occur by a “malus” mechanism. However, ex post adjustments might still occur by a “clawback”. Implicit ex post adjustments (eg change in value of share-linked instruments) may still occur until ultimate pay out.

The FSB's Implementation Standards require that remuneration payable under deferral arrangements should generally vest no faster than on a pro rata basis. This means that there is the potential for the vesting period and deferral periods to overlap.

Annex 3

Scorecards for the assessment of risk adjustments

Notes and guidance

1. The scorecards should normally be completed at consolidated group level. However supervisors may decide that for large groups it may be necessary to complete separate scorecards for significant units with autonomous governance and control functions.
2. Leave cells blank where, in scorecard 1, an agent plays no significant role and in scorecard 2, a risk adjustment technique is not applied to a particular risk.
3. Blank rows or columns are therefore possible, but in each case supervisors should consider carefully whether that can be justified, or whether this means that there is a gap in the risk adjustment process.
4. For the assessment, proportionality should be used. The scoring thresholds for significant financial institutions should be higher than for smaller/less complex institutions.
5. Scoring could be as follows:
 - 3 - good practice
 - 2 - acceptable
 - 1 - poor practice, remedial action required.
6. A scorecard where no score is higher than 2 may also suggest the need for action by the firm (to “raise its game”).

Risk Adjustment of Bonus Pools: Scorecard for completion by Supervisors

Scorecard 1: Governance and Controls					
Risk Adjustment Tasks	Board	RemCo	Risk Function	Business Unit (Front Office)	Compliance
Articulation of risk appetite					
Design selection of risk adjustment techniques					
Cost of Capital Calculation / Allocation & control					
Valuation adjustment review /control					
Funds transfer pricing oversight/control					
Qualitative risk adjustments					
Determination of top down bonus pools (including capital sustainability check)					
Arbitration between top down pool and bottom up bids					
Other					

Indicate which functions in the firm have a significant role in each of the risk adjustment tasks

Scorecard 2: Matrix of risks and risk techniques								
		Risk type						
		Credit	Market	Liquidity	Operational	Business	Legal	Reputation
Measures	Financial Metrics							
	Stress Tests							
	Non Financial metrics							
	Long term performance measurement							
	Qualitative discretion							
Structures	Deferral							
	Performance adjustment							

Annex 4

Case Study – Large Wholesale Bank¹⁵

Part 1 (Quantitative ex ante risk adjustments)

A large wholesale bank establishes a pool for variable remuneration. At each level, quantitative ex ante adjustments are considered in conjunction with qualitative ex ante adjustments. The actual size of the pool is set by the board, following a guideline of ranges that is established with reference to the bank's cash net profit and return on allocated equity, relative to a group of peers. This provides an initial mechanism for ex ante adjustment, aligned to the bank's overall risk.

This pool is then allocated to business units. Each business unit receives an allocation based on its net income. Further ex ante adjustments are made based on capital charges for credit, market and liquidity risks as appropriate and specified in business unit objectives. For business units which do not generate profit, allocation is based on performance against non-financial objectives. This ensures that ex ante adjustments are aligned to the specific risks of the business unit.

At an individual level, quantitative ex ante adjustments are used where these are appropriate to the roles and responsibilities. This will usually occur for senior management, where there is a direct link between their actions and the profitability of the business unit. However, for most staff, ex ante risk adjustments are applied on a qualitative basis (see below).

Part 2 (Qualitative ex ante risk adjustments)

The large wholesale bank also considers the need for qualitative ex ante risk adjustments at each point of allocation for variable remuneration.

At the group level, the board considers the bank's overall risk appetite and its performance relative to defined risk objectives throughout the year. In particular, any serious deficiencies identified within the risk management framework, risk management issues or compliance breaches will result in the total pool being revised downwards. The board's Risk Committee provides input in to this review. This includes an assessment of the bank's performance against potential strategic risks.

At the business unit level, similar ex ante risk adjustments are applied. The business unit's performance is considered in the context of its risk management framework. This includes both its operations within the existing risk management framework and initiatives undertaken to improve business unit risk management. The relevant risk management unit provides an assessment of the business unit's performance.

At the individual level, a balanced scorecard approach is used. The scorecard incorporates qualitative measures such as performance within established risk limits, compliance with risk management, adequacy of response to audit issues and performance against bank values.

¹⁵ As mentioned earlier for the various examples presented in this report, this case study is presented for illustration purpose and should not be considered as a model.

Effective performance measured against the risk and compliance metrics acts as a 'gate keeper' for employees to be eligible for variable remuneration. The risk management unit provides input on individual performance against risk management objectives for senior management.

By adopting an approach which combines quantitative and qualitative risk adjustments the bank ensures that there is adequate alignment between its variable remuneration and risk. Setting objectives at each level throughout the organisation strengthens the relationship between individual decisions and behaviours and overall risk within the bank.

Part 3 (ex post risk adjustments)

The large wholesale bank awards variable remuneration to its staff on the basis of performance against pre-determined measures. Variable remuneration may consist of both short- and long-term incentives as appropriate to the individual's role.

For executive management, up to 40% of variable remuneration may be paid as short term incentives. A minimum of 60% of total variable remuneration is deferred. Performance is assessed on the basis of financial metrics (weighted at 60%) and non-financial metrics (weighted at 40%). The key financial metrics include return on risk adjusted capital and total shareholder return. The non-financial metrics include a mixture of risk, compliance and people/leadership objectives.

An award of variable remuneration is made in a given year to the Chief Executive and consists of:

- Short term incentives (STI – 30%)
Half the STI is paid out immediately as cash. The remaining half is deferred for 1 year and will be paid out as equity.

At the end of the 1 year deferral period, the board reviews the bank's return on risk adjusted capital and total shareholder return for the previous year. If either rate has fallen below a pre-determined hurdle, the remaining STI is forfeited. Similarly, any serious compliance breaches or risk issues during the deferral period will also result in forfeiture. If the bank has remained within its specified range, the STI is paid out as equity in the bank.
- Long term incentives (LTI – 70%)
The LTI award is deferred for three to seven years and is all paid as bank equity. At the end of the third year, the board reviews the bank's performance using the return on risk adjusted capital and total shareholder return for the past three years. If at any point during the deferral period either return has fallen below the predetermined hurdles, the incentive component due to vest (1/5 of the total LTI) will be forfeited. Similarly, any serious risk or compliance issues will lead to a reduction in the variable reward, including to zero.

At the end of each year, the board reviews the LTI remuneration due to vest against the key return metrics for the past three years and determines whether any downwards adjustments are necessary.
- The board retains the ultimate right to require the Chief Executive to pay back any vested variable remuneration in the event of extreme risk outcomes.

Annex 5

Members of the SIG Task force on Remuneration

Chairman	Mr Fernando Vargas
Australia	Mr David Lewis
Belgium	Mr Jo Swyngedouw
Canada	Mr Ted Price
France	Ms Maud Abdelli
Germany	Mr Alexander Drung
Italy	Mr Paolo Mandurino Ms Erlinda Oliverio
Japan	Mr Toshiyuki Miyoshi
Netherlands	Ms Annick Teubner
Saudi Arabia	Mr Mansour Al Najashi
Spain	Ms Eva Catarineu
Switzerland	Mr Oliver Wünsch
Turkey	Mr Erdem Enisel
United Kingdom	Mr David Raikes Ms Su-Lian Ho
United States	Mr Mark Carey Ms Meg Donovan Mr Clinton Lively Ms Karen Kwilosz
Financial Stability Board	Ms Simonetta Iannotti
Secretariat	Mr Sylvain Cuenot