

FSB Workshop on the Link between Compensation and Conduct Data collection and analysis

Frankfurt, 7 December 2017

Key takeaways and selected topics

On 7 December 2017 the FSB hosted a workshop on compensation practices, and in particular on the collection and use of data to support robust analysis of the link between compensation and misconduct risk.¹ The objective was to share experiences and understand how firms manage misconduct risk using compensation tools as part of wider performance management and compensation frameworks. The workshop focused on:

- i) **monitoring and data collection processes**, to provide an understanding of the types of data firms are collecting vis-à-vis compensation and misconduct;
- ii) **data analysis**, to understand how data are being used by firms in the performance management and compensation processes, and the kind of analyses being carried out;
- iii) **supervisory reporting**, to understand what data is provided to supervisory authorities, and firms' views on key information for an effective supervisory process; and
- iv) **impact of misconduct**, to understand how firms are utilising lessons from the analysis of risk events to better prevent misconduct through more effective compensation and risk practices.

Senior executives responsible for control and remuneration functions at 14 large internationally active banks and officials from the FSB Compensation Monitoring Contact Group (CMCG) participated in the workshop. The CMCG is responsible for monitoring and reporting on national implementation of the *Principles for Sound Compensation Practices* and their *Implementation Standards* (Principles and Standards). This summary reflects the understanding of regulators and supervisors who attended the workshop concerning the main points raised in the discussion, conducted under the Chatham House rule. It does not therefore represent an assessment of activities across a large number of banks but rather an illustration of issues

¹ Throughout this summary, the term “misconduct risk” is kept for consistency with the terminology used in the FSB work on measures to address “misconduct risk” (see www.fsb.org/2017/07/reducing-misconduct-risks-in-the-financial-sector-progress-report-to-g20-leaders/). The FSB wording derives from the consideration that there is not a risk of “good” conduct, rather a risk of “misconduct”. Banks at the workshop emphasised that conduct programmes often go well beyond efforts to prevent misconduct, however.

discussed with those that took part in the workshop. It does not necessarily represent the views of authorities nor consensus views expressed by banks at the workshop.

The FSB welcomes any feedback on topics discussed at the workshop and summarised in this note. Comments should be sent by Friday 6 July to fsb@fsb.org.

Key Takeaways

The key takeaways, and in particular the lessons learned from misconduct events and the analysis of misconduct risk are the following:

- Misconduct incidents that have attracted attention in the last few years have resulted in enhanced frameworks and significant changes in the reward process and structure of compensation systems. There is a recognition that the risk of misconduct requires all employees to be monitored to some extent.
- There is now a clear recognition that incentive structures should both encourage good conduct and discourage bad conduct and that compensation must be linked to behaviour by including non-financial considerations.
- Compensation decisions increasingly rely on key performance, conduct and culture metrics and this has pushed line managers to engage much more directly with their teams and to own the “how” in doing business.
- Banks emphasised the need to focus on those who do not adhere to the firm’s culture or expected values, but also on measures to incentivise positive behaviours.
- Compensation tools must permit banks to take action when misconduct is discovered after compensation is awarded. This is key to encouraging personal accountability for conduct at both the employee and line- or senior management level. Banks are increasingly focused on reviewing line- and controls-oversight effectiveness in their consideration of conduct, for instance: reviewing line managers with repeat behaviour incidents which they fail to correct, or cases where there are multiple infractions from different individuals with a common line or senior manager.
- Compensation should distinguish between deliberate misconduct and unintentional acts that can also negatively impact the firm.
- A firm’s approach to compensation – the structure of reward processes, the way in which compensation pools are formed, the adjustment of individual awards and justification of compensation adjustments – is discussed today in significantly greater detail with boards and supervisors, and increasingly with external stakeholders groups, industry associations, and clients. Such discussions, in the context of “could it happen to us” debate, have a very immediate and strong impact on internal processes.
- Integrity, completeness and accuracy of data are important, including in order to maintain a detailed audit trail. One bank noted that *“the collection and use of data to support analysis of the link between compensation and misconduct risk is key to reducing the opportunities of misconduct while strengthening the ability to contain the associated risks.”*
- **Banks face challenges in both collection and use of data.** Among these are issues with legacy systems and integration of multiple data streams; the need for an “end to end” system

on conduct and individual level information; reconciling group vs local data and data capture weaknesses in certain markets, and the fact that employment law does not always align with compensation and disciplinary goals.

- Banks are making important strides in their analytical/intelligence capability across all three lines of defence through the use of enhanced surveillance, evolving technology and advanced analytics, robotics, statistical modelling, pattern and trend detection.
- In terms of taxonomy, a clear common definition of what constitutes a risk adjustment event from the perspective of supervisors would be helpful, because there is a difference between risk events, conduct issues, poor performance and poor decisions.

In detail, workshop participants discussed the following aspects related to monitoring and data collection, data analysis and supervisory reporting.

1. Monitoring and data collection

- 1.1 Banks report that efforts to collect data and link compensation decisions to misconduct issues are an important area of focus. Firms emphasised the need for consistent decision-making, and holistic approaches to incentivising appropriate behaviour while deterring misconduct. They highlighted the challenges posed by differences in employment law and the need to ensure the quality of information on which decisions are based.**
- 1.2 In the past, financial data were the primary, if not the sole input to compensation decisions. There is now significant emphasis on data around behaviour and a goal of positively adjusting for good behaviour and negatively adjusting for bad behaviour. Data-driven decision making is employed across different people processes (recruiting, retention, performance and conduct evaluation). A central challenge is ensuring the integrity, completeness and accuracy of data that are collected. Consistency is a key hurdle (e.g. using firm-wide definitions of key event types and other terms), but it is essential for ensuring fair and balanced decisions.
- 1.3 Participants commented that the speed and cycle of different aspects of the misconduct monitoring and review process may contribute to potential inconsistency, since it is challenging to ensure appropriate sequencing and validation of data and still make timely decisions.
- 1.4 Banks emphasised that the sources of data, and the tools for analysis, continue to expand. Data is gathered from multiple sources, including risk events, surveillance and internal control monitoring activity, compliance and audit reviews, whistleblower lines, client and customer complaints, and control forums (where the various control functions meet together under the auspices of human resources (HR) to provide performance management feedback). Governance frameworks on compensation have been reinforced, also by establishing specialised committees involved at different levels in the analysis and decision making revolving around causes and effects of misconduct, both at the individual and at the organisational level. This facilitates board involvement and discussion through specialised**

committees at the board level. A variety of reports are produced, to help inform performance assessments and risk adjustments of compensation awards, as well as to help track and assess specific misconduct cases and, more generally, behavioural patterns and practices and enhance preventive efforts.

- 1.5 From an organisational stand point, while information is collected from and used by all three lines of defence, the control and support functions (HR, legal, audit, finance, risk management and compliance) are those most involved in both gathering and assessing data and making decisions related to accountability for misconduct. Lines of business play an important role in monitoring and providing quantitative data and are increasingly engaged in monitoring and addressing potential misconduct.
- 1.6 Although “speak up” and “escalating issues” culture is important, firms believe that a focus on the “positives” is a more promising approach for reducing misconduct than simply instilling a culture of punishment. The need for “whistleblowing” programmes is seen in some ways as a failure to “speak up” because it means a risk has already crystallised. Firms described efforts to find ways to encourage participation and willingness to speak up in positive ways such as programmes that highlight “good conduct” and ensure that it impacts compensation and promotion decisions. In this spirit, the identification of role models as well as the ability of management to self-identify, independently assess, escalate and remediate issues are elements of a push towards promoting “business integrity” (which some banks prefer to the term “whistleblowing”), and fostering appropriate conduct. Banks underscored that their programmes are focused on “conduct” and not “misconduct”, expressing the view that in this space semantics matters.
- 1.7 Timely identification and escalation of risks is increasingly emphasised. One bank said the motto is now “see something, say something”. Banks also emphasised the importance of root cause analysis and lessons learned “read across” to identify similar vulnerabilities in other areas of operations.
- 1.8 One bank illustrated the usefulness of “business partners” for HR and other control functions. These are experts in the various business lines that are lent to the HR or other control functions to monitor conduct, review potential vulnerabilities and analyse or investigate incidents when they occur.² Rotation of business partners and their periodic involvement with HR functions is seen as conducive to informing decision-making and spreading good risk culture across the organisation.
- 1.9 Another bank shared that they have established a process whereby the firm gets all control function heads (including HR) in a room twice a year, to assess the risk profile of every division. Product control, compliance, legal, audit, risk, etc. are discussed, in order to form a collective assessment. This gets recorded, examples captured, and communicated to division heads – with potentially positive or negative impacts on the bonus pool. The participant noted that this development has led to immediate changes in behaviour, with significant improvements seen in a very short time frame. Other participants noted that oversight mechanisms such as control fora play a critical role in more effective

² Typically, these are employees with substantive or operational expertise who can provide insight on potential vulnerabilities or the root cause of conduct events. They should not be individuals from the same office or trading desk as the employee under investigation in order to avoid potential conflicts of interest.

identification and prevention of misconduct, as well as providing essential input into the performance management process. Data on incidents also help identify control weaknesses and develop new controls tailored to remediate identified failures.

- 1.10 **In terms of performance measurement, firms are trying to find the balance between the “what” (what has to be achieved) and the “how” (how the goals are achieved) and ensure adherence to appropriate standards of conduct, compliance, risk management and fair treatment of customers. A number of firms indicated that they use “performance modifiers”, which can act as gate conditions (i.e. minimum conditions for access to rewards). Financial metrics remain important, but both firms and supervisors as well as other stakeholders now look at the “how” in assessing long-term sustainability of the business model. It is increasingly understood that the focus should no longer be solely on profit maximisation.**
- 1.11 Banks more commonly utilise so called “non-financial” metrics (such as conduct, compliance and customer service goals) as part of annual performance assessments and monitor related indicators as part of ongoing oversight. Documentation of employee reviews is increasingly enriched with information about behaviour. One bank indicated that its process now focusses on “multi-year” positives or negatives. Another bank mentioned the practice of “second year monitoring” whereby adjustment to compensation is monitored in the following year to avoid a situation where compensation or other offsetting actions “makes whole” an individual for adjustment from previous years. Other banks commented that they maintain multi-year conduct tracking programmes for those with disciplinary infractions, or implement heightened supervision mechanisms. One bank discussed their “red flag” process (part of performance review), whose outcome has an impact on both compensation and promotion potential.
- 1.12 Monitoring activities extend beyond “material risk takers” (MRTs) to cover broader groups of employees, whose compensation should reflect positive behaviour. One bank noted that it had introduced “group variable compensation” to cover recognition of positive behaviour of junior employees. Banks also highlighted the need to also focus on individuals working in sensitive areas of the firm, for example those with higher level permissions and access to systems, and groups or networks of individuals (within and across firms).
- 1.13 Incentive systems can also lever on more structural aspects. One bank for example noted that in Japan long term contribution and career development within the same company are important incentivising tools, whereby internal rotation systems support permanence with the company and building up “internal equity” with the institution. The retirement package is also designed to support long-term contribution.
- 1.14 **Participants highlighted changes that have been made in data collection and reporting as a result of the new focus on misconduct, including: enhanced monitoring activities aimed at deterring misconduct (e.g. surveillance of trading activities and behavioural patterns); strengthened governance processes, including heightened standards for managerial oversight and new tools such as risk dashboards and advanced analytical capabilities as well as improved root cause analysis.**
- 1.15 Participants also discussed data collection challenges. The challenge for most firms is not sufficient data, but the integration and analysis of what is collected. It is difficult to extract data from legacy systems and identify and integrate meaningful information when

indicators are mainly qualitative. The use of non-financial metrics is still in early stages and quantitative indicators are less common. Banks discussed the relative merits of quantitative vs qualitative metrics and financial vs non-financial metrics. Financial metrics are the most transparent and difficult to dispute. While easy to apply, they generally need a qualitative overlay. Qualitative metrics allow for flexibility but subjectivity increases the risk of challenge. Banks described efforts to enrich the information content of quantitative metrics based on supporting qualitative evidence.

- 1.16 Risk and conduct information is often maintained in multiple databases (such as risk, HR, and investigations databases), and pulling together multiple data streams of different structures is difficult. Several banks emphasised the need for “end to end conduct systems”.
- 1.17 Banks also mentioned potential legal challenges related to personal data protection and privacy regulations, which differ across jurisdictions. They raised issues related to legal privilege in instances of investigation, and the challenge of employment law, which does not always align well with disciplinary goals. Finally, banks noted that the reconciliation of local versus group data, “capture weaknesses” in some markets and sufficiency of insight and evidence from local teams are key challenges.
- 1.18 Progress continues in the production, development and use of misconduct data and further improvements are expected. It was mentioned that the next phase is being able to integrate consequence management frameworks in a way so that everyone understands how both good and bad behaviour are factored in. One firm noted a trend of collecting more and deeper data, which will build up a history of data over time and allow firms to improve on identification of patterns and root causes and achieve more robust and consistent outcomes.

2. Data analysis

- 2.1 **There has been good progress also in the way firms use data in the conduct space. Firms mentioned new efforts in advanced analytics and use of increasingly sophisticated tools to identify patterns of misconduct, pre-empt threats before they occur, and track consequence management and related disciplinary actions. Intelligence capability has increased across the three lines of defence. Firms are mainly focused on creating frameworks for misconduct prevention and then on consistent application of measures when misconduct occurs.**
- 2.2 The data to complement the misconduct incidents assessments includes data on the individual’s history, role and responsibility within the organisation, behavioural patterns (entry and exit times, printing activity, etc.), financial, risk and transactional information, customer complaint data, and control function input. Some banks are investing in large data analytics and robotic tools to enhance what one bank called their “intelligence capability”, defined as heightened surveillance, and evolving technological advances (e.g. new analytical tools, use of robotics, pattern and trend detection across the three lines of defence) to better predict the likelihood of misconduct, more rapidly identify incidents and more effectively target enhanced monitoring where necessary. Text and voice analytics are key in developing useful metrics.
- 2.3 Very granular behavioural data (training information, late booking of trades, unreported outside activity, limit breaches) may constitute more minor incidents but when viewed in

combination with other activity or behaviour over a longer time span can help highlight potential conduct concerns and pre-empt more serious issues. The “broken window” hypothesis depends heavily on new analytical tools to uncover patterns and trends, such as big data analysis and artificial intelligence (AI). AI is particularly useful in identifying patterns from disparate levels of data where those patterns may not have been previously obvious and to use them to prevent improper behaviour. The objective is to design new surveillance tools that utilise firm-wide data in order to enable banks to identify emerging risks and better target interventions. At one bank, a multi-disciplinary team of industrial and organisational psychologists, statisticians and data engineers works with HR to derive measurable outcomes. Another participant described how statistical modelling was used to identify “at risk” populations and target preventative intervention measures, including subjecting them to more intense supervision or surveillance (e.g. those most likely to commit misconduct).

- 2.4 One participant, emphasising the importance of a proper selection process, noted that we “need to look at the road ahead, not the rear view mirror” and “ensuring that individuals are fit and proper on hire is the best way to minimise conduct risk”. Predictive analytics could help screen out candidates who have a level of risk-taking outside the firm’s appetite. However, one bank described predictive analytics as currently “long on desire, short on results.” Another noted that finding someone who is going to do a bad thing is highly unlikely, but looking backwards at conduct incidents and reviewing the patterns behind those events and the specific actions of people who committed them over a period of years can help isolate predictive factors. These analyses can also be useful in identifying control failures and opportunities for improvement (e.g. lack of clarity in policies or procedures, insufficient training, lax oversight, insufficient consideration of the risk of new products).
- 2.5 **Board reporting has been enhanced, in order to build a framework of integrated accountability for identifying and remediating culture and conduct issues before they seriously impact operations. In this direction, detailed reporting is increasingly being presented to the board on a set of conduct and control related metrics, generally including aggregate and specific information about disciplinary actions and conduct events across the firm.**
- 2.6 Internal reporting can cover business integrity matters, suspicious activity reports, review of transactions and insider threats, voluntary attrition issues, etc. Reports are also shared with various risk and governance committees, which provide feedback and suggestions for additional actions on compensation policies and outcomes.
- 2.7 **Management information systems increasingly track and assess misconduct with greater rigour and formality. Significant incidents and aggregated data are escalated and records are designed to document and demonstrate accountability and effective remediation.**
- 2.8 The need for audit trails has resulted in a higher standard of documentation. Evidence of decision making and the factors that influenced the outcome of such processes is recorded in much more detail. One bank mentioned that the introduction of the senior managers’ regime in the UK has made senior managers much more demanding in terms of documentation, so that they are able to track activity in their own areas, intervene early when needed, and have background information on hand to explain issues when they arise.

- 2.9 **Another area for development is back-testing. While banks have been able to take steps to explain and address outliers in their trend and root cause analysis of misconduct, they shared the view that a real back-testing process of the effects of policies in place (i.e. what would have been the outcome had those policies been in place for five or 10 years) is still not available. Similarly, demonstrating an effective alignment of risk and compensation is still a work in progress.**
- 2.10 One bank noted that ultimately firms should be able to model and stress test misconduct risk to the same level as interest rate and market risk, although lack of quantitative metrics makes this more challenging. The dialogue with senior management and the board will therefore rely on a combination of qualitative and quantitative data for both conduct and culture. Firms also emphasised the need to “connect the dots” when multiple individuals commit misconduct “if three individuals are committing misconduct, what does this tell me about a) the supervisor and b) the senior manager?”
- 2.11 Some banks pointed to the usefulness of data and illustrated the benefits of a well-designed and implemented compensation policy. Behavioural ratings are used to affect the individual’s pay based on his/her conduct, including determining positive and negative variable pay adjustments. One bank has a detection programme to recognise positive conduct in real time (including those with small amounts of variable pay). At that firm, all businesses are required to measure themselves against a set number of global conduct outcomes. The participant noted that they are seeing good correlation not just between performance and pay, but also between behaviour and pay. Another bank noted that they had analysed their employee population impacted by negative compensation adjustments to determine how many would repeat negative behaviour; 90% of those whose compensation had been impacted had no second adjustment over that span of time. Several banks noted that the incidence and character of misconduct had changed – while conduct events may not have declined overall,³ the nature of the conduct incidents was less serious.
- 2.12 One challenge is the extent to which activity is considered intrusive surveillance versus effective risk management. Banks are cognisant of the privacy considerations which are important in collecting and analysing data and which need to be carefully managed. Behavioural analytics require organisations to systematically capture and analyse behavioural data, which in turn triggers ethical and moral considerations. Participants held a shared view that analytics alone cannot drive an outcome, and an element of human judgement will always be needed. Firms are also using tools such as role-play, case studies and training exercises such as false trades or fake phishing e-mails. In all cases, effective communication and processes to collect employee feedback are seen as key to successful outcomes.
- 2.13 **A key challenge is scope of coverage, which for misconduct risk extends well beyond the traditional MRTs population. Anyone at the firm can impact reputational risk. One bank noted that their “global conduct outcomes” are applied across the entire employee population. Another firm indicated that they spend a lot of time analysing**

³ Several banks pointed out that the drivers of trends in overall levels of misconduct were sometimes difficult to identify – more events could indicate an increase in misconduct but also better detective processes (more efficient identification of conduct events).

“future MRTs” and addressing the challenge of potentially missing reputational risk in the junior ranks.

- 2.14 For example, millennials bring specific cultural patterns with them, and have different expectations on what to do with data and what data privacy means. They do not tend to see barriers around the firm and its information, but instead around friends and colleagues, so they believe data can be shared more widely than is actually permitted. Firms are particularly attuned to the “propensity for multiple employee misconduct” (such as incidents across multiple firms propagated by network effects).
- 2.15 Several participants noted the tendency outside the identified MRTs to be potentially more exposed to misconduct. One participant noted “we are seeing people who don’t think they pose risks and don’t see themselves as financial services professionals”. It was noted that the traditional definition of MRT relates to risks that are easily quantified (capital, liquidity, interest rate, etc.). There is no lexicon on misconduct risk so it is difficult to capture other risks, which can however become systemic. It was noted that there are new elements of risk over-taking traditional components of risk, such as IT or cyber risk or data leakage. For this reason some firms have integrated misconduct risk into operational risk, although there remains the challenge of how to classify incidents where no money is lost for the bank but clients may have been disadvantaged. One bank is conducting independent risk management reviews to see how to incorporate the “how we do things” into the risk assessment process, and create a “non-financial risk management framework”, which takes into account misconduct events for broader risk management purposes.

3. Supervisory reporting

- 3.1 **Although firm processes have developed in light of supervisory dialogue, firms noted that the information provided to supervisors is difficult to systematise and aggregate, since information is often individual- and case-specific and needs to be read in context. A common vocabulary on misconduct risk and incident categorisation/remediation is important, with the challenge however to preserve informativeness of data which can be specific to the business and the practice of each firm. Firms discussed duplication of effort due to different reporting requirements and approaches of supervisory authorities. One bank noted that “while regulators share same overarching principles, there is great variance in terms of the reporting and amount of oversight”.**
- 3.2 One firm noted there are three typical approaches: regulators who required an extensive package of information up front and then lighter touch going forward; regulators who required annual data submissions; and regulators who sought information through thematic reviews. A single governance process would be helpful, but local regulatory needs also need to be met.
- 3.3 For supervisors, relying on quantitative data alone may not be sufficient to assess if there is an appropriate alignment between compensation and misconduct. Narrative and qualitative data are required to understand the nature of the misconduct event and the appropriateness of adjustments at both the firm and individual level. However, metrics around compensation can indicate firms’ priorities. If, for instance, they only consider financial performance metrics, that provides insight into what they consider important.

- 3.4 In addition, data on compensation adjustments for “lower level” conduct issues can provide important information on widespread or recurrent issues beyond what can be gathered by focussing only on significant events. One firm noted that the role of supervisors is important in that they could help identify systemic issues and behaviours that cut across firms (such as issues that might happen in a network of people) and risks that could affect multiple firms.
- 3.5 Having an open and transparent dialogue (and relationship) with the supervisor is critical to assessing whether there is appropriate alignment between risk and compensation decisions. For larger firms, the dialogue with supervisors often involves presentations and discussions with the compensation team so that supervisors have a full sense of the nature of the underlying event and how the investigation was conducted. Internally firms are likely to reference more data, including full compensation adjustment history for the years in question (for the individual and peers), before arriving at a compensation adjustment decision. Ultimately the nature of the data collected internally will vary by the nature of the underlying risk adjustment event. Input from supervisors can however influence the way firms are developing their internal reporting.
- 3.6 In terms of taxonomy, a clear common definition of what constitutes a risk adjustment event would be helpful, because there is a difference between risk events, conduct issues, poor performance and poor decisions. An alignment of priorities between different supervisors and supervisors and firms could lead to an alignment of data needs, however, as one participant put it “firms are different from each other in many ways and need flexibility to tell their story”.
- 3.7 It was also observed that tensions between labour laws, tax laws and regulation mean data could appear incorrect or at variance with regulation, but it is collected or used in a way that supports multiple requirements.