

## **AN ANALYSIS OF OPERATIONAL RISK MANAGEMENT GUIDELINES IN VARIOUS BANKING SYSTEMS FROM ASIA**

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### **Abstract**

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk. Compared to credit and market risk, this definition explicitly takes into account external as well as internal events. Therefore, the definition of operational risk could be seen as broader and more complex by comparison with other type of risks. Operational risk management (ORM) is particularly important in the banking system, since operational losses are likely to have significant impact not only on the financial condition of the banks, but also on their reputation. The authors posit that the regulatory openness regarding ORM results in legal texts that are highly influenced by the culture of the country where the central bank which issues guidelines on ORM resides. The research results are useful to the local and global regulators of the banking system in fine-tuning their decisions in different cultural environments.

### **Keywords**

culture; banks; Asia; operational risk; Basel

### **JEL Classification**

M42, A14

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### **Introduction**

The Basel II Capital Accord defines operational risk as ‘the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk’. Compared to credit and market risk, this definition explicitly takes into account external as well as internal events. Therefore, the definition of operational risk could be seen as broader and more complex by comparison with other type of risks (Wahlström, 2006). Nevertheless, the abstract nature of this definition makes it advantageous, because it captures as many events as possible, but at the same time, makes it imprecise, thus having the potential of creating problems in the practice.

Given their complex and pervasive nature, as well as their potential reputational impact, operational risks have recently attracted increased attention from academics, professionals, and regulators. However, since the history of operational risk is still young when compared to the ones of credit and market risk, data availability on operational risk is limited. Consequently, research on operational risk is still hindered by the lack of data and, generally, very scarce. Our study’s objective was to investigate whether there is a

correlation between the cultural traits of people in a particular country and the attributes of the corpus published by the central bank of the respective country. The remainder of the paper is structured as follows: first, a thorough literature review is carried out by the authors; second, the study's objective and the research design are presented; last but not least, the researchers interpret the results and offer the conclusions of the study.

### Literature Review

Firstly, the Romanian literature regarding operational risk management (ORM, hereafter) comprises some theoretical studies (Anghelache et al., 2016; Stanciu, 2010). Anghelache et al. (2016) offer a mere definition of operational risks, describe the steps for quantifying operational risk and give an overview on qualitative approaches for operational risk measurement such as setting up a sound system of internal control. Similarly, Stanciu (2010) explores the approaches and the changes needed in risk management, in general and in operational risk management, in particular. The author discusses in detail the operational risk management process; the operational risk definition and content; the operational risk regulatory framework; and the solutions for operational risk management.

Another category of studies (e.g. Dănescu and Muntean, 2008; Socol et al., 2006) are focused on the procedural aspects of operational risk management. Dănescu and Muntean (2008) provide solutions for assisting the organization in an effective risk management and control over operational risks, taking into consideration some particularities of the Romanian banking system. More precisely, the authors offer a practical procedural guidance on how Risk Based Internal Audit (RBIA) could be developed for supporting organizations in operational risk management. On the contrary, Socol et al. (2006) focus strictly on the process of managing operational risks and offers concrete guidance regarding the procedures that could be implemented by banks in operational risk identification, valuation, monitoring, and management.

The Romanian academic literature on operational risks also includes empirical papers. Dima (2009) assumes that operational risk is mainly driven by transactions and by means of regression analysis, proves that the probability of operational losses increases as the volume and complexity of transactions increase. A different empirical approach, namely a case-study approach, is taken by Matiș (2007), who focuses on the process of operational risk management in a selected commercial bank from Romania, namely Banca Comercială Română (BCR). The author describes in detail each of the steps that are part of the process of operational risk management at that particular bank: risk identification, risk assessment, risk monitoring, and risk management.

The literature available at international level is also limited compared to the high significance of the research area. At global level, the major problems addressed by the literature that deals specifically with operational risk management (ORM) in the banking system relate to (1) the appropriateness of different measurement models for the operational risk capital charge; (2) the determinants of ORM disclosure; (3) the quality and quantity of ORM disclosure. Our research contributes to the growing body of literature on operational risk.

Regarding the characteristics of legal text, Contreras (2013) notes that legal rules are affected by the vagueness of natural language. According to Hospers (1976), vagueness occurs when there is no defined set of conditions governing the use of the word. The word lacks precision because there is no set of conditions that enable us to say exactly when the word is to be used. There is no set of conditions each of which is necessary and that together are sufficient for the use of the word in the world.

According to Cao (2007), an expression is vague if it admits of borderline cases in actual use. Saying that a concept is vague is equivalent to saying that it is not clear whether the concept applies or not. For example, the words 'tall', 'bald' and 'old', and concept words or

cluster concepts such as 'just', 'legitimate' and 'reasonable' are vague. Another example is 'serious'. For instance, for the provision that 'serious consequence will result' if United Nations resolutions are not complied with, what does 'serious' entail: economic sanctions, use of force, or any other consequences? One type of vagueness is intensional vagueness, with words such as 'religion', 'vehicle', and 'fruit' (see Alston, 1964; Moore, 1981, 1985). International treaties and other similar legal instruments are texts that resulted from negotiation to represent the diverse interests of the participating member States parties. In international diplomacy, negotiators frequently choose a compromise that glosses over their differences with vague, obscure or ambiguous wording, thus clarity is sacrificed for the sake of obtaining consensus in treaties and conventions (Sarcevic, 1997:204; Tabory, 1980). Our contribution to the body of literature is the fact that we considered the role of culture in impacting the level of disclosure on operational risks in differing banking set-ups. Culture has been defined as "the collective programming of the mind which distinguishes the members of one human group from another" (Hofstede, 1980). The role of culture in influencing and explaining behaviour in social systems has been acknowledged and explored in various fields, especially in anthropology, sociology and psychology. A framework for the comparison of different cultures was developed by Geert Hofstede and his research team.

The Hofstede cultural model originally consisted of the following four dimensions:

- **Individualism versus Collectivism:** Individualism refers to a preference for a loosely knit social framework in which individuals are expected to take care of themselves and their immediate families only. On the contrary, collectivism shows the preference for a tightly knit social framework where individuals belong to 'in-groups' that take care of them in exchange for unquestioning loyalty. This dimension relates to whether people's self-image is defined in terms of "I" or "We". The extent to which people feel independent reflects individualism, whereas the extent to which they feel interdependent as members of larger wholes reflects collectivism.
- **Large versus Small Power Distance:** Power distance is defined as the extent to which the members of society expect and accept the unequal distribution of power in institutions and organizations. People in Large Power Distance societies accept hierarchical order in which everybody has a place which needs no further justification. People in Small Power Distance societies struggle for power equalization and require justification for power inequalities.
- **Strong versus Weak Uncertainty Avoidance:** Uncertainty avoidance refers to the attitude of the members of a certain culture towards anxiety and ambiguity. Strong Uncertainty Avoidance societies maintain rigid codes of belief and behavior and are intolerant towards deviant persons and ideas. Weak Uncertainty Avoidance societies maintain a more relaxed atmosphere in which practice counts more than principles and deviance is more easily tolerated. The fundamental issue addressed by this dimension is whether society tries to control the future or simply lets it happen.
- **Masculinity versus Femininity:** Masculinity refers to the preference of society for heroism, assertiveness, achievement, and material success. On the contrary, Femininity stands for a preference for relationships, modesty, caring for the weak, and the quality of life. This dimension captures what motivates people, wanting to be the best (Masculine) or liking what you do (Feminine). In a masculine society, social gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success; women are supposed to be more modest, tender, and concerned with the quality of life. On the contrary, in a feminine society, social gender roles overlap, whereas both men and women are expected to be modest, tender, and concerned with the quality of life.

Gray (1988) expands Hofstede’s model at the level of the accounting subculture and identifies four values, which he correlates with Hofstede’s cultural dimensions: Professionalism versus Statutory Control, Uniformity versus Flexibility, Conservatism versus Optimism, and Secrecy versus Transparency. Two of these value dimensions are particularly relevant in the context of the present research, namely secrecy, and professionalism.

**Research design**

Authors have analyzed a corpus of 50,000 words which includes the guidelines on operational risk management published in English by the central banks of China, Hong Kong, India, Indonesia, Japan, Singapore, and South Korea. The study’s objective was to investigate whether there is a correlation between the cultural traits of people in a particular country and the attributes of the corpus published by the central bank of the respective country. The cultural traits taken into consideration as independent variable are the above-mentioned Hofstede’s cultural dimensions further developed by Gray (1988). The authors hypothesized that the attributes of the corpus influenced by culture are clearness and prescriptiveness.

**Results**

We have extracted the cultural traits in each of the selected countries from South-Eastern Asia: China, Hong Kong, India, Indonesia, Japan, Singapore, and South Korea according to the Hofstede’s model, as well as the values of the relevant cultural dimensions of Gray’s model, namely “Secrecy” and “Professionalism”. The highest level of secrecy is that of Korea, while the country that is inclined the most towards transparency is Japan. Regarding professionalism, the people of Singapore prefer statutory control, while Korea scores highest in terms of professionalism, meaning that the professional judgment weighs more than regulations.

**Table no 1 Cultural traits of selected countries from Asia**

	Index secrecy	Index professionalism	Power distance	Individualism	Masculinity	Uncertainty Avoidance
<b>China</b>	24.00	90.00	100.00	17.65	48.21	26.19
<b>Hong Kong</b>	15.00	72.00	53.85	32.35	32.14	25.00
<b>India</b>	13.00	69.00	88.46	100.00	30.36	38.10
<b>Indonesia</b>	66.00	112.00	92.31	0.00	12.50	47.62
<b>Japan</b>	5.00	100.00	0.00	94.12	100.00	100.00
<b>Korea</b>	88.00	127.00	23.08	11.76	0.00	91.67
<b>Singapore</b>	14.00	62.00	76.92	17.65	16.07	0.00
<b>Mean</b>	32.14	90.29	62.09	39.08	34.18	46.94
<b>Std. dev.</b>	31.78	24.16	38.10	40.78	32.95	36.54
<b>Min</b>	5.00	62.00	0.00	0.00	0.00	0.00
<b>Max</b>	88.00	127.00	100.00	100.00	100.00	100.00

Source: authors’ own design based on Hofstede’s index values

The longest guidelines are the ones issued by the national Bank in Japan (14,124 words), while the shortest ones are the ones provided to the banks in China (2,031 words). The data regarding the clarity and prescriptiveness of text was gathered both manually and through specialized content analysis software. It results that the most prescriptive text is that of Korea, while the least prescriptive ORM guidelines are the ones of Japan. Regarding clarity, the foggiest guidelines are those of the Chinese national bank, while the highest clearness is achieved by Korea.

By applying different correlation coefficients such as the Kendall coefficient, the following has been found: (1) the higher the masculinity, the less clear is the text; (2) the higher the masculinity, the less prescriptive is the text.

### Conclusions

Operational risk disclosure is an important part of the transparency debates within the banking industry. Most operational losses attract the attention of the public, although financial losses may be relatively small. Sometimes, the reputational impact is much more significant than the direct effect from the loss itself (Sturm, 2013; Țurlea & Mocanu, 2016). The study's objective was to investigate whether there is a correlation between the cultural traits of people in a particular country and the attributes of the corpus published by the central bank of the respective country. The authors hypothesized that the attributes of the corpus influenced by culture are clearness and prescriptiveness.

Authors have analyzed a corpus of 50,000 words which includes the guidelines on operational risk management published in English by the central banks of China, Hong Kong, India, Indonesia, Japan, Singapore, and South Korea. The longest guidelines are the ones issued by the national Bank in Japan (14,124 words), while the shortest ones are the ones provided to the banks in China (2,031 words).

Results show that the highest level of secrecy is that of Korea, while the country that is inclined the most towards transparency is Japan. Regarding professionalism, the people of Singapore prefer statutory control, while Korea scores highest in terms of professionalism, meaning that the professional judgment weighs more than regulations.

Our research is relevant and significant, because based on the ORM guidelines published by each central bank the individual banks make decisions regarding the implementation of the operational risk management in their institution, as well as regarding the aspects to be disclosed to their stakeholders on the topic. This makes the ORM guidelines an important regulatory instrument in the banking industry and highlights the relevance of the described study. Last but not least, the research results are useful to the local and global regulators of the banking system in fine-tuning their decisions in different cultural environments.

### References

- Alston, W. P. 1964. *Philosophy of Language*. Prentice-Hall, Englewood Cliffs, N.J
- Anghelache, C., Manole, A., Anghel, M.G. and Soare, D.V. 2016. Statistical-econometric model used to analyze the operational and insolvency risks. *Theoretical and Applied Economics*, 3(608), pp. 221-228.
- Cao, D. 2007, Inter-lingual uncertainty in bilingual and multilingual law, *Journal of Pragmatics* 39, 69–83
- Contreras S. (2014), The Underdetermination of Natural Law. Notes about the Classical Theory of the Determination of Natural Just, S. Contreras, *Boletín Mexicano de Derecho Comparado*, año XLVII, núm. 141, 839-866.
- Dănescu, T., Muntean, A. 2008. *Addressing Operational Risk by Using a Risk Based Internal Audit Approach: Benefits offered to Romanian Banking System*. *Applied*

- Economics, Business and Development*. Retrieved from <http://www.wseas.us/e-library/conferences/2010/Tunisia/AEBD/AEBD-14.pdf> ;
- Dima, A.M., 2009. Operational Risk Assessment Tools for Quality Management in Banking Services. *Amfiteatru Economic*, 11(26), pp. 364 – 372.
- Gray, S. J. 1988. Towards a Theory of Cultural Influence on the Development of Accounting Systems. *Abacus*. 1-15, <https://doi.org/10.1111/j.1467-6281.1988.tb00200.x>;
- Hofstede, G., 1980. *Culture's Consequences*. S.l: Sage Publications.
- Hospers, J., 1976. *Introducción al análisis filosófico*, Madrid, Alianza, pp. 95 y 96.
- Matiş, E.A., 2007. *Operational Banking Risk Management – Research Performed at the Romanian Commercial Bank* [online] Available at: <https://core.ac.uk/download/pdf/6304098.pdf> [Accessed 4 March 2019].
- Moore, M. S., 1985. *A natural law theory of interpretation*. Southern California Law Review 58, 277–398
- Socol, A., Iuga, I., Gavrilă-Paven, I. 2006. *Procedures to manage of operational risk on the banking internal level - Romania's Case*, International Academic Conference „National and Regional Economy VI”, University of Herlany, Slovakia, 11-13 October 2006, 354-359;
- Stanciu, V., 2010. Managing Operational Risk in Banks. *Analele Ştiinţifice ale Universităţii "Alexandru Ioan Cuza" din Iaşi – Ştiinţe Economice*, 57, pp. 245-260.
- Sarcevic, Susan, 1997. *New Approach to Legal Translation*. Kluwer Law, The Hague
- Tabory, Mala, 1980. *Multilingualism in International Law and Institutions*. Sijthoff & Noordhoff, New York
- Țurlea, E., Mocanu, M. and Radu, C., 2010. Corporate governance in the banking industry. *Journal of Accounting and Management Information Systems*, 3(9), pp. 379-402.
- Wahlström, G., 2006. Worrying but accepting new measurements: the case of Swedish bankers and operational risk. *Critical Perspectives on Accounting*, 17, pp. 493–522.