Measurement of Capital Adequacy for Operational Risk: A Case Study in a Bank Operating in Turkey

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Abstract: During the recent years, restrictions and obstacles of the finance sector are declining; on the other hand the volume of financial activity is increasing. Banking sector is also affected from this alternation; day by day sector's risks are changing and growing. Banks in competition are increasing the variety of products and this variation results in that banks are subjected to the risks of different products and activities. The purpose of the risk management is not only preventing losses but also changing the risks and opportunities. Banks are developing different studies and applications about the control and management of the risk. Although risk measurement is known as a very old and important subject, with the growing importance after multi-dimensional operational losses occurred in recent years, the measurement of operational risks is still a new and developing field. The structure of the Operational Risk has a wide risk area which brings about serious losses in the bank. The Basel Committee who makes different arrangements and gives different advices about this area defines the Operational Risk as "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events". The methods of observing Operational Risk differs according to the risk sensibility. This difference affects the results of capital needs which are calculated by the banks. Banking sector must take precautions and be ready for the situation with risk that can occur at any moment.

This study deals with risks in banking sector, banking crises caused by operational risk, and the methods that can be used for measuring capital adequacy and operational risk management. In this context, risk measurement methods proposed by the Basel II committee are discussed. It has been attempted to measure the operational risk of a bank that operates in the Turkish banking sector with the methods of basic indicator approach, standard approach and alternative standard approach by using data of the bank and also, it has been analyzed differences in capital adequacy that calculates as a result of the different measurement approaches with tables.

Keywords: Risk Management, Operational Risk, Capital Adequacy, Basel II Committee, Basic Indicator Approach, Standard Approach, Alternative Standard Approach.