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Title	The Impact of BIS Regulation on Market Risk Management – Comparison of Standardized Method and Internal Models Approach		
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Abstract

The objective of the thesis was to study and analyze the two alternative methods; the standardized method and the internal models approach, for calculating minimum market risk capital requirements provided by the Basel Committee. The aim was to describe and analyze what would actually be the difference in market risk charge, when the capital charges are calculated using above mentioned alternative methods, and to illustrate exactly how large could the difference be in capital charge between these methods. The background of the thesis originates from the development of financial markets in the last few decades, e.g., increased volatility and growing complexity of financial products has spurred new emphasis on risk management. Regulators have responded to this development, at the head Basel Committee on Banking Supervision, an organization hosted by the Bank for International Settlements (BIS). Financial institutions need to comply with these regulations, and have an incentive to achieve thorough understanding of the academic and regulatory frameworks to reduce the regulatory required capital to gain competitive advantage.

In the theoretical part of the thesis, market risks and shortly also other financial risks were first defined. Furthermore, the measurement and management of market risk were examined, and finally the regulatory framework for market risk was introduced.

In the empirical part of the thesis, these minimum market risk capital charges were calculated for a hypothetical sample portfolio, and the results were analyzed and compared to each other. The empirical material of the thesis; the hypothetical sample portfolio, consisted of time-series data received from Thomson Datastream database. The time-period of data for all instruments used was from period April 7, 2005 to April 7, 2008, and therefore consisted of 782 observations. The internal models approach require a type of Value at Risk (VaR) methodology to be used, thus calculations were conducted using commonly used VaR approaches: variance-covariance approach, historical simulation, and Monte Carlo simulation. The thesis is nomothetic by nature, and the conclusions were deducted from the empirical part of the thesis.

Against expectation, according to calculation conducted in the thesis, the market risk charges were overall smaller when calculated with the standardized method. The results of the calculations questioned the superiority of the internal models approach in certain situations. Therefore, the standardized method could be more reasonable alternative to small and mid-sized financial institutions. Based on the examination conducted in the thesis, it seems also that qualitative requirements of the internal models approach are approximately similar to those urged by the academics concerning the implementation of market risk management.

Key words	Market Risk, Capital Adequacy Requirements, Basel Committee
Further information	