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Systemic Risk Measures in Financial Markets: Identifying the Systemically Important Companies in TSE

Hossein Dastkhan¹, Naser Shams Gharneh²

Abstract: In the recent years, the occurrence of systemic risk events is one of the main issues of the complex financial systems. Identification of the systemically important firms is one of the main issues in order to mitigate and control the systemic risk events. In this paper, different network-based systemic risk measures are introduced and compared to each other to identify systemically important firms. These measures are divided in to the interconnectedness and the size measures. Using cross-holding data of Tehran Stock Exchange and network theory principles, the systemically important firms and sectors are identified and their relations are assessed. The results show that the application of integrated cross-holding network leads to a better understanding of the systemic risk in the considered financial market. Moreover, a combination of interconnectedness and size measures can lead to more reliable results. The statistical analysis of the results indicates that there are few firms which have a dominant role in the occurrence of financial systemic risk according to different measures.

Keywords: *Network Theory, Interconnectedness, Systemic Risk, Cross-Holding.*

JEL: *C6, E44, G10, G18, G32*

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Impacts of Credit Risk and Liquidity Risk on Performance of Banks

Mehdi Ferdosi¹, Mohammad Hasan Fotros²

Abstract: Along with globalization of economy and strengthen competition among the banks, profit margin of traditional banking activities be falled and caused increasing of the banks risk. Risk is one of the effective factors on bank performance that be attended because of fiscal crisis in recent years. This research investigates impacts of credit and liquidity risk on performance of banks in Iran. For this end, 31 banks during 1386-1393 by annual data are investigated. Findings by fixed effect and GLS method represents negative effect of credit and liquidity risk on banks profit margin as performance index. Other results show negative effect of diversification index and positive effect of concentration and cost management on profitability.

Keywords: *Credit Risk, Liquidity Risk, Profitability, Bank System.*

JEL: *G21, G29, G32*

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Deployment of Risk Culture In Financial Institutions

**Aryan Gholipour¹, Mohammad Abooyee Ardakan², Hassan Ghalibaf Asl³,
Asghar Asadi⁴**

Abstract: While quantitative models and governance frameworks for risk management are now well established, but behavioral aspects, which focuses on the concept of risk culture, often are unclear and requires intellectual efforts and develop more theories. Establish and maintain an appropriate risk culture is still one of the major challenges in risk management. In this paper, we attempt has been to clarify the status of the risk culture in risk management, different dimensions described in financial institutions and its status in one of the financial institutions group.

In this regard, as a starting point records of previous research, the available models and frameworks was investigated. During the review of the literature, by comparing the different frameworks, dimensions and cultural elements of risk Financial Stability Board was selected as a base. Then, through interviews and review records and documents, also using survey and questionnaire was tested aspects of risk culture. The findings show that the dimensions of the risk culture in the organization which is the case study, is average. Among the elements of risk culture, succession planning and talent development have obtained the lowest scores and outcomes specified and risk ownership have obtained the highest scores.

Keywords: *Financial Institutions, Risk Management, Organizational Culture, Risk Culture.*

JEL: *G01, G31, G32, M14*

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The Impact of Intellectual Capital on the Financial Performance of Banks in Iran

Mahmood MahmoodZadeh¹, Farshid Efati Baran²

Abstract: The goal of most companies is to earn more profit and this case is reflected in the form of financial performance in banks and financial institutions. One of the factors affecting on financial performance is intellectual capital. The aim of this study was to evaluate the effect of intellectual capital and its components (human capital, physical and structural) on financial performance of banks active in the Tehran Stock Exchange during 2006-2015. Intellectual capital efficiency of banks is measured via the Value Added Intellectual Capital (VAIC). Panel data regression analysis showed a significant positive impact of intellectual capital on return on assets of banks. In particular, human capital and return on assets had a significant positive relationship. This result shows the efficiency coefficient of human capital has a greater impact than structural capital and physical capital efficiency coefficient on bank profitability. The results identify of special incentives of intellectual capital that affect on profitability and business efficiency.

Keywords: *Value Added, Return on Assets, Intellectual Capital, Leverage Ratio.*

JEL: *G11, G21, O34*

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An ANFIS System for High Frequency Trading using Intraday Seasonality Observation Model

Ali Salehabadi¹, Sajad Farazmand²

Abstract: The main goal of this article is prediction of gold price time series. An ANFIS and its fuzzy reasoning combined with pattern recognition ability of NN is used for predicting and trading in high frequency. Taking volatility of financial time series into consideration has brought about the development of the Intraday Seasonality Observation Model. Models are examined with data from June 2014 to April 2016. This model allows us to observe specific events and seasonality's in data and subsequently removes any unnecessary data. This volatility based model provides the ANFIS with more accurate inputs. Based profit factor, ROI, and Sharpe ratio the model has increased the overall performance of the system so that winning rate of the system reaches 69 percent.

Keywords: *ANFIS, Neuro-fuzzy network, Volatility Model, High-frequency trading (HFT).*

JEL: *C32, C45, G15, G24*

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Firm Life Cycle and Stock Price Crash and Jump Risk

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Abstract: Corporate life cycle represents the evolution of an organization due to changes such as strategy and competitive pressures the corporate is facing, happens based on the theory of competition and signaling theory, firms during different stages of their life cycle have different characteristics and conditions that may affect stock price crash and jump risk. The aim of this research is to investigate the relationship between firm life cycle and stock price crash and jump risk. In order to achieve this research goal, we selected 144 firms during the 2010 to 2015 we used log it regression to test our hypothesis. The results showed that there is not relationship between firm growth and mature stages and stock price crash risk and there is negative and significant relationship between firm decline stage and stock price crash risk. Also, there is not relationship between firm life cycle stages and stock price jump risk in the research.

Keywords: *Firm Life Cycle, Stock Price Crash Risk, Stock Price Jump Risk.*

JEL: *D91, E32*

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Funds Flow, Market Return and Retail Investors Risk

Mohammad Osoolian¹, Moien Nikusokhan²

Abstract: There are different types of investors in mutual fund market that rely on different information, therefore the relationship between fund flows and market returns is different among various groups of investors. The aim of this study is to explain how the relationship between equity fund flow and market returns of the Tehran Stock Exchange based on the risk-taking of retail and institutional fund investors during the period 1387 to 1396. We used ordinary least squares regression (OLS) and seemingly unrelated regression (SUR) models for a sample of 101 equity mutual fund. The results of the retail fund sample indicate that feedback trading; ie, 1 percent increase in stock market returns led to a 2.84 percent increase in fund flows and this indicates a risk for retail investors in the short-term. In contrast, there is a few evidence of a relation between fund flow and market returns for the institutional funds. Also, no evidence found about the flow to be Inducer price pressure in the stock market.

Keywords: *Stock market return, Fund flows, Mutual funds, Price pressure, Feedback trading.*

JEL: *G10, G20, G23*

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