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Contents
Predicting Corporate Governance Ratings .......................................................... 5
Regime-Switching Measure of Systemic Financial Stress ........................................ 6
The Variability of IPO Initial Returns in The Spanish Capital Market .......................... 7
Performance evaluation of Islamic mutual funds relative to conventional funds: Empirical evidence from Saudi Arabia ............................................................................. 10
Macroeconomic News Surprises and Volatility Spillover in the Foreign Exchange Markets ............................................................... 12
Determinants of Credit Default Swap Spread in the banking sector: The role of house prices in driving credit risk in the UK ............................................................................. 14
One crisis, two crises...the subprime crisis and the European sovereign debt problems ........ 16
Director Connections in the Mutual Fund Industry .................................................. 19
Value Relevance of Accounting Information in India over the past Twenty one years ........ 21
Spillovers in Banking Sector - A Dynamic Probit Approach ....................................... 22
Transparency, Value Creation, and Crises .................................................................. 25
Return-Based Attribution with Fama-French Factors ............................................... 28
Money Supply, Interest Rate, Liquidity and Share Prices: A Test of Their Linkage ........... 30
The Effect of Functional Diversification on Firm Performance and Risk: Evidence from the Banking Industry in Australia ................................................................. 31
Tracking Error of Traditional and Synthetic European Exchange-Traded Funds ............. 32
Asymmetric Investor Overreaction: Unobservable portfolios and System GMM? ............. 34
Opening the Box: An Analysis of FTSE 100 Membership Changes from a Microstructure Perspective ... 35
The price, quality and distribution of mortgage payment protection insurance: A hedonic pricing approach .................................................................................... 38
Market Manipulation and Expiration Day Effects: Evidence from Taiwan .................... 39
An Evolutionary Theory of Systemic Risk and its Mitigation Outlined for the Global Financial System\... 40
Insider Trading Activity, Tenure Length, and Managerial Compensation ...................... 41
Causes and Effects of Demutualization of Financial Exchanges .................................. 42
Managing extreme risk in Indian stock market: An extreme value theory approach ........... 43
Investment Readiness As a Determinant for Raising Capital From Venture Capital Market ........ 46
Is there a Speculative Risk in the Indian Secondary Market? ....................................... 48
New evidence on the impact of fees on mutual fund performance of two types of funds ........ 50
Competence Value Emersion: a Key to Sound Practices in Entrepreneurial Finance ........................................51
Malaysian Corporate Finance Behaviour .............................................................................................................54
An Investigation of Australian Takeover Firm Returns from an Investor Viewpoint ......................................56
The impact of interest rate and foreign exchange rate on banks’ stock returns and volatility: Evidence from China ..........................................................................................................................58
Illiquidity and Loss Spirals in Equity Markets .......................................................................................................59
Determinants of Derivative Usage – Empirical Evidence from Poland .................................................................61
Perceived Effectiveness of Business Internships and Students’ Personality Traits ..............................................63
The Driving Forces of Venture Capital Investments ..............................................................................................64
The Abstract of The Driving Forces of Venture Capital Investments .................................................................65
Fundamentals of bank intermediation margin: The implication of contractual interest rate and nonmaturity deposit ..........................................................................................................................66
Policy Applications of a Systemic Risk Early Warning System .......................................................................68
What lies behind the “too-small-to-survive” banks ............................................................................................70
Impact of Double Taxation Treaties on Cross Border Portfolio Equity Flows, Valuations, and Cost of Capital ..............................................................................................................................................73
The Securities and Exchange Commission as a Learning Regulator: Lessons From Proxy Access, ...............75
Good Times and Bad Times: a Comparison of Heston Model Specifications for Eur usd Option Valuation Before and After 2008 ........................................................................................................77
Are Ethics-based Sukuk Securities the Same as Conventional Bonds? ...............................................................79
Equity Financing Capacity and Stock Returns: Evidence from China .................................................................83
Traders Activities, Ownership and Stock Price Reactions to the MSCI Index Change: Evidence from Taiwan ................................................................................................................................................85
Thinking by Analogy and Option Prices ...............................................................................................................89
Hidden Costs of Mandatory Long-Term Compensation .....................................................................................90
One crisis, two crises...the subprime crisis and the European sovereign debt problems ................................91
Mega-Banks’ Self-insurance with Cocos: A Work in Progress ............................................................................94
The Valuation of Firms in Taiwan’s Biotech Industry ..........................................................................................95
Can we profit from momentum within a diversified portfolio? - Evidence from European stock markets ....................................................................................................................................................98
Commodity Futures Prices: More Evidence on Forecast Power, Risk Premia and the Theory of Storage .......................................................................................................................................................101
Do Investors See Through Accounting Profitability and Recognize Efficiency? Evidence from Chinese Listed Companies ................................................................. 103

Financial Reporting in Russian Banks: a Study in Corporate Governance ................................................ 105

Does Corruption Increase Trading Costs? .................................................................................................. 107
Predicting Corporate Governance Ratings

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Abstract
In this paper we use six governance variables to predict the ISS’s indexes values. Using a sample of 392 UK companies, the results indicate that governance variables can predict the ISS’s governance rates with a higher degree of accuracy and significance. This suggests that corporate governance indexes actually measure what they claim to measure: corporate governance. Moreover, these results suggest that corporate governance indexes’ values are predictable in an out-of-sample context. So, those wishing to invest in companies with “good” corporate governance can do so by using our ordered probit model applied on observable proxies for corporate governance.

Key words: Corporate Governance, ISS’s Ratings, Board Independence, CEO Compensation, Ownership Structure and Large Creditors.

1 Any errors are the authors’ responsibility.
Regime-Switching Measure of Systemic Financial Stress*

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February 2012

Abstract

In this paper, I propose an approach to measuring systemic financial stress. In particular, abrupt and large changes in the volatility of financial variables that represent the dynamics of the US financial sector are modeled with a joint regime-switching process, distinguishing “low” and “high” volatility regimes. I find that the joint “high” volatility regime for the TED spread, return on the NYSE index, and capital-weighted CDS spread for large banks is closely related to periods of financial stress. This result suggests that the probability of the joint high volatility regime of these financial variables can be considered as a measure of systemic financial stress.

(JEL C32, G01, G12)

Keywords: Financial stress, Systemic risk, Regime-switching process, SWARCH.

*The views expressed in this paper are solely my own and do not necessarily reflect the position of the Federal Reserve Bank of Richmond or the Federal Reserve System.

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THE VARIABILITY OF IPO INITIAL RETURNS IN THE SPANISH CAPITAL MARKET

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Abstract

The aim of this paper is to analyse how IPO initial return volatility affects the valuation of firms that go public on the Spanish stock market during the period 1993-2011. The goal is to test whether this new metric for evaluating the pricing of IPOs is relevant on the Spanish capital market, bearing in mind that the degree of ex-ante uncertainty regarding the value of the firm for IPOs in Spain is lower than in other countries, as is the level of underpricing. Consistent with IPO theory, the asymmetry of information’s hypothesis and the hot IPO market hypothesis are confirmed in my study because the volatility of IPO initial returns is substantial, fluctuates dramatically over time, and is considerably larger during “hot” IPO markets. The amount of learning that occurs during the registration period is substantial and more likely for firms whose value is more uncertain. These results only partly confirm the signalling hypothesis for underpricing.

Recent researches on IPOs try to find alternative methods for evaluating the pricing of IPOs. For instance, Lowry et al. (2010) propose a new metric for evaluating the pricing of IPOs in traditional firm-commitment offerings: the volatility of initial returns to IPO stocks. They find that there is considerable volatility in initial returns. To the extent that the IPO price is a forecast of the secondary market price for the stock, these forecasts are not only biased downward (underpricing), but the range of the forecast (or pricing) errors is huge.

In the Spanish case, there are differences in the market that justify specific analysis. This analysis can reveal the extent to which the characteristics of the Spanish stock market influence the valuation and production of information throughout the process of IPOs in the market. This implies taking into consideration the particularities of the Spanish corporate system characterized by a lesser separation between property control and a pronounced presence of family and banking groups among shareholders. Within this context, the degree of ex-ante uncertainty regarding the value of the firm for IPOs in Spain is lower than in other countries, as is the level of underpricing.

The reader will find this study of added interest due to the fact that the results provide additional evidence for comparison with other markets, especially with that of the United States. Due to its specific characteristics, the degree of ex-ante uncertainty for IPOs in Spain is lower than in other countries. We can therefore expect different results for our market than for other countries.

Based on the implications of the particular characteristics of the Spanish capital market, I put forward three hypotheses to be tested in this research about the valuation of shares to be placed on the stock market.

The Asymmetry of Information Hypothesis (H1): “The level and volatility of Spanish IPO underpricing is lower than in other countries due to the minor degree of ex-ante uncertainty about the company being going public in the Spanish capital market. Moreover, there is direct relationship between the ex-ante uncertainty and the level of initial underpricing”.

The Hot Markets Hypothesis (H2): “The initial underpricing and the volatility are higher for the IPOs that take place during the hot market period”.

The Signalling Hypothesis (H3): “The initial underpricing is higher for high quality firms with high market value that recoup this loss in the future with new SEOs”.

The database used in this study to test these hypotheses comprises the firms that began trading on the Spanish capital market between 1993 and 2011. Throughout the analyzed study period, I have selected the firms that employed the book-building mechanism to go public, which allows the final IPO price to be better adjusted to the
actual market demand for shares. In order to evaluate these three hypotheses and on the basis of the variables for which one would expect significant differences in the results, the following model is tested in this study:

\[
IR = C + \alpha_1 \cdot \text{AIM} + \alpha_2 \cdot \text{BUBBLE} + \alpha_3 \cdot \text{TIME} + \alpha_4 \cdot \text{MARKET} + \alpha_5 \cdot \text{AGE} + \alpha_6 \cdot \text{SHARES} \\
+ \alpha_7 \cdot \text{UPDATE} + \alpha_8 \cdot \text{VC} + \alpha_9 \cdot \text{TECH} + \epsilon
\]

[1]

\[
\text{LogVar}(\epsilon) = C + \beta_1 \cdot \text{AIM} + \beta_2 \cdot \text{BUBBLE} + \beta_3 \cdot \text{TIME} + \beta_4 \cdot \text{MARKET} + \beta_5 \cdot \text{AGE} \\
+ \beta_6 \cdot \text{SHARES} + \beta_7 \cdot \text{UPDATE} + \beta_8 \cdot \text{VC} + \beta_9 \cdot \text{TECH} + \epsilon
\]

[2]

The variance of the error from the regression model in [1] is assumed to be related to the same firm- and offer-specific characteristics that are posited to affect the level of initial returns. In order to compare the results, following Lowry et al. (2010) and Greene (1993, pp. 405-407), I assume that the log of the variance of the regression error follows the model shown in [2]. Maximum likelihood estimation (MLE) of [1] and [2] is essentially weighted least squares estimation of [1] using the standard deviations of the error as weights. The advantage of this approach is that it enables me to estimate the influence of each characteristic on both the level and the uncertainty of firm-level initial returns.

Considered in general, the results of the model estimations fully corroborate Hypothesis 1 and Hypothesis 2 of this paper and partially corroborate Hypothesis 3. Focusing first on the mean effect in the MLE results, most findings are consistent with the OLS regressions and with prior literature, except for the Signalling Hypothesis (H3). Turning to the variance portion of the MLE, I find that the firm and offer characteristics that predict average underpricing are even more strongly related to the volatility of underpricing. The signs of the coefficients in the mean equations are almost always the same as in the variance equation. The level of significance of the coefficients is generally much larger in the variance equation. The first important result of the study is that the variable BUBBLE is positive and statistically significant both for OLS and for the variance portion of the MLE regressions. This result confirms the Hot Markets Hypothesis (H2) according to which the initial underpricing and the volatility is higher for the IPOs that take place during the hot market period—between January 1997 and December 1999. The second result of the paper is that, the Asymmetry of Information Hypothesis (H1) is confirmed, taking into account the results for the most part of the variables included in the estimations. Regarding the Signalling Hypothesis (H3), the results for the variable SEOs do not help to confirm this hypothesis due to the changes in sign and the reduced level of significance.

All the regressions presented show a coefficient of determination around 20% for the OLS estimations and a Probability of the Chi-squared test of 0.00 for the mean and variance of MLE estimations. These results highlight the goodness of the estimations

carried out.

REFERENCES


Performance evaluation of Islamic mutual funds relative to conventional funds: Empirical evidence from Saudi Arabia

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Abstract

This article reviews and extends previous research on the performance of Islamic mutual funds (IMFs) by evaluating the relative performance of IMFs and conventional funds during the global economic crisis from April 2007 to June 2011 in the context of the Saudi Arabian capital market. There is a growing literature of the relative performance comparison of ethical mutual funds with that of conventional mutual funds. Empirical literature suggests that ethical-based mutual funds underperform compared with conventional funds due to lower diversification and issued investment opportunities. However, such funds may outperform conventional funds in the longer term due to lower volatility, lower cash outflows (especially during recessions), and investors’ commitment to the funds. Investors in IMFs are similarly concerned with the potential marginal cost in terms of lower returns or higher risk as a result of adherence to their belief. Abdullah et al., (2007) and Hoepner et al., (2011) suggest that IMFs perform better than conventional funds especially in the economic downturn due to the absence of leverage from securities that these funds hold.

Saudi Arabia constitutes more than 20% of the global Islamic capital market. More than 80% of the mutual funds listed on Saudi Arabian stock market are Shari’ah compliant funds. There is very little research on the performance of Saudi Arabian mutual funds and as such there is no published study that provides a comprehensive analysis of mutual funds performance in Saudi Arabia, especially during the current financial crisis. This study provides a comprehensive comparative analysis of IMFs and conventional funds by including all fund managers and the majority of funds listed on the Saudi Arabian stock market. Therefore, this paper extends the knowledge of the emerging literature of mutual fund performance.

Standard CAPM regression and Treynor and Mazuy (1966) models are used to compare the market timing and stock selection abilities of IMFs and conventional funds by using monthly returns data on 159 mutual funds listed on the Saudi Arabian stock market from 2007 to 2011. As a robustness check, coefficients of IMFs and conventional funds are compared by using the differences in mean and standard deviation analysis obtained from the standard CAPM model on individual funds.

The empirical results show evidence of better performance of IMFs relative to conventional funds during the economic crisis. In addition, although, there is no evidence of relative superiority in market timing ability, managers of IMFs appear to have better stock selection ability during the economic crisis. The combination of superior stock selection ability of IMFs and the negative market timing ability of conventional funds suggests that IMFs offer better hedging opportunity to investors during periods of economic downturn.
The findings of this paper suggest that IMFs can provide hedging against adverse economic conditions. All investors, regardless of ethical or religious orientation, can enjoy the benefit of hedging by holding a proportion of investment portfolio in IMFs. Similarly, managers of conventional funds can improve risk adjusted performance by following similar screening criteria as IMFs during economic slowdowns.

**Keywords:** Capital markets, Islamic mutual funds, performance evaluation, market timing ability, stock selection ability

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Abstract

The impact of information on the volatility of foreign exchange (FX) markets has been theoretically and empirically studied in several papers, e.g. Degennaro and Shrieves (1997), Andersen and Bollerslev (1998), Cai, Cheung, Lee, and Melvin (2001), Bauwens, Ben Omrane, and Giot (2005), and Evans and Lyons (2008). Each study has focused on the effect of US macroeconomic announcements on the volatility of one of the most active currency markets (Euro/US Dollar (EUR/USD), British Pound/US Dollar (GBP/USD) and Japanese Yen/US Dollar (JPY/USD)). The common result of the above studies is that domestic news releases increase FX volatility of the domestic exchange rate with other currencies. In other words, US macroeconomic news affects USD volatility, Japanese news affects JPY volatility, European news affects EUR volatility, etc.

Andersen, Bollerslev, Diebold, and Vega (2003), however, have studied the response of more than one currency return and volatility to US and German macroeconomic news, but considered independently, without taking into account FX market dependencies. This excludes possible effects due to volatility spillover from other rates, as has been documented e.g. by Hong (2001) for the Deutsche Mark and the Yen. Andersen, Bollerslev, Diebold, and Vega (2007) have characterized the response of US, German and British stock, bond and foreign exchange markets to US macroeconomic news only.

Ederington and Lee (1996) show that implied volatilities obtained from option prices decrease following scheduled news releases, but increase following unscheduled announcements. They do not distinguish, however, between announcements that are in line with market expectations and those that are surprises to the market. These two types of announcements may have quite different effects on subsequent volatilities, which is one of the topics we investigate in this paper.

With respect to the previous literature on FX volatility about the impact of news announcements, the aim of this paper is twofold. Firstly, we develop a new methodology that aims to decompose the macroeconomic news effect on volatility within two components: direct and indirect effects induced by volatility spillover. We analyze the simultaneous impact of a more refined and extended set of eight categories of news announcements, involving scheduled and unscheduled news surprises related to US, UK, European and Japanese economic performances, on the three major currency volatilities. Secondly, we investigate volatility adjustment to news surprises throughout the post-announcement period.

The contribution of our research extends previous results, in at least three important dimensions. First, we decompose the total news effect into direct and indirect effects. Second, we separate domestic and foreign news simultaneous effects on volatility. Third, includes our focus on volatility adjustment to news throughout the post-announcement period. Fourth, all of the above is placed in a multivariate setting.

First, we develop a multivariate volatility model and implement an impulse response analysis to decompose the news surprise impact on volatility into direct and indirect effects. The latter effect is induced by volatility spillover from one currency to another. The model allows us to estimate a different persistence of each news impact on volatility independently from endogenous effects.

Second, we use a new extensive and refined data-set including real-time executable prices, macroeconomic...
expectations, macroeconomic realizations, and unscheduled announcements. The data gives live executable prices, rather than the indicative quotes that have been used in most previous high frequency exchange rate studies (Andersen, Bollerslev, Diebold, and Vega (2003) and Bauwens, Ben Omrane, and Giot (2005) amongst others). We include unscheduled news announcements in addition to scheduled news already discussed in the literature. Moreover, motivated by possible volatility spillover, we consider foreign news in addition to domestic news announcements. In other words, we analyze for instance the impact of UK news surprises not only on the British Pound but also on the Euro and the Japanese Yen. We do the same for the European and Japanese news announcements.

Third, we focus on the simultaneous effect of news surprises on volatility, and we address the central open issue in exchange rate economics: the link between FX volatility and fundamentals. We investigate the simultaneous news effects on the major three currencies using a multivariate model that allows for volatility spillover and includes exogenous shocks in a flexible way. In spite of the multivariate setting, our model allows univariate estimation techniques and does not require specification of correlation dynamics, which can be constant or time-varying.
Determinants of Credit Default Swap Spread in the banking sector: The role of house prices in driving credit risk in the UK

Nadia Benbouzid and Sushanta Mallick†

Abstract

The recent financial crisis that started from a housing bubble caused a dramatic increase in default risk. This paper investigates the determinants of the CDS spread in the UK banking sector considering the role of house price in driving credit risk, while taking into account the standard financial determinants namely the yield spread, TED (difference between the three month UK T-Bill and the three month LIBOR) uncovering the liquidity channel, and the FTSE 100 index. Using corporate UK CDS spread related to the banking sector, covering the period from January 2004 to April 2011, we employ two different methods to analyse the long run relationship: the Johansen’s method and the Dynamic Stock-Watson’s (OLS) approach, and a structural VAR model to investigate the short run effects. We found strong evidence that the house price dynamics has been the key driving factor behind the recent collapse of corporate CDS market, showing a negative relationship. Furthermore, there is a negative relationship between the CD S spread and the yield spread. As short term interest rate increases, investors will demand higher yield as a compensation for bearing extra risk, influencing credit risk. In addition, the FTSE 100 index is positive and significant under DOLS method, implying that as the stock price increases, both banks’ capital and its borrowing capacity rises, resulting in a higher credit risk. Furthermore, liquidity (TED) was found to be positive and significant in the long run under the DOLS method, and in the short run in the structural VAR model. Therefore, as liquidity goes up, banks tend to lend more to

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less credit-worthy (subprime) borrowers; thus increasing credit risk and the overall CDS spread in the banking sector.
One crisis, two crises...the subprime crisis and the European sovereign debt problems

Abstract

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The occurrence of financial crises became more and more frequent in nowadays economies\textsuperscript{1} (Bordo and Eichengreen, 1999) and seems to shape the contemporaneous economic and financial environment since the 1980s. The most recent example is the current European sovereign debt crisis that immediately followed the subprime crisis. In 2007, the subprime crisis started with a real estate crisis. An increase in interest rates combined with a decrease in house prices led to an explosion of default rates on subprime mortgages. Many banks found themselves on the verge of bankruptcy or even got bankrupt. The process was amplified by the various securitization practices built up on these defaulting mortgages, increasing banks’ exposure to financial markets. Developed countries governments were thus forced to implement various rescue plans aimed at avoiding market panic and restoring investors’ confidence. These financial packages mainly consisted in capital injections, liquidity provisions and guarantees. One major consequence was that some governments began to face difficulties to refund their own debt starting with the beginning of 2010.

Several studies tried to characterize the different crisis and the similarities/differences that can be established between them (Kindleberger, 2005; Reinhart and Rogoff, 2008; White, 2009; Claessens \textit{et al.}, 2010; Ureche-Rangau and Burietz, 2010; Hautcoeur, 2011). These comparative and historical

\textsuperscript{1}E.g. the American S&L crisis in 1980, the Black Monday in 1987, the financial and real estate crisis in Japan in 1989, the currency crisis in Mexico in 1994, the Asian crisis of 1997, the Russian crisis in 1998, the sovereign debt crises in Brazil and Ecuador in 1999, the dot com bubble in 2000, the sovereign debt crisis in Argentina in 2001, the subprime crisis in 2007…
approaches should allow a better understanding of the main causes that may explain the appearance of a crisis and hence, better forecasts, including sound policies that may help avoiding such financial troubles. However, Hautcoeur (2011) explains that even if financial crises may present numerous common points, they all have their specificities. The subprime crisis for example was drawn by complex financial innovations like securitization and massive use of credit derivatives, which was quite new with respect to previous financial crises. This argument may explain the difficulties in predicting financial crises even if the literature on the topic is large.

In this article, we focus on the link between the subprime crisis and the current European sovereign debt crisis. Our goal is to shed some additional light on the way the different rescue packages implemented by the Euro zone governments following the subprime crisis impacted the risk and hence, the cost of these European sovereign debts. While the literature on the causes and consequences of the different financial, economic and monetary crises is extremely dense, significantly fewer empirical works were conducted on link between a financial industry crisis and a sovereign debt crisis (remarkable exceptions include Reinhart and Rogoff, 2008; Candelon and Palm, 2010; Acharya et al., 2011, Arezki et al. 2011 among others). As our objective is to empirically measure the relation between the rescue plans and the sovereign debt risk as measured by the interest rate spreads, we use the capital injections, central bank support and guarantees provided between January 2008 and September 2011 for a sample of ten European countries as proxies for the various rescue packages. We also include the impact of the stock market in our estimations. All our data was hand collected from a variety of available sources allowing cross-checks and robustness comparisons and organized in a monthly database. This monthly database is one major contribution of our work. Furthermore, in order to be able to use a monthly database, we also transformed quarterly GDP series for our sample of ten countries into monthly figures. Finally, we implemented a panel data analysis to measure the impact of our different explanatory variables on the evolution of the interest rate spreads of each country in the sample with respect to the German 10-year interest rate that states as our benchmark.
Our study provides three major results. First of all, three out of our four explanatory variables have a significant impact. Capital injections and guarantees contribute to an enlargement of the interest rate spreads, i.e. they increase the cost of the sovereign debt service. On the contrary, stock market prices are negatively related to interest rate spreads. Stock market drops and their associated high volatility translate into higher risks associated to sovereign debts and hence, larger risk premiums. Second, the only explanatory variable that is not statistically significant is the central bank support. We explain this result by the difficulty to collect clear-cut relevant information on this variable in the Euro zone. Finally, this article shows direct empirical evidence on the link between the banking crisis and the European sovereign debt crisis.
Director Connections in the Mutual Fund Industry
Paul Calluzzo

The mutual fund late trading scandal of 2003 brought the importance of mutual fund oversight to the public’s attention. Vital to protecting shareholder interests from the self-interests of the fund’s management is the independent director. Federal law requires at least 50 percent of a fund’s directors to be independent. From 2000 to 2008, the percentage of mutual fund boards with over 75 percent of board seats held by independent directors increased from 52 percent to 88 percent. However, boards dominated by independent directors can create unintended consequences. In the investing world, who you know can affect how you invest. Anderson, Mansi and Reeb (2004) report 56 percent of corporate directors are executives at other firms. Thus, within mutual fund board rooms, fund managers get to know corporate executives.

This paper examines the professional network that exists within mutual funds among a fund’s manager and its directors. A mutual fund becomes connected to a publicly traded firm when a director of the fund is simultaneously an employee of a publicly traded firm. Research shows that investors rely on geographical (Coval and Moskowitz (2001)), professional (Hong, Kubik and Stein (2005), Duan, Hotchkiss and Jiao (2011)) and social ((Cohen, Frazzini and Malloy (2008)) networks to acquire information that informs investment decisions. Being part of a network provides a comparative

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advantage in the acquisition of information, which in turn allows information about companies to flow along the path of least resistance to connected investors.

Directors who are employees of public firms are likely to possess private information about these firms (Cohen, Frazzini and Malloy (2008)). Mutual fund managers have a large incentive to obtain private information. If fund managers extract such information from directors, I hypothesize that mutual funds will place large bets on connected firms and achieve high returns on these holdings. To study this network, I assembled a unique dataset containing 4,165 distinct fund-firm director connections between 2000 and 2008.

The central finding of this paper is that the director network facilitates information flow from the connected firm to the fund, impacting portfolio choices and investment returns. Funds hold larger stakes in in-network connected stocks compared to out-of-network unconnected stocks. Specifically, I find that following the formation of a director connection, funds increase their holdings of connected stocks by an average of 17.6 percent (t=2.92). After controlling for fund and stock specific factors, conditional on a fund actively holding a stock, I find funds hold 7.99 percent (t=7.00) larger stakes in connected stocks compared to unconnected stocks. With respect to investment returns, I compare the Cumulative Abnormal Returns (CAR) around quarter earnings announcements of held connected stocks, unheld connected stocks, and unconnected stocks. Depending on the specification, the quarterly CAR of the held connected stocks exceeds the quarterly CAR of unheld connected stocks by 0.78 percent to 1.55 percent (t=2.52 to t=3.81). The quarterly CAR of held connected stocks exceeds the quarterly CAR of unconnected stocks by 0.84 percent to 1.17 percent (t=3.08 to t=3.28).
Value Relevance of Accounting Information in India over the past Twenty One years

Abstract: This study empirically investigates the value-relevance of accounting information in India. This enquiry is motivated by the findings of research studies on various markets that conventional historical cost financial statements have become less value-relevant over time. Contrary to the assertions in the professional literature, the findings provide evidence that the combined value-relevance of earnings and book values has not declined over the past 21 years, and in fact, has increased significantly. Between the incremental value relevance of book value and earnings, the results find no change in the incremental value relevance of earnings, while there is significant increase in the incremental value relevance of book value over time. We have tried to explain the temporal increase of combined value relevance as well as incremental value relevance of book value by controlling factors such as intangible intensity, negative earnings, and firm size. The evidence shows that the increasing value relevance still remains even after these factors have been controlled. This is probably because of some other factors which have not been taken into account here. The results of industry analysis suggest that for IT industry, the explanatory power of earnings is significantly higher than that of book value, and the reverse is true for financial services firm.
Spillovers in Banking Sector - A Dynamic Probit Approach

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Detailed Abstract

Banks are key players in the financial system of a country. They perform the role of a fuel provider to the economy by creating credit and channeling funds from the depositors to the borrowers. They, furthermore, give a helping hand toward economic development by performing agency function. Problems in the banking could be very detrimental for the health of an economy. Recent global recession is an example which was caused by the problems which started in the U.S. banking sector due to the subprime mortgage loans and spread globally. Caprio and Klingebiel (1996) have documented the historical country wise economic costs of banking crises and Hoggarth et al. (2002) estimate the average cumulative output losses incurred during banking crisis periods around 15% to 20% of annual GDP. Furthermore, Demirguc-Kunt and Detragiache (1997) describe that banking crises may also jeopardize the functioning of the payments system and, by undermining confidence in domestic financial institutions, they may cause a decline in domestic savings and/or a large scale capital outflow.

In this paper, by using a dynamic probit model, we study the transmission of shocks from the banking sector of the United States (US) to fifteen European economies as well as similar contagious effects within Europe from four major European economics, henceforth MEE, to fourteen other European economies, hereafter OEE, by using the banking sector stock index. The MEEs include the United Kingdom (UK), Germany, France, Italy. Other European economies include Austria, Belgium, Denmark, Finland, Greece, the Netherlands, Norway, Portugal, Spain, Sweden and Switzerland. In our probit specification, besides controlling for the persistence of the crisis via one period lag of the dependent variable, we also use either the default premium or the first principal component (PCF) extracted from various macroeconomic
variables as control variables. We find that there is spillover of shocks from USA to many European economies, namely Belgium, France, Greece, Italy, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK when using PCF and default premium as controls. The transmission of shocks from four MEEs is not very widespread. Shocks from UK and Italy spillover to only four European economies, from Germany to five, and from France to seven economies. Finland and Norway are found to receive no contagious effect from either the US or any of the MEEs. On the other hand, Belgium, Greece, France and the Netherlands seem prone to receiving spillovers from all the major economies including the US. Within Europe, even post-integration, the idiosyncratic shocks still remain important and have policy implications for the region as a whole. For example, absent any banking crisis in a big economy, if the domestic sector is perceived to be in crisis, the opportunity of portfolio rebalancing due to free capital movement might export the crisis from this otherwise small economy to the region as a whole.

This exercise contributes to the literature in several ways. Firstly, as non-linearities are hypothesized in the literature to be at work in the transmission of shocks (Favero and Giavazzi (2002) and Gropp and Moerman (2004)), we account for it by resorting to a non-linear dynamic binary response (Probit) model. The dynamic Probit has not been used for the financial contagion studies so far. Secondly, as demonstrated by Pesaran and Pick (2007) that many of the correlation based studies suffer from identification and endogeneity problem, we cope with this by including, separately, either the first principal common factor (PCF) extracted from relevant macro-variables or the default premium as controls, to account for country specific information. The use of PCF allows dimension reduction as well. We thus avoid using multiple explanatory variables which might otherwise spuriously improve the fit of the model (Bai and Ng (2002)). Thirdly, we introduce dynamics in the model by inclusion of country specific lagged dummy to account for the persistence of shocks (see e.g., Dueker (1997); Kauppi and Saikkonen (2008)). This setting also allows us to check the spillover of shocks from a reference country to a target country by including the lagged dummy of the reference country, while at the same time accounting for home country’s macro-fundamentals as well as the serial correlation of the its shocks. A significant lagged dummy of reference country would be interpreted as contagion from that country. Fourthly, there being no consensus on the dating of the banking crises, we determine the turbulent periods via a non-parametric Bry and Boschan (1971) method from the share price index of the banking sector for each country. This unlike previous studies, e.g. Gropp and Moerman (2004), which use the share price indexes of the major banks of respective countries. Fifth, we demonstrate via the out-of-sample forecastability of our framework that it can also be used as a predictive instrument. It can thus be used by policy makers as an early warning tool and by investors for portfolio diversification by identifying possible safe markets. Lastly, simplicity of our methodology and parsimony our model is a virtue in itself.

References


Transparency, Value Creation, and Crises

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ABSTRACT

The corporate scandals and financial crises that have plagued the last decade have inevitably drawn attention towards the role that corporate governance conditions play in the creation and destruction of shareholder value. While the negative impact of inadequate governance has been evident during stable economic times, it has been especially noteworthy during times of crises. One feature of corporate governance, the quality of disclosed financial information, has been the object of much attention. When disclosure quality suffers, the informational content behind widely used accounting metrics ultimate loses its usefulness in facilitating governance. The most recent financial crisis in 2008 painfully reminded us of the price we pay when the quality of disclosure is insufficient. In this paper, we use the degree of management of earnings as an inverse indicator of disclosure quality and study the relationship that exists between shareholder value creation and disclosure quality for firms that compose Spain’s IBEX35 stock index during the 2000 to 2010 period. The motivation for this study is to further understand the relationship between corporate governance and shareholder value creation (destruction) during times of financial crises.

We measure shareholder value (Fernandez, 2002) as the change in the market value of equity plus all payments received by shareholders minus payments made by shareholders. This measure is then additionally adjusted by subtracting the required return on equity. Our measure of disclosure quality is based on the notion that insiders, in order to conceal their private benefits of control, manage reported earnings. Based on the existing literature on earnings management for international firms (Leuz, Nanda, and Wysocki, 2003; Lang, Raedy, and Yetman, 2003; Lang, Raedy, and Wilson, 2006), we estimate three measures for each firm-year in our sample. The first measure of earnings management, EM1, is the standard deviation of operating income divided by the standard deviation of operating cash flows. This measure captures the extent to which insiders smooth earnings by managing accounting accruals. Our second measure, EM2, is the Spearman correlation between accruals and operating cash. This measure captures the degree in which accruals are used to smooth the variability in cash flows. Lastly, EM3 is the absolute value of accruals divided by the absolute value of operating cash flows. This measure captures the extent to which insiders use accruals to exercise discretion in the reporting of earnings. We calculate an overall measure of earnings management by ranking each EM metric and then finding the arithmetic average of the three percentage ranks.

To study the link between value creation and the quality of disclosure during crises, while also controlling for firm and industry characteristics, we run a fixed effects regression model using RSVC, our
measure of value creation, as the dependent variable. Our explanatory variables are EM, the arithmetic average of three earnings management rank estimates, CRISIS, a dummy variable that is equal to one during the periods of financial turmoil and EMxCRISIS, an interaction variable obtained as the product of EM and CRISIS. We control for firm and industry characteristics using SIZE as the natural log of total assets, LEVERAGE as debt over total assets, and the industry group dummies GICS10–GICS55.

Our results show a negative and strongly significant coefficient for our EM measure, indicating that lower quality of disclosure can be linked to value reduction for shareholders during our period of study. As expected, we also observe a negative and significant coefficient for the CRISIS dummy variable, an indication that periods of financial turmoil are linked to value destruction for shareholders. Our interaction variable, EMxCRISIS, presents a coefficient that is negative and statistically significant at the 5% level. We interpret our results as an indication that firms adopting earnings management policies are particularly exposed to value losses for their shareholders during periods of economic downturn. Thus, there seem to be negative market consequences to less transparent disclosure. If the smoothing of earnings is argued to have a signaling role, our results would suggest that alternative signaling methods should be explored so that they do not exacerbate the threat to shareholder value when the firm is more vulnerable, such as during financial crises.

From a governance perspective, our findings suggest the benefit of clear guidelines regarding the degree of discretion that management may exercise in preparing and presenting financial accounts. Greater transparency can help protect shareholders’ interests by providing accounting data of higher quality that facilitates fundamental assessments of profitability and risk. However, we should remember that even without the explicit intention to misinform, a lack of transparency can also exist due to a firm’s more complex structure. Thus, while deceptive intent can be countered by regulation, the issue of accounting complexity may in fact be exacerbated by increased regulatory requirements. The solution is thus not a simple one, given the need for reporting guidelines that are clear and, equally important, more simplified. With our current findings, we provide additional evidence that the conversation regarding disclosure quality requirements is one that has very real implications for shareholder value. While efforts to disclose trustworthy financial data seems like a good policy at all times, it clearly appears to be the best choice in bad times.
Return-Based Attribution with Fama-French Factors

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Hsiu-lang Chen* and Gilbert Bassett*

Abstract: Returns-based attribution with the Fama and French three-factor model assigns a portfolio’s return to (i) the overall market—RMRF, (ii) size—SMB, and (iii) value—HML. A time series regression of a portfolio’s returns on the three factors provides an estimate of the portfolio’s dependence on each factor. These estimates are often interpreted in absolute terms, so that, for example, a positive SMB coefficient would mean a portfolio tilted toward small capitalization stocks. To emphasize that this is not the case and that attribution is relative to the overall market we present estimates of the three-factor model for portfolios with known large size but a positive SMB coefficient. We also explore how the greater variability of small-cap stocks can make the SMB coefficient positive.

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Money Supply, Interest Rate, Liquidity and Share Prices: A Test of Their Linkage

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Money Supply, Interest Rate, Liquidity and Share Prices: A Test of Their Linkage

Abstract

This paper reports new evidence of a liquidity effect on share prices from money supply changes. Money supply impacts on interest rate and liquidity were first proposed in 1969 and there is evidence that money supply increase leads to interest rate decline. Yet the proposition that money supply increase should lead to liquidity surge – thus to credit expansion – has yet received unanimous empirical support. Using quarterly data over 1968-2011, our results from a two-stage simultaneous solution of a system of equations indicate that money supply changes lead to a positive liquidity effect, as per the theory prediction. By extending the liquidity equation to asset prices, we also show that liquidity change has a significant positive effect on share prices, after controlling the effect of earnings. These findings, obtained after solutions to serious econometric issues of existing studies, appear to provide a clearer verification of theory on the money supply effect on liquidity and on asset price.

JEL Classification: E41 and E44

Key words: Liquidity, Money supply, System of equations, Causality test, Share prices, Interest rate, Two-stage least squares, Structural break
The Effect of Functional Diversification on Firm Performance and Risk: Evidence from the Banking Industry in Australia

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Abstract

Deregulation has prompted many Australian banks to diversify their asset bases. This diversification is carried out in two essential areas—diversification of activities from traditional deposits and loans to a broader range of financial services, and entry into overseas markets. Such initiatives represent a transformation of the structure of Australian banking. This study examines the implications of such diversification on Australian bank performance and profit exposure. Our findings call into question some published results that rely on simple regression calculations. We report that, in general, diversification has been good for Australian bank financial performance, with little impact on profit variability. Interestingly, this was already evident in the early stages of bank diversification, leading us to conclude that a “learning curve” for bank diversification is generally not an issue.

JEL classification: G10, G20, G21

Keywords: Foreign diversification; Australian banks; Bank performance; Bank profitability

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Tracking Error of Traditional and Synthetic European Exchange-Traded Funds

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Exchange traded funds (ETFs) were introduced in 1993 when the American Stock Exchange (AMEX) listed the Standard and Poor’s Depositary Receipts (SPDRs), which track the S&P 500. In Europe the first ETFs, tracking the Euro Stoxx 50 and the Stoxx Europe 50, were listed on the German market in 2000. Since the introduction of these products, the industry has experienced rapid growth, and according to a BlackRock Invest ment Institute report, at the end of June 2011, 1,185 and 1,039 ETFs were listed in Europe and in the USA, respectively. The estimated value of the assets under management for the European ETFs is $321.2 billion, while in the US it is $ 973.5 billion.

This study investigates the tracking error of traditional and synthetic ETFs traded in Europe. The objective of ETFs is to track the returns of the benchmark index as closely as possible. Traditional ETFs attempt to fulfill this objective by holding the benchmark underlying securities, while synthetic ETFs use derivatives contracts, primarily total return swaps. However, neither type of ETF can guarantee that their performance perfectly matches the returns of the benchmark index.

In Europe, ETFs are UCITS funds. One interesting feature of the European market that does not exist in the US because of regulatory constraints, is the synthetic replication method that was introduced in the French market in 2001. Synthetic ETFs hold a basket of securities that usually do not match the index’s underlying securities and then swap their return with that of the benchmark index. The swap counterparty is usually the parent company of the ETF provider.

Synthetic ETFs appear to have some advantages over traditional funds, but they can also incorporate additional risks. The synthetic replication model makes it possible to create ETFs that track indices that otherwise would be very difficult to reach because of restrictions on foreign investments. Moreover, synthetic ETF providers claim that the synthetic replication method is more efficient and produces a lower tracking error when compared with traditional ETFs. However, the main concern with this replication strategy is counterparty risk. According to UCITS regulations, counterparty risk cannot exceed 10% of the ETF’s net asset value (NAV). However, if the swap counterparty defaults on its obligations, the ETFs might face a loss failing to track the return of the benchmark index. Ramaswamy (2011) notes that the synthetic replication strategy transfers the tracking error risk into counterparty risk and highlights the potential systemic risks that this replication strategy can create. Large liquidation of synthetic ETFs in periods of higher counterparty risk could force all the collateral, often illiquid assets. This in turn can hinder the correct functioning of the markets. He concludes that the market risk of these products can be underestimated. Further more, the synthetic replication method represents a serious threat to the traditional flagship qualities of ETFs, i.e., simplicity and transparency.

Previous empirical studies identify the main factors that give rise to tracking error, including transaction costs, index-composition changes, corporate activity, fund cash flows, index volatility, the reinvestment of dividends, and index replication strategies. The volatility of the exchange rate is a further source of tracking error.

This article finds that both traditional and synthetic European ETFs are affected by a significant tracking error. This analysis provides evidence that ETFs that follow a synthetic replication strategy rather than holding the underlying benchmark securities, enjoy a lower tracking error and a high tax efficiency. Further more, they are particularly efficient when tracking emerging-market benchmarks. However, synthetic ETFs underperform both the benchmarks and the traditional counterparts.
This paper extends the previous literature by examining the tracking ability of traditional and synthetic European ETFs offered by the leading providers in Europe. The synthetic replication method, although widely used by European ETF providers, has never been deeply analyzed by previous studies. However, synthetic ETFs became a serious concern for regulators also because of the potential implications for the stability of the financial system. This research is motivated by the need to provide investors, who seek a transparent and cost-efficient passive investment strategy, with more insight regarding the tracking ability of traditional and synthetic ETFs.
Asymmetric Investor Overreaction: Unobservable portfolios and System GMM?

Abstract

I utilised the two-step difference GMM model to explore both cross sectional variations and time series effects within the post-event period for losers and winners portfolios. Some of these effects are not observable but ignoring them lays the estimation open to bias from concealed heterogeneity amongst companies and periods. Using daily data on a sample of companies experienced dramatic 1-day price change as the result of four major events; the system GMM reveals strong evidence of price reversal. I also find that unobservable portfolios outperform traditional size portfolios by 25% and 3.5% for losers and winners respectively.

JEL classification number: G14

Keywords: price reversal, system GMM, unobservable
Opening the Box: An Analysis of FTSE 100 Membership Changes from a Microstructure Perspective

March 2012

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In this paper we examine revision events of the FTSE-100 index. At a daily frequency we confirm previous results and find an abnormal return of 1.3% for stocks on the day before they are added to the index, which is reversed the following day. Next, we go beyond the analysis of daily data and investigate trading dynamics from a microstructure perspective. The microstructure analysis is conducted using the London Stock Exchange tick and rebuild order book datasets. From this data we are able to infer order flow and discover that the most significant trading activity occurs at the closing auction on the days before revisions occur. This is an obvious moment for index tracker funds to rebalance their portfolios, because it affords them perfect index replication. Our analysis suggests that the closing price on the day before inclusion in the FTSE 100 is set by a few large trades which suggest a significant passive investment player(ers) seek to set the closing price to minimize tracking error.

Next we consider an enhanced index tracking strategy to assess the potential benefits from rebalancing before the closing auction. Our ‘what if’ analysis indicates that the pre-revision abnormal returns could have translated to an annual portfolio excess return of 13 basis points at the expense of tracking error of less than 1 basis points. We also investigate stock liquidity in terms of order book depth, quoted and effective spreads and spread components, and demonstrate that liquidity improves for stocks added to the index and deteriorates for deleted stocks. The asymmetric price response for additions and deletions and reduction in asymmetric information for additions only is consistent with Merton’s Investor Recognition Hypothesis. However, in contrast, the overall effect is consistent with the temporary price pressure hypothesis.

Keywords: FTSE-100; index fund; market microstructure; liquidity; order book depth; bid-ask spreads

JEL Classification: G11; G12; G14
Domestic Portfolio Diversification: An Empirical Study on the Saudi Stock Market

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ABSTRACT

Purpose:
Diversification means reducing risk by investing in a variety of stocks. A diversified portfolio will have less risk than the weighted average risk of its constituent stocks and often lesser risk than the least risky of its constituents. A portfolio is diversified if its risk is reduced to a minimum as portfolio size (PS) increases; in other words, if an asymptote is reached. A reduction in the portfolio risk through an increase in diversification is entirely the result of a reduction in the unsystematic portion of the risk.

The purpose of this study is to investigate the potential benefits that may arise for portfolio managers, private investors and institutional investors from domestic portfolio diversification in the Saudi Stock Market (SSM).

Several characteristics of the SSM differentiate it from other developed and emerging markets. The SSM is relatively large in size in comparison with other markets in the region; its breadth with only 145 firms listed is relatively small while capitalisation and trading volume are relatively large. These characteristics of the SSM and the lack of academic studies on it make it an interesting topic of study.
Methodology

The study employs daily data of all listed stocks on the Saudi Stock Market (SSM) from January 2007 to November 2009, which included 730 observations.

The stocks forming the portfolio are selected randomly and have equal weights. The portfolio risk for a two-stock portfolio is calculated as

$$\sigma_p^2 = (\bar{\beta})^2 (\Sigma\beta)^2 \sigma_m^2 + (\bar{\beta})^2 (\Sigma \sigma^2).$$

The same method can be used to calculate the portfolio risk for a three-stock portfolio, four-stock portfolio, and others.

Findings

A very high degree of reduction in the total risk could be reached by diversification in the SSM. A reduction of 80.7% in the total risk was possible with a portfolio size of 10 stocks. However, no further reduction in the risk could be achieved after 10 stocks.

Originality/value

A significant number of papers have investigated the question of “How large is a diversified portfolio in developed markets?”, and only few have studied the SSM. On the basis of measuring the risk reduction rate as diversification increases, an unambiguous answer does not seem to be available for the SSM.

Keywords: domestic portfolio; diversification; systematic risk; SSM; risk.
The price, quality and distribution of mortgage payment protection insurance: A hedonic pricing approach

Abstract

Mortgage payment protection insurance (hereafter MPPI) provides varying combinations of accident, sickness and unemployment insurance and is used to protect the mortgage payments of policyholders in the event of a fall in income. Recently the provision of this service in the UK has been heavily criticised for providing poor value for money and for being associated with unhelpful sales techniques especially when sold jointly with a mortgage. Consequently in 2009 the Competition Commission ruled that MPPI should not be sold jointly with lending. In this study we examine whether this prohibition was justified and specifically does the form of distribution, either jointly with the mortgage or independently influence the premium levels. This research question is examined using a hedonic pricing approach with details and premiums of 281 MPPI policies. We conclude that the premiums of policies sold independently are lower than those policies distributed jointly for a given set of benefits and conditions. These findings support the prohibition of the joint sale of the MPPI with mortgages.
Market Manipulation and Expiration Day Effects:

Evidence from Taiwan

Abstract

In this study, we analyze the expiration effects of index futures on the cash market in Taiwan, and find that both volatility and trading volume are higher on the final settlement days as compared to normal trading days. We also calculate the volume of open interest for final settlement relating to different classes of traders, as well as the profits from the open interest positions of these traders in index futures contracts. We find that proprietary traders exhibit superior performance whereas foreign investors achieve the worst returns. Our empirical results provide evidence in support of the view that the expiration effects in the Taiwan futures market are partially attributable to attempts at ‘marking the close’.

Keywords: Expiration effects; Open interest; Final settlement price; Manipulation.

JEL Classification: G14; G15.
An Evolutionary Theory of Systemic Risk and its Mitigation Outlined for the Global Financial System

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Abstract

A theory of systemic risk is outlined for the global financial system, with practical implications for systemic risk mitigation, based on evolutionary economics viewed from an operational behaviour perspective. The paper begins with an introduction to systemic crises and what motivates this contribution, followed by an explanation of the theory development approach taken. Then a critical review of the main themes in relevant literature leads to a proposed gap in theory. The scope of extant theories is argued to be limited to perceived causes and effects of specific events from the past, with few general insights for recognizing, avoiding and responding to potential failures of this system, wherever they may emerge in the future. After declaring theoretical foundations, new conjectures and propositions from a current programme of research are presented to address that gap and outline a general theory, introducing multidisciplinary notions about: an operational behaviour paradigm of systemic failure for the global financial system; a cusp catastrophe-type model of supply versus demand in systemically important financial services (SIFS) among systemically important participants (SIPs); and four hypotheses for plausibility evaluation. Then a brief discourse explores new opportunities for systemic risk mitigation based on these contributions, qualified by a critical assessment of the value and limitations of the outlined theory, and consideration of its falsifiability. In conclusion, further research is suggested using agent-based methods from computational economics (ACE) to expound, empirically validate and verify this theory, with data about a recent national financial system failure serving as a proxy for similar events in the global financial system.

JEL: A12; E11; E10; E44; E58; F02; G15.

Keywords: Systemic risk; systemic failure; risk mitigation; evolutionary economics; economic theory; computational economics; global financial system; operational behaviour; operational paradigm; cusp catastrophe.
Insider Trading Activity, Tenure Length, and Managerial Compensation

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Abstract

In this study, insider trading activity is used as part of managerial compensation structure. The wage structure changes with the tenure of the insider. Managers with shorter tenure rely more on insider profits as part of their compensation. On the other hand, managers with longer tenure execute insider transactions with lower profits. Different measurements of insider profits using calendar day returns of insider transactions, holding period returns for different horizons, or weighted average cumulative abnormal returns all provide the same conclusion. The results are robust to various well-known empirical models, such as the CAPM model, the Fama and French (1993) three-factor model, or the Carhart (1997) four-factor model. Insider trading profits have increased in recent years, especially after the Securities and Exchange Commission (SEC) implementation of Rule 10b5-1 in 2000. Therefore, the design of a wage schedule incorporating insider trading activity has become more relevant.
Causes and Effects of Demutualization of Financial Exchanges

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Abstract

We examine how the forces of automation, competition, and demutualization are rapidly changing the industrial organization, ownership, and capital structure of the financial exchange industry. We propose the conditions under which demutualization becomes optimal from the perspective of mutually owned exchange owners. We then proceed to build an empirical dataset characterizing the evolution of the leading stock and derivative exchanges around the World along these dimensions. We empirically find that technology driven growth opportunities, product driven growth opportunities and increases in market concentration are the main stimulants for demutualization. These factors remain strongly significant in explaining demutualization after controlling for market capitalization, trading volume and economic freedom environment within country where the exchange is domiciled. Finally, we analyze the impact of demutualization from the perspectives of other stakeholders in financial markets. Turnover and liquidity improve after demutualization helping reduce the cost of capital.
Title: Managing extreme risk in Indian stock market: An extreme value theory approach

Madhusudan Karmakar*

Abstract

The study investigates the relative performance of Value-at-Risk (VaR) models using daily share price index data on S&P CNX Nifty compiled by the National Stock Exchange in India. The main emphasis of the study has been given to Extreme Value Theory (EVT) and to evaluate how well conditional EVT models perform in modeling the tails of distributions and in estimating and forecasting VaR measures. We have followed McNeil and Frey’s (2000) two stage approach called conditional EVT to estimate dynamic VaR. In stage 1, we model the conditional volatility using an AR-EGARCH approach which serves to filter the return series such that EGARCH residuals are closer to iid than the raw return series. In stage 2, we apply EVT to model the fat tails of the EGARCH residuals. We have compared the accuracy of conditional EVT approach to VaR estimation with other competing models. The best performing model is found to be the conditional EVT, although the static models also perform surprising well. Since the conditional EVT model forecasts time varying VaR that adapts quickly to changing market condition, we would advocate the use of the model when managing tail related market risk in Indian stock market.

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STOCK MARKET CORRELATIONS DURING THE FINANCIAL CRISIS OF
2008–2009: EVIDENCE FROM 50 EQUITY MARKETS

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Abstract

Financial or economical crises can have serious consequences for investors and as a result the topic issue has attracted considerable amount of interests among academic researchers. Our study contributes to the earlier studies on the financial crisis by examining time varying covariance structure between global stock indexes during the financial crisis. Like Syllignakis & Kouretas (2011) we also analyze dynamic correlations, but unlike them we do not focus on the contagion issue. Instead, we examine the dynamic correlations from the portfolio manager’s point of view across global stock markets.

Using data from 50 equity markets we examine the stock market correlations around two significant banking events, i.e. JP Morgan’s acquisition of Bear Stearns and the Lehman Brothers collapse, covering a period from March 15, 2007 to March 16, 2009. Our empirical findings demonstrate that the impact of the Lehman Brothers collapse resulted in significant increases in correlations, whereas the acquisition of Bear Stearns had only a minor effect on correlations. Furthermore, analyzing both the unconditional and conditional correlations we

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find that the impact of the Lehman Brothers collapse on stock markets is prominent for all regions.

To measure the value of covariance information the augmented dynamic conditional correlation model is constructed. As a specification check for the method we propose in our study, we construct two assets portfolios to evaluate the performance of the model estimates. Specifically, the evaluation of portfolio optimization and hedging performance is considered in-sample i.e., the hedges are evaluated and constructed using the same set of data. We show that by taking into account the change in the level of variance in high volatility periods, the estimates of the conditional covariance are more efficient in capturing the dynamics of the stock markets variance.

The properties of the estimated conditional correlation in the asset allocation framework are introduced. In a two-asset allocation framework, the model consistently generates relatively low portfolio variances, implying substantial benefits in portfolio diversification. Furthermore, during the financial crisis it is evident that the combination of the pair-wise assets by holding one asset and shorting another performs better than the minimum-variance combination of the same assets.

\textit{JEL classification:} G01, G11, G15

\textit{Keywords:} Dynamic conditional correlation, financial crisis, interdependence
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INVESTMENT READINESS AS A DETERMINANT FOR RAISING CAPITAL FROM VENTURE CAPITAL MARKET*

**Key words:** investment readiness, venture capital, impact.

Investment readiness can be briefly defined as a set of factors proving the level of entrepreneur’s readiness to apply for funding of a particular project. Among them the following should be enumerated: applying entity’s understanding and knowledge of his/her own financial needs, possessing the knowledge about accessible financial forms and resources, insight into investor’s preferences and competent presentation of a project, that is ability to answer to informational expectations of an investor.

In case of venture capital market, investment criteria of a potential venture capital investor are extremely important. In the process of applying for capital, it is crucial that an entrepreneur have an insight into the investment model and the strategy applied by the chosen fund, including its subject of interest and consequences connected with raising risk capital. Awareness of the above mentioned and the possesed knowledge concerning investor’s preferences and the flaws and merits of the discussed financial resource will help the entrepreneur in effective raising of the funds from venture capital market. Thus, they will accelerate the process of launching an enterprise to the market.

An entrepreneur characterized by a high investment readiness will get the venture capital necessary for the business development much faster. The possessed knowledge will allow him/her to apply for funding to those venture capital funds for which the enterprise will be suitable, as for the scope of investment criteria.

In order to accelerate the process of raising funds from venture capital market, an entrepreneur should at first estimate his/her investment readiness level, including the assessment of his/her knowledge about venture capital, assure himself/herself that he/she understands the flaws and merits of funding this resource, get to know investment preferences of chosen funds and answer the question if the received support will meet his/her needs.

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Beneath, there are presented proposals of original and simple ratios, which may be helpful in measuring investment readiness of a particular enterprise in the scope of raising funds from venture capital market. They are a measure for ultimate analysis carried out during or after the funding application process. They will help to indicate if an entrepreneur should take actions in order to build investment readiness, or if it is not necessary.

1. Rejection ratio of funding applications by venture capital investors is estimated by dividing the number of funding applications rejected by venture capital investors, by the number of all funding applications submitted to venture capital investors. The higher the value of the described ratio the lower the level of investment readiness presented by the entrepreneur and his/her company.

2. Acceptance ratio of funding applications by venture capital investors is the opposite of rejection ratio of funding applications by venture capital investors.

3. Ratio of raising risk capital can be measured as a ratio of the number of applications that has been found interested by the venture capital investors to all the applications submitted by an entrepreneur, but not accepted to be funded by potential investors (not only venture capital). The low value of the ratio means that the entrepreneur is characterised by a low investment readiness.

4. Ratio of raising capital from venture capital market shows the dependence of the accepted and the rejected funding applications submitted to venture capital investors. The higher the level of the ratio the better. This ratio can be measured in case if there are rejected funding applications.

5. Ratio of searching for capital can be calculated as a ratio of the applications submitted to a well-considered and consciously chosen investor, who is able to meet the entrepreneur’s needs, to the general number of funding applications submitted in the examined period. The higher the level of the ratio the better.

6. Ratio of using help of the institutions of business support (IBS) in raising venture capital shows which part of IBS support programmes used by a enterprise concerns the aspects of raising investment readiness.

Ratios presented above are just a few of indicators which can help entrepreneur to indicate the level of his/her investment readiness to apply for funding of a particular project. Their simplicity can be used by everyone, not only by those entities that have financial education background.
Is there a Speculative Risk in the Indian Secondary Market?
Rajendran Madhumathi (IIT Madras), Madabhushi Ranganatham (University of Madras), Ravindran Jayashree (IPE, Hyderabad)

Risk prevalent in markets is a dynamic phenomenon. The presence of speculative risk in the secondary market hinders the dynamic information flow. Speculative activities in the market create excessive volatility leading to unpredictability of price behavior. Theoretical arguments for the efficiency of financial markets rely crucially on the stabilizing powers of rational speculation.

Speculative bubble theory attempts to explain the excessive financial spot market price volatility often observed in the real world within the context of a predetermined external reality that imparts intrinsic or fundamental values to all real economic assets (Davidson, 2002). If the bubble is rational, decision makers believe that there is a probability of a positive deviation from the intrinsic value in the next period’s market price. Identification of speculative bubbles would confirm the presence of excessive risk, which could be theoretically hypothesized to influence investors' risk perception.

Data are obtained from the National Stock exchange (NSE). NSE was incorporated in November 1992 and arguably NSE portfolio is the most rigorously constructed stock market index in India. The data set S&P CNX NIFTY index of NSE reflects the price movement of 50 stocks selected on the basis of NSE market capitalization and liquidity. The closing prices, dividend, earnings per share and book value of the index from January 1, 1999 to December 30, 2011 are used for analysis.

The market index return is positively skewed though not very high. The distribution may indicate a slight bullish run in the market. When the data is tested for kurtosis, there is an indication that the distribution is leptokurtic. The peaked distribution could indicate an overvaluation in the market. There could be a market growth which from time to time tends to correct itself to the fundamentals through rational speculative deals in the market. This raises a suspicion of presence of speculative bubbles in the market.

Testing for the presence of speculative bubbles has been done using indirect and direct procedures that examine market efficiency and identify the presence or absence of bubbles. The results of the variance bounds test (Table 1) suggest that the variance of expected stock price is significantly lesser than the variance of actual data sets. This indirectly suggests that there is a positive term ‘c_t’ that could indicate the presence of rational speculative bubble. Two forms of specification test have been examined (Table 2: differentiated and undifferentiated). The models, though statistically significant, did not give a statistically significant coefficient of ‘c_t’. The coefficients of the fundamentals (prior prices and dividends) are positive and can be construed to imply that market prices are positively influenced by growth in fundamentals.

Table 1 Variance Bounds Test (Significance at 1% level - *)

<table>
<thead>
<tr>
<th>Index</th>
<th>Constant</th>
<th>Π</th>
<th>c_t</th>
<th>F (Significance)</th>
<th>Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIFTY</td>
<td>-569.114</td>
<td>0.994</td>
<td>7151.75</td>
<td>4745.454 *</td>
<td>0.3412</td>
</tr>
</tbody>
</table>
Table 2 Specification Test (Significance at 1% level - *; Significance at 5% level - **)

<table>
<thead>
<tr>
<th>Index</th>
<th>Whether Differentiated</th>
<th>$\theta_1$</th>
<th>$\theta_2$</th>
<th>F</th>
<th>Hausman’s Specification Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIFTY</td>
<td>No</td>
<td>0.998*</td>
<td>0.002</td>
<td>4167.38*</td>
<td>0.771 **</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0.064*</td>
<td>-0.007</td>
<td>6.72*</td>
<td>59.856*</td>
</tr>
</tbody>
</table>

Markovian bubbles show ever expanding behavior, similar to fundamentally justifiable expectations, resulting in an extreme increase in the endogenous process (prices). There is an evidence for existence of Markovian bubbles and temporary intrinsic bubbles in the NIFTY series when dividends, EPS and book value are used as proxy for fundamental exogenous process (Table 3). Permanent intrinsic bubbles are not existent in the Indian market (Table 4). The intrinsic bubbles through this model are confirmed in the index when book value is used as fundamental. However, the phenomenon of bursting bubbles is evident through the earnings and dividend models.

Table 3 Temporary Intrinsic Bubble (Significance at 1% level - *)

<table>
<thead>
<tr>
<th>Fundamental</th>
<th>$c_0$</th>
<th>$c_1$</th>
<th>$\alpha$</th>
<th>Adjusted $R^2$</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend</td>
<td>0.243*</td>
<td>0.617*</td>
<td>1.689</td>
<td>0.840</td>
<td>5666.89*</td>
</tr>
<tr>
<td>EPS</td>
<td>0.853*</td>
<td>0.635*</td>
<td>-22.070</td>
<td>0.896</td>
<td>9318.11*</td>
</tr>
<tr>
<td>Book Value</td>
<td>-0.097*</td>
<td>0.634*</td>
<td>108.783*</td>
<td>0.834</td>
<td>5431.61*</td>
</tr>
</tbody>
</table>

Table 4 Permanent Intrinsic Bubble Significance at 1% level - *)

<table>
<thead>
<tr>
<th>Fundamental</th>
<th>$C_0$</th>
<th>$C_1$</th>
<th>$\lambda$</th>
<th>Adjusted $R^2$</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend</td>
<td>4.296*</td>
<td>-3.434*</td>
<td>0.837</td>
<td>0.0155</td>
<td>8363.074*</td>
</tr>
<tr>
<td>EPS</td>
<td>5.748*</td>
<td>-4.800*</td>
<td>0.925</td>
<td>0.0111</td>
<td>20125.94*</td>
</tr>
<tr>
<td>Book Value</td>
<td>-0.742*</td>
<td>1.654*</td>
<td>0.832</td>
<td>0.0084</td>
<td>8070.739*</td>
</tr>
</tbody>
</table>

Both the direct and indirect specification tests confirm the existence of bubbles, where there is some unexplained positive component that departs from the actual price movement. The use of linear rational expectations model in the behavior of the variables has brought out the speculative (bubble) process in the market and one of the significant attributes of this bubble going up could be the expectation of investors which is very high and is much more than what the price movements can be explained by the fundamentals.
New evidence on the impact of fees on mutual fund performance of two types of funds

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Abstract

The impact of fees on mutual fund performance has received little research attention as is also the case of performance differences of religious mutual funds. This paper reports significant declines in the apparent returns computed as the total returns from reported net asset values of two different classes of mutual funds. The reported performance of substantial returns to investors declines rapidly as soon as we factor the different fees charged by funds. Another significant finding is that the reported evidence in support of market timing ability of funds disappears once the econometric problems of the methodology are addressed by using panel regression method. We believe that these findings add new insights for assessing the impact of different fees on returns to investors and help to highlight the need to address methodological problems in mutual fund studies.

Keywords: Ethical finance, Islamic funds, Market timing, Conventional funds

JEL Classification: C1, G10, G11, G23
COMPETENCE VALUE EMERSION: A KEY TO SOUND PRACTICES IN ENTREPRENEURAL FINANCE.

(FROM “Q” TO “T” RATIOS IN THE NORTH-EASTERN ITALIAN EXPERIENCE)
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The P-0-9 Staff, Teofilo Intato Foundation, Stabie di Lentiai (p09-research@teofilo-intato.it)

Concept
Full adoption of techniques based on the “Basel-II agreement” has dramatically changed the funding procedures for credit allowances used by financial intermediaries: no significant risk restraint appears but huge capital rationing deployed. Small and Medium Business are mostly involved in credit crunch as a consequence of their higher credit risk as highlighted by standard financial analysis procedures. Entrepreneurships are hit even more, due to their higher concentration of investments in intangible assets and human capital. Both debt and equity capitals diverted from Entrepreneurial Finance tranactions for their apparent low return-to-risk ratio mainly due to perceived-excess-risk and higher investor’s risk aversion. That’s why the announcement of Basel-III standards is depicted as the “final countdown” to the end of the Entrepreneurial Finance. No one is able to definitively say if these problems generate mainly in methodology (i.e. the adoption of specific techniques in financial analysis) or in assessment (i.e. the concept of Entrepreneurial Business valuation and management). We suggest a common root to both sides of the puzzle: the lack of competence value measurement. The practice of application of financial analysis tools demonstrates a kind of schizophrenia: it recognizes the importance to use methodologies based on market values, but it gives criteria based on book values, specially for unlisted corporations. The need to strike a balance between analysis carried out on "book values" and those referring to "market values” remains the most difficult problem to tackle: the contribution of knowledge they both offer is clear, but being able to reconcile the results in order to offer appropriate solutions to businessmen is extremely difficult. Moreover, entrepreneurial finance is usually missing market values along with affordable pairing groups for its benchmarking. We are forced to use value estimations based on standard/neo-classical financial models which has only a clear quality: they are missing un-merged values due to market incompleteness (i.e. they are aborting Entrepreneurship and Entrepreneurial Finance). The loop is clear: “no measurement” means “no assessment”, that means “no business decision”; that means “no investment”, that means “no market value”, that means “no measurement” opportunities. Even the research question is then clear: is it possible to concept competence value in order to increase trust over Basel tools avoiding their loop-involvement?

In the Italian case, the problem seems even more complicated due to the typical structure of our businesses. Small companies, strong (family)ownership control, under-capitalization and lack of transparency in financial statements are the elements that make the investigation more complex to play. Different technical solutions can be adopted in financial analysis practice to solve the problem: asymmetry that generates from the characteristics of our businesses in order to decide whether to land banking money. That sounds a legitimate and correct approach, but it avoids to explain the above average performance of several small business districts (e.g. the Venetian-North-Eastern Area) and its long term persistence. Moreover, such approach nowadays fully shows its limits by constraining growth as macroeconomics data are clearly showing along with those regarding business development. But the complexity gene rated by anomalies and asymmetries of the Italian case can be an exceptional gymnasium to develop alternative
approaches to Entrepreneurship analysis moving from skills measurements. The presence of the Italian SMEs performance supports the adoption of a conceptual scheme where the strength of the economic activity must be highlighted through the emergence of the competence value, even if the subject is as fascinating as dangerous. Difficulties in transforming such a “competence value” into “market value” can suggest the drivers that support it along with the keys to carry on sound Entrepreneurial Finance.

The “competence value”

We must think about skills as a productive fact or contributing to business economics. In the entrepreneurial businesses, skills contribution to corporate economics is typically joined to that of the capital employed in the company. Joint productivity of invested capital and skills is the key problem to sound value measurement of entrepreneurial economics (and finance). Returns are unique while inputs are all identifiable, but it is very difficult to split expected returns according to the marginal contributions of different inputs. The reason is clear: capital can be separated from humans but competences cannot, since slavery has been abolished. But even a lemma should be clear: skills cannot increase capital book value in accounting standards and even in market prices: that is why book value can divert market value (price) that can divert (fair) value. Financial market efficiency is no guarantee of convergence between value and price, but only a precondition for negotiations to make it easier to facilitate the convergence: only in complete markets all the value is embedded into market price. But since slavery abolition no one (nor us) got the idea that a specific characteristic of entrepreneurial enterprise is its convertibility from an individual feature to a firm hallmark, thus triggering a process of corporate wealth capitalization. This is because know-how is the inner element of entrepreneurial skills: it can be spread only through learning experience, not through market transactions. This implies that: (i) time is the only affordable mean to transmit knowledge and (ii) business organization is the framework that allows you to embed business skills into corporate structures. Once the skill transfer to corporate organization has been completed, wealth generation at competitive rates of return is due to increased productivity brought by the incorporation of competence. So, incomplete financial markets are a terrific economic incentive to let value emerge and a good challenge for Entrepreneurs to attract capital flows.

Competence value estimation through the Intato’s T-Ratio

At time zero, the market value of a competitive corporation can be computed as the present value of expected cash returns. Since the corporation is competitive, its book returns are expected above the cost of capital level. The market value will be higher than book value if the corporate rate of return “r” is higher than the cost of capital “k”. The absolute value of goodwill can be exposed as $G = \text{Price} - \text{BookValue} = \text{BV}[(r/k)-1]$. In an entrepreneurial venture having the same competitive advantage plus grafted skills lower expected cash flows are generated until competence is fully transferred to the organization so that lower value can be estimated:

\[ W_1 = \text{BV} \frac{(r-x)}{k} \]

Being: \(W_1\), the estimated value of the entrepreneurial business; “x” is the relative weight of competence investments “x” being positive, \(W_1/\text{BV}\) will be lower than \(P/\text{BV}\)…apparently! The competence spreading into the corporation could generate, in case of success, higher return-to-risk “t” years, thus completing the corporate value. The missing value can be described as follows:

\[ W_2 = \left[ \frac{p}{(1+k)t} \right] \left[ E(X) + E(\varepsilon) \right] / k \]

Being: “p” the probability of entrepreneurial success; \(E(X)\) the investment required for competence pulling; \(E(\varepsilon)\) the extra-cash flow generated by competences at work; “t” the required time-spreading of competences
The missing price-to-book value will be

\[ W_2/BV = \frac{p/(1+k)t}{\frac{x}{(1+k)t}} \]

The gap between \( P \) and \( W_1+W_2 \) will depend from the relationship between “c”, “x”, “p”, “k” and “t”, i.e., the determinants of \( W_2/BV \). If the entrepreneurial project is successful \( W_2 \) is transformed in market value, thus regenerating the missing value (including goodwill): we will call \( W_2 \) as “competence value”. In a state-p reference approach value discovery of competence value can be done by thinking about entrepreneurial success as a real call option having expected maturity at time “t”. Being an European-style option such an option highlights these economics: (i) \( P-W_1 \) is the premium to call \( W_2 \); (ii) \( [W_1+W_2]-P \) is the economic value of the option when it enters in-the-money; (iii) \( [P-t-P] \) is the actual payoff of the option. A huge help in valuing the option may derive from the Lintner’s approach to asset pricing. Such a model is based over a bottom-up approach, i.e. do not require to collect from commercial financial markets to fixed investment values. The use of confidence estimation of the shortfall level is consistent with the value-at-risk typically adopted inside Basel-related risk measurement systems.

**The Empirical evidence in the Treviso’s District**

This is exactly the core of the Intato’s method deployed in the full paper, where an empirical application of the above methodology on a sample of about 3,000 companies inside the Treviso’s District is deployed to assess the competence value through the Intato’s T-Ratio (i.e. estimation of \( W_1+W_2/BV \)) and compared with the more traditional Tobin’s Q-ratio (i.e. estimation of \( P/BV \)) computed at industry level emerging from a first application. We found out that 42.11% companies of the sample are value-creating corporations (1.6049 Q-ratio); the entire district is underperforming the expected return (cost of capital) thus having a lower 0.7773 Q-ratio level. But the same district even display 31.58% companies that are competence based having a 1.2818 T-ratio level. The gap between T-ratio and Q-ratio depicts the opportunity cost of bad practices in credit allowances by Italian banks even in a strongly competitive area as the Treviso’s district. On average, the missing value is about 51% (i.e. 1.28 – 0.77) of total book values; should entrepreneurship being able to complete value transformation (from competence to market values) their leverage ratio would drop dramatically. Moreover standard Basel-2 (and 3) methods for credit allowances do refer to Q-Ratios thus investing more money to short-term competitive industries and crunching credits to those having higher opportunities (i.e. wider T-Q spreads).

**References (restricted)**


MALAYSIAN CORPORATE FINANCE BEHAVIOUR

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ABSTRACT

Corporations are getting larger and risker so is the need to scrutiny their performance on a continuous basis. Due to competition and global demand, corporate financial activities are becoming complex. Thus, corporate financial health depends on the interaction of a number of variables. Good quality investment (positive NPV) decisions are taken positively by the corporate stakeholders. Thus, companies with quality investment announcement receive increase in share price. The use debt in financing expansion is taken positively by the stakeholders as increase in debt opens up opportunity for outside control and transparency. However, use of debt finds a negative interaction while influencing financial performance. Companies using debt in below average quality investment experience reduction in market value.

Investors consider dividend positively as it provides a signal to the market of good performance of the company. Thus, companies giving cash dividend experience positive changes in their stock prices. However, new investment opportunity and more cash dividend interact, and negatively influence stock price if the investors consider dividend more important than new investment. Recent theories argue that companies provide dividend not because they have higher income but because market wants the dividend. Thus, the role of capital structure becomes even more important.

Majority of the determinants of corporate financial performance, such include dividend policy, capital structure, investment, interact with corporate governance and board characteristics. Under the agency theory perspective, companies with large number of board members negatively influence the corporate financial performance. Investors consider the
presence of independent board of directors as positive indication as this will ensure check and balance. However, dual role of chief executive officer as the board chairperson is taken negatively by market. Large number of board members raises conflict of interest among the members and hampers the usual process of decision making regarding dividend announcement, capital structure and M&A decisions. Hence, higher dividend and use of debt positively influence firm financial performance. However, large board size, CEO duality and absence of independent directors negatively influence firm performance.

This study analysed the performance of non-financial publicly listed Malaysian firms during the year 2002-2007 to identify the determinants of corporate performance. Tobin’s Q was used to proxy corporate performance. Using panel data regression, this study reported four significant factors. These are use of debt (leverage), dividend per share, CEO duality and board size. The study used fixed effect panel regression. Hausman test was used to decide on the fixed or random effect model. Corporate data were primarily collected using Datastream database by Thomson Reuters and subsequently checked against published annual reports of the selected companies. The sample selected in the study represents all the sub-categories of the companies (i.e. trading, construction etc.) listed with Bursa Malaysia.

Higher dividend per share and higher leverage were positive, and presence of CEO duality and presence of board size were negative determinants of corporate performance. Dividend per share was the most influential factors with the highest beta coefficient. It supports the existing studies on dividend and corporate performance where higher rate of dividend positively influences market participants, hence, market performance. Higher use of debt, based on agency theory, provides better check and balance as external stakeholders are involved with the company. Thus, higher use of debt offers financial discipline in the company, which results in better performance. CEO duality creates confusion in decision making, which results in sluggish corporate performance. Same goes to large board size. If the board size is larger, decisions will be taken late and there are more opportunities open for agency problems. The study conducted a within sample forecast for the year 2007 using the data from 2002-2006. Within sample forecast was conducted to check the forecasting accuracy of the model. A t-test of the forecasting says that the error from forecasting of Tobin’s Q using selected parameters is indifferent than zero. Thus, model can be used to effectively estimate corporate performance in Malaysia.
An Investigation of Australian Takeover Firm Returns from an Investor Viewpoint

Abstract

In the takeover literature, the target and acquirer firm shareholders are typically characterised as homogeneous investors. Further, the literature concludes that it is the target firm shareholders who are the ‘winners’ from a takeover event while the bidder firm shareholders are held not to lose; there is still some debate, however, regarding this latter point. With regards to this bidder and target shareholder wealth gain dichotomy, behavioural finance studies and in addition financial economic and financial market evidence indicate that if an investor viewpoint were employed, then this would provide a more complete description and understanding of the takeover wealth gain realisation than the target and bidder firm shareholder dichotomy. Concerning this, behavioural finance studies document investor differences between a sophisticated/informed investor on the one hand and an uninformed/unsophisticated investor on the other. A study of Australian takeover firm returns from an investor perspective is in consequence undertaken within this paper.

The connection between behaviour, information, and a subsequent trading performance is the research focus, for which three main empirical analyses are undertaken. They are: (1) an investigation of investor trading behaviour around the announcement of a takeover proposal; (2) an examination of the share price impact, specifically the public information hypothesis, for the target and bidder firms; and (3) the wealth apportionment from the takeover occasion for a number of investor groups. In regards to these three studies, they are expected in combination, to provide a more complete description and understanding of the wealth gain realization from the takeover occasion, which was achieved as follows:

For the investors’ trading behaviour investigation, a buy-sell imbalance indicator (BSI) was employed and the analysis undertaken was for eighteen investor classes which constituted the complete trading environment. Only four domestic domiciled investor categories were found, however, to be active traders in the target and bidder firms. The fourteen investor classes which did not trade were consequently considered for the takeover event to be uninformed. The four active investor classes identified were domestic domiciled: (1) nominees (namely fund managers); (2) superannuation (pension) funds; (3) incorporated companies; and (4)
individuals. The behaviour demonstrated by these investors was found to be systematic, significant, and consistent with an early-informed and a late-sophisticated trader as portrayed by theoretical models. In particular, the behaviour by the superannuation funds and individual investor was found to be consistent with an early-informed trader. Furthermore, the behaviour by the nominees was found to be consistent with a late-sophisticated investor. In regards to this outcome, a regression analysis determined that the investors’ trading behaviour was ‘takeover driven’.

For the share price impact analysis, an investigation of the public information hypothesis was performed for three proxy groups which were: (1) proxies for the investor classes; (2) a generic small, medium, and large order size proxy group; and (3) differing order concentration levels; the second and third proxy groups are consistent with preceding research methodology. For the share price impact analysis, the public information hypothesis for the target firms was rejected; the public information hypothesis for the bidder firms was not rejected. The share price impact analysis further determined that it was the nominee investor class which was disproportionately responsible for moving the share price for the target firms; no investor class was found to be disproportionately responsible for moving the share price for the bidders.

For the wealth gain apportionment analysis, it consisted of two return calculations. The first was a trading profit performance and the second was a mark-to-market (MTM) return. The trading profit performance outcome revealed that for target firms, the superannuation funds and individual investors achieved a higher return performance which was significantly above the performances realised by the nominees and incorporated companies; all of the investors were found, however, to realise a poor trading outcome for the bidders firms. The MTM return analysis further revealed that the return differences depended on a passive and an aggressive trader distinction. In particular, the aggressive trader was found to lose to the passive trader. An exception to this outcome was for small order sizes for target firms. For target firms, the small order sizes were found to realise a substantial positive return for small firms, which became a substantial negative return for larger firms.

This paper therefore goes beyond the standard “target-bidder” firm dichotomy to explain takeover returns from an investor viewpoint.
The impact of interest rate and foreign exchange rate on banks’ stock returns and volatility: Evidence from China

Abstract

Bank’s risk exposure has increased considerably since financial liberalization in China. However, the impact of enhanced risk exposure on banks remains unclear. A better understanding of the impact is essential for the future reform. This paper employs a GARCH model to investigate the effects of interest rate and foreign exchange rate changes on Chinese banks’ stock returns. The results suggest that market returns and foreign exchange rate changes are statistically significant in explaining banks’ stock returns. However, the risk sensitivity varies across different bank portfolios. Further, bank stock return sensitivities are found to fade quickly for market return and that foreign exchange rate movements affect state-owned banks more instantly than joint-stock banks. However, interest rate fluctuations appear to be insignificant in the equity pricing process. The results confirm the link between market risks and stock return and highlight the need for further reform on interest rate liberalization.
Illiquidity Loss Spirals in Financial Markets

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INTRODUCTION

Liquidity is one of the critically important factors for financial market stability and efficiency. The lack of liquidity in markets has often been blamed for exacerbating market crises such as the 1987 stock market crash and the 1998 near collapse of the hedge fund Long Term Capital Management (LTCM). The market crash in 2007-08 created the threat of a collapse of both financial markets and the real economy re-opened the debate on the role of liquidity in determining asset prices. According to Brunnermeier’s (2008) theoretical framework, market illiquidity was potentially one of the primary causes of the 2007-08 crisis. In a prior study, Brunnermeier & Pedersen (2007) show that funding liquidity (the ease with which traders can finance themselves in the face of collateral constraints) and market liquidity (the ease with which assets can be sold) can usually reinforcing in creating illiquidity. We explore two new measures of illiquidity, which we call price or loss spirals and spread or illiquidity spirals, and assess whether market valuations are stressed due to the vulnerability of stock markets to these spirals.

Our data shows significant variation in average annual returns and relative quoted spread of the S&P 500 index. The variation characteristics indicate that security returns fall steeply during crisis periods while bid-ask spreads widen. These results indicate that these two phenomena are closely linked. For example, when a stock becomes illiquid due to market downward trend, this causes an increase in spread because trader assumes this trading illiquidity as a risk as associated with stock. Afterward, when spread get wider this decreases the return for that stock further below. In this way, an illiquidity cycle starts with return decreases and completes cyclic iterations that result in a severe financial crisis.

We address two research questions. First, we attempt to explain how valuation of a security gets affected due to continuous market illiquidity. Second, we examined role of short selling activities on market illiquidity. In order to address these questions, first, we develop a
measure to capture market illiquidity following the theoretical framework of Brunnermeier and Pedersen’s (2009). These two measures provide a continuous quantification of market illiquidity. In order to define market liquidity level, we looked at the behavior of security returns and bid-ask spread in detail. Second, we define two new illiquidity measures, illiquidity and loss spirals and investigate the role of these measures on the valuation of assets. We followed approach similar to Pastor & Veronesi (2003). Third, we investigate short selling activity in periods surrounding loss spirals.

We examine financial market by empirically identifying spiral events based on our new definition. Next, we revisit valuation theory and examine the impact of these two illiquidity measures on asset valuation by examining various existing valuation models. Our new definition allows us to identify such illiquidity spirals in given security market. Based on our spiral definition, we find that there are almost 2 percent occasions when illiquidity spiral magnitude exceeds 6 continuous day illiquidity. The numbers of such event are almost 12 percent for loss spiral measure. Higher the magnitude of illiquidity spiral indicates more friction in the market and higher volatility in trading activity. We document a negative relationship between both the illiquidity spiral measure and loss spiral measure and a firm’s price to earnings and price-to-book value. We also examine outstanding short interest in the periods preceding and following the loss spiral events. Short interest is much higher in these periods for the spiral stocks than the average short interest for all stocks. Furthermore, short interest is higher in the periods preceding spirals than in periods following spirals suggesting that shorts tend to cover their position after a stock has declined for 10 days in a row.

REFERENCES
Determinants of derivative usage: empirical evidence from Poland

JEL classification: G3, G32

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Abstract

The financial crisis in Poland has been a time of lively discussion about the use of derivatives. Some companies signaled big losses on investments in derivatives. These problems encouraged us to investigate the issues of derivatives usage to manage risk. Financial researchers have identified financial distress costs, agency costs of debt and equity, underinvestment hypothesis, tax convexity and hedging substitutes as the main determinants of firms’ hedging policy. The use of derivatives by firms is thought to increase their value. The positive impact of derivative usage on a firm’s value (proxied by Tobin’s Q) can be treated as a testable hypothesis. Ambiguous findings about that impact led us to make changes in our approach to research. The problem is formulated as follows: what determines the use of derivatives by companies? Through our research we try to find an answer to the question whether the same factors as those in developed economies affect the use of derivatives by listed companies in a country whose economy is classified as an emerging one in the region of Central and Eastern Europe.

The purpose of our article, therefore, is to define the determinants of the use of derivatives by non-financial Polish companies listed on the Warsaw Stock Exchange (WSE) in 2009 and 2010. To examine the differences between firms that use and those that do not use derivatives, we have used a nonparametric test (Mann-Whitney test). To investigate the direction of certain factors’ influence on derivatives usage and the significance of that influence, we have used a logit model. The first tested hypothesis concerned the positive effect of firm size on the use of derivatives. Our study confirmed the significant influence of variables reflecting the size of a company on derivatives usage. The results confirmed also the second hypothesis of no effect of debt on the use of derivatives. In order to monitor the effects of agency relationship occurring in the surveyed companies on the use of derivatives, we performed a limited examination of this issue and found that there was no significant effect.
It seems that ours were among the first studies whose aim was to examine the use of derivatives by companies listed on the Warsaw Stock Exchange. Our research was only preliminary. We are going to extend the analyses by using a panel data approach in order to eliminate a diversity of results in different research periods. We also propose extending the whole research horizon.
Universities and colleges have been using internships as a means of providing business students with practical experience and preparing them for their future careers. California State University, Fresno (CSUF), in general, and the Craig School of Business (CSB), in particular, have been placing an increasing emphasis on student internship programs. Aiming at becoming a nationally recognized applied school of business, in spring of 1996, CSB incorporated internship program as a major component of its mission. Since then, this undertaking has thrived rapidly and evolved into the school’s award-winning Internship Partners Program. Currently, this program provides students with a variety of internship opportunities in all academic majors with for-profit businesses, nonprofit organizations, and government agencies.

This study evaluated perceived effectiveness of business internships and compared and contrasted such perceptions between two groups of students: those who had not yet taken an internship and those who had taken or were currently taking one. This study also examined the effects of personality traits on the two groups of students' perceptions/expectations. Accordingly, the followings were hypothesized:

Hypothesis I: Perceived effectiveness of business internships differs between students who have not yet taken an internship and those who have taken or are currently taking one.

Hypothesis II: The impact of personality traits on students’ perceptions varies between the two groups.

This study was based on a portion of a three-part, web-based research survey. The survey was conducted at the latter parts of fall and spring semesters over the past three years. Students from sixteen sections of production/operations management core course at California State University, Fresno, provided the frame for this survey. A total of 646 students constituted the survey group, of whom 561 (86.8%) completed the three survey questionnaires. To test the research hypotheses, these students were divided into two groups: Group I, those who had not yet taken an internship (n = 410) and, Group II, those who had taken or were currently taking an internship (n = 151).

The findings of this study confirmed the study’s hypotheses. Students overall found business internships to be an effective means of providing them with business education and preparing them for their future careers. Such perceptions were, however, stronger for those students who had not yet taken an internship than those who had taken or were currently taking one. Likewise, personality traits had more impact on perceptions of those students who had not yet taken an internship.
The Driving Forces of Venture Capital Investments

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The Abstract of

The Driving Forces of Venture Capital Investments

We examine the variation and driving forces of U.S. venture capital investments in the past 15 years (from 1995 to 2009) from a macroeconomic perspective. We find that the VC investments in the U.S. at an aggregate level, by number of deals, and by the average financing per deal were all significantly impacted by the large changes in economic situations (i.e. 2000 dot-com bubble and 2008 global financial crisis). The risk preference and investment strategies of venture capitalists have also been changed by such fundamental changes. Further examination revealed that the performance of technology and high-growth companies traded on the NASDAQ stock market is the best predictor for US venture capital investments, which is positively related to NASDAQ Composite and CRSP NASDAQ Value-Weighted Index. However, we find no evidence that GDP growth rate and RUSSSELL 2000 Index, which is the small-cap stock market index of the bottom 2000 stocks including the VC-backed IPO firms, are related to VC investments.

Key Words: Venture Capital
Macroeconomic Factors
NASDAQ Composite
RUSSSELL 2000 Index
**Fundamentals of bank intermediation margin: The implication of contractual interest rate and non-maturity deposit**

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**ABSTRACT**

Fundamentals of bank margin have been extensively analyzed. Model specification might vary but the theoretical settings typically refer to Ho-Saunders model (JFQA, 1981). This study investigates alternative factors influencing banks’ intermediation margin based on the extended Ho-Saunders model (1981). The extended model is close to multiproduct model in Allen (1988), and Valverde and Fernández (2007). Unlike model in both papers and many other literatures, non-maturity deposits are integrated into the theoretical setting. Contractual interest rates are also exploited to handle potential bias estimates. Additionally, model specification resorts to measures used in pricing bank products. The empirical model is estimated on quarterly data of 39 banks in Indonesia over the period 2005 – 2010. There are several reasons explaining relevance of Indonesian case. First, there has been massive merger and sharp increase in foreign ownership of Indonesian banks during the analyzed period. Second, some banks have been aggressively raised non-maturity deposit that pays low interest rates but bears high liquidity risk. Third, banks heavily depending on non-maturity deposits appear to hold more debt securities in their earning asset portfolios and enjoy high return.

The empirical results suggest that using contractual interest rates gives better estimates of regression coefficients and lower mean square error, even when different estimation methods and proxies for intermediation margin as well as credit risk are used. High intermediation margin is associated with implicit interest rates, expected profit, size of transaction, risk premium, and market power. High margin is also related to high share of loan in earning asset portfolio and dependency on non-maturity deposit. Interestingly, policy rate does not matter much to the margin whilst interest rate on fully insured deposits is statistically significant in explaining variation in the margin. The result might provide explanation about price stickiness of loans during monetary expansion in Indonesia.
The interplay between accounting margin and some variables changes in sign when proxies for intermediation margin and proxy for credit risk change. Specifically, the model performs poorly when potential timing difference between revenue and cost recognition is not taken into account in estimating risk premium. High pure margin is associated with implicit interest rate, expected profit, risk premium and transaction size. High gross margin on the other hand, is associated with opportunity cost of capital charge, risk premium, expected profit, transaction size and market power. Additionally, some factors introduced in papers such as Maudos and Solis (2009) are not statistically significant in explaining variation in contractual and accounting margin. Lagged margin is statistically insignificant in the contractual margin setting but statistically significant in explaining variation in pure-accounting margin.
Policy Applications of a Systemic Risk Early Warning System
Mikhail V. Oet, Stephen J. Ong, and Dieter Gramlich

Abstract

How can a systemic risk early warning system (EWS) facilitate the financial stability work of policymakers? This paper explores this complex topic in the spirit of starting an open discourse. We examine the conceptual bases for specific types of policy applications as tactical supervisory actions. These actions are enabled by specific macroprudential tools, and the tools are constructed to accomplish macroprudential policy objectives in support of financial stability. These objectives target systemic stress aggregation in two dimensions: across time and institutions. A systemic risk EWS is only one of the tools capable of this role. Yet, it enables a distinct set of policy applications—our focus in this study.

Strategically, systemic risk EWS focuses on identification of stress and institutional imbalances, in addition to forward looking analytics, differentiation of excessive exposures, sensitivity to systemic risk posed, and capacity for macroprudential risk management. Dealing with stress aggregation across time, we discuss potential EWS policy applications in pursuit of two tasks: prevention and mitigation. We consider the policy applications targeting stress aggregation across institutions via common exposures and interconnectedness. One of key EWS benefits in this context is discriminating imbalances that have strong positive and negative associations with financial stress. This differentiation allows a rich set of policy applications including use of defensive imbalances as stress buffers, limit setting on common adverse imbalances, and institutional targets for imbalance diversification.

This study shows that a systemic risk EWS provides a consistent conceptual basis for the deployment of macroprudential policy applications as a function of systemic stress. It extends the topic of EWS supervisory policy applications, up to now insufficiently developed. This basis further substantiates macroprudential policy choices in contrast to the conventions of microprudential practices. Notwithstanding the potential for these powerful applications, we also urge two notes of caution. First, care must be taken in the calibration of macroprudential applications, given their reliance on quality of the underlying systemic risk-modeling framework. Second, macroprudential applications should not commence without explicit economic impact analysis of feedback mechanisms involving the new policies.

Section 1 details precedent literature on macroprudential policy organization (Borio 2003, Nier 2010, Hannoun 2010, and Lim et al. 2011) and integrates principal objectives of macroprudential policies for aggregate risk in two dimensions: across time and institutions. Across time, these objectives include the long-term goal to avoid macroeconomic costs linked to financial instability and short-term goal to limit financial system-wide stress. Across institutions, the objectives include the common exposure imbalance-based goal to limit severity of failure, common exposure imbalance-based goal to limit probability of failure, and interconnectedness-based goal to strengthen infrastructure resilience. Any macroprudential tool designed to support these objectives must enable corresponding strategic capacities.

In Section 2, we build on Gramlich et al. (2010) critical review of EWSs for systemic risk and focus on strategic aspects of macroprudential policy applications. To do so, we first show that the systemic risk EWS identifies stress in the financial markets and imbalances in financial agents. EWS also enables the initial macroprudential objectives because of its capacity to provide disclosure of stress, stress components, and stress-inducing financial system imbalances. It further allows analysis of aggregate imbalances and their decomposition across institutions. Disclosure serves as principal policy strategy across time by increasing transparency of the financial system, reducing information asymmetry, and enabling financial agents to manage systemic stress and imbalances across time. Analysis of aggregate

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imbalances and decomposition of imbalances by institution provides the principal macroprudential means for prevention and mitigation of stress across institutions. In conclusion, we discuss these normative EWS capacities in their relationship to the three features of Central Bank regulatory policies: feedback policies, structural monitoring policies, and risk management policies (Greenspan 1997, Bernanke 2004).

Section 3 discusses macroprudential tactics across time and institutions and provides our main contributions. We explore specific supervisory actions and their conceptual bases in support of macroprudential objectives. The tactics for the time dimension are predicated on differentiation of four time phases of stress cycle: ex-ante stability, ex-ante escalation, systemic stress, and ex-post. Given an imbalance-based EWS of systemic risk, we show that policymakers’ decision process is assisted by finding stress target policies and imbalance action thresholds. When the forecasts of stress fall short of the target action level, the EWS supports the markets’ ability to self-resolve the particular level of stress. When forecast of stress exceeds the target level of stress, the policymakers can weigh the economic costs of regulatory preventive action against the economic costs of a shock bringing the aggregate imbalances back to the fundamentals.

The macroprudential objective of prevention is accomplished by the short-term macroprudential EWS tactics. These are exercised during the ex-ante escalation, systemic stress, and ex-post phases. We suggest instruments focusing on monitoring and disclosing levels of stress and imbalances. Additional instruments are suggested to help reduce stress during the systemic stress phase, including solvency and liquidity targets as a function of overall risk. The supervisors can utilize macroprudential EWS analysis to establish pre-targeted minimums that institutions must maintain to prevent systemic stress.

The macroprudential objective of mitigation is achieved by the long-term macroprudential EWS tactics. These are exercised during the stability and ex-ante escalation phases. The short-term policy instruments are modified for the long-term by long-run limits and targets to encourage countercyclical risk management. Specifically, long-run EWS instruments could include new instruments of recommended defensive targets for interbank exposures, liquidity under stress, and solvency measures.

EWS tactics to limit severity of failure include instruments that identify and limit common cross-sectional imbalances, which are applied institution-by-institution. Tactics to limit probability of failure include policy instruments that monitor and limit aggregate adverse long run and short run imbalances. Interconnectedness tactics to strengthen infrastructure resilience are two-fold. The first set consists of policies that encourage idiosyncratic imbalances across significant institutions. The second set consists of policies that encourage defensive imbalances.

Section 4 discusses risk management aspects of macroprudential EWS applications. It urges caution against rash macroprudential choices and argues for a prerequisite economic impact analysis before adoption of macroprudential policies. In this context, we address the propensity of regulatory policies to dynamic effects feeding back into financial system. Section 5 concludes by summarizing and highlighting several critical aspects of supervisory EWS applications to financial stability. Overall, the paper explores macroprudential applications for systemic risk in a dynamic institutional context. Appropriate strategies and instruments ground on identifying and disclosing overall stress based on a systemic risk EWS. While this new direction of supervisory applications targets to enhance financial system transparency and strengthen the resilience of infrastructure and institutions, the feedback interaction of policies and the financial system agents also has some adverse potential. Therefore, the dynamic effects of macroprudential applications should be well considered in advance.

Keywords: financial stability, regulation, macroprudential, policy instrument, early warning system, systemic risk, financial stress, imbalance

JEL classification: G01; G18; G28; E32; E37
What lies behind the “too-small-to-survive” banks

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Extended Abstract

In September 2007, Northern Rock, one of the most significant retail and commercial banking institutions in UK and a substantial mortgage lender, after being largely affected by the problems in credit markets triggered by the US subprime crisis, sought for a liquidity support facility in order to replace money market funding. Bank of England took the decision to extend a loan facility to the distressed institution. Indeed, by January 2008, it had borrowed to Northern Rock more than USD 25 billion. A month later and after the weakness of Northern Rock to find a commercial buyer that would commit to repay taxpayers’ money, the bank was eventually nationalised by the British Government that effectively took ownership away from its shareholders.

The government financial aid provided to Northern Rock has been officially recorded as the first bank bailout after the eruption of the crisis in August 2007. This was the prelude of a series of far-reaching and urgent rescue efforts that took place in the financial services industry during the late 2000s crisis. Nevertheless, as it is almost always the case, every coin has two sides. On 4 October 2007, Miami Valley Bank was hit by the credit crunch and shut down by the US federal regulatory authorities. The Federal Deposit Insurance Corporation (FDIC) took receivership of the failed bank and all insured deposit accounts (that is up to $100,000) were transferred to an assuming institution. Hence, Miami Valley was the first commercial banking institution to be failed in the financial meltdown. The collapse of Miami Valley Bank was followed by those of Douglas National Bank and Hume Bank in early 2008. Importantly, the number of failures increased in a geometric progression since then. In particular, for the period

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starting from early September 2007 and extending until March 2011, there have been recorded 293 commercial bank collapses in US and the FDIC has been appointed receiver of all these bankrupt institutions.

According to the above discussion, the U.S. federal authorities as well as the EU and several other national authorities have provided substantial financial support to many banking organizations while, at the same time, have let numerous others to go bankrupt that also incurred massive losses on the system. A question that comes up naturally is why this was allowed to happen. Was it simply because some particular institutions were considered important and big enough to save in the sense that a collapse of any of them could trigger contagious defaults, whereas some others were perceived as “too-small-to-rescue” in that their failure would have no material impact on their counterparts, let alone on the system as a whole?\(^1\) Is, indeed, the size and the systemic importance of banking institutions the fundamental factors that make the authorities to treat them differently or it is also that the failed banks have gone really badly in terms of performance and risk-taking -even worse than those that were bailed out- and this was the main reason why no financial aid was provided to them. In other words, was it the authorities that were reluctant to help some part of the problem banks to stay afloat because they were considered as too-small-to-save, or these banks were of so poor performance that were not capable of withstanding some serious shocks whatsoever?

To provide concrete answers to the aforementioned questions, we empirically investigate the relationship between bank performance and risk with bank size using a sample that contains all troubled banks in the U.S. market in the late 2000s crisis. Put differently, we categorise all problem banks (both assisted and failed) in different size groups and then test for any differences in the performance and risk-taking behaviour among size groups. More specifically, we first identify all banking organisations that either failed or were bailed out during the late 2000s crisis. Failed banks are formally defined as the insured institutions that have been closed requiring disbursements by the Federal Deposit Insurance Corporation (FDIC). We collect the relevant information from

\(^1\) In September 1984, the Office of the Comptroller of the Currency (OCC) in US made a public distinction for the first time between systemically and non-systemically important banking institutions announcing that eleven from a total of approximately 14,000 banks were considered as TBTF and as such they would be offered full deposit insurance, whereas all the rest would remain partially covered.
the official website of FDIC. Bailed-out banks, on the other hand, refer to those that received funding from TARP. The relevant list of TARP recipients is obtained from the U.S. Department of the Treasury.

We expect the rescued institutions to perform generally better and take lower risk compared to the failed ones. This could explain why the latter group of banks has been left by the authorities to go bankrupt. However, our empirical findings show that both groups performed equally bad before the onset of the crisis taking high-risk investment decisions and operating poorly in terms of efficiency and productivity. This is to say, it is not that the overall performance and the risk-taking behaviour of the non-rescued banks were so bad that they had no alternative but to go bankrupt. On the contrary, authorities provided no financial aid to the banks that failed during the crisis simply because they were of little or no importance for the financial system as whole. This implies that it is indeed the degree of systemic importance of the financial institutions, which makes the authorities to treat them differently. Along the same lines, size is found to be one of the main determinants of bail-out governmental policies. Such a bail-out strategy is very likely to create higher incentives for banking firms to become bigger rather than safer simply because regulators seem to be reluctant to help a well-performed, non-risky bank to stay afloat if the bank is not viewed as being important enough for the entire system. In addition, small-sized banks which are not considered by the authorities to be systemically important and hence are not protected by bail out policies is likely to take higher risk when the bailout probability of the protected banks is increased.
Impact of Double Taxation Treaties on Cross-border Portfolio Flows, Valuations, and Host of Capital

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Cross-border transactions can have significant tax consequences for investors. An investor’s home (source) country and the investee’s destination (host) country may both impose different levels and forms of taxations. An important government policy initiative, facilitating inter-country equity investments, is the signing of various pacts and treaties such as bilateral Double Taxation Avoidance Treaties (DTT) between countries. In this paper, we investigate whether and how DTTs affect the inflow of foreign equity portfolio investment, stock valuations, and cost of equity capital for the firms in the countries signing the DTTs.

A number of studies have investigated effects of DTTs on foreign direct investment (FDI); however, little work has been done regarding foreign portfolio investment (FPI) flows between countries. FDI involves active managerial participation, purchase and acquisition of productive assets such as factories, mines and land in a foreign country. FDI explicitly excludes foreign portfolio investments through passive share purchases. Thus, FDI and FPI may be nearly mutually exclusive; however, a relationship between each type of foreign investment may exist. One would anticipate that lower corporate and personal tax rates in host countries and DTTs designed to reduce double taxation of income would stimulate both FDI and FPI because of higher after tax returns for equity investors. In the absence of a DTT, corporate income may be subject to taxes levied in multiple jurisdictions. Double taxation payments, however, may be avoided subsequent to the source and host countries signing and ratifying a DTT. Thus, net income after taxes distributed to stock investors most likely will be lower without a DTT and higher with a DTT.

We make several contributions to the literature. First, our study focuses on cross-border equity FPI as opposed to most previous studies covering only cross-border FDI. To understand the effects of DTTs, we utilize a relatively new FPI data set from the International Monetary Fund (IMF) containing each country’s reported equity portfolio investments held by nonresidents. Our second contribution is the international scope of the paper. Unlike previous single country studies most of which are focused on the United States, we use a dataset covering 38 host countries from all continents and 50 source countries. Third, we formulate an event study
methodology for new treaties signed between 2001 and 2007 to investigate their impacts on cross border equity investments. Our analysis incorporates the differences between host and source country corporate income tax rates and structures, and GDP growth rates to determine their effects on FPI flows. Fourth, we focus on the effect of DTTs on stock valuations. Finally, we assess the importance of DTTs for corporate cost of capital. Using a method similar to Jain (2005), we study the impact of DTTs on cost of equity capital in host countries.

We observe a surge in signing of bilateral DTTs during the last two decades. Using the coordinated portfolio investment survey (CPIS) dataset from the IMF, we find that signing and ratifying of DTTs tends to increase bilateral FPI flows between the treaty countries. During the year that the DTT is signed, we observe a $48.53\%$ increase in foreign equity portfolio investment between the two countries and during the second year after the signing of the DTT, we observe an annual increase of $21.34\%$. In addition, we observe that equity flows also increase with relative difference in source and host countries corporate income tax rates, where in general, countries with relatively lower corporate tax rates tend to attract increased equity investment from those countries with higher corporate tax rates.

Next, we find that the average price to book ratio (P/B) for a country’s stock market increases after the country signs DTTs. Improvements in a country’s stock valuations subsequent to signing of the DTT may result from a country becoming a more favorable investment destination. Since the P/B ratios are related to both the cost of capital and expected future growth rates, we also examine the impact of DTT on cost of capital, controlling for the differences in growth rates. Cost of capital is reduced by an annualized $0.135\%$ after the signing of DTT.
THE SECURITIES AND EXCHANGE COMMISSION AS A LEARNING REGULATOR: LESSONS FROM PROXY ACCESS

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In 2010, the Securities and Exchange Commission introduced Rule 14a-11, which was intended to facilitate the rights of shareholders to nominate directors on corporate boards as part of the Commission’s response to the 2008 financial crisis. Recently, the District of Columbia Circuit of the US Federal Court of Appeals vacated the rule, in Business Roundtable and Chamber of Commerce of the United States of America v. Securities and Exchange Commission (2011), on the grounds that “the Commission acted arbitrarily and capriciously for having failed once again … adequately to assess the economic effects of the new rule.”

I argue that the rule, which placed a downward negative pressure on the Commission’s reputation and legitimacy as both a regulator and an enforcer of securities legislation in the US, is the result of factors that can be summed by the argument that the Commission does not appear to have a clear grasp of the nature of public corporate ownership in the US.

The article critically analyzes the Commission’s decision-making using the learning regulator framework (“LRF”) developed in the context of rule 14a-11. The framework holds that regulators need to maintain awareness of, and adaptation to, the socio-economic realities of the environment subject to their oversight. Adaptability requires the implementation of necessary legislative amendments in response to changing
needs and demands in order to ensure the regulatory framework is reflective, responsive, relevant and efficient.

The concept of ownership is one of the principal considerations guiding the Commission’s approach to the regulation of the federal proxy process, the regulation of which is one of the Commission’s original responsibilities delegated to it by Congress. Accordingly, any deficiencies/achievements in the area reflect directly on the Commission’s performance.

Descriptively, relying on historical accounts and socio-legal and investment theory explanations, I trace the Commission’s failure to come to terms with the nature of public firm ownership to views and cognitive constructs of the concept held by the architects of the Securities Exchange Act of 1934. The views introducing distortions into the regulatory framework governing the securities markets in the US were embedded into the fabric of the framework and carried forward to the present day.

The normative implications of the ownership distortion are analyzed using institutional, organizational, and risk regulation approaches. From an institutional perspective, I show that the failure to recognize the ownership distortion by the Commission resulted in the failure to introduce efficiency into the US capital markets. From an organizational perspective, I show that the Commission’s failure to recognize the ownership distortion resulted in the failure to display organizational learning and the protection of the Commission’s reputation. From a risk regulation perspective, I show that the Commission, rather than display an ability to deal with matters of risk, has become a source of an endogenous type of risk affecting the regulatory framework, the integrity of which it is supposed to guard.
GOOD TIMES AND BAD TIMES:
A COMPARISON OF HESTON MODEL SPECIFICATIONS
FOR EURUSD OPTION VALUATION
BEFORE AND AFTER 2008

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Abstract
Since the formal inception of euro (EUR) in the early 2000’s, the market dynamics of this currency relative to the U.S. dollar (USD) have shown significant periods of smoothness. In financial markets analysis, this relative calm can lead to a particular specification of models for option valuation. But the worldwide financial crisis that started in the U.S. and later spread over the European Union has led to a fundamental shift in the relation between these two currencies (EURUSD).

Over the last few years, a number of factors have contributed to the changing dynamics of EURUSD. These include, among others, the shift in rate spreads due to subprime mortgage abandonment, the Bear Sterns bailout and buyout, the Lehman Brothers crash, the AIG bailout, the Greek debt crises, and the downgrades for the US and EU debts. These are just a sample of significant events in the global financial arena that have been shocking the dynamics of volatility in the EURUSD market.

This paper explores the specification of valuation models for European options based on the Heston model (1993), before and after the worldwide crises. We divide the timeframe into three periods: 2006 to 2007, 2008 to 2009 and 2010 to 2011.

Considering the total and the three subsamples, our analysis based on the standard descriptive statistics and a GARCH model over EURUSD returns, in the total sample, indicates certain periods that have very different features. The first subsample (over the years 2006 and 2007) shows a pattern of low mean-reverting variance. Then in the subsample that goes from 2008 to the end of 2009, we observe an uprising pattern that finally comes to revert to its initial levels. Finally, in the 2010-2011 subsample we observe mixed patterns that may not be fully consistent with a mean reverting behavior, but probably with a jump-driven dynamics of high level activity.

Typically, calibration of option valuation models is based on matching settlement prices or implied volatilities in forex derivatives markets. However, several of the strikes listed by the derivatives exchanges have no actual volume, thus the prices considered are not observed at all. In this paper, we deal with an alternative calibration, intended to analyze the theoretical response of valuation models to the outputs of certain analytical tools used in practice. After analyzing the impact and sensitivity of such specification components, we draw some conclusions about the use of Heston model amidst these turbulent financial times.

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For the sample and each of the subsamples, we gathered historical information such as the level of underlying prices at the beginning of each subsample, as well as domestic and foreign rates. Then, we computed GARCH parameters as the base for Hull White Monte Carlo model calibration. In the next step, we ran the procedure for 5 initial-price-to-strike ratios (0.8, 0.9, 1, 1.1 and 1.2) considering the level of underlying price at the beginning of each period. Along with the price, we compute the standard error and the elapsed time for computations.

For Heston models, there are some additional parameters to be considered. Thus, we built an EWMA volatility model to proxy the initial volatility and the correlation at the beginning of each period. Though the long run volatility may be retrieved from a well behaved GARCH model, since not all the GARCH equations showed statistical significance in all of their coefficients, we decided to proxy the long-run volatility as the average of the EWMA volatility in the last 30 days of the subsample. With these additional parameters, we ran both a Monte Carlo Heston model and a FFT variant based on the proposal by Carr and Madan (1998) with some amendments proposed by Albrecher, et al (2006) and Janek, et al (2011).

The first general finding is related to the pattern followed by the standard error of Monte Carlo procedures. Whenever the option expected payoff is computed to end at-the-money (ATM) at maturity, the standard error of the option price estimation increases. In the case of the analyzed series, this rising in the output standard error occurs for the ATM initial price, considering that the difference between domestic and foreign interest rates is quite brief. In order to assess the effect of the drift rate on this pattern, we conducted experiments imposing a larger domestic rate (up to 1500 basis points over the foreign rate) in order to show that the shift in the distribution of the terminal payoff is related to a shift in the distribution of standard errors.

Another finding is related to the use of GARCH coefficients as preliminary parameters for stochastic volatility models, as suggested in Hull (2012). Along the subsamples, we observed that not all GARCH(1,1) outputs were fully usable since some of the coefficients may not be significant, or may not have some of the desirable properties of a GARCH model, such as variance stability or the computability of an unconditional variance (that should proxy the long-run variance).

Since in all subsamples the coefficient for the lagged residual showed to be significant, we used it as a pivot to compute the coefficient for lagged volatility observations out from the EWMA estimated long-run volatility, if it was not available from GARCH itself. We noticed that the 2008-2009 subsample was the only one that showed a well-behaved GARCH, thus we built a GARCH process for the whole sample (2006-2011) to create a control set of outputs.

Regarding the comparison of the stochastic volatility models, we analyze the features of the computed parameters and their relation to some observed patterns. The Hull-White model seems to be more sensitive to the smile effects when compared with both the Monte Carlo and the FFT Heston computations. It is observed as well that the implementation of the Hull-White Monte Carlo is a little bit slower than the equivalent Heston implementation. Time wise, as expected, the FFT implementation is faster by far. Nonetheless, the FFT model shows the instabilities reported in the prior literature (see Carr and Madan, 1998 and Rivera and Serdán, forthcoming) in the out-of-the-money region for very short maturities.

After the sensitivity analysis, we point out the limitations of this paper, and offer a few proposals to overcome such drawbacks.

Keyterms: Option valuation, Stochastic volatility.

Category: Work-in-progress

Are Ethics-based Sukuk Securities the Same as Conventional Bonds?

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Are Ethics-based *Sukuk* Securities the Same as Conventional Bonds?

*Sukuk* securities have some similar features with conventional bonds, which led the financial press to describe them as if they are the same (to the extent of calling *sukuk* as Islamic bonds). This paper investigates this matter empirically by examining the yield to maturities of *sukuk* securities and conventional bond counterparts for various issuers and maturities. Securities issued by seven major types of issuers are investigated for maturities ranging from 3 months to 20 years. Malaysia is selected as the sample, as it possesses adequate liquidity for both types of securities in the secondary market. Comparison of yield curves shows a slight difference existing between these securities. Although aggregated yields of *sukuk* securities are higher than conventional bonds by 0.5 basis points in general, the difference is ranging from +10.56 basis points for long-term AAA corporate issues to -8.69 basis points for mid-term AAA corporate issues.

Comparison between yield of *sukuk* securities and conventional bonds shows that in more than 70 per cent of cases, the yield is significantly different. *Sukuk* securities issued by Central Bank of Malaysia (Bank Negara Malaysia) and Government of Malaysia offer a significant higher yield to their investors. This is also the case for medium- or long-term *sukuk* securities issued by the Malaysian national mortgage corporation (Ca gamas). However, government investment arm (Khazanah Nasional), which is a powerhouse in design and issuance of Islamic instruments, offers lower yield for *sukuk* securities with short- or medium-term maturities. Long term *sukuk* securities issued by AAA financial institutions are offering higher yields. In case of corporate issues, whether guaranteed or not, short- and medium-term *sukuk* securities offer lower yields; while, their long-term *sukuk* issues are offering higher yields.
Granger causality tests are conducted to determine whether yield of conventional bonds Granger-cause sukuk bond yields, or vice versa. Results of pair-wise Granger causality tests do not show a general and definite causal relation between yield of Islamic sukuk securities and conventional bonds. In other words, changes in yield of Islamic sukuk or conventional bonds do not generally change the other one. It implies that only yields of Islamic sukuk differ from yields of conventional bonds, but also these yields do not have causal relation with each other.

Another finding of this research is the significant effect of the issuance of ijarah sukuk on the risk behavior of the issuing company. Ijarah sukuk requires the issuer to transfer the ownership title of some specific asset to sukuk-holders (or the SPV). It is documented that the risk, in terms of absolute changes in CAPM beta, before and after issuance of the security is significantly different from each other. However, the direction of change in beta is not the same for all cases, and, the influential factors on the direction of change are yet to be studied. The results shows that the absolute change in beta of the firm is significant, which needs careful interpretation.

Our main conclusions are: sukuk securities are not the same as conventional bonds; hence, they should not be priced the same way as conventional bonds; the market for equity of issuing companies appear to suggest that the risk of the firm has changed significantly because of the issuance of ijarah sukuk certificates.

Keywords: Sukuk, Bond, Yield curve, Yield to maturity, Islamic finance, Islamic bond, fixed income finance, securitization

JEL Classification: G12, Z10, Z12, B59
HOW DO CAPITAL BUFFERS RESPOND TO BASEL? AN EMPIRICAL ANALYSIS OF THE BRAZILIAN BANKING SYSTEM †

João André C. M. Pereira † and Richard Saito ‡

This version: 04/15/2011

Abstract

We empirically examine the main determinants of the capital buffer management (capital exceeding the minimum required by regulation) for the Brazilian banking industry, in order to test whether banks respond to the previous and new fundamentals of capital regulation. We find evidence that regulatory capital requirements may influence banks behavior, since those with more volatile earnings and higher adjustments costs may decide to hold higher capital buffers. We also find that banks may follow a pecking order when deciding their capital levels, and larger banks present lower levels of capital ratios, which may be related to too-big-to-fail issues. Moreover, we provide evidence that: (i) Central Bank supervision exerts positive pressure on bank’s decision; (ii) market discipline may play a minor role in driving capital ratios; and (iii) the business cycle has a negative impact on bank’s capital cushion, suggesting a pro-cyclical capital management. The results contribute to the discussion of the implementation in Brazil of the macro-prudential regulatory policies discussed in the Basel Committee.

Keywords: bank regulation, regulatory capital, asset risk.

JEL Classification: G21, G28.

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† The opinions expressed are those of the authors and do not necessarily reflect the views of the Central Bank of Brazil.
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Equity Financing Capacity and Stock Returns: Evidence from China

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Abstract

There is a large body of literature on the relation between equity financing and stock returns. These studies focus on the actual financing activities such as issuance of equity and debt. However, there is very little research on the relation between the capacity of a firm to raise external funds and stock returns. China provides a unique setting for studying the stock market valuation of equity financing capacity because the listed firms in China have to meet specific requirements set by the China Securities Regulatory Commission (CSRC) to become eligible to issue equity and debt securities. The CSRC effectively defines a firm’s capacity to issue equity and debt. We examine whether the equity financing capacity, defined as the eligibility to raise external equity capital through rights and public offerings as per CSRC regulations, is related to future stock returns using a comprehensive sample of listed firms in China for the time period from 2000 to 2009. Our paper is uniquely different from previous research on financing and stock returns in that we focus on the impact of the capacity to raise equity funds rather than the actual financing activities on stock returns.

We contribute to the literature in a number of ways. We examine the relation between equity financing capacity and stock returns, which has received very little attention in the empirical finance literature. More importantly, our study is based on a unique setting where the capacity to issue equity and debt to the public by firms listed in China is determined by the Chinese securities market regulation. The requirements for becoming eligible to raise external capital essentially creates to types of firms – those eligible to raise external capital and hence have external financial capability and those that are not eligible and hence have constrained external financing. We specifically examine whether the capacity to make rights and public offerings of equity is priced in the market in terms of future returns. Due to tight control and regulations related to access to public capital markets, only a portion of listed firms qualify to access public equity and debt markets in China. The capacity to raise external capital is an important intangible option available to the firm and could conceivably affect stock returns. We are able to enrich the
Traders Activities, Ownership and Stock Price Reactions to the MSCI Index Change: Evidence from Taiwan

Previous studies investigating market reactions to changes in the Standard and Poor’s 500 Stock Index (S&P 500) constituents find significantly positive abnormal returns for additions, and negative abnormal returns for deletions. These abnormal returns apparently occur at both the announcement day and effective day. Trading volume also changes dramatically around these additions and deletions. The abnormal returns and excess trading volume associated with the changes in index constituents is well documented, and is referred to as the “index effect”. However, few studies have been devoted to studying the own-ship changes of firms added to, and/or deleted from the index, most likely due to the unavailability of detailed ownership data.

In this paper, we shed light on the ownership changes of firms added to, or deleted from the MSCI Taiwan Index. In fact, the stocks in Asian countries that were added to, or deleted from the MSCI Standard Index experienced a great swing in equity price that received large coverage in local newspapers. There are two reasons behind the run-up in equity price of stocks added to the MSCI Standard Index. Firstly, the MSCI Standard Index is an important benchmark for cross-border investment. Secondly, MSCI constituent changes may also provide “certification” value for the stocks that are added to the Index, particularly in emerging markets with poor corporate governance and weak investor protection. Such certification value may come from the monitoring activities of foreign investors, or the index agent having a better ability to predict future performance.

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1 For example, on May 15, 2009, The Asian Wall Street Journal reported that “…The results of index provider MSCI’s semiannual review also affected stocks in Asia. StarHub’s shares gained 4% in Singapore trading on news it would be added to the MSCI Singapore Index. SK Broadband was up 7.8% in Seoul on its inclusion in the Global Standard Index. NEC Electronics slumped 11% after being removed from the MSCI Japan Index, but McDonald’s Holdings Co. (Japan) added 4.8% on its inclusion in the index. Formosa International Hotels gained 2.8% on news of its inclusion in the MSCI Taiwan Index”.
Therefore, we expect that stocks added to the MSCI Taiwan Index would not only induce foreign investment flow, but also attract naïve uninformed individuals. Among the major market participants, who are the net buyers and sellers of stocks that are added to, or deleted from the MSCI Taiwan Index? Who provides liquidity for the buy/sell imbalance, if any, around the announcement day and the effective day? Who can make profits from this event? The examination of the ownership changes around these additions and deletions is helpful in answering the above three questions, which motivates the studies in this paper.

To analyze the ownership changes of the stocks added to, or deleted from the MSCI Taiwan Index, we use a detailed intra-day database, which contains the transaction date and time, a stock code, buy or sell, transaction price, number of shares, and trader type (individuals, foreigners, mutual funds, corporations, or dealers). The database enables us to identify the net buyers versus net sellers and liquidity providers versus liquidity demands, as well as to examine the investment performance of traders around the event of additions or deletions. The benefits of addressing the issues are two-fold: it provides us with a better understanding of trader behavior around index constituent changes, and it also complements the growing literature on index effects by introducing local market reactions and investor trades during an add-on or deletion event from an important international equity index.

Our sample covers 125 additions to, and 74 deletions from the MSCI Taiwan Index between January 1999 and December 2008. We find that stocks added to the MSCI Taiwan index experience a significantly positive abnormal return of 1.50 percent on the date of announcement, and a further 3.82 percent in the period following until the close of the effective day. For deletions, the abnormal returns are significantly negative, and higher in magnitude, at -2.76 percent and -10.82 percent,
respectively. However, the deletions have a significantly positive abnormal return of 18.3 percent in the 60-day period following the effective day. The strong price reversal lifts the equity price of deletions 60 days after the effective day to 4.73 percent above the closing price on the day prior to the announcement. We also find that additions experience excess trading volume of 4.721 percent on the announcement day, and 16.37 percent on the effective day. For additions, the corresponding excess trading volumes are 1.19 percent and 161.14 percent, respectively. These excess trading volumes dissipate very quickly for additions, but remain at a high level over the 60-day period following deletions.

The analysis of the buy-sell imbalance indicates that foreigners are net buyers of additions, and net sellers of deletions. This result is not surprising because the MSCI Standard Index is an important benchmark for cross-border investment and is tracked by Exchange Traded Funds or iShares abroad. For additions, we find that in the aggregate, foreigners buy 20.89 percent (38.07 percent) and sell 9.43 percent (17.83 percent) of the total volume on the announcement (effective) day for added stocks. For deletions, the aggregate foreigners buy 8.42 percent (5.73 percent) and sell 17.07 percent (13.43 percent) of total volume on the announcement day. The most extreme buy-sell imbalance occurs on the day prior to the effective day of deletion; foreigners buy volume accounts for 8.63 percent, and sell volume accounts for 51.51 percent of market volume on that day. It is consistent with the view that foreigners demand liquidity to adjust their portfolios. During the days where there is a buy-sell imbalance, the individuals stand on the other side of the trade. It seems that individuals provide the liquidity to foreigners.

The analysis of investment performance among different investor categories shows a discrepancy between additions and deletions. We calculate the investment performance of traders in the interval between the open of trading on the
announcement day, when the news has been made public, and the close of trading on the effective day, or 10 days after the effective day. Foreigners appear to be winners when it comes to additions, but losers on deletions. On the other hand, individuals lose a small amount on additions, but profit on deletions. Surprisingly, mutual funds and corporate investors have a significantly negative return on both additions and deletions.

Our results from buy-sell analysis and investment performance suggest that individuals provide liquidity to foreigners. These foreigners attempt to buy shares of stocks added, and sell shares of stocks deleted from the MSCI Taiwan Index immediately after the announcement. Since the equity price appreciates on the announcement day, and the days following, individuals tend to dispose of the additions (disposition effect). Therefore, individual investors are overactive relative to foreigner demand for immediacy, resulting in an excess supply of liquidity for additions and, therefore, no compensation for individuals. On the other hand, since individuals are not confident about the future of deletions, a higher return is required to compensate the individuals for providing liquidity for these stocks.
Thinking by Analogy and Option Prices

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Abstract

Recent empirical and experimental work on option pricing has uncovered some intriguing anomalies. Empirically, systematic risk of the underlying as well as the investor sentiment has been found to affect option prices apart from other well known implied volatility puzzles discovered earlier. In addition, experimental work has found that people tend to price an in-the-money call in analogy with the underlying stock by equating its expected return with the underlying’s expected return. We develop a new option pricing model based on the idea that the market consists of people who are prone to thinking by analogy as well as rational investors when limits to arbitrage (transaction costs) prevent rational investors from profiting at the expense of analogy based thinkers. The new formula, which is a closed form solution to the model, is a generalization of the Black-Scholes formula. The new formula provides a unified explanation for various implied volatility puzzles.

Keywords: Coarse Thinking, Option Pricing, Implied Volatility, Implied Volatility Skew, Systematic Risk, Investor Sentiment, Implied Volatility Term Structure

JEL Classification: G13, G12
Hidden Costs of Mandatory Long-Term Compensation

James C. Spindler

After the 2008 financial panic, long-term compensation measures have gained favor as a way to limit managerial opportunism and excessive risk-taking. These measures, which may become mandatory for systemically important institutions, include restriction (i.e., deferral) of stock grants for a period of years, and, in the event of performance reversals, divestment of deferred stock and clawbacks of bonus compensation. These measures are considered uncontroversial enough that some have suggested that all public companies, not just systemically important firms, should adopt them.

In this Article, I argue that the benefits of long-term compensation have been overstated while the potential downsides have been largely ignored. Restricted periods for equity grants must be large compared to the executive’s tenure in order to have a significant effect upon behavior overall, and mandatory clawback provisions end up transferring what would have been bonus pay into salary. Furthermore, to the extent that long-term compensation does affect behavior, these consequences are not necessarily good. I show that given fairly reasonable assumptions of executive risk aversion, the information content of long-term and short-term price signals, and managerial control over the timing of project execution and disclosure, a long-term focus can have significant negative effects.

* Sylvan Lang Professor of Law, University of Texas School of Law and Professor, McCombs School of Business, University of Texas at Austin. For helpful comments, I would like to thank Sharon Hannes, Holger Spamann, and Jesse Fried.
One crisis, two crises...the subprime crisis and the European sovereign debt problems

Abstract

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The occurrence of financial crises became more and more frequent in nowadays economies\textsuperscript{1} (Bordo and Eichengreen, 1999) and seems to shape the contemporaneous economic and financial environment since the 1980s. The most recent example is the current European sovereign debt crisis that immediately followed the subprime crisis. In 2007, the subprime crisis started with a real estate crisis. An increase in interest rates combined with a decrease in house prices led to an explosion of default rates on subprime mortgages. Many banks found themselves on the verge of bankruptcy or even got bankrupt. The process was amplified by the various securitization practices built up on these defaulting mortgages, increasing banks’ exposure to financial markets. Developed countries governments were thus forced to implement various rescue plans aimed at avoiding market panic and restoring investors’ confidence. These financial packages mainly consisted in capital injections, liquidity provisions and guarantees. One major consequence was that some governments began to face difficulties to refund their own debt starting with the beginning of 2010.

Several studies tried to characterize the different crisis and the similarities/differences that can be established between them (Kindleberger, 2005; Reinhart and Rogoff, 2008; White, 2009; Claessens \textit{et al.}, 2010; Ureche-Rangau and Burietz, 2010; Hautcoeur, 2011). These comparative and historical

\textsuperscript{1}E.g. the American S&L crisis in 1980, the Black Monday in 1987, the financial and real estate crisis in Japan in 1989, the currency crisis in Mexico in 1994, the Asian crisis of 1997, the Russian crisis in 1998, the sovereign debt crises in Brazil and Ecuador in 1999, the dot com bubble in 2000, the sovereign debt crisis in Argentina in 2001, the subprime crisis in 2007…
approaches should allow a better understanding of the main causes that may explain the appearance of a crisis and hence, better forecasts, including sound policies that may help avoiding such financial troubles. However, Hautcoeur (2011) explains that even if financial crises may present numerous common points, they all have their specificities. The subprime crisis for example was drawn by complex financial innovations like securitization and massive use of credit derivatives, which was quite new with respect to previous financial crises. This argument may explain the difficulties in predicting financial crises even if the literature on the topic is large.

In this article, we focus on the link between the subprime crisis and the current European sovereign debt crisis. Our goal is to shed some additional light on the way the different rescue packages implemented by the Euro zone governments following the subprime crisis impacted the risk and hence, the cost of these European sovereign debts. While the literature on the causes and consequences of the different financial, economic and monetary crises is extremely dense, significantly fewer empirical works were conducted on link between a financial industry crisis and a sovereign debt crisis (remarkable exceptions include Reinhart and Rogoff, 2008; Candelon and Palm, 2010; Acharya et al., 2011, Areski et al. 2011 among others). As our objective is to empirically measure the relation between the rescue plans and the sovereign debt risk as measured by the interest rate spreads, we use the capital injections, central bank support and guarantees provided between January 2008 and September 2011 for a sample of ten European countries as proxies for the various rescue packages. We also include the impact of the stock market in our estimations. All our data was hand collected from a variety of available sources allowing cross-checks and robustness comparisons and organized in a monthly database. This monthly database is one major contribution of our work. Furthermore, in order to be able to use a monthly database, we also transformed quarterly GDP series for our sample of ten countries into monthly figures. Finally, we implemented a panel data analysis to measure the impact of our different explanatory variables on the evolution of the interest rate spreads of each country in the sample with respect to the German 10-year interest rate that states as our benchmark.
Our study provides three major results. First of all, three out of our four explanatory variables have a significant impact. Capital injections and guarantees contribute to an enlargement of the interest rate spreads, i.e. they increase the cost of the sovereign debt service. On the contrary, stock market prices are negatively related to interest rate spreads. Stock market drops and their associated high volatility translate into higher risks associated to sovereign debts and hence, larger risk premiums. Second, the only explanatory variable that is not statistically significant is the central bank support. We explain this result by the difficulty to collect clear-cut relevant information on this variable in the Euro zone. Finally, this article shows direct empirical evidence on the link between the banking crisis and the European sovereign debt crisis.
Mega-Banks’ Self-Insurance with Cocos: A Work in Progress

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Summary

When contingently convertible debt securities trigger and convert into common equity well before the capital ratio of a financial institution has reached its regulatory minimum, they are known as going-concern or go-cocos. Their objective is to recapitalize an institution under stress and not to facilitate its resolution as would be the task of low-trigger goners-cocos. Because cocos are an “infant instrument” that grew out of the 2007-2009 crisis, few of their design features, their tax treatment or role in bond indexes are settled. Their portfolio fit with unsecured senior non-contingent debt on the one hand and common equity on the other is also an open question. Its resolution has much to do with how adding go-cocos may affect debt overhang in a firm.

This paper attempts to clarify such underexposed open issues. Its chief contribution, however, lies in sifting through the experience with cocos triggers and conversion methods in order to link both actual, and one proposed, conversion methods to the recovery rates on cocos likely to be obtained from the common shares received by conversion. Experimenting with sparsely parameterized survival patterns that reach specified survival-rate levels after 10-years, and with the implied hazard rates and default rates conditional on survival, then allows a schedule of CDS premiums to be derived. These provide insight into the competitiveness of pricing the loss-of-value risk in go-cocos, instead of in the common-equity premium, over AAA-rated bonds.
THE VALUATION OF FIRMS IN TAIWAN’S BIOTECH INDUSTRY

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ABSTRACT

Investing in the biotech sector involves considerable risk because historically more failures than successes have been observed. However, Taiwan biotech stocks remain attractive to investors hoping for a potentially huge return within a very short time period. Given the innovation-driven nature that differs from many other business models, firm valuation in this sector does not only involve financial factors commonly used for estimating corporate value, but also certain non-financial factors such as intellectual property, patent, and R&D activities.

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Our study aims to explore appropriate measures for biotech firm value, and the relationship of various financial and non-financial factors to this valuation. Considering the trend in pursuing opportunities in today’s global markets (e.g. China’s market), we place our emphasis on Asia's growing biotech industries. We choose the sample of biotech companies in Taiwan for investigation because we consider the development of this industry may provide an interesting comparison with the more developed biotech industry in North American and Western European countries. For instance, supportive government involvement and regulatory policies have played an important role in the growth of the biotech sector in Taiwan. These factors need consideration when measuring firm performance.

Our analysis focuses on the time period of 1996 through 2009, where the techniques of multiple Stepwise Regression and Back-Propagation Neural Network (BPNN) are used to analyze the data. The goal is to provide evidence of whether a relationship exists between various financial and non-financial factors and six criteria we use to measure corporate valuation (operating profit margin, net income ratio, ROE, ROA, Tobin’s Q and stock price), and if such relationship does exist, how this relationship can be identified using certain financial and non-financial factors combined. Using stepwise regression, we have found that based on how accurate the criterion can be predicted, operating profit margin comes first, followed by ROE, ROA, net income ratio, Tobin’s Q and stock price; however the BPNN method leads to a different order of operating profit margin, Tobin’s Q, net income ratio, ROA, ROE, and stock price. Operating profit margin consistently is considered as the no.1 predictable valuation measure. Further, BPNN shows an improvement over the regression method in terms of overall error in predicted values.
Our result offers valuable input not only for US biotech industry and regulators (e.g. how regulations may impact developing biotech companies), but also for biotech investors interested in international markets (e.g. what environment variables should be considered when investing in/collaborating with biotech businesses overseas). Additionally, we have explored and presented the application of different quantitative methods to measuring firm value such as regression and BPNN. This demonstration should be of interest to practitioners in the field (e.g. financial analyst) as well, since it provides a useful tool for estimating and/or forecasting firm value.
Can we profit from momentum within a diversified portfolio?
- Evidence from European stock markets.

Abstract for GFC 2012

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Abstract

The anomaly profit from traditional momentum is firstly documented by Jegadeesh and Titman (1993, 2001), in which past winners continue to outperform past losers by around 1% per month. Since then, researcher subsequently discloses that momentum profits from individual stock returns exist in not only the United States, but also in European (e.g. Rouwenhorst (1998)) and emerging markets (e.g. Fong, Wong and Lean (2005) and Chui, Titman and Wei (2010)). This traditional momentum approach has been challenged by new momentum approaches: the 52-week high momentum (George and Hwang (2004)) and the intermediate horizon momentum (Novy-Marx (2010)). They point out that momentum strategies based on the 52-week high prices or the intermediate horizon are more profitable than the traditional strategy. Marshall and Cahan (2005) disclose 52-week high momentum profits in the Australian stock market; Liu, Liu and Ma (2011) demonstrate 52-week high momentum profits for 20 countries, but remark the market state-dependence of these profits.

Since the comparison among these three strategies has not been documented, “Does the profit exist in the momentum strategy? Can we profit from these strategies? And which one is more efficient?” these questions motivate us to start discussion from investigating the performance and efficiency of the traditional, the 52-week high and the intermediate term momentum strategies. We apply the three kinds of comparison methodology to evaluate the momentum benefit: Sharpe ratio test (Jobson and Korkie (1981)), a modified stochastic dominance test (Linton, Maasoumi and Whang (2005)) and cross-sectional dummy regression on the winner and loser variables in each strategy (George and Hwang (2004)).

Apart from most of the existing studies on individual stocks, we would like to see whether momentum exists in comparatively fine industry level across countries. Because existing research has shown intensive evidence on significance of momentum strategies based on individual stocks, we use the finest industry classification in Datastream to check the change of momentum after the first aggregation from the individual and see whether momentum is still significant in aggregation level.

Moreover, comparing to investing in an individual stock, diversified portfolios are generally less risky and more stable. So, globalization and integration of many financial markets over the past decades motivate an increasing number of investors and portfolio managers to trace profits from international investments and portfolios. Under this circumstance, diversification cross countries or across industries is a question in front of the international investors. Which effect outperforms in momentum, therefore, determines the investment direction of international momentum strategy.

Our sample covers the major 17 European markets, over the period January 1990 to December 2011, i.e. Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. Considering data availability, we use the MSCI Europe as the representative of European market index. The risk-free rate is the three-month Germany FIBOR rate. The momentum is constructed on the monthly returns.

In order to make our results comparable, we use 12 months ranking period, no-skipping period and 1 month holding period momentum strategies and consider the top 30% to be the winners, the bottom 30% to be the losers. The results of our portfolio returns shown are based on equally-weighted average momentum portfolio returns.
Our findings show that the first step aggregation from individual stocks to the finest industry indices does not change the significance of momentum across three strategies. Especially the returns of these strategies remain similar to those in existing papers on individual stocks, sometimes even better.

The traditional (JT) momentum generate monthly zero-cost return rate 1.19%, while 52-week high momentum strategy accounts for 0.71% and intermediate-term momentum for 0.90% over the entire sample period. These momentum mean returns are all significantly different from zero at 1% confidence level after adjusted heteroscedasticity and autocorrelation. Among these three strategies tests, the traditional momentum performs better than the intermediate-term momentum strategies generally. Both of them outperform the 52-week high momentum. These results remain consistence over three tests.

The debate of the industry effect on momentum strategy is another important issue in momentum research. For instance, Moskowitz and Grinblatt (1999) document industry effects by aggregating the individuals to industry level, and show that industry momentum strategies are more profitable than price momentum strategies. Menzly and Ozbas (2004, 2009) further document potential connections between industries and their inter-predictability. Grundy and Martin (2001), however, contradict the importance of industry effects on momentum strategies. Furthermore, Nijman, Swinkels and Verbeek (2004) construct 196 portfolios and identify country, industry, size and value and individual firm effects contribution to momentum profits. Their results show that the individual stock effects are the main driver in European momentum strategies, downplaying the industry effect on. Naranjo and Porter (2007), focus on European and emerging markets and show that industry effects are not able to explain the co-movement or correlation of country-neutral momentum returns.

At the same time, European integration and globalization have increased the correlation among countries, and country effect was proven to be a proxy for industry effect, reflecting the differences in industrial composition of countries (De Roon et. al. (2012)). We therefore wonder whether this tendency influences the impact of the country and industry effect on momentum profits. Therefore, we analyze the higher aggregation level to countries and industries.

We present the country and the industry momentum in the traditional strategy\(^1\). Both the country and the industry momentum are less than the momentum from the finest aggregation level over three strategies. For example, under the traditional momentum strategy, country momentum is not significant, while the industry momentum is significant at 10% confidence level but half of the finest result.

Besides, the time-varying feature of momentum has been documented by existing literature. Along with the globalization and European integration, industry effect has been found increasing even exceeding country effect. It is not only a debate prevail in momentum research but also a question when we compare the country momentum and the industry momentum. As a result, we investigate this feature and the driven force during the aggregating process.

In addition, the time-varying trend is obvious. The finest industry momentum was not significant in the first decade of sample period but significant in the second decade. In contrast, the industry momentum that existed in Europe during the 10 years became less for the past 10 years. The country momentum is not significant at all.

\(^1\) The result in the 52-week high and intermediate-term keep consistent with the traditional strategy.
Commodity Futures Prices: 
More Evidence on Forecast Power, Risk Premia and the Theory of Storage

Chris Brooks, Marcel Prokopczuk and Yingying Wu *

Recently, commodities have caught much attention due in part to the booming economies of developing countries. Apart from their hedging function for commercial traders, commodities are regarded by investors as good alternative investment vehicles due to their low correlations within commodity subgroups and with other asset classes. Knowledge of commodity futures pricing helps investors to understand the underlying risks and to compose optimal portfolios. Different from other asset classes such as stocks and bonds, commodities have their own features and are less explored. Each commodity has its own market where its price is determined by the forces of supply and demand.

Futures contracts written on commodities embed a unique component - the convenience yield - which accrues to the physical holder of commodities that could be used as inputs to production in the case of an unexpected demand shock. A long lasting discussion has concerned the question as to whether commodity futures prices contain a positive, negative or zero risk premium. Commodity futures pricing theories have been examined from many different perspectives.

The relatively less debated theory of storage is built on the foundation of the time value and net return from physically holding the commodity. The convenience yield, describes the linkage between the current inventory level and the future scarcity of the commodity. Nevertheless, empirically, one big problem is that the convenience yield is not directly observable and good inventory data are not easily available. Fama and French (1987), denoted FF hereafter, therefore propose an indirect approach to test the theory of storage and find

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supportive results\textsuperscript{1}.

Another body of literature aims to address the question of the existence or absence of a risk premium in commodity futures markets (risk premium theory). This issue originates from the theory of normal backwardation proposed by Keynes (1930), where the term structure of commodity prices is attributed to the greater hedging pressure of commodity producers who need to sell the commodity, which was indeed the case in the 1930s in the UK \textsuperscript{2}. Under the implicit assumption of a net long position, the normal backwardation theory states that higher demand from short hedgers to transfer price risk leads the futures price to be below the expected spot price. The difference between the expected spot price and the futures price represents a compensation to market participants for bearing risk (a risk premium).

In this paper, we extend the empirical work of FF testing the two commodity pricing theories, in several directions. First, the empirical tests performed by FF had limited power due to their limited data availability. Therefore, now 25 years later, we are able to extend their sample period. Second, we also extend the universe of commodities analyzed by considering the heavily traded commodity subgroup of energy futures contracts. Given that FF’s work has become regarded in the literature as the definitive study of this topic and that their results are routinely cited by others, a re-examination of the robustness of their findings is long overdue. Using the same methodology as FF has the big advantage that our results are directly comparable with theirs. Third, apart from extending the data under study, we also analyze time-varying patterns and possible structural breaks in the series. Fourth, we investigate the causal relationship between seasonality and the forecast power of the basis. Our results show that over a longer time scale, evidence of seasonality in the basis is enhanced, which supports the theory of storage. In testing for forecast power and risk premia, stronger evidence, mostly for seasonal commodities, is found regarding the forecast power of the basis while the evidence for time-varying risk premia is less consistent and inconclusive. By analyzing the 12-month basis, the causal relationship between the seasonality and forecast power in the basis is rejected. Moreover, structural breaks are detected for energy commodities in the forecast power tests, only parallel movements are detected, illustrating that the forecasting power of the basis is stable over the different economic environments investigated. Finally, several robustness tests confirm our findings.


Do Investors See Through Accounting Profitability and Recognize Efficiency? Evidence from Chinese Listed Companies

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This paper studies the accounting performance measure, profit efficiency and investor valuation of 1,156 Chinese firms listed in Shanghai and Shenzhen Stock Exchanges between 1999 and 2007. Profit efficiency is defined as the ratio of actual profit realized to the optimal profit described by stochastic frontier approach. Controlling for industry effect throughout, I estimate a robust ordinary least square model for accounting performance measures (ROA) and find negative skewness of the residuals. The existence of profit inefficiency is evident.

In the main body of empirical tests, a year-by-year cross-section stochastic frontier analysis documents a declining pattern of accounting performance and a contrastive increasing tendency of profit efficiency. Linking the market-to-book ratio to profit efficiency illustrates a significant empirical relationship that Chinese investors reward firms of higher efficiency with higher market valuation. The over-time improvement of efficiency is also associated with increased market
valuation. The empirical results are robust to alternative distributional assumptions of
the efficiency term and measures of accounting profitability and market valuation.

The major contribution of this study lies in a comprehensive and updated
examination of efficiency and market valuation of Chinese listed firms using
stochastic frontier analysis. It fills in the gap in research on the level and change of
profit efficiency of public firms after China’s privatization, and more importantly,
whether and how the change in such efficiency is captured by the fast growing capital
market in China. This study also provides an explanation from the view of efficiency
to reconcile the inconsistency between firm accounting performance and investors’
valuation in Chinese stock market.

Key words: performance, profitability, efficiency, stochastic frontier, Chinese
listed firms

JEL classification: G15, M11, M16, P34, O16, O53
FINANCIAL REPORTING IN RUSSIAN BANKS: A STUDY IN CORPORATE GOVERNANCE

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ABSTRACT

The Organisation for Economic Cooperation and Development (OECD) has established some benchmarks for various aspects of corporate governance. One benchmark involves the timeliness of financial reporting, a topic that has also been addressed by the American Institute of Certified Public Accountants (AICPA) and other organizations. The crux of the issue is that corporations should issue their financial reports in a timely manner so that stakeholders will have access to information before it becomes outdated. The present study examines the timeliness of financial reporting in the Russian banking sector and compares it to timeliness in the banking sectors of the European Union and the United States.

We determined timeliness by counting the number of days that elapsed between year-end and the date of the auditor’s report. Some data was obtained from www.rustocks.com, a website that contains a great deal of financial information about publicly listed Russian companies. Other data were gathered from the U.S. Securities and Exchange Commission website¹ as well as the websites of various U.S. and European banks.

The range for the Russian banks was 18 to 346 days, meaning that at least one Russian bank published its financial information 18 days after year-end whereas at least one Russian bank waited until 346 days after year-end. Russian banks took an average (mean) of 98.8 days to publish their financial information, compared to an average of 44.9 days for non-Russian banks. The respective median days were 104 for Russian banks and 59 for non-Russian banks. A Wilcoxon test found these differences to be significant at the one percent level (p <= 0.01). The chart below illustrates the relative timeliness for the two groups of banks.
The study found that it takes Russian banks significantly longer to report their financial results. This lack of timeliness may impede their ability to raise capital in foreign equity markets. More research is needed on this point. The failure to publish financial information in a timely manner may be a symptom of a more serious problem, the lack of a good system of corporate governance. If a company does not report its financial information in a timely manner, it likely does not follow many other corporate governance guidelines either. And since the banking sector of transition economies tends to be more highly advanced than other sectors of transition economies, it is likely that the other sectors of the Russian economy are doing an even worse job of publishing their financial information. More research is needed on this point as well.
Does Corruption Increase Trading Costs?

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Abstract

Numerous empirical studies in finance have focused on the ADR market because it offers a controlled environment to test the impact of institutional factors on security price behavior and trading costs. Specifically, because this market contains securities originating from a wide variety of countries, the consequences of country-level institutional factors such as investor protection laws or judicial efficiency may be studied effectively in this common setting. Our study focuses on one such institutional factor, corruption. Many countries are affected by this widely-acknowledged problem. The World Bank Institute estimates total bribes (a form of corruption) to be around $1 trillion per year, indicating the economic significance of the problem. Despite its significance, corruption has not been examined to the same extent as other institutional factors affecting ADRs. We conjecture that a high level of corruption in a foreign country increases information risk to ADR investors and that this information risk will be reflected in trading costs.

Using a sample of foreign firms traded as ADRs in the U.S. markets, we examine the relation between country-level corruption and equity trading costs. We show that country-level corruption has a significant impact on trading costs. Specifically, we find that ADRs from countries with less severe corruption tend to have narrower bid-ask spreads, greater market depth, higher market quality index, smaller price impact of trades, and lower adverse selection cost of
trading. Our results are robust in tests using country-averaged variables and tests using an alternate corruption measure. Overall, our results are consistent with the conjecture that country-level corruption creates greater operating and governance-related risks, thereby exacerbating the information asymmetry problem and increasing equity trading costs.

*JEL classification:* D73; G14; G15; G30

*Keywords:* Corruption; Trading cost; Information asymmetry; ADR; Bid-ask spread