Evaluating the Systemic Risk and Its Impact on Profitability and Liquidity; Evidence from European Countries

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Abstract: The objective of this research study is to establish if there is systemic risk and its impact on profitability, liquidity of the banks in Europe. This study used various financial performance ratios of 50 banks operating in different European countries to investigate if such relationship exists over seven year period.

Before working on evaluating the systemic risk we need to know that in order to shape up the financial structure of any firm, the operating performance is of crucial importance. It is expected that the outcomes of this research are of importance both to investors as well as bank managers, as these findings will help them in fully analyzing the effects of various strategic choices keeping in view related to risk profile of banks. Some implications of the potential policy which based on the new capital requirements in view of the risk-leverage relationship have also been discussed in this dissertation.

Keyword: Financial Risk, Business Risk, Profitability, Liquidity

1. Introduction

This chapter defines main purpose of the topic. It states the aim/scope, the concept of systemic risk, the motivation of choosing this research topic, Objectives, Study Focus, and Purpose of findings.

1.01 AIM / SCOPE

Systemic risk and business behaviors are a recent active research area in Europe. The proportion of risk assets such as stockholding in European nations for example, Germany, France and England has been increased than that of Japan and United States. The systemic risk has remained a topic of deliberation in economic debates since its emergence i.e. 2007 and now the on-going financial crisis has recently become the major topic under discussion in most national and international economic summits and forums which proves that it is not a new phenomenon anymore. Franklin et al (2007) stated while stressing on financial history of Western Europe, “that systemic risk is not a new thing to western Europeans. Europe has been experiencing systemic risk in almost every decade within the last 400 years.” The author further documented that in 1866 UK had faced banking crises and that Germany and France had also experienced banking crisis between the period of 1870 and 1933 that happened because of systemic risk involved. According to Gorton (1988) “US experienced consistent banking crises between the periods of 1873 – 1914”.

1.02 The concept of systemic risk

Systemic risk incorporates a wide range of features and may vary accordingly. For instance; market infrastructure, financial institution, an instrument, a market or a segment of financial system can be the carrier of systemic risk, can be affected by it, and can be the origin of it as well. It is very difficult to analyze if the magnitude of a situation is, or going to be systemic, as it happens in some chaotic conditions, as some dynamic changes might be behind the assessment when it affects some parts of the system and there is a high chance of underestimation bias is involved. Systemic risk can be having its origin inside or outside the financial framework or it can come about because of the interconnectedness of specific financial foundations and budgetary markets and their exposure to the real economy” (Szpunar, 2012).

This effect is most of the times present in the functions of financial system. Therefore, it is very crucial to measure the effect of the systemic risk as a measurement tool of the financial framework functions’ impairment. Systemic risk can be exogenous, that is, originating from outside the financial framework or endogenous, emerging from the mutual behavior of financial establishments (or one of them – SIFI). Obviously it is hard to differentiate between the sources of systemic risk as these two risks may imbricate and a sudden upsetting inside the framework which is enlarged by the system could both end up destroying the major parts and even the entire system, or it goes on ruining the real economy.
1.03 The motivation of choosing this research topic
The motivation behind choosing this topic emerges from the expected results from the newness and also the uncertainty of this risk supervision in banking, as well as from the importance of this activity so as to safeguard the solidity of the banking system in specific and financial system in general. On the one hand, systemic risk management requires orientation of supervision to monitor the situation and evolution of national banking systems as a whole combined with the monitoring of monetary policies and the micro prudential supervision of banks. On the other hand, the real system interacts heavily with the banking system which generates repercussions on the banking and financial stability.

1.04 Objectives
A very crucial feature related to risk is systemic risk in relevance to the financial securities that is also analyzed factually in the past studies and is also debated in financial theories. Beta factor plays a vital role in figuring the systemic risk because it formulates alliance in between stock market and company decisions. The financial crisis has badly affected the global economy. It has been considered as the post depression worst crises in 1930s due to its harsh blow on the financial institutions around the world and the global economy as a whole. Because of this, numerous banks inside the euro zone and America have gotten bailout reserves keeping in mind the end goal to guarantee congruity of their operations and the nations like Portugal, Ireland, Spain, Italy and Greece needed to actualize some starkness monetary arrangements with a specific end goal to draw in bailout store from the European national bank. Lives of customary individuals have been antagonistically influenced as unemployment rate continues taking off bringing about vulnerability about what’s to come. The worldwide budgetary emergency has brought on the ruin and setbacks to some surely understood and trusted financial institutions, for example, Lehman’s Brothers and UBS in the Western world. As these financial institutions speak to the foundation of western economies, it has represented a noteworthy test to political initiative of the western world. (Barry et al 2012).

2. Literature Review
In Literature review, we explain the various researchers’ opinions. In this chapter main topics going to be discussed are systemic risk and its determinants, the major determinants of accounting for systemic risk in main banking sector, most significant indicators of bank systemic risk are size, asset to long-term liabilities ratio and equity capitalization. European banks reflect overflow impacts of US financial crisis. Biggest expansion in adding up to the systemic significance originated from Spanish and Italian bank, the main evaluation of the risk pertains to liquidity an endeavor to distinguish the evaluation of liquidity risk creation, Capital impact on bank liquidity creation and others.

2.01 Systemic Risk and its determinants
Systemic risk and its indicators are generally examined in financial writing and are viewed as a standout amongst the most intriguing topics in banks related researches and studies. The Capital Asset Pricing Model (CAPM) proposes a straight correlation amongst the beta and the required rate of return of any stock (Sharpe, 1964). As it is obvious that the rate of return of required stock from the perspective of an organization likewise develops the expense of equity capital, the elements which influence an organization’s systemic risk in the meantime by implication impact the funding cost of the organization, and in addition to its market value. As already mentioned the significance of beta and CAPM in financial investigation, that’s not astonishing that the indicators of an organization’s systemic risk are widely studied.

2.02 Primary systemic risk determinants in banking sector
The current research goes for maximizing the proof emerging out of the current writing for verifying the primary accounting elements of the systemic risk in the banking division. Discoveries relate to the European settings particularly, our evaluations centered on market and accounting sector panel information of European bank’s. Financial indicators’ are investigated as “could be” factors which determining the systemic risk of the banks’.
(1) Book leverage (2) Book value of total assets (3) Liquidity Ratio (4) Loan to Asset ratio (5) Loan Loss Ratio (6) Intangibles to assets Ratio and, (7) Earnings per share

2.03 Important determinants of the bank beta are 1) Dividend yield 2) Size 3) Asset to Long term Liability Ratio 4) Equity Capitalization.
Determinants of Systemic risk have been broadly talked about in past studies. The Capital Asset Pricing Model, created by William Sharp in 1964, constituted a memorable breakthrough in current financial hypothesis, principal hypothetical model to acquaint security sensitivity with market risk that is the systemic risk or beta, as a fundamental
determinant of its required rate of return in an all around broadened investment portfolio setting. A couple of years prior, Miller and Modigliani (1958) had built up the General Equilibrium Model on Corporate Capital Structure, that also influences advanced financial reasoning.

2.04 European banks reflects overflow impacts of the US monetary emergencies
The movement in the marker for the banks of Europe in 2008 and 2009 shows overflow impacts of the financial crisis in US. That also proposes the anxiety was for the most part because of increased liquidity storing and risk aversion in the worldwide financial markets. To start with, the systemic risk marker for the banks of Europe is lifted in the sovereign debt crisis and the financial crisis; however the indicators of systemic risk amid those phases seem to vary.

2.05 Biggest expansion in commitments to systemic significance has originated from Italian and Spanish bank
The lifted systemic risk of the banks of Europe amid the crisis of the sovereign debt achieving its stature in 2011 was to a great extent because of expanded default risk. Systemic risk promptly extended due to the understanding named as “Greek bailout”, and the systemic risk of the banks of Europe quickly rose to its most key top with the disentanglement of the European obligation emergency. In 2011, the European banks’ Physical default probabilities climbed stunningly that also focuses on certified dissolvability hazard in terms of a basic supporter to the advancement of systemic risk. Because of their having a place of fringe European sovereign obligation, banks were confronted with honest to goodness dissolvability risks from their benefit reports. Due to the extra liquidity implantations from the ECB European Central Bank, Systemic risk just started to reduce at the end of 2011.

3. Methodology
As defined in the literature review about evaluating the systemic risk, we now need to define the evaluation process. For this explanation, the smooth process has been defined in methodology which explains the rules and overall agenda. This study will help European Government and its offices in coming up arrangements. In view of hypothesis and past banking literature proof, I have tried an extensive variety of accounting indicators as would-be prudent evaluators of the European banks for systemic risk. Through a one by one relapse procedure, we at last constrained our research to the accompanying six markers which are; (i). Measuring Size, (ii). Measuring Financial Leverage, (iii). Measuring Liquidity (iv). Measuring profitability (v). Measuring business strength (vi). Measuring business operating efficiency.

3.01 Variables in this Study
Six variables have been utilized as a part of past exact researches on systemic risk evaluations. Assets turnover (AT), quick ratio (QR), equity ratio (EQR), return on assets (ROA), dividend payout ratio (DIV), EBIT growth (GRW), and total assets (ASST), these five were main part of Border’s 1998 study. Equity ratio is measured of influence was a proportion of aggregate value to aggregate resources. Likewise, assets was net salary isolated by aggregate resources, was a measure of gainfulness belongs to aggregate venture. The annual profit installments to whole pay are the dividend payout ratio. Growth of EBIT was the yearly change of rate in EBIT. Assets turnover ratio was all out income divided by total assets, demonstrating the proficiency of utilizing advantages for deals income. At long last total assets were utilized compare through the size of the firm.

3.02 Banking networking and simulation methods
Banking administration and recreation techniques are effortlessly translated by market analysts, it indicates obviously the structure of banking segments, distinguishes sources of systemic risk. In examining the progressions of systemic risk starting with one financial organization then onto the next; it is vital to recognize three principle wellsprings of risk: the conduct of indebted person banks, leaser’s banks and delegates’ banks, on account of likelihood of default of one bank depends upon its introduction in another defaulting bank.

3.03 The symbol wise indicator
The symbol wise indicator shows in below table with their ratios for calculations. For this purpose I have done the same ten ratios on one hundred banks on their five year data and the total ratios rose to five thousand. Illustrative variables tried in the study
3.04 Investigation of the Data and Comparison Techniques

The accounting indicator shows banks’ estimation aggregate resources that can be used as variable which is bank size. From one viewpoint, a negative relationship is not out of the ordinary since bigger banking establishments have a scale upper hand over little ones, are more differentiated and profit by the verifiable government ensures given by the too-big to-fail (TBTF) guideline. Then again, the size impact may positively affect the banks’ danger appraisal shows bigger establishments frequently highly presented to different certain bank-particular risk profile, for example, credit and working risk to exchange scale risk and systemic risk coming about because of basic stuns to the fiscal structure(Rosenberg and Perry, 1981; Vander Vennet et al., 2005). Hypothetically, to the degree that the money streams created by various bank exercises are not flawlessly related, expansion ought to build income laziness along these lines reduced banks systemic risk presentation. Various studies demonstrate that bank systemic risk exposure is not influenced by increase in non-bank exercises (Templeton & Severiens, 1992; Demsetz & Strahan, 1997), while others show the prevalently positive impact impact of broadening on banks’ business sector beta which is totally opposite to what we actually expect. (Vander Vennet et al., 2005).

3.05 Profitability and Liquidity Impacts Calculations

At last, we explored regardless of whether high profitability levels furnish bank with an auxiliary fence against weakening in financial market situations. In particular, we observe a negative relationship among a bank’s general benefit or profitability and its systemic risk, since banks with higher edge limit ought to have less unstable benefits. Benefits are actually measured by the earnings per share marker (EPS).

3.06 Sample Data and Data Study Worth

Populace of current study is 50 recorded banks in European nations. I have utilized the information of 50 banks from (2009 – 2015) by utilizing helpful sampling. Information utilized as a part of current study is accessible on sites and Balance sheet examination through soft- trax programming. Mainly the purpose of this research is to check the systemic risk and define the impact on profitability and liquidity.

4. Data Analysis, Results & Discussion

This chapter expresses the value of data which can be checked by using different tools. With a specific end goal to break down accumulated information, we plan to utilize measurable programming like E-
views and STATA that run results like descriptive, correlation, R square, t-statistics, probability, CoVAR. The information will be exhibited through each and every result as per generate in e-views and from other tools. We considered a wide range of banking foundations, and for every banking institution, main accounting ratios are acquired to the annual united pay statement and balance sheet, even as value systemic risk are assessed by the relapsing banks day by day profit on stocks.

4.01 Data and Variable Definitions
Panel information is utilized as a part of current study. Panel information gives an impact of times arrangement and cross sectional information. A basic effect model has been utilized for assessing the speculation. The equations are:

PROF<sub>it</sub> = β<sub>0</sub> + β<sub>1</sub> Size + β<sub>2</sub> LEV + β<sub>3</sub> BOE + β<sub>4</sub> BS + β<sub>5</sub> SR + e

LIQ<sub>it</sub> = β0 + β<sub>1</sub> Size + β<sub>2</sub> LEV + β<sub>3</sub> BOE + β<sub>4</sub> BS + β<sub>5</sub> SR + e

Where an observation shows;
SIZE=Size, LEV=financial leverage, LIQ=Liquidity, PROF=Profitability, BS=Business strength, BOE=Business operating efficiency

As effectively watched, the current research investigates bank particular accounting calculations that connect fundamentally through stocks business risk that is value beta, in the European banking segment. I have also measured a wide range of banking foundations. With a specific end goal to break down accumulated information, we plan to utilize measurable programming like E-views and STATA that will run results, relapse and such. The information will be exhibited through each and every result as per generate in e-views and from other tools.

4.02 Data Analysis
As mentioned in methodology the main indicators with symbol and their measurements for calculations, the purpose of the showing indicators are relevant to the purpose of calculating the measurements.

One of the other indicators of systemic risk is financial leverage (LEV) as per the classical theory which also helps developing a positive relationship among equity beta and leverage. This assessment based upon the leverage ratio like book ratio estimation of debt and book estimation of equity (book leverage). Hypothetically, this standard degree becomes the reason of cash flows. One of the findings that show that systemic risk can’t be affected by non bank exercises’ advancement (Templeton & Severiens, 1992; Demsetz & Strahan, 1997), has been opposed in another study wherein it is thought to have positive impacts on bank. (Vander Vennet et al., 2005). Our observation shows that the liquidity ratio (LIQ) goes as an intermediary for bank systemic risk, whether it is the money proportion and balanced to total assets. Lower money related misfortune is also linked with the higher liquidity of a bank which carries bad or negative impact on the ratio of liquidity in a bank.

Rundown insights of the explanatory variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROF</td>
<td>11.55</td>
<td>8.99</td>
<td>71.31</td>
<td>(0.42)</td>
<td>14.48</td>
</tr>
<tr>
<td>LIQ</td>
<td>1.48</td>
<td>1.53</td>
<td>2.11</td>
<td>0.05</td>
<td>0.38</td>
</tr>
<tr>
<td>BS</td>
<td>3.94</td>
<td>2.84</td>
<td>10.00</td>
<td>1.00</td>
<td>2.79</td>
</tr>
<tr>
<td>BOE</td>
<td>0.15</td>
<td>0.11</td>
<td>0.98</td>
<td>(0.72)</td>
<td>0.23</td>
</tr>
<tr>
<td>LEV</td>
<td>9.50</td>
<td>8.04</td>
<td>36.27</td>
<td>0.04</td>
<td>7.15</td>
</tr>
<tr>
<td>SIZE</td>
<td>6.25</td>
<td>6.39</td>
<td>11.67</td>
<td>0.39</td>
<td>1.99</td>
</tr>
</tbody>
</table>

As mentioned in above table the values in each variable shows that the trend of data is very clear and near objects like the values of mean in same variables same as minimum and maximum values show the trend of data values.

4.03 Comparison with Gu and Kim (2008) Results
Like the investigation of Kim and Gu (2008), its concentrate additionally discovered assets value a net worth evaluation of the firms systemic risk, recommending the more efficient in utilizing asset to create return which decrease the risk. Kim’s and Gu study utilized clubhouse company as the example, though present research restaurant
companies that have working components entirely not the same as casinos.

4.04 Cross Examination of European countries
At the end of the sample, Spain and Italy are the two countries with the higher amount of total shortage, 2.235 million and 2.101 million respectively, whereas European Russia and Germany have no shortage. Indeed, the Greek shortage reached its peak of 2.811 million euros in this table on December 31, 2009 during the sovereign debt crisis and declined to 349 million euros on December 30, 2011. The result captures the bailout of the Greek economy, which started in 2010.

4.05 Relationship between Systemic Risk Management and Bank Performance
According to various authors and researchers, systemic risk is most noteworthy of all related risks related to size of potential losses. As the augmentation of credit has dependably been at the center of banking operation, the center of banks’ risk management has been systemic risk management. At the point when banks deal with their risks better, they will motivate favorable position to expand their performance (return). The banks additionally get more chances to build the productive assets, prompting higher bank profitability, liquidity, and solvency. (Tandelilin, Kaaro, Mahadwartha, Supriyatna, 2007).

4.06 Discussion on Results
The liquidity (LIQ) and profitability (EPS) coefficients are an inverse and measurably significant at 1%, giving proof that higher liquidity and profitability stage brings down a banks systemic risk. Driven outcomes from them are not different because of high performing and liquid firms are by and large seen, ceteris paribus (CP), as fewer unsafe than banks’ with terrible economic performance or low liquidity level. I have also mentioned a solid and positive relationship between a bank’s equity beta and BOE i.e. its business operating ratio which is statistically significant as it works as an intermediary for banks’ upgrade level, as assumed in this research paper Less or no profit activities do not take place where there is a high credit portfolio with relative to total assets. Subsequently, our relapse model shows an inverse relationship among banks’ systemic risk and the level of income expansion.

4.07 EPS to Other Variables
The first case in taking earning per share/profitability as dependent variable and the rest of the four variables take as independent variable to check the stability of banks and check the ultimate effects on profitability. So, the results given show positive impact as probability factor shows zero and the R-squared made at around one, also the Durbin Watson test consists on value two.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>11.24805</td>
<td>2.043316</td>
<td>5.504802</td>
<td>0.0000</td>
</tr>
<tr>
<td>BS</td>
<td>0.075907</td>
<td>0.012188</td>
<td>6.227823</td>
<td>0.0000</td>
</tr>
<tr>
<td>BOE</td>
<td>-0.049475</td>
<td>0.020659</td>
<td>-2.394794</td>
<td>0.0172</td>
</tr>
<tr>
<td>LEV</td>
<td>0.001112</td>
<td>0.000529</td>
<td>2.102254</td>
<td>0.0363</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.001421</td>
<td>0.001755</td>
<td>-0.056334</td>
<td>0.9551</td>
</tr>
</tbody>
</table>

Weighted Statistics

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.132649</td>
<td>Mean dependent var</td>
<td>0.006945</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.122593</td>
<td>S.D. dependent var</td>
<td>0.024572</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.023017</td>
<td>Sum squared resid</td>
<td>0.182773</td>
</tr>
<tr>
<td>F-statistic</td>
<td>13.19074</td>
<td>Durbin-Watson stat</td>
<td>2.677769</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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The results above show the value of C as each value of bank. As the estimation for the equation is PROF C BS BOE LEV SIZE as PROF in dependent variable and the BS BOE LEV SIZE are independent variables.

4.08 Liquidity to Other Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.832555</td>
<td>0.089538</td>
<td>9.298384</td>
</tr>
<tr>
<td>BS</td>
<td>0.148746</td>
<td>0.023253</td>
<td>6.396895</td>
</tr>
<tr>
<td>BOE</td>
<td>-0.095889</td>
<td>0.039409</td>
<td>-2.433172</td>
</tr>
<tr>
<td>LEV</td>
<td>0.004792</td>
<td>0.001009</td>
<td>4.748656</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.004299</td>
<td>0.003348</td>
<td>1.284120</td>
</tr>
</tbody>
</table>

The Third case is taking liquidity as dependent variable and the rest of the four variables taken as independent variable to check the strength and liquidity of the banks and check the ultimate effects on banks performance. So, the results given show positive impact as leverage factor shows zero and the R-squared made at around one, also the Durbin Watson test consists on value two.

In above results the values of C show each value of bank. As the estimation for the equation is LIQ C BS BOE LEV SIZE as LIQ in dependent variable and the BS BOE LEV SIZE are independent variables. Mean value of the data is 1.54 which shows the values of earning impact through size. SIZE and BOE variables are decidedly related with equity beta for all the relapse conditions and their assessed relapse coefficients swing out to be measurably important. EPS, LIQ and LLR pointers demonstrate a negative relapse coefficient which is very huge for most of the relapse models.

Correlations for Profitability and Liquidity

A positive relationship between the correlations and the absolute value of CoVaRs which is intuitive as we expect that if this relation is positive then correlation must increase as the correlation of the European banking indices with the countries’ index increases.

Correlation for liquidity aims to extract externalities embedded in the fundamental co-movement of financial institutions or spillover effects. CoVaR is measured as the VaR of a financial institution conditional on the VaR of another institution.

<table>
<thead>
<tr>
<th>PROF</th>
<th>SIZE</th>
<th>LEV</th>
<th>BOE</th>
<th>BS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROF</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>0.25</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>0.12</td>
<td>0.09</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>BOE</td>
<td>0.10</td>
<td>(0.00)</td>
<td>(0.20)</td>
<td>1.00</td>
</tr>
<tr>
<td>BS</td>
<td>0.06</td>
<td>0.31</td>
<td>0.02</td>
<td>(0.10)</td>
</tr>
</tbody>
</table>

Correlation for liquidity aims to extract externalities embedded in the fundamental co-movement of financial institutions or spillover effects.
5. Findings & Conclusion

This chapter defines the final conclusion and explains the findings on systemic risk and its evaluation impact on profitability and liquidity. Spain and Italy are the two countries with the higher amount of total shortage, 2.235 million and 2.101 million respectively, whereas European Russia and Germany have no shortage. Hence, the main objectives of this dissertation have been (i) to propose an adjustment of the popular market-based systemic risk measures (ii) to theoretically and empirically evaluate these measures with respect to their ability to capture systemic risk characteristics, and (iii) to measure changes in risk exposures across banks, as well as their commonality, which is a strong origin of systemic risk.

- **Propose a policy direction to identify and determine the accurate amount of loss absorbency**

The main advantage of this approach is to use publicly available data on stock returns and balance sheet components to propose a policy direction to identify and determine the accurate amount of loss absorbency.

- **Systemic risk measures miss the mark in getting the different parts of systemic risk**

Also concluded that Systemic risk measures miss the mark in getting different parts of systemic risk and this finding has been echoed by several academic studies (Löffler and Raupach, 2013; Tavolaro and Visnovsky, 2014; Idier, Lamé and Mésonnier, 2012). To extend this work, simple rankings based on these measures may be not accurate since the individual systemic risk contribution of two financial institutions could be not significantly different. Yet systemic risk remains a promising avenue of research, notably on the aspects that are about to be presented. The quantification of systemic risk is based on models and the inherent risk of those should be econometrically addressed.

- **Systemic risk measures should be defined**

To evaluate individual systemic risk measures, among others, Giglio, Kelly and Pruitt (2013) evaluate these measures in view of their capacity to foresee low quantiles of real macroeconomic aggregates. They show that, taken individually, these measures fall short to predict economic slowdown whereas an index based on those measures performs well. Most of derivative exchanges use central counterparties (CCPs). Acharya et al. (2009) have suggested that the lack of such clearing process for Credit Defaults Swaps (CDS), for instance, have significantly exacerbated the severity of the financial crisis because they were traded in bilateral transactions over-the-counter.

- **European Countries Insider Reviews**

Spain and Italy are the two countries with the higher amount of total shortage, 2.235 million and 2.101 million respectively, whereas European Russia and Germany have no shortage. This highlight emphasizes the Spanish and Italian distress during the year 2011 even if these sums were below those at the end of 2009.

- **Correlation analysis Impact**

Correlation analysis has demonstrated that low correlation is connected with debt leverage, growth, liquidity, operating effectiveness, profitability, and firm size in the banking division of Turkey. This study involves various strategic implications at various levels. Whereas, it seems very much suitable for Italian banks to keep up the level of liquidity and gainfulness and also build revenue from a systemic risk’s point of view, it is also assumed that Italian recorded banks would also likely to have some loan loss arrangements and varying accounting rules and its exposures. In general, the consequences of this paper propose that the systemic risk ought to be represented while plotting liquidity and capital controls, therein a mixture of both capital and liquid resources prerequisites and its full scale prudential direction will be considered as liquidity danger.

- **Micro level Judgment**

Our model catches a few channels of systemic subsidizing liquidity emergency. By using fundamental markers and inspecting bank-particular income limitations, we review the onset and improvement of liquidity anxiety in various stages. Focused on banks take defensive activities attempting to battle off a liquidity emergency, which may, subsequently, have a systemic impact. In particular, liquidity gathering abbreviates the wholesale obligation structure of various banks, while resource fire deals may impact the estimation of other banks’ advantages, which therefore can impact their financing conditions.

- **Mitigating Systemic Risk**

Perceiving the issue of systemic risk, financial firms have since quite a while ago coordinated to
point of limit dangers associated with the disappointments of other monetary firms. Securities and items trades emerged hundreds of years back to settle exchanges productively under fixed, clear rules. Like bank clearinghouses, trades diminish default hazard by requiring their people to meet least capital and revelation prerequisites in the event that an individual from the trade defaults, the different individuals bear that affiliation's commitments as demonstrated by the trade’s misfortune sharing rules. In this manner, enlistment prerequisites and misfortune sharing plans diminish the danger that defaults by one firm will inimically impact different people of the trade. Thusly, a firm whose disappointment postures systemic risk will tend to carry on less wary than the general public would hunger for and, from this time forward, government association may be vital to restrain systemic risks.

6. Limitation
Restricted access to the data is the significant confinement of this report, as the fundamental wellsprings of data is the yearly report. In audited quarterly reports organizations normally give those data which produce positive ideas about the organization and presentation of the data in their own specific manner clearly is a key constraint if there should arise an occurrence of outline of the accurate situation.

7. Recommendations
As a researcher, it is my responsibility to suggest for the further research in this area. There are more than 20sector firms in European Stock Exchange, this study only considered banking sector for the study so further researchers can do their research in other different sectors and also they can do the research in the same sector with 100% sampling for the accurate findings. In this study I considered only regression and correlation analysis so other analysis part can be done by other researchers and the researchers can use other different latest statistical packages. Finally, the debt structure of the financial institutions could be explored all the more nearly, since it is the level of short-term debt that is pivotal while deciding the robustness of the financial institutions.

Reference


