# PalArch's Journal of Archaeology of Egypt / Egyptology

# FINANCIAL STABILITY IN THE BANKING SYSTEM OF EMERGING ECONOMIES

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Aisha Saleem Aljehani, Rozina Shaheen. Financial Stability In The Banking System Of Emerging Economies--Palarch's Journal Of Archaeology Of Egypt/Egyptology 18(13), 652-660. ISSN 1567-214x

Keywords: Financial Stability, Emerging Economies, Non-Performing Loans, Deposit Interest Rates, Bank Liquidity, Reserves Values

#### **ABSTRACT:**

This study investigated the challenges that face financial stability in the banking system of the emerging economy. This study looked at the following variables as the objectives; the deposit interest rates, non-performing loans as well as the bank liquidity influence on financial stability. This study analyzed the financial stability of India, China and Mexico. A secondary data source was used to collect the information and was obtained from the databases of the World Bank. These data were related to financial stability in emerging economies banking systems. After the data were obtained, a regression analysis was carried out, which was obtained through the use of the SPSS (Statistics Packages of Social Sciences). The regressed data was analyzed based on the coefficient of determination which was obtained to be 78.1% for India, 93 % for China and 13.4% for Mexico. Thus, the result showed a positive relationship between the model and the variables for India and China. This showed that stability in the banking system was positively influenced by the rate of non-performing loans, the deposits in the interest rates as well as the banks liquidity influence. On the other hand, in the case of Mexico, the results did not show a positive relationship between the variables as its coefficient of determination was below 50%.

# **INTRODUCTION:**

Financial stability is a process where the financial system becomes resistant to financial shock [1]. The financial system includes financial institutions and financial market systems. In financial stability, the financial system is fit to fulfill all the basic system in the financial system, which involves the

intermediation of all financial funds, risk management and payment arrangements [2].

Financial stability in a financial institution is very important. It not only helps to stabilize prices, but also helps to achieve its goals. Financial stability is also very effective in every country as it helps the country to stabilize the price as well as achieve different central bank policies [3]. This is simply because; the lack of financial stability in a country entails heavy costs in the economy of the country, which is caused by the volatility of price variables in the increase of financial markets. This may cause bankruptcy of the financial institution or financial corporation [4].

Financial stability has been one of the areas most discussed in the finance literature as well as in the current economy. According to Fischer [5] the first discovery of financial stability took place during the international finance crises that took place near the end of the 1990s. This situation was later reinforced by the financial and economic crises that took place in 2007 [5]. The development aimed at continuing the prompt provision of public opinion with reliable features showing the conditions of financial sectors in different countries [5]. Because of the dependence of mutual relations, the financial sectors in different countries offered both vertical and horizontal analysis to cover the system of financial intermediaries [6].

According to Deku et al. [7] there are different theories that have defined the factors limiting an organization's achievement of financial stability. The leading factors that need to be considered and addressed were non-performing loans, deposit interest rates, as well as banks ' liquidity reserves value [7]. The other factors as reported by Gumata and Ndou [8] are inadequate economic policies, mechanisms of exchange rates that are non-credible, rapid liberalization of the financial sector, week supervision and inefficient resource allocation. In addition, Cucinelli [9] has pointing out that non-performing loans are related to financial pollution, which is very harmful to both social welfare and economic development. The non-performing loan ratio is one of the well-known indicators that helps identify credit risk, which is a very important factor in the banking sector [9]. Ekanavake and Azeez [10], conducted a study on Indian banks and used regression analysis. The outcome found that non-performing loans are significantly affected by both financial and macroeconomic factors. Furthermore, financial stability of banks is sufficiently maintained by capitalizing on the level of security of risk assets and the banks that guarantee liquidity and reliability. In their research, Focarelli and Pozzolo [11] showed that high market concentration negatively influences deposit interest rates and causes rigidity in deposit rates. Thus, it was stated that if the bank records high profits, it shows that credit management organizations are effective in how they use their resources. Furthermore, according to Gomez and Vo [12], financial instability in some banks is considered through qualitative resource base and liquidity levels, which turns out to be crucial especially when the funds raised have the largest share of the resource structure of the banks and meet the needs of the

enterprise, the population and the organization as a whole.Banks are financial institutions that offer services like lending of loans, accepting cash deposits and allowing transfer of money. In most economically emerging countries, banks have been the key elements in poverty reduction and improving the economy as a whole. Furthermore, most of the emerging countries are facing challenges in establishing the financial stability in their banking systems. Thus, this study aims to analyze financial stability in banking systems in emerging countries, in this case is India, Mexico and China. This study analyzed the impact on financial stability of non-performing loans, deposit interest rates and liquidity reserves value.

#### METHODOLOGY

#### **Research Design**

For this work, the study used a cross-sectional investigation design to illustrate the factors affecting the financial stability in the banking systems of the emerging economies. Information was collected from the World Bank concerning the topic.

#### **Model Specification**

The model used cross-sectional data. Therefore, it was represented by the following regression analysis as shown in Equation 1.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \tag{1}$$

Where Y = the challenges of financial stability in the banking system of the emerging economies,  $\beta_0$  = is the constant value,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  = represented the coefficients of the independent variables, which are respresented by X\_1, X\_2 and X\_3 respectively.

#### Data Collection Method

The information on the financial stability of the banking system of the emerging economy was collected from the World Bank. This means that the secondary source of data was applied in the data collection.

### **Target Population**

In this work, the target population from emerging economies was India, China and Mexico.

#### Data Analysis

The data was regressed using the Statistical package for social sciences (SPSS) to integrate the challenges limiting the financial stability of different banks in the society. The analyzed data were then tested by the measurement of the goodness of fit. After the regression analysis, the results were presented in form of tables.

#### **Research Variables**

The research framework in Figure 1 shows the relationship between the dependent and the independent variables of this work.



Figure 1: Research framework

# **RESULT AND DISCUSSION**

#### India

The results in Table 1 were obtained after performing the linear regression analysis. Based on Table 1, the constant represents the banking system's dependent variable or financial stability. For the interest variable, the dependent variable is constant when the coefficient is 0.123. The dependent variable is still constant when the coefficient of loans and liquidity in the banks is-0.073 and 0.045 respectively. The coefficients of the variables are used to show the rate at which the independent variables affect the model. All the other related results are shown in Table 1.

Model	Unstandardized		Standardized	t	Significance
	Coefficients		Coefficients		(Sig)
	В	Std. Error	Beta		
Constant	7.106	2.780	-	2.556	0.027
Interest	0.123	0.181	0.095	0.683	0.509
Loan	-0.073	0.029	-0.331	-2.508	0.029
Liquidity	0.045	0.009	0.702	4.287	0.001

Table 1:	Coefficients	for	India
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Table 2 shows the results for the coefficient of determination for India. Based on Table 2, the determination coefficient was found to be 78.1 % (represented by the adjusted R square). This is used to determine the rate at which the independent variables are related to the dependent variable or to show the relationship between the variables and the model. If the determination coefficient is above 75 %, the relationship is said to be excellent, if it is between 50 % -75 %, it is said to be good and if it is below 50 percent, there is a poor relationship between the model and the variables. In this case, the relationship was found to be 78.1%. This showed it was perfect. This means that financial stability in a banking institution is determined by non-performing loans, interest rates as well as liquidity influence. The details of the other results such as change statistics and other relevant values are shown in Table 2.

Model	R	R Square	Adjusted R Square	Std Error			
1	0.910 <sup>a</sup>	0.828	0.781	0.11171			
a. Predi	a. Predictors: (Constant), liquidity, loans, interest						

## Mexico

Table 3 shows the coefficient for Mexico. Based on Table 3, the constant is the dependent variable or the financial stability of the banking system. For the interest variable, when the coefficient is 0.786, the dependent variable is constant. When the loans and liquidity variables in the banks are -0.132 and 0.014 respectively, the dependent variable is still constant. All the other related results are shown in Table 3.

Model	Unstandardized		Standardized	t	Significance
	Coefficients		Coefficients		(Sig)
	В	Std. Error	Beta		
Constant	-0.371	2.683	-	-0.138	0.897
Interest	-0.132	0.148	-0.436	-0.890	0.424
Loan	-0.786	0.471	1.004	1.670	0.170
Liquidity	0.014	0.024	0.344	0.591	0.586

Table 4 shows the results for the determination coefficient for Mexico. Based on Table 4, the coefficient of determination was found to be 13.4%. This was used to determine the rate at which the independent variables are related to the dependent variable . If the coefficient of determination is greater than 75%, the relationship is said to be excellent if it is between 50% and 75%, it is said to be good and if it is less than 50%, there is a poor relationship between the model and the variables. In this case, the relationship was found to be 13.4%. This has shown a very poor relationship between the variables and the model. Precisely, the variables did not describe the model positively.

Table 4: Coefficient of determination for Mexico

Model	R	R Square	Adjusted R Square	Std Error			
1	0.711 <sup>a</sup>	0.505	0.134	0.12920			
a. Predicto	a. Predictors: (Constant), liquidity, loans, interest						

#### China

Table 5 shows the coefficient for China. Based on Table 5, in the case of the interest variable, the value is 0.236 when the financial stability is constant. In addition, variable loans and liquidity in banks are-0.004 and 0.016, respectively, when the dependent variable is still constant.

Model	Unstandardized		Standardized	t	Significance
	Coefficients		Coefficients		(Sig)
	В	Std. Error	Beta		
Constant	0.271	0.487	-	0.556	0.589
Interest	-0.004	0.012	-0.161	-0.340	0.740
Loan	0.236	0.189	0.349	1.245	0.239
Liquidity	0.016	0.013	0.544	1.211	0.251

Table 5:	Coefficients	for	China
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Table 6 shows the results for the determination coefficient for China. Based on Table 6, in China, the R squared was found to be 93%. Since it was above 75%, the model is also said to have excellently explained by the variables. This means that the financial stability of a banking institution is determined by non-performing loans, interest rates and the influence of liquidity.

Table 6: Coefficient of determination for China

Model	R	R Square	Adjusted R Square	Std Error
1	0.566a	0.942	0.930	0.16049
a. Predictors: (Constant), liquidity, loans, interest				

#### **Overall Discussion**

Financial stability is a process in which the financial system becomes resistant to financial shock. In this study, which selected India, China and Mexico as emerging economies, the study looked at the impact of non-performing loans, the changes in interest rates on banks, as well as the impact of liquidity. From the stated independent variables, this work was able to identify a positive relationship between the variables and the model. However, Mexico did not show a positive relationship between the variables as its coefficient of determination was below 50%. The positive relationship was described in terms of the coefficient of determination obtained from the results. As has been shown, it was 78.1 % in India and 93% in China. This percentage was very high and indicated that the model was excellent. This means that the level of financial stability in emerging economies is determined by the following: non-performing loans, changes in interest rates on different banks and the impact of liquidity.Precisely, if the rates of non-performing loans in an organization are very high, this makes the organization financially unstable. This is because it will not be able to offer loans to different individuals as well as to fund development projects. This is agreed by Ghosh [13] where it was reported that augmented level of non-performing loans will cause the financial stability of an organization to be effected. Thus, proper management of nonperforming loans is highly necessary.Second, high interest on financial institutions by national banks may make them financially unstable. This is simply because, because banks are heavily charged, they are also forced to pay

a high price to their customers, which, in turn, can cause financial instability. This is in accordance to the work of Kay [14] where it was reported that when high interest rates is incurred to financial institution, the financial stability will be affected. Finally, bank liquidity is when the asset can be sold quickly and certainly for cash with very low price and cost implications. If a bank organization has a high rate of bank liquidity, it is prone to financial instability. This is agreed by Berger et al.[15] where it was confirmed that high rate of bank liquidity causes financial instability and effects the overall financial performance of the bank.

#### CONCLUSION

In this work, the financial stability in the banking system of the emerging economy was examined. The study emphasized on three variables which were; non-performing loans, interest rates changed on different banks and the influence of the liquidity. The study showed that for India and China, this work was able to identify a positive relationship between the variables and the model. However, for Mexico the analysis did not show a positive relationship between the variables. In order to improve financial stability, the authors recommend that the financial institutions of the emerging countries follow up on all their loans, to ensure that the loans are paid in due time and in the right amount to maintain their financial stability. This can be achieved through better conciliation and through the process of recovery in the financial institution.

#### ACKNOWLEDGMENTS

The authors are very grateful for the support and input of Effat University Business College.

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