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Assessing the Factors Affecting the Liquidity Risk in Jordanian Commercial Bank: A Panel Data Analysis

Abstract

One of the main purpose of banks risk management is to control the major risk such as credit and liquidity risk which are the main sources of risk. This research explores factors affecting liquidity risk of commercial banks operating in Jordan, spanning from 2003 through 2017. The sample of the study includes all commercial banks by employing pooled OLS and panel 2SLS econometric methods. The findings show that bank size, ROA, CAR, risk, NPL, T-equality and T-liability have a positive impact on liquidity risk. While ROE shows the negative and significant impact on the liquidity risk. This study suggests that authorities should trace and monitor the determined internal factors that have a negative impact on the liquidity of banks to minimize bank run chances.

Keywords: Liquidity risk, Commercial bank, Jordan, ROA, CAR, Panel data

1. Introduction

The efficiency of the banking system is critical for economic stability and development (Halling and Hayden, 2006). Every day in our everyday lives, both financial and non-financial sectors face 'risk,' and individuals equate risk with losses and harm to either recover or failure or devastation in full and final. When we examine the business area, we will realize that each company is taking protective measures to move into the risk control sector. If we check the field of business, we will find that each company takes protective measures to leap into the field of risk-use. We do so either by being limited by the organization's capacity or by being absolute risks. In economic terms, risk may be formed as a simple variable, or at times as different types of strategic variables.

Risk and uncertainty are analyzed in various business environments, and extensive examination in organizational functions, such as managerial decision taking (Yates and Stone, 1992; Shapira, 1995). Risk has been defined as "to what extent it is uncertain, whether the decision would possibly have positive and/or disappointing consequences" (Sitkin and Pablo, 1992). Risk was described as the probability of an occurrence occurring in most cases and is often correlated with negative outcomes (McNamara and Bromiley, 1999). Though there are also some beneficial possibilities, people typically equate risk with failure or injury. Risk applies to the probability of universal route deviations. Such discrepancies reduce the interest and lead to unpleasant circumstances. A commonly accepted approach is risk classification as credit, sector, and operational (Lam, 2001; BCBS, 2003).

A wider meaning for the word 'risk' has quickly become the standard for many corporations, non-profit organizations, and government agencies alike, in recent studies. Enterprise risk as it is called

is the probability that the predicted results do not match the actual results. In this perspective risk has two characteristics, namely uncertainty characteristics and risk acceptance by an organization as it participates in its activities (Note 1). Enterprise risk typically varies with the business line, company nature, political and economic problems, and other variables. It is the aggregate risk resulting from the risk of industry, financial risk, and the risk of enterprise. [Please put in the classification item here and finish this paragraph].

Risk management has undergone major shifts in recent decades. It has emerged into the corporate world as a separate discipline as in the 1990s. The idea of managing risk is not so innovative, as managing risk strategies such as a mitigation of risk by health, hazardous education and quality control; other risk financing; as well as long-standing protection such as self-insurance plus captive insurance (Doherty, 2000). The today's risk are the potential losses of tomorrow. They are, however, not as evident as real profits and costs. Risk measurement is both a conceptual and a practical challenge, which explains why risk management has been plagued by a dearth of reliable measures (Bessis, 2011). Recognition of risk management as a separate management role brings with it several advantages, for example, it provides better quality data for decision making, risk management discussions can create more positive working relationships with their key personnel, budget can be estimated accurately and it encourages the firm to protect from its threat etc. Inclusion of risk management as a technique in the common role of management helps to improve efficiency (Suryanarayana, 2003). Usually, Financial institutions use two specific risk control approaches. Another strategy requires the definition of threats individually and separate treatment of each. The other supports risk management by becoming well-diversified. They believe different types of financial risks while providing financial amenities, where every transaction that the bank carries out changes the bank's risk outline. The Basel Banking Supervision Committee adopted a risk definition:

"And ... Risk of failure occurring from ineffective or unproductive internal techniques, individuals as well as structures or external outcomes.

Allen et al. (2008) proposes that by diversifying and smoothing volatility over time, banks play a significant role in spreading the risk in the economy. The fixed nature of the claims that they issue, however, can cause financial system fragility. Banks have a significant role to play in supplying funding for businesses and helping them expand the economy. Risk management in banking therefore allocates the whole setting of risk management procedures and versions that permit banks to implement risk-grounded guidelines and practices.

The basic preconditions to implementing management of risk in banks are to quantify, in addition to analyze the different kinds of risks posed in banks, and then track those risks back to regulated risk drivers. Nonetheless, once we know the extent of the risks to remain under control then what they represent in the form of upcoming value lost, jumping to market instruments to mitigate risks without sufficient awareness of experiences to the several risks is worthless. Therefore, the problem of risk management is not as straightforward as it might seem at first.

Poor or insufficient liquidity can lead to loss of the confidence of depositors, which can also lead to a loss of the status of banking institutions. It is therefore very necessary for banks to maintain a proper level of liquidity (Shah et al., 2018). So far, no research in the Jordanian background has been conducted on the liquidity risk. Therefore, this study focuses on evaluating the factors that affect liquidity risk in Jordanian commercial banks. Therefore, this study might be the unique which identify the factors that affect liquidity risk of banks. Findings of the study would be beneficial for all the relevant stakeholders, for example for the banking industry itself, the central bank of Jordan and the overall economy.

2. Literature Review

As discussed above, the types of risk that are faced in banks and other private institutions during transactions in daily operations. It has resulted, after a lot of surveys, that risk management has allowed organizations to cause failures or downfall (Wiseman & Bromiley, 1991 and McNamara & Bromiley, 1999). The main goal for risk management is to maintain a balance between the power and the loss. For a decade, all the theory regarding this activity and the strategies used to sustain and monitor has been addressed in detail in less developed countries.

Some of the studies reported that the corporate-government CRO plays a very vital role in keeping the company out of risk management as the CRO while interacting directly with the boards of directors and providing them with reliable reports that lead the organization towards growth and succession. Such banks have (less or negative) capital returns and asset returns since the recession, although they have high or low ROE in traditional corporate governments, because the CRO has no clear contact with the boards of directors. Allen et al confirmed about this comparison for this effectiveness of the role of corporate governance, as in countries like Germany, where bankers control the organization's system.

Zaleha et al. (2011), has focused on the accounting management and risk management partnership. And find out as a result that they are both interrelated. The relationship goes to both sides as it depends on the business' approach. The survey findings indicated that the study of financial versions was detected in order to subsidize mostly to managing the risk, even the people who were asked about the relationship agreed that these two are the key features for an organization's running. The interviewees also stated, mark by the survey outcomes, that financial control, budgeting, and strategic arrangement played an important part in risk management.

Cummins et al. (2009), studied the connection between risk-management practices besides intermediation either they collaborated with each other or they became two separate practices. For research purposes, US financial institutions have been extensively studied with property-liabilities insurers as to how they can use the intermediation activities (i.e; financial and insurer intermediation) along with cost reduction. Following the observation, it was shown that some insurers had the versatility to work on reducing their costs while getting the extension that kept them away from risk management and focusing on various activities that improved economic performance.

Al-Tamimi et al. (2007) pursued another goal of observing different types of risks taken at UAE Banks. After the observation, it was noticed that banks are taking various types of risk that are correlated to risk management. When a survey was conducted to conclude on risk types, it was found that three kinds of risk challenged by UAE well-paid banks are distant exchange risks, chased by credit risk, and then operational risk. Similarly, UAE banks are very effective in managing risk, the most significant variables in risk management activities are risk recognition and risk control and analysis. Lastly, the results showed that there was a substantial gap risk assessment and analysis between the UAE national, international banks and risk management and control. In addition to liquidity ratio, Shen et al. (2009) used substitute liquidity risk procedures and investigated the causes of liquidity risk (sources of liquidity risk model), by means of an unstable dataset of 12 progressive markets to commercial banks over the period of 1994-2006. Liquidity risk has been revealed to be the first determinant of bank performance. Moreover, they discover that liquidity risk may decrease bank productivity (return on average properties and return on typical equity) due to advanced fund cost but enhance the net interest limits for the bank. In addition, they classify countries as bank-based or the financial system of marketplace and reveal the liquidity risk of market-based monetary system is negatively connected to bank demonstration.

Finally, Ahmed et al. (2011) analyzed the level of company's liquidity risk determinants of Islamic banks of Pakistan from the four years between 2006 to 2009. Results indicate that leverage, solidity and phase are main factors of liquidity risk for the Islamic banks of Pakistan. However, the findings also indicate that the explanatory size and profitability variables are not strong explanatory variables to describe the liquidity risk of Pakistan's Islamic banks.

Based on previous literature reviewed, the aim of this study is to examine the liquidity determinants in risk management in the financial sector in Jordan. It is going to look specifically at the operation of commercial bank in Jordan. The next section will highlight the data used and the analytical techniques to be used to achieve the purposes proposed for this research.

3. Model and Methods

3.1 Models Specification

The liquidity risk of banks can be affected by numerous factors. In the previous literature, various factors are identified as influencing liquidity risk of banks. The present study is conducted to investigate the internal factors that influence liquidity risk of commercial banks operating in Jordan. The variables included in the study are "total equity", "total liabilities", "capital adequacy ratio" (CAR), "return on equity (ROE)", "risk-weighted assets" (Risk), "net income", "Non-performing loans" (NPL), "return on assets" (ROA) and bank size. Few studies which have used these factors to identify the liquidity of banks are Ghazali (2008), Shen-Hua et al. (2009), Alman and Andreas (2010), Ahmed et al. (2011) and Kimathi et al. (2015). The following model is specified for the purpose of analysis.

$$LIQ_{it} = \beta_0 + \beta_1 Size_{it} + \beta_2 ROA_{it} + \beta_3 ROE_{it} + \beta_4 CAR_{it} + \beta_5 T. LOAN_{it} + \beta_6 Risk_{it} + \beta_7 NPL_{it} + \beta_8 T. EQUI_{it} + \beta_9 T. LIAB_{it} + \beta_{10} N. INC_{it} + \mu_{it}$$

In the above model, liquidity (LIQ) is a dependent variable and, size, ROA, ROE, CAR, T.LOAN, RISK, NPL, T.EQU, T.LIA, and N.INC are independent variables. β 1, β 2 ... β 10 in Model are coefficients of the variables; 'u' in the equation is error terms; *i* and *t* represent cross-sectional and time aspects of the variables. Table 1 presents a summary of how those variables were measured.

Table 1. Measures of variables

Symbol	Variable	Proxies				
LIQ	Liquidity Risk	Cash to Total Assets				
DER	leverage ratio	Total liabilities to total equity of the bank				
CAR	Capital Adequacy Ratio	Tier 1 Capital + Tier 2 Capital / Risk-Weighted Assets				
ROE	Return on Equity	Earnings Available for common stockholders/Common Stock Equity				
RWA	Risk-Weighted Assets	Risk-weighted assets to total assets of a bank				
FINANCE	Credit Facilities	Total Finance to total assets of banks				
NPL	Non-performing loans	Non-performing loans				
ROA	Return on Assets	Asset Utilization Ratio = Operating Income/Total Assets				
SIZE	Size of the Bank	The logarithm of total assets				
Е	Error Term	Е				

3.2 Data

The whole banking sector of Jordan is considered to analyze the internal factors of banks liquidity risk. The study is using a sample of 13 commercial banks of Jordan for the period of 2003 to 2017. Financial statistics are composed from the Jordanian banks to evaluate and estimate liquidity of risk management. Data is collected from ASE, annual reports of banks, and Jordanian central banks. In this analysis, liquidity risk in dependent's variable, is stated as the proportion of cash to total assets. This proportion calculates the portion of the assets reserved by a bank in currency or marketable safeties.

3.3 Methodology

As nature of the data utilized is basically panel, therefore, for the estimation of the panel data, there are two extensively used models in literature such as fixed effects (FE) and random effects (RE) modelling techniques. FE method is appropriate if there is serial correlation between explanatory variables and the error term of the model. On the other hand, RE model procedure is more appropriate in the absence of serial correlation between the explanatory variables and the error term. Though, in case of panel data, there are always possibilities that error term and explanatory variables may be related strongly. In this case, the FE would be preferred over RE modelling. Still, the decision pertaining to choosing between the RE and FE modelling is carried out using the

Hausman test. The results of the Hausman test reported in the appendix suggest using the fixed effects model instead of the random effects model.

Once the decision is made to choose FE modelling procedure, next step is to choose between pooled model and RE model. For this purpose, the OLS estimation technique is applied, the F method is used between the pooled and RE method. If the choice is RE model, GMM estimation technique would be better to estimate the model of dynamic random effects. To check the robustness of results, we have deployed multiple techniques of panel data (FE, RE, pooled OLS and GMM). In addition, our analysis uses the instrumental variable technique. In this paper, we used 2SLS to get rid of the endogeneity problem. For pooled, set, and random use we used 2SLS. We decided based on the F-test and the Hausman test. To analyze and comparison the effect of independent variables with the dependent variable, descriptive, correlations and regression analysis are employed by using Stata 15.

4. Results and Discussion

In this section, we analyze the outcomes of the Jordanian commercial banks' liquidity risk determinants 2003-2015. The outcomes from pooled OLS, from Fixed Effect, Random Effect, and the Dynamic models (2SLS) and GMM are summarized in Tables 4 and 5. The outcomes of statistical descriptive study and correlation matrix are presented in Tables 2 and 3 respectively.

4.1 Descriptive Statistics

Table 2. Descriptive Stat

Variable	Obs	Mean	Std. Dev.	Min	Max
LIQ	180	13.19739	6.949127	.4651946	59.44868
Size	180	9.209529	.4731137	8.032707	10.41262
ROA	179	1.437263	.6512898	17	4.97
ROE	179	10.37313	5.199495	-1.45	39.84
CAR	159	17.75465	4.609318	10.9	36.71
T-Loan	180	45.26394	10.0965	.2785299	60.27897
RWA	135	63.69287	20.76063	.063043	96.26323
NPL	170	98.20294	220.292	0	981
T-Equity	180	653.7788	264.9932	224.5205	2529.297
T-Liability	180	86.92454	15.24643	47.43368	281.9875
Net Income	180	1.941067	6.605782	1659192	89.62292

The descriptive analysis reveals that the "LIQ" mean is 13.19 and the std. Dev is 6.94, with a mean size of 9.20 and a std. Dev stands at 0.473 holds that 13.19% of liquidity buffer among Jordan commercial banks. ROA mean is 1.43, and std. Dev is about 0.651. ROE mean is 10.373 and std.

Dev is on 5.1999. CAR average is 17.75, and std. Dev is around 4.60. T loan averages 45.26 and std. Dev 10.096, mean of RWA is 63.692 with a std. Dev of Dev 20.760. NPL mean is 98.20 and std. Dev is about 220.29. The T-equity mean is 653.77 with the std. dev of 265. Furthermore, the mean T- liability is 86.924 and the std. Dev is 15.25. Net income average of 1.941 and std. Dev is about 6,605.

4.2 Correlation Matrix

The correlation analysis in able 3 revealed that risk management indicators and the independent variables are positively correlated with Liquidity risk, while CAR, TLOAN, RISK, NPL and Net Income are negatively related to Liquidity risk. Bank size, ROA, ROE, RISK, T-equality, and T-Liability are positively related with liquidity risk in the banking sector of Jordan. The highest correlation is between T-liability and liquidity of banks, that is 0.63. Evidence of strong correlation amongst the variables taken into the study is not found.

Table 3. Correlation Matrix

	liq	size	roa	roe	car	tloan	risk	npl	tequal~y	tliabi~y	netinc~e
liq	1.0000										
size	0.3947	1.0000									
roa	0.0353	-0.0234	1.0000								
roe	0.0786	-0.0709	0.8360	1.0000							
car	-0.0916	-0.3010	0.1497	-0.1249	1.0000						
tloan	-0.2571	-0.1149	0.1619	0.0898	-0.1385	1.0000					
risk	0.0580	-0.0899	0.0391	0.0091	-0.1982	0.1176	1.0000				
npl	-0.1537	0.0682	-0.1498	-0.1936	-0.0627	0.2410	-0.3978	1.0000			
tequality	0.5628	0.1500	-0.1209	0.1934	-0.4719	-0.1784	-0.0477	-0.1653	1.0000		
tliability	0.6329	0.1181	0.0142	0.1026	-0.0896	-0.0575	-0.0286	-0.0558	0.7271	1.0000	
netincome	-0.0609	-0.0977	0.0321	0.0225	-0.0091	-0.0080	0.0540	-0.0452	-0.0139	-0.0022	1.0000

4.3. Regression Results

The regression outcomes of the balanced panel data are presented in Table 4. Further, to check the robustness, results of FE, RE and dynamic RE models are presented in table 4. Durbin Watson's value in close to 2 which means there is no problem of autocorrelation. F-test among Pooled OLS and model of fixed effect, F test declares to us that the pooled model is suitable. Test of Hausman is used between random effecting model and fixed effect signifying that the model of random effect is appropriate. The test of LM is used for choice between Pooled model and the random effect model, representing that OLS has been pooled accordingly. The VIF value indicates there is no problem of multicollinearity in the data.

Regression results show that bank size significantly causes an increase in Liquidity risk by 5.85% at 1% level of significance (p < 0.01), showing the effective performance of banks. The results could be described through the huge amount of fund that large banks can hold in addition to the high capital that holds by the Jordanian commercial banks which increasing the liquidity risk as a result to the huge amount of credit that they offer. These results are consistent with the study of Chen et al. (2018), who found positive relationship between bank size and liquidity performance in Tunisia. ROA also positively and significantly associated with liquidity risk at 10 percent level of significance (p < 0.1). Results of the study show that one percent increase in ROA also results in growth of liquidity risk by 3.24 percent in value. This suggests that the commercial banks of Jordan follow a traditional strategy for the management of liquidity risk by sustaining adequate money reserves to meet Jordan's central bank requirements. Our results are consistent with prior studies of Bourke (1989), Kosmidou and Pasiouras (2005) and Ghazali (2008), who estimated a positive connection between ROA and Liquidity Risk. Result is anticipated as 'high-risk to high return, low-risk to low return. Moreover, a percent ROE change causes reduction in the risk value of liquidity by 0.30 percentage point. But ROE has no significant relationship with 'liquidity risk' (p > 0.1) but negative sign indicates that the lower return of equity (ROE), the more liquid risk the bank has. As a result, the connection between productivity and liquidity risk can be a major factor for potential investors, which means that the influence of banks' liquidity risk cannot be negligible when considering profit motives.

CAR also positively and significantly affect the liquidity risk of banks. As, one percent increase in CAR induces 0.48 percent increase in the liquidity risk (p < 0.01). The positive relationship may be clarified by the high ratio of the capital adequacy ratio reached at 21% (the Basel committee minimum is 8% and the CBJ 12%) representing the well-capitalized banks. This reform would improve the adequacy of capital and liquidity risk management, through the introduction of stricter risk assessment procedures in lending institutions and the creation of tighter prudential standards for banks in order to strengthen their capital (Žuk-Butkuvienė et al., 2014). In addition, an increase in T-loans reduces the liquidity risk but this relationship is statistically not significant. However, it leads to reduction in the liquidity risk of the Jordanian commercial bank which can be explained by the high level of capital retained by the business. Risk is positively and significantly associated with banks liquidity at 1% level of significance and causes 0.07 percent point increase in a liquidity among commercial banks of Jordan. The results shed light on the efficiency of the portfolio of Jordanian banks that offer an indication of the expansion in risky assets that explain the negative association. RWA may not forecast market risk indicators in general, but there is evidence of a positive relationship prior to the US crisis that then turns negative (Das & Sy, 2012). Moreover, point change in NPL reasons an increase in liquidity with 0.24 percent points but statistically this relationship is not significant (p > 0.1). The results confirm the correlation between risk and liquidity risk, we may understand that by raising the risk assets of the Jordanian banking portfolio, the NPL ratio will increase as a result of the Jordanian bank 's high liquidity risk level, it is worth noting that Basel's minimum liquidity ratio is 100%, while in the Jordanian bank it reaches 150%. Results of our study are consistent with the Vodová (2011) who finds positive impact of nonperforming loans on liquidity in Czech commercial banks.

Results of this study also depict that T-equity also cause an increase in the liquidity risk by 2 percent which determine the good financial leverage of a bank. Finally, net income has no significant relation with banks liquidity risk in Jordan. but this effect depicts the negative relationship between net income and liquidity risk of banks (β = -0.02; p > 0.1). The result could be explained by the high volume of deposits received particularly after the Arab Spring to the Jordanian industry, and the income produced by the portfolio of risky assets.

Table 4. Panel Data Analysis (Dependent Variable = LIQ)

Models	Pooled OLS	FE	RE	Dynamic RE
	Estimates	Estimates	Estimates	Estimates
Coefficients	[std. Error]	[std. Error]	[std. Error]	[std. Error]
	(P-value)	(P-value)	(P-value)	(P-value)
	-66.87489	-57.47528	-61.50902	-76.76632
Intercept	(12.25928)	(11.50952)	(11.97143)	(20.46754)
	0.000	0.000	0.000	0.000
	5.845737	5.306038	5.447658	7.866322
Size	(1.060003)	(0.9924129)	(1.032286)	(2.066774)
	0.000	0.000	0.000	0.000
	3.242554	2.704304	1.762431	1.033549
ROA	(1.812745)	(1.77133)	(1.815024)	(2.507763)
	0.076	0.130	0.332	0.680
	2961238	2672281	1245151	1033712
ROE	(0.231398)	(.2248889)	(.2302963)	(.2902704)
	0.203	0.237	0.589	0.722
	.4833513	.2125151	.3044691	0090045
CAR	(.1206262)	(0.1245617)	(.1299365)	(.1612928)
	0.000	0.091	0.019	0.955
	-0.082362	1207349	1105488	1002673
T Loan	(.0525623)	(.0506651)	(.0515935)	(.0656989)
	0.120	0.019	0.032	0.127
	.0739706	.0509104	.0589593	.0377706
Risk	(.0228322)	(.0227607)	(.022584)	(.0411647)
	0.002	0.027	0.009	0.359
	.0024273	.0035667	.0009431	.0001742
NPL	(0.0020613)	(.0030386)	(.0020481)	(.0041372)
	0.241	0.243	0.645	0.966
	.0219975	.0111011	.0117055	.0044366
T Equity	(.0023274)	(.0039056)	(.0039958)	(.0055813)
	0.000	0.005	0.003	0.427

-				
	.1302565	.126136	.1237466	.1778562
T Liability	(.0400281)	(.0388944)	(.0397103)	(.0535373)
	0.001	0.002	0.002	0.001
	020395	0790124	0259748	.0913563
Net Income	(0.0512129)	(.0486121)	(.0495228)	(.3575292)
	0.619	0.107	0.600	0.789
				.0185188
Lag Term				(.0618421)
				0.765
R^2	0.5614	0.5737	0.5937	
A 3:4- J D2	0.5202			
Adjusted R^2	0.5293			
F test	0.0018	0.0047		
T 7	TE 250 D L	XX7.4 1.0.41/	745 II	2540 T N / 1 000

VIF = 2.50; Durban Watson = 1.941545; Hausman = 0.3549; LM= 1.000

We may determine the significance and non-significance of the parameters, based on the likelihood value. If the possible value is a smaller amount than 0.05 then the parameter's estimation which is significant, but if the possible value is greater than 0.05 then the parameter's estimation is insignificant. OLS model R-square can capture 56 percent variability of our model which should be considered the best fit model as F-test value is also significant at 1% level of confidence.

5. Conclusion

This paper examined the liquidity risk determinants of the commercial banks in Jordan over the time of 2003-2017 using annual data collected from ASE, CBJ, and the annual reports of each bank. The analysis employed panel methodology to study the impact of bank-definite variables at the liquidity risk of Jordanian commercial bank. The findings show that bank size, ROA, CAR, risk, NPL, T-equality and T-liability have a positive impact on liquidity risk. While ROE shows the negative and significant impact on the liquidity risk of the commercial banks of Jordan during the study period. Whereas loans and net income has no significant impact on the liquidity risk.

Findings of the study would be beneficial for all the relevant stakeholders, for example for the banking industry itself, the central bank of Jordan and the overall economy. It is suggested that authorities should trace and monitor the determined internal factors that have a negative impact on the liquidity of banks to minimize bank run chances. This study somehow sheds light on the important liquidity risk determinants in the Jordanian banking industry that help regulators, managers, and researchers concentrate more on those variables to strengthen the liquidity risk role of banks. This study recommends researchers to investigate whether liquidity problems in Jordan are same for each type of banks or whether liquidity has created any challenges and ripple effects for the domestic economy.

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Appendix: Panel 2SLS estimation results

Models	Common effect model	Fixed effect model	Random effect model
	Estimates	Estimates	Estimates
Coefficients	[std. Error]	[std. Error]	[std. Error]
	(P-value)	(P-value)	(P-value)
	-71.83231	-66.76282	-71.83231
Intercept	(12.88688)	(12.84613)	(13.53308)
	0.000	0.000	0.000
	6.163763	5.918621	6.163763
SIZE	(1.078537)	(1.071251)	(1.132619)
	0.000	0.000	0.000
	1829021	1.345084	1829021
ROA	(2.375865)	(2.39635)	(2.495002)
	0.939	0.575	0.942
	.0833395	1172794	0833395
ROE	(.3069547)	(.3117603)	(.3223468)
	0.786	0.707	0.796
	.3818477	.2883076	.3818477
CAR	(.1317939)	(.1335699)	(.1384026)
	0.004	0.031	0.006
	0559761	0747949	0559761
T loan	(.0607707)	(.0623279)	(.063818)
	0.357	0.230	0.380
	.0654493	.0584195	.0654493
Risk	(.02239)	(.0237067)	(.0235128)
	0.003	0.014	0.005
	.0006392	.0034467	.0006392
NPL	(.0020064)	(.0030544)	(.002107)
	0.750	0.259	0.765

	.0110232	.0109972	.0110232
T equality	. (004589)	(.004649)	(.0048191)
	0.016	0.018	0.022
	.127138	.1259979	.127138
T liability	(.0426976)	(.043455)	(.0448387)
	0.003	0.004	0.005
	0218348	0747477	0218348
Net income	(.0466318)	(.0479282)	(.0489701)
	0.640	0.119	0.656
R^2	0.6173	0.5965	0.6173
Wald test	191.47	1329.41	173.62

Durbin-Watson = 1.98; Hausman = 0.9548