Grammercy Bank - A hypothetical bank example

This example gives us a brief analysis of Grammercy Bank, which has reported the ficticious financial results shown in the tables to the right.

(a) Divide net operating income by total assets to arrive at return on assets which is **ROA: 11/100 = 1.00%**

(b) Divide total interest income by total earning assets to get the gross yield on earning assets: **GYEA: 60/995 = 6.03%**

(c) Divide total interest expense by total earning assets to get the rate paid on funds: **RPF: 40/995 = 4.02%**

(d) Divide net interest income by total earning assets to get the net interest margin **(NIM): 20/995 = 2.01%**

(e) Provision for loan losses does not cover net charge-offs. As a result, the reserve for loan losses is being run down. Assuming that loans did not grow during the year. The reserve as a percentage of total loans declined from 1.56% at 2010 year end to 1.11% (14 / 900 = 1.56%, versus 10/900 = 1.11%.) Since the level of non-performing loans is relatively high (45/900= 5.00%) and net charge-offs as a percentage of loans is relatively high (6/900 = 0.67%), the reserve should arguably be higher.This would require a higher provision , which would, in turn, reduce income.

(f) Long term debt as a percentage of debt plus equity is fairly high at 41% (35/(35 + 50). This suggests that further borrowing could be difficult to obtain.

(g) The ratio of loans to total assets (900/1100 =82%) is quite high. The high rate will increase the bank's loan default risk. The bank is loaned up to the hilt and its liquidity is very low.

Grammercy Bank Income Statement		
Total interest Income	60.0	**(b)**
Total Interest Expense	(40.0)	**(c)**
Net Interest Income	20.0	**(d)**
Provision for Loan losses	(2.0)	**(e)**
Non Interest Income	2.0	
Provision for loan Losses	(4.0)	
PreTax Income	16.0	
Income Tax	(5.0)	
Net Operating Income	11.0	**(a)**

Grammercy Bank - Reserve for Loan Losses		
Balance, beginning of year	14.0	**(e)**
Provision for Loan Losses	2.0	
Charge-offs	(8.0)	
Recoveries	2.0	
Net Charge-offs	(6.0)	**(e)**
Balance, end of year	10.0	**(e)**
Nonperforming Loans	45.0	**(e)**

(h) Tier 1 and total capital are calculated as follows:

Tier 1 = $50 stockholder's Equity/ $1,095 in risk-adjusted assets ($5 cash weighted at 0%, the rest at 100% for simplicity, totaling $1,095 in risk adjusted assets) = a Tier 1 ratio of 4.57% which is above the FDIC's guideline of 4.00%.

Total Capital includes Tier 1 plus $10 in the reservefor loan losses (up to 1.25% of risk-adjusted assets) plus subordinated notes up to 50% of Tier 1 capital (or $25).

Total risk-adjusted capital would equal $85/$1,095, or 7.77%, which is below the 8.00% FDIC guidelines.

In summary, some additional equity financing in conjunction with an adddition to the reserve appears to be warranted.

Grammercy Bank - Balance Sheet						
Assets				**Liabilities**		
Cash	5.0	**(h)**				
Temporary Investments	20.0			Deposits	775.0	
Investment Securities	75.0	**(b),(c),(d)**		Short Term Borrowings	240.0	
Loans	900.0	**(e),(g)**		Long Term debt	35.0	**(f)**
Total Earning Assets	995.0					
Reserve for Loan Losses	(10.0)			Total Liabilities	1,050.0	
Building & Equipment	110.0			Stockholdings equity	50.0	**(a),(f),(h)**
Total Assets	**1,100.0**	**(g)**		**Total Liab & Stock Equity**		**1,100.0**