

INTERNAL AND EXTERNAL DETERMINANTS OF PROFITABILITY OF BANKS**EVIDENCE FROM PAKISTAN*****SYEDA ANUM JAVED BUKHARI**FOUNDATION UNIVERSITY INSTITUTE OF ENGINEERING & MANAGEMENT SCIENCES
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Abstract

The aim of the research is to find out the relationship between the internal and external factors that affect the profitability of a bank. For this, a panel data of five years from 2005 to 2009 has been taken on quarterly basis for 11 banks in Pakistan. This paper uses regression analysis to implicate the results with the hypotheses. The factors taken into consideration are Bank size, Advances (Loans), Deposits (Liability), Non-interest income, Credit Risk, Interest income, Expense Management, Discounted rate, Imports, Exports and CPI. The result from the analysis shows that, few of internal variables have significant influence on a bank's profitability whereas external variables do not affect profitability of the banks.

Keywords: *Banks, Profitability, Macroeconomic Factors, Market Driven Factors, Bank Specific, Regression*

1. INTRODUCTION

The foremost action in understanding the vastness of a topic is to break it down into chunks. Before we introduce the topic, it's important to understand the terms such as banks, the internal and external determinants of profitability of banks and how these determinants can be influential in the profitability of the banks

While the basic questions may seem quite straightforward, the answer can even be as much complex. In simplest of words, we can call a bank a financial institution where you can deposit you money. Banks provide you with a system that can transfer from you to another person, business, or business to another and vice versa ensuring safety in legality in a structured manner. Moreover, it saves time at your end that you can invest in your business. You don't have to worry about your deposits in the banks; your money stays safe and sane years after years. The questions that comes to our minds is how do these banks make any earnings they aren't taking any fees from you?

The answer is simple and very detailed. There are several internal and external determinants such as the Bank Size, Advances given to people, Deposits made by other people, Interest income, Inflation rates, Interest Income, Loans, Imports, Exports, etc.

While looking at these determinants for the banks of Pakistan, we see that Pakistani banking sector has high density of commercial banks. The banking sector of Pakistan like other countries started growing rapidly in the last decade and experienced major transformations in its environment which ultimately resulted substantially on its performance. Many banks in different countries showed bankruptcy whereas a lot mergers and acquisitions took place worldwide including Pakistan. Identifying the key winning factors of commercial banks allows formulating such strategies which may improve the efficiency and profitability of the banks

From this regard, it is vital to study what are the determinants whether internal or external, responsible for the profitability of Banks in Pakistan

The purpose of this study is to extensively study the data on the internal and external determinants of profitability of banks and examine the extent to which these factors make significant impact on the profitability of banks

Like all papers are designed, next section of this paper is for literature review of researchers from different parts of the world which will help us design our research methodology in the third section. After we discuss the results in the fourth section, we will conclude and suggest future implications in the last section of the article

2. LITERATURE REVIEW

The aim is to review the critical points of the current knowledge including findings of researchers from different parts of the world as well as theoretical and methodological contributions they made for this topic

On the same note, Abreu et al. (2001) realized the interest margins react positively to the operating costs, but profits do not. This means less efficient banks charge higher interest rates on loans or pay low rates for the deposits. However, since a lot of banks compete in the market, the banks do not overcharge the interest on loans to achieve a competitive profitability. The external factor such as nominal effective exchange rate and GDP growth rate does not have any impacts on the profitability of the banks

Results from Ataulhah et al (2004) research suggest that bank-specifics like technological advancements are vital for bank's financial performance. Ataulhah in his comparative analysis between the banks of Pakistan and India said banks need to improve their efficiency; the loans and advances have a negative impact on the profitability of the banks studied a panel of banks for a five year period from 2005 to 2009 and realized that banks in Ukrainian suffer from low quality of loans and do not make considerable profits

Furthermore, Athanasoglou et al. (2005) found that capital is important in explaining bank profitability and that increased exposure to credit risk, lower the profits. The coefficient of capital variable is positive and highly significant. Also, internal determinant such as labor productivity growth does give a positive and significant impact on profitability. In other words, the banks earn larger profits if it has improved labor productivity. On the contrary, operating expenses have a strongly negative relationship with the profitability of bank. It shows that cost decisions of bank management play substantial role in its performance

Bikker et al. (2002) claim the capital ratios are positively related with the size. That means as the size increases, the profitability of the banks also increases. They used a number of macroeconomic variables such as GDP and interest rate and found that the bank profits are correlated and have a positive relation as opposed to Abreu et al. (2002) who found there is not impact of GDP growth rate on the profitability of the banks

Chan et al (2006) believed banks with more equity capital are safer and have an advantage that can be translated into higher profitability. However, his research showed that successive cuts in the interest rate in the market due to competitive credit market narrowed the bank's profitability. Inflation, the macroeconomic indicator has a positive relationship with bank's profitability, the bank's income increase more with inflation than its costs

The size of the bank has a positive impact on the profitability. However, the unexpected is that deposits have a negative relationship with the profitability. This is because of the short term deposits by the customers out of which the banks are not able extract profits because they failed to attract long term deposits Davydenko (2010)

Buyinza (2010) found that high profitability of the banks was associated with well-capitalized banks with efficient management and bank size. The macroeconomic factor, inflation showed a mixed effect on the profitability of the banks while GDP had positive impact on the profitability of the banks

While on the other attempt, the equity has a positive relationship with profitability while loan ratios have a negative impact. Loans are low risky options for banks and hence do not make any significant impact on the profitability of the banks, Kabir et al (2003)

On the other hand, Kaddumi et al (2011) found that bank-specifics play a major role in bank's profitability. The size of the bank is insignificant and the credit risk has an inverse relationship with profitability of the banks

Srairi (2009) has a similar story to tell from his results. Capital adequacy ratio has a positive impact on bank's profitability. Also the macroeconomic variables such as money supply and GDP have significant and positive impact on the income of the banks

Professor Sudin Haron (2004) researched the effects on Islamic Banks and realized that the deposits are a long term which enables banks to extract more profits out of them

Likewise, Ramlall (2009) also examined a correlation analysis on bank-specific, industry-specific and macroeconomic determinants of profitability in Taiwanese banking system such as SIZE, Capital, Credit Risk, Efficiency, Stock Market Capitalization, GDP and interest rates and discovered that Capital has a positive

impact on the profits and the profitability of the bank is well-diversified. Nevertheless, Ramlall implies that bank's profitability will be sensitive to the availability of the credit as opposed to what Yongil (2005) stated

Jeon (2005) examined the evidence of the relationship between several measures of banks profitability at a state level and found a strongly positive correlation between banking profitability and performance by testing it against the average return on equity within the state. Moreover, the relationship shows higher the equity of the bank, higher gets the profitability gets. This relationship does not reverse if the equity is lowered

3. RESEARCH METHODOLOGY

As per the objectivity of the study, below are the hypotheses developed while researching for dependent variable i.e. Profitability against the independent variables that include internal and external factors that may affect the profitability. Following hypotheses are drawn:

H1: There is significant relationship between sizes of the banks with the profitability of the banks

H2: There is significant relationship between advances with the profitability of the banks

H3: There is significant relationship with the deposits with the profitability of the banks

H4: There is significant relationship between non-interest income and profitability of the banks

H5: There is significant relationship between credit risk and profitability of the banks

H6: There is significant relationship between interest income and profitability of the banks

H7: There is significant relationship between expenses and profitability of the banks

H8: There is significant relationship between discounted rate and profitability of the banks

H9: There is significant relationship between imports and profitability of the banks

H10: There is significant relationship between exports and profitability of banks

H11: There is significant relationship between CPI and profitability of banks

Banking sector in Pakistan provides an interesting framework for studying the profitability in this sector as it has undergone significant changes in the last decade. Lots of banks have emerged, few did mergers and few were acquired. The administrative intervention was minimized and the customers' focus has been forced automated

The data has been taken from the balance sheet analysis published by the State Bank of Pakistan. All the numbers in the data is in Pakistani rupees. We have various determinants that will affect the profitability of the banks. We have divided our determinants in three sections as discussed in the introduction

In the external determinants, we have macroeconomic indicators (discounted rate, import and exports) and market/industry characteristics (Consumer Price Index)

Whereas, the internal determinants have bank specifics such as the bank size, loans, deposits, credit risk, interest income, non-interest income, expense management and profits before taxes

3.1 Measure of Performance

This analysis will be descriptive in its nature as well as regressive. Since it is a panel data of five years divided quarterly i.e. 2005 to 2009, (see appendix) we will apply regression analysis and find out the random and the fixed effects

3.2 Determinants of the Banks Profitability

The basic test involved is regress the dependent variable (Profitability) against the eleven independent variables that are Bank Size, Advances (Loans), Deposits (Liability), Non-interest income, Credit Risk, Interest Income, Expense Management, Discounted Rate, Imports, Exports and CPI

This provided a test of relationship between the dependent and the independent variables and thus, the following regression was embraced

3.3 Methodology

$$\text{Profitability of Banks} = \beta_0 + \beta_1 (\text{SIZE}) + \beta_2 (\text{LOANS}) + \beta_3 (\text{DEPOSITS}) + \beta_4 (\text{NON INTEREST INCOME}) + \beta_5 (\text{CREDIT RISK}) + \beta_6 (\text{INTEREST INCOME}) + \beta_7 (\text{EXPENSES}) + \beta_8 (\text{DISCOUNTED RATE}) + \beta_9 (\text{IMPORTS}) + \beta_{10} (\text{EXPORTS}) + \beta_{11} (\text{CPI}) + e$$

Where,

β_0 = constant

β_1 = Regression coefficient that measures sensitivity of Bank's Profitability to change in BANK SIZE

β_2 = Regression coefficient that measures sensitivity of Bank's Profitability to change in LOANS given

β_3 = Regression coefficient that measures sensitivity of Bank's Profitability to change in DEPOSITS

β_4 = Regression coefficient that measures sensitivity of Bank's Profitability to change in NON INTEREST INCOME

β_5 = Regression coefficient that measures sensitivity of Bank's Profitability to change in CREDIT RISK

β_6 = Regression coefficient that measures sensitivity of Bank's Profitability to change in INTEREST INCOME

β_7 = Regression coefficient that measures sensitivity of Bank's Profitability to change in EXPENSES

β_8 = Regression coefficient that measures sensitivity of Bank's Profitability to change in DISCOUNTED RATE

β_9 = Regression coefficient that measures sensitivity of Bank's Profitability to change in IMPORTS

β_{10} = Regression coefficient that measures sensitivity of Bank's Profitability to change in EXPORTS

β_{11} = Regression coefficient that measures sensitivity of Bank's Profitability to change in CPI

e = Error Term

The fixed and random effects of the variables would be estimated by studying the effects of variables on the Bank's Profitability at specified time. In order to analyze the data regression has been applied

4. RESULTS AND DISCUSSION

Regression test was applied on the internal and external determinants of profitability to check if there was a positive or a negative effect of these variables on the profitability of banks or not. Variables like Bank Size, Advances, Deposits, Non-interest income; Credit Risk, Interest Income, Expense Management, Discounted Rate, Imports, Exports and CPI were taken to see the effect.

Multi-co-linearity was found between deposits and size of the bank (0.916046) and in imports and exports (0.890318). So deposits and imports were not considered for that matter. Multi-co-linearity is a statistical phenomenon in which two or more predicted variables in a multiple regression model are significantly correlated.

The regression test was applied and results reveal that:

Size (Coefficient = -0.005761, p = 0.4039)

Non-Interest Income (Coefficient = -0.358003, p = 0.2319)

Expenses (Coefficient = 0.352712, p = 0.3269)

Exports (Coefficient = -12.42735, p = 0.3621)

CPI (Coefficient = 1.44531, p = 0.3118)

Discounted Rate (Coefficient = -324394.5, p = 0.4981)

Size, Non-interest Income, Expenses, Exports, CPI and Discount Rates have insignificant relationship on the profitability of the banks. Abreu et al. (2001) revealed similar results where he realized the discount rates do

have effect on the operating costs, but no effect on the profitability of a bank, so did Kaddumi et al (2011) that supports our results realizing that the size of the bank is insignificant with the profitability of a bank

Whereas results reveal that:

Advances (Coefficient = 0.024553, $p = 0.001$)

Interest (Coefficient = -0.6531, $p = 0.0473$)

Credit Risk (Coefficient = 1.870129, $p = 0.000$)

Advance, Interests and Credit Risks have significant relationship on the profitability of banks, where Advances and Credit Risk have positive impact on the profitability of banks and Interest has negative impact on the profitability of the banks. Attaullah et al (2004) in his research found out that low quality of loans do not make considerable profits and hence interest income has a negatively significant relationship with the profitability of a bank. Ramlall (2009) implies that bank's profitability is sensitive to the availability of the credit

While reviewing the results, we have come to take a decision on accepting and rejecting the assumptions drawn and accept that Advances, Credit Risk and Interest Income are significantly related with the profitability of a bank and interest Income out these factors have negative correlation with the bank's profitability

Hence we accept **H2**, **H5** and **H6** and reject all other hypotheses drawn

5. CONCLUSION

In this paper, there were one less than a dozen determinants combined internally and externally taken to check the significance of these factors on the profitability of the banks. Data from eleven banks were taken for a period of five years divided on each quarter. While looking at the results and decisions taken, it is concluded that:

Determinants such as Advances and Credit Risk have significantly positive relation with the profitability of the banks i.e. if the Advances or the Credit Risk is increased, the profitability of the banks also increase. Whereas, Interest Income has also been found to be significantly related with the bank's profitability, but negatively related. It was also found that the size of the bank, Non-interest Income, Expenses, Import Exports, CPI and Discount Rates have very no significance on the profitability of a bank. The hypotheses drawn for these determinants were not verified and hence rejected. Therefore, this result is in line with the literature results as well as with empirical results

Overall, these empirical results provide evidence that the profitability of banks in Pakistan is shaped by factors such as Advances, Credit Risks and Interest Incomes. The approach followed in this research may well have considerable potential for improvement and maybe applied as a tool for suggesting ways to improve the profitability of bank by reshaping it policies for optimized outcomes

REFERENCES

- Abreu, M., & Mendes, V. (2001) "*Commercial bank interest margins and profitability: evidence from some EU countries*" Paper presented at the Proceedings of the Pan-European Conference jointly organized by the IEFIS-UK & University of Macedonia Economic & Social Sciences. Thessaloniki, Greece, May 17–20
- Ataullah, A., T. Cockerill and H, Le (2004) "*Financial Liberalization and Bank Efficiency: A Comparative Analysis of India and Pakistan*", Applied Economics, 36: 1915-24
- Athanasoglou, P.P., Brissimis, S.N., Delis M.D. (2005). "*Bank-specific, industry-specific and macroeconomic determinants of bank profitability*" International Financial Markets, Institutions and Money, 18, 121-136
- Bashir, A. M. and M. K. Hassan (2003), "*Determinants of Islamic Banking Profitability*" presented on the ERF 10th Annual Conference
- Bikker, J.A., Hu, H. (2002). "*Cyclical patterns in profits, provisioning and lending of banks and pro-cyclicality of the new Basel capital requirements*" BNL Quarterly Review 221, 143-175.
- Buyinza, Faisal (2010) "*Determinants of Profitability of Commercial Banks in Sub Saharan Africa Countries*" Dept of Economics, Johanssen Kepler University, Linz Austria
- Davydenko, Antonina (2011) "*Determinants of Bank Profitability in Ukraine*" Undergraduate Economic Review: Vol. 7: Issue 1, Article2.
- Haron, Sudin (2004) "*Determinants of islamic bank profitability*", Global Journal of Finance and Economics. USA, Vol 1, No 1, March 2004
- Imad Z. Ramadan, Qais A. Kilani, Thair A. Kaddumi. (2011). "*Determinants Of Bank Profitability:Evidance From Jordan*" International Journal Of Academic Research Vol. 3. No. 4. July, 2011, I Part
- Jeon, Yongil and miller, Stephen M. (2002), "*Bank Concentration and Performance*" Economic Working Papers, Paper 200225
- Ramlall, Indranarain. (2009). "*Bank-Specific, Industry-Specific and Macroeconomic Determinants of Profitability in Taiwanese Banking System: Under Panel Data Estimation*" International Research Journal of Finance and Economics, ISSN 1450-2887, Issue 34
- Srairi, Samir Abderrazek. (2009). "*Factors Influencing the Profitability of Conventional and Islamic Commercial Banks in GCC Countries*", Review of Islamic Economics Journal of the International Association for Islamic Economics & the Islamic Foundation, Vol. 13, Issue 1
- Vong P.I., and Chan Hoi Si. (2006), "*Determinants of Bank Profitability in Macao*", the 30th Anniversary of Journal of Banking and Finance Conference, Beijing

APPENDIX

BANK	YEAR	Book Value of Assets (Bank Size)	Advances	Deposits	Non-Performing loans	ROA	Credit risk	Discount Rate (End of Period) (Interest Rate)
Askari Bank	2005Q1	107203127	71905229	80847525	146465	0.14766	0.8565	7.500
Askari Bank	2005Q2	127284784	76388429	103646119	247728	0.12165	0.5973	9.000
Askari Bank	2005Q3	127181912	78692638	97628654	29062	0.16654	0.929	9.000
Askari Bank	2005Q4	145099907	85976895	118794690	638547	0.50659	2.4067	9.000
Askari Bank	2006Q1	137086278	85588176	107380866	330419	0.10247	0.5495	9.000
Askari Bank	2006Q2	150826952	89811035	122543016	259572	0.15335	0.7591	9.000
Askari Bank	2006Q3	152484138	89779842	122701103	2788436	0.09658	0.5014	9.500
Askari Bank	2006Q4	166033588	99179372	131839283	1128137	0.50735	2.5386	9.500
Askari Bank	2007Q1	163803109	97190443	126780898	96581	0.15318	0.8323	9.500
Askari Bank	2007Q2	180647281	97172062	142255091	608457	0.07814	0.3946	9.500
Askari Bank	2007Q3	178498219	94877362	142435897	186521	0.07835	0.3968	10.000
Askari Bank	2007Q4	182171885	100780162	143036707	3920240	0.31969	1.6078	10.000
Askari Bank	2008Q1	177516507	102110623	134867282	826078	0.0334	0.1841	10.500
Askari Bank	2008Q2	194211936	114035648	153324010	821799	0.03309	0.1714	12.000
Askari Bank	2008Q3	202923342	124630353	161107631	1153745	0.00178	0.0091	13.000
Askari Bank	2008Q4	206191138	128118242	167676172	1647877	0.06222	0.3048	15.000
Askari Bank	2009Q1	204571545	120218200	157324474	700291	0.05938	0.3221	15.000
Askari Bank	2009Q2	222179045	129130255	180657569	565176	0.04037	0.2069	14.000
Askari Bank	2009Q3	240793293	124959127	191448680	69614	0.09024	0.4667	13.000
Askari Bank	2009Q4	254327446	135034499	205970227		0.17604	0.4347	12.5
AlHabib	2005Q1	82017455	50619436	63706136	10597	0.12205	0.6309	7.500
AlHabib	2005Q2	82645992	49952356	65779238	10296	0.26929	1.3759	9.000
AlHabib	2005Q3	85406289	49189457	70362261	13831	0.42253	2.1247	9.000
AlHabib	2005Q4	91501541	55303779	75795858	75330	0.52948	2.6677	9.000
AlHabib	2006Q1	99441262	59866098	80459764	60578	0.15189	0.7812	9.000
AlHabib	2006Q2	107451146	63782107	86627616	32566	0.30378	1.5105	9.000
AlHabib	2006Q3	107914138	60684261	88003122	291417	0.13628	0.6904	9.500

AlHabib	2006Q4	114998037	70795961	91419963	20959	0.5653	2.9418	9.500
AlHabib	2007Q1	122873438	69973305	98628839	63430	0.12767	0.6598	9.500
AlHabib	2007Q2	132007629	67745529	106746310	48890	0.18142	0.9016	9.500
AlHabib	2007Q3	133229024	67907829	109338784	6585	0.13081	0.6567	10.000
AlHabib	2007Q4	141234274	79224380	114818855	93266	0.51879	2.6583	10.000
AlHabib	2008Q1	152932486	87741736	123405739	19267	0.14213	0.6571	10.500
AlHabib	2008Q2	132336091	71212761	107383197	53043	0.28763	1.2533	12.000
AlHabib	2008Q3	101617732	53719435	82725987	37185	0.21208	1.4302	13.000
AlHabib	2008Q4	177329929	100217408	144340496	1165666	0.64466	2.448	15.000
AlHabib	2009Q1	96721577	53168483	78378731	27374	0.17558	1.0653	15.000
AlHabib	2009Q2	141054060	78222835	114463855	318790	0.23639	1.5012	14.000
AlHabib	2009Q3	222400092	95504291	175859699	323720	0.13927	0.5952	13.000
AlHabib	2009Q4	153391910	75631870	122900762	223295	0.39116	0.9764	12.500
HBL	2005Q1	475748637	250612460	386332570	4358901	0.02674	0.1374	7.500
HBL	2005Q2	516824126	288276234	427940541	388170	0.23895	1.141	9.000
HBL	2005Q3	504863891	279403495	416335667	1234864	0.41644	2.068	9.000
HBL	2005Q4	528893905	316881635	432545165	1282942	0.2213	1.0807	9.000
HBL	2006Q1	527244669	312066654	441861769	2060232	0.0978	0.478	9.000
HBL	2006Q2	552648383	315068416	442589635	1859608	0.27749	1.3637	9.000
HBL	2006Q3	534902902	319803480	427156416	1916716	0.55588	2.9285	9.500
HBL	2006Q4	590291468	349432685	459140198	2060232	0.28249	1.4997	9.500
HBL	2007Q1	628465940	340781231	496782674	319846	0.19726	1.019	9.500
HBL	2007Q2	654652021	354980449	517481952	813166	0.38998	1.971	9.500
HBL	2007Q3	653026936	345646191	528066759	1277035	0.59862	3.0495	10.000
HBL	2007Q4	691991521	382172734	531298127	1284849	0.37479	1.9678	10.000
HBL	2008Q1	702780113	386907791	537724314	489183	0.22507	1.1997	10.500
HBL	2008Q2	730354251	421631649	567407430	1130980	0.39393	2.0474	12.000
HBL	2008Q3	744141320	438993578	582248987	527464	0.21688	1.119	13.000
HBL	2008Q4	757928389	456355507	597090545	1478974	0.27194	1.3724	15.000
HBL	2009Q1	748770849	419015124	593207647	2393338	0.16717	0.8772	15.000
HBL	2009Q2	807646483	459639034	642895347	5285783	0.3211	1.6189	14.000
HBL	2009Q3	813046914	158605261	634381636	1342614	0.18284	0.9666	13.000
HBL	2009Q4	863778621	454662499	682750079	-4181658	1.23768	3.1317	12.500
KASB	2005Q1	41230015	26927312	45087317	53680	0.03196	0.109	7.500
KASB	2005Q2	35675625	22749527	34352598	12163	0.01262	0.0384	9.000
KASB	2005Q3	16529487	9073124	11297725	4000	0.00693	0.0437	9.000
KASB	2005Q4	19102987	10739337	14828110	5250	0.00164	0.0089	9.000
KASB	2006Q1	21215874	11243490	16237194	508549	0.09411	0.4814	9.000
KASB	2006Q2	20316604	10889161	15613432	131074	0.22272	1.1849	9.000
KASB	2006Q3	21215874	11243490	16237194	72164	0.08185	0.4814	9.500
KASB	2006Q4	26538735	14512718	21275570	56537	0.06429	0.3279	9.500
KASB	2007Q1	27713414	14984956	22125537	31127	0.02867	0.1332	9.500
KASB	2007Q2	23682913	12026554	18549853	10643	0.12595	0.8311	9.500
KASB	2007Q3	37521137	22618049	30616418	14697	0.11306	0.5665	10.000
KASB	2007Q4	39181928	23354031	31839555	214718	0.03855	0.2059	10.000
KASB	2008Q1	45850145	29098870	37976973	37774	0.04879	0.2557	10.500
KASB	2008Q2	53658959	32650861	44326442	67994	0.00489	0.0245	12.000
KASB	2008Q3	57519326	35531615	47029403	183392	0.04045	0.188	13.000
KASB	2008Q4	51799098	32240196	35087477	2034196	-0.8285	-	15.000
							5.2703	
KASB	2009Q1	59801473	31528504	42550359	109379	-0.0753	-	15.000
							0.4253	
KASB	2009Q2	60287062	30101778	43237683	696645	-0.8678	-	14.000

							3.7378	
KASB	2009Q3	32828758	19423764	28152900	58021	-0.2076	-	13.000
							1.2356	
KASB	2009Q4	50972431	27018015	37980314	78275	-0.0121	-	12.500
							0.2157	
MCB	2005Q1	287160641	121354478	189265958	119440	0.17533	1.0886	7.500
MCB	2005Q2	300392823	156068756	241461321	1024915	0.19135	0.9193	9.000
MCB	2005Q3	279613763	147896380	224798503	218184	0.30264	1.5599	9.000
MCB	2005Q4	299707631	180322753	229341890	1144355	1.08191	5.6765	9.000
MCB	2006Q1	301937857	154573924	237093729	233089	0.35664	1.863	9.000
MCB	2006Q2	317316716	185357208	255710348	-412891	0.35326	1.758	9.000
MCB	2006Q3	318948796	183581850	251085017	245309	0.32761	1.7251	9.500
MCB	2006Q4	342108243	198239155	257461838	1182737	1.3149	7.1858	9.500
MCB	2007Q1	361393969	186819096	280730060	192954	0.35084	1.8626	9.500
MCB	2007Q2	383800104	193916316	300914980	1444051	0.38311	1.9514	9.500
MCB	2007Q3	382593513	190524312	287921856	410338	0.33288	1.8338	10.000
MCB	2007Q4	410485517	218960598	292098066	3065051	1.31992	7.2948	10.000
MCB	2008Q1	396686082	229835976	301670698	615220	0.33993	1.9089	10.500
MCB	2008Q2	450336516	228975656	350721984	836898	0.26709	1.3887	12.000
MCB	2008Q3	461438385	242763228	375108623	887291	0.44231	2.1344	13.000
MCB	2008Q4	443615904	262510470	330274155	626467	0.46471	2.5328	15.000
MCB	2009Q1	456430342	244148651	338310851	1742165	0.33751	1.8439	15.000
MCB	2009Q2	467682438	258849852	361834511	4066398	0.29102	1.5064	14.000
MCB	2009Q3	468802159	238292022	362116406	1120306	0.30413	1.6471	13.000
MCB	2009Q4	511741878	253248265	367581075	7322321	1.99291	6.3521	12.500
MetroPol	2005Q1	74064527	43930711	53222615		0.13198	0.7372	7.500
MetroPol	2005Q2	74569825	44586232	54623122		0.13727	0.7527	9.000
MetroPol	2005Q3	75175684	41013544	52179711		0.18346	1.0888	9.000
MetroPol	2005Q4	79665898	43463256	56712820		0.19747	1.164	9.000
MetroPol	2006Q1	87474552	47012631	58153644		0.0979	0.6069	9.000
MetroPol	2006Q2	92766115	47560285	60021963		0.12974	0.8087	9.000
MetroPol	2006Q3	94297579	46982201	60376757		0.09826	0.7908	9.500
MetroPol	2006Q4	148668395	83324059	102492712		0.29553	1.7826	9.500
MetroPol	2007Q1	160438492	83306574	113134797		0.15857	0.9238	9.500
MetroPol	2007Q2	169116985	82768032	118807800		0.15097	0.8696	9.500
MetroPol	2007Q3	173053010	83043714	132029909		0.14907	0.7811	10.000
MetroPol	2007Q4	172867001	89826806	121066469		0.15137	0.9038	10.000
MetroPol	2008Q1	188572199	95629444	131869566		0.13379	0.7732	10.500
MetroPol	2008Q2	192452947	101223811	128973411		0.17114	1.0066	12.000
MetroPol	2008Q3	186825698	105090606	128313700		0.17469	1.0052	13.000
MetroPol	2008Q4	182357403	108261259	128369670		0.15236	0.8822	15.000
MetroPol	2009Q1	189280291	102030939	119357294		0.17727	1.1779	15.000
MetroPol	2009Q2	207253542	105368884	131488952		0.12913	0.8673	14.000
MetroPol	2009Q3	234316417	99141611	134508157		0.14293	1.0025	13.000
MetroPol	2009Q4	237412230	102293132	142457376		0.06245	0.2238	12.500
My bank	2005Q1	17841249	10114259	13289161	292479	0.58241	3.4212	7.500
My bank	2005Q2	21189951	11899954	15715317	12190	0.12889	0.6202	9.000
My bank	2005Q3	16617984	8540963	12438147	13941	0.13503	0.7347	9.000
My bank	2005Q4	17218757	9294381	12856615	15171	0.0813	0.4392	9.000
My bank	2006Q1	17506613	10041835	13274230		0.62837	3.6901	9.000
My bank	2006Q2	21469706	10533807	15684306	4181099	0.22372	1.2471	9.000
My bank	2006Q3	22245878	11463018	16211987	589571	0.21792	1.3084	9.500
My bank	2006Q4	26421304	13486839	19171752	760	0.16264	1.0523	9.500

My bank	2007Q1	35601367	17790468	25177866	23294	0.19235	1.1106	9.500
My bank	2007Q2	37084757	18531737	26226944	1283	0.17	0.9634	9.500
My bank	2007Q3	37228793	19303918	27982814	2004	0.1446	0.8044	10.000
My bank	2007Q4	40601613	20791151	34659293	648425	0.10812	0.5113	10.000
My bank	2008Q1	41344415	12218155	28619166	44435	0.21282	1.2849	10.500
My bank	2008Q2	45047398	12971191	30941657	14461	0.438	2.5031	12.000
My bank	2008Q3	43367931	22230671	30307636	269644	0.45739	2.5103	13.000
My bank	2008Q4	39803003	20940081	28032735	1169917	-0.6818	-	15.000
							3.8214	
My bank	2009Q1	38756419	19256323	26059892	863853	-0.306	-	15.000
							1.9303	
My bank	2009Q2	43432893	19217562	28401183	549425	0.035	0.204	14.000
My bank	2009Q3	39350909	18909559	28032735	95209	-1.4407	-	13.000
							7.6928	
My bank	2009Q4	35490705	17428423	26848808	16724395	0.05688	2.3688	12.500
NBP	2005Q1	523564782	248965213	478562137	56486	0.72706	3.5937	7.500
NBP	2005Q2	659148609	272575235	477481389	13093	0.77663	3.7914	9.000
NBP	2005Q3	506348666	252889877	409420771	105230	0.87891	4.6544	9.000
NBP	2005Q4	577718806	268838779	463426602	2446739	0.27771	1.4305	9.000
NBP	2006Q1	615894235	295462131	495621325	256423	1.03161	5.3086	9.000
NBP	2006Q2	659325744	294716915	523701271	698925	0.25994	1.2759	9.000
NBP	2006Q3	625897456	315564898	482654562	856421	0.29023	1.5166	9.500
NBP	2006Q4	635132711	316110406	501872243	1180771	0.874	4.4195	9.000
NBP	2007Q1	633743650	306868113	504458713	367761	1.04446	5.5625	9.500
NBP	2007Q2	709554517	331795453	553289982	138064	0.25409	1.2653	9.500
NBP	2007Q3	668033834	320466379	522928976	640375	0.44307	2.4236	10.000
NBP	2007Q4	762193593	340677100	591907435	2648391	0.63316	3.2101	10.000
NBP	2008Q1	738285719	361636012	564475559	1524516	0.74964	4.0748	10.500
NBP	2008Q2	795853045	372766231	621341765	5053479	0.20547	1.0145	12.000
NBP	2008Q3	737976441	388170526	561499498	6734076	0.31142	1.7257	13.000
NBP	2008Q4	817758326	412986865	624939016	10593565	0.45199	2.4002	15.000
NBP	2009Q1	841568994	405277080	640509415	1584427	0.29642	1.6129	15.000
NBP	2009Q2	901089879	452131375	692721067	5064429	0.32795	1.6723	14.000
NBP	2009Q3	865137661	435504840	653518020	8631720	0.37608	1.9257	13.000
NBP	2009Q4	807991576	390373550	604261173	7737216	0.58478	1.5974	12.500
NIB	2005Q1	17307705	13777534	10277425	9462	0.06166	0.4531	7.500
NIB	2005Q2	20452018	16692039	11435616	11464	0.04402	0.3155	9.000
NIB	2005Q3	20529506	18360589	9679792	12610	0.02811	0.3052	9.000
NIB	2005Q4	32018715	19622929	21123556	120931	0.02047	0.1278	9.000
NIB	2006Q1	33939848	21497968	23049721	2077	0.00643	0.0413	9.000
NIB	2006Q2	40105743	26045656	25647256	18565	0.00922	0.0578	9.000
NIB	2006Q3	40257696	28649202	21709377	74446	0.04839	0.3865	9.500
NIB	2006Q4	46428843	31052169	30566540	31696	0.11377	0.7328	9.500
NIB	2007Q1	52015916	34560855	32815372	2414350	0.07336	0.6157	9.500
NIB	2007Q2	85680602	40028252	40715332	144714	0.06793	0.6519	9.500
NIB	2007Q3	109686079	43132227	45308045	264423	0.03569	0.4514	10.000
NIB	2007Q4	176872441	81932379	116671219	296210	0.02743	0.1693	10.000
NIB	2008Q1	183179637	85291632	115124325	76652	0.00474	0.0298	10.500
NIB	2008Q2	178521843	85428603	112804923	1133729	0.02885	0.1836	12.000
NIB	2008Q3	180363535	85958175	114325504	1708536	0.04889	0.3073	13.000
NIB	2008Q4	178909115	138034419	104586167	9657400	0.04837	0.3372	15.000
NIB	2009Q1	185597484	78224620	107898705	286637	0.0996	0.6957	15.000
NIB	2009Q2	191218693	84539665	99937152	241089	0.03387	0.2577	14.000

NIB	2009Q3	189033993	79973978	105852037	344094	0.16718	1.2545	13.000
NIB	2009Q4	208118963	84021406	93919805	1195329	0.06461	0.6858	12.500
UBL	2005Q1	290328298	156805484	245587837	168854	0.10505	0.6905	7.500
UBL	2005Q2	516824126	288276234	427940541	365649	0.13494	0.53	9.000
UBL	2005Q3	323626012	173091335	278660405	375521	0.21265	1.0236	9.000
UBL	2005Q4	347048951	204810470	289226299	303341	0.1201	0.5863	9.000
UBL	2006Q1	358969081	208349636	288676500	411873	0.19244	1.2154	9.000
UBL	2006Q2	552648383	315068416	442589635	501267	0.26122	1.1106	9.000
UBL	2006Q3	388177397	235301020	308064963	892464	0.05499	0.2897	9.500
UBL	2006Q4	423320207	243237819	335077873	411873	0.83192	4.2652	9.500
UBL	2007Q1	435645380	251543270	352432310	355577	0.24455	1.2979	9.500
UBL	2007Q2	499586675	279780740	402983041	386208	0.22374	1.0915	9.500
UBL	2007Q3	483397747	279902372	380751509	2858804	0.16839	0.8965	10.000
UBL	2007Q4	530124331	293373007	400974539	2821457	0.60874	3.2433	10.000
UBL	2008Q1	538066068	319868216	407509340	1193679	0.1993	1.0897	10.500
UBL	2008Q2	576015177	328551347	465534964	1348327	0.18937	0.9573	12.000
UBL	2008Q3	600704337	364942660	455368787	1338279	0.20069	1.0628	13.000
UBL	2008Q4	605072482	361863689	483560062	4217000	0.56517	2.8692	15.000
UBL	2009Q1	622377749	360083158	469272582	2223983	0.15709	0.8403	15.000
UBL	2009Q2	632698057	368380466	508707229	4194707	0.11525	0.5554	14.000
UBL	2009Q3	593077005	351964833	452379473	2691281	0.13162	0.7036	13.000
UBL	2009Q4	616050937	360142819	476786428	411873	0.21015	0.6831	12.500
Alfalah	2005Q1	158848388	92851000	134476176	79046	0.08815	0.4508	7.500
Alfalah	2005Q2	185034276	97325359	162736316	167484	0.16572	0.7836	9.000
Alfalah	2005Q3	199727755	103955790	172252515	98602	0.08783	0.4569	9.000
Alfalah	2005Q4	248313793	118864010	209192928	69002	0.06064	0.2898	9.000
Alfalah	2006Q1	251600643	124324119	222345028	169052	0.05003	0.2303	9.000
Alfalah	2006Q2	260111114	128421698	206769521	752840	0.05847	0.295	9.000
Alfalah	2006Q3	261499469	133355747	214843051	592717	0.07283	0.3615	9.500
Alfalah	2006Q4	271685541	149999325	239509391	699227	0.2392	1.0713	9.500
Alfalah	2007Q1	264685125	133031057	227616526	223811	0.08413	0.4249	9.500
Alfalah	2007Q2	310058793	155835916	270655821	390947	0.06816	0.3135	9.500
Alfalah	2007Q3	312460024	149336509	260228448	508999	0.20067	0.9891	10.000
Alfalah	2007Q4	328895152	171198992	273173148	2370867	0.35569	1.6603	10.000
Alfalah	2008Q1	308680053	169516839	263467372	134366	0.11189	0.5439	10.500
Alfalah	2008Q2	331681099	180062597	287771009	364098	0.09739	0.4501	12.000
Alfalah	2008Q3	333234242	187935411	280717636	420844	0.06799	0.3305	13.000
Alfalah	2008Q4	348990764	192671169	300732858	2035997	0.13239	0.5968	15.000
Alfalah	2009Q1	328823753	177634702	273258711	555213	0.0494	0.2434	15.000
Alfalah	2009Q2	344460184	188399596	295603143	780635	0.05343	0.2499	14.000
Alfalah	2009Q3	346688677	189279136	294815168	726681	0.04189	0.1951	13.000
Alfalah	2009Q4	339990871	185104478	287892341	710654	0.08262	0.1951	12.500

Fig 3.1 – Raw Data of Eleven listed Banks

Bank	CPI:12 MAJOR CITIES ALL INC.	EXPORTS	IMPORTS , CIF	Inflation Rate	Interest income	Non- interest income	Expense managemen t	PBT
Askari Bank	96.769	220078.000	328279.000	1.8732	1595730	392132	534402	692481
Askari Bank	99.357	251688.000	366252.000	2.674	1953073	358114	586834	619116
Askari Bank	101.073	249446.000	391031.000	1.727	2476520	404844	689214	906934
Askari Bank	102.800	234252.000	424253.000	1.709	2755375	397476	783367	2859081
Askari Bank	104.414	241212.000	421621.000	1.570	2829535	497979	758744	590063
Askari Bank	106.288	267648.000	474254.000	1.795	3005554	549986	786952	930241
Askari Bank	109.597	257741.000	448256.000	3.113	3257891	558778	932681	615248
Askari Bank	111.385	253883.000	453698.000	1.631	3503941	532511	799117	3346855
Askari Bank	111.970	244641.000	457235.000	0.525	3591255	587026	924412	1055251
Askari Bank	113.844	282773.000	492620.000	1.674	3692364	745714	1073142	561276
Askari Bank	117.347	269672.000	487547.000	3.077	3896794	578815	1470303	565167
Askari Bank	121.326	286309.000	541922.000	3.391	3962828	2653941	1333730	2299785
Askari Bank	125.869	301550.000	689167.000	3.744	3988361	578533	1328213	248305
Askari Bank	135.868	384633.000	793848.000	7.944	3953846	885620	1381143	262825
Askari Bank	146.119	389507.000	801532.000	7.545	4982509	784172	1604921	14603
Askari Bank	150.858	347760.000	664475.000	3.243	5518597	458675	1601338	511130
Askari Bank	151.299	313567.000	557624.000	0.292	5563384	576922	1675526	506786
Askari Bank	156.075	354811.000	701580.000	3.157	5415960	3661447	1682257	373800
Askari Bank	161.694	370853.000	626129.000	3.600	5483380	2703052	1809474	893578
Askari Bank	165.893	394322.000	702531.000	2.597	6199030	2554071	1862968	895452
AlHabib	96.769	220078.000	328279.000	1.8732	910861	233972	378071	401951
AlHabib	99.357	251688.000	366252.000	2.674	1072433	220857	407051	905086
AlHabib	101.073	249446.000	391031.000	1.727	1369916	256685	433473	1494966
AlHabib	102.800	234252.000	424253.000	1.709	1582416	324550	512247	2022008
AlHabib	104.414	241212.000	421621.000	1.570	1713800	318183	515576	628518
AlHabib	106.288	267648.000	474254.000	1.795	1958208	349360	584130	1308486
AlHabib	109.597	257741.000	448256.000	3.113	1962938	319479	634970	607558
AlHabib	111.385	253883.000	453698.000	1.631	2222799	376222	697773	2689381
AlHabib	111.970	244641.000	457235.000	0.525	2337968	369329	680907	650792
AlHabib	113.844	282773.000	492620.000	1.674	2548844	641290	783028	962373
AlHabib	117.347	269672.000	487547.000	3.077	2445046	544882	802673	718055
AlHabib	121.326	286309.000	541922.000	3.391	2627044	591117	948343	3052227

AlHabib	125.869	301550.000	689167.000	3.744	2892230	462579	930529	810893
AlHabib	135.868	384633.000	793848.000	7.944	3108993	822938	1098597	1345862
AlHabib	146.119	389507.000	801532.000	7.545	3853517	764867	1138537	1183164
AlHabib	150.858	347760.000	664475.000	3.243	4749497	365920	1206763	3533387
AlHabib	151.299	313567.000	557624.000	0.292	5164771	474962	1320665	834980
AlHabib	156.075	354811.000	701580.000	3.157	5482376	476695	1164767	1718326
AlHabib	161.694	370853.000	626129.000	3.600	5482257	555326	1357337	1046748
AlHabib	165.893	394322.000	702531.000	2.597	5993311	423325	1422719	1200018
HBL	96.769	220078.000	328279.000	1.8732	5830868.0	1601005.00	5429052.00	530866
					00	0	0	
HBL	99.357	251688.000	366252.000	2.674	7513358.0	2156739.00	3254703.00	4882592
					00	0	0	
HBL	101.073	249446.000	391031.000	1.727	8761611.0	1650302.00	3566307.00	8609899
					00	0	0	
HBL	102.800	234252.000	424253.000	1.709	10237369.	2046254.00	2162517.00	4674452
					000	0	0	
HBL	104.414	241212.000	421621.000	1.570	10052700.	1505982.00	3548212.00	2112320
					000	0	0	
HBL	106.288	267648.000	474254.000	1.795	10266026.	1622208.00	3701940.00	6035587
					000	0	0	
HBL	109.597	257741.000	448256.000	3.113	11809433.	1990497.00	6473774.00	12509361
					000	0	0	
HBL	111.385	253883.000	453698.000	1.631	11557581.	3370809.00	1878943.00	6885756
					000	0	0	
HBL	111.970	244641.000	457235.000	0.525	11903763.	2161130.00	4509743.00	5062270
					000	0	0	
HBL	113.844	282773.000	492620.000	1.674	11567342.	2518954.00	4033370.00	10199315
					000	0	0	
HBL	117.347	269672.000	487547.000	3.077	13476262.	2467372.00	4319238.00	16103208
					000	0	0	
HBL	121.326	286309.000	541922.000	3.391	13533654.	2875708.00	5245899.00	10454931
					000	0	0	
HBL	125.869	301550.000	689167.000	3.744	14040907.	2963981.00	4665503.00	6450999
					000	0	0	
HBL	135.868	384633.000	793848.000	7.944	14563256.	2875036.00	5482603.00	11617006
					000	0	0	
HBL	146.119	389507.000	801532.000	7.545	16931312.	3431578.00	5873730.00	6515509
					000	0	0	
HBL	150.858	347760.000	664475.000	3.243	17769558.	7108216.00	5914669.00	8194505
					000	0	0	
HBL	151.299	313567.000	557624.000	0.292	18647255.	2377426.00	5936167.00	5203821
					000	0	0	
HBL	156.075	354811.000	701580.000	3.157	18798791.	3217464.00	5469753.00	10407978
					000	0	0	
HBL	161.694	370853.000	626129.000	3.600	18937103.	2762307.00	5817214.00	6131671
					000	0	0	
HBL	165.893	394322.000	702531.000	2.597	19693198.	2802415.00	6135717.00	21381636
					000	0	0	
KASB	96.769	220078.000	328279.000	1.8732	223150.00	80120.000	125604.000	49158
					0			
KASB	99.357	251688.000	366252.000	2.674	256260.00	56511.000	141603.000	13175
					0			
KASB	101.073	249446.000	391031.000	1.727	279776.00	48628.000	152444.000	4935
					0			
KASB	102.800	234252.000	424253.000	1.709	314502.00	20365.000	206794.000	1323
					0			
KASB	104.414	241212.000	421621.000	1.570	409010.00	60198.000	154314.000	78171
					0			

KASB	106.288	267648.000	474254.000	1.795	445894.00	143476.000	204472.000	185006
					0			
KASB	109.597	257741.000	448256.000	3.113	429743.00	249326.000	206031.000	78171
					0			
KASB	111.385	253883.000	453698.000	1.631	505700.00	139947.000	295350.000	69758
					0			
KASB	111.970	244641.000	457235.000	0.525	541579.00	122836.000	234302.000	29475
					0			
KASB	113.844	282773.000	492620.000	1.674	636270.00	317125.000	280986.000	154169
					0			
KASB	117.347	269672.000	487547.000	3.077	828848.00	275616.000	295545.000	173440
					0			
KASB	121.326	286309.000	541922.000	3.391	910647.00	105902.000	364071.000	65562
					0			
KASB	125.869	301550.000	689167.000	3.744	1061090.0	133131.000	294931.000	97097
					00			
KASB	135.868	384633.000	793848.000	7.944	1060566.0	390916.000	392363.000	10864
					00			
KASB	146.119	389507.000	801532.000	7.545	1557993.0	87722.000	292714.000	88435
					00			
KASB	150.858	347760.000	664475.000	3.243	1181751.0	48866.000	852400.000	-1849199
					00			
KASB	151.299	313567.000	557624.000	0.292	1514933.0	117937.000	460968.000	-180961
					00			
KASB	156.075	354811.000	701580.000	3.157	1109573.0	200101.000	662043.000	-1616139
					00			
KASB	161.694	370853.000	626129.000	3.600	1306460.0	151633.000	589174.000	-347865
					00			
KASB	165.893	394322.000	702531.000	2.597	1130667.0	85361.000	702433.000	-81905
					00			
MCB	96.769	220078.000	328279.000	1.8732	3108267.0	1285521.00	1754791.00	2060287
					00	0	0	
MCB	99.357	251688.000	366252.000	2.674	4079145.0	996163.000	1912827.00	2219737
					00		0	
MCB	101.073	249446.000	391031.000	1.727	5035932.0	1211114.00	1717303.00	3506526
					00	0	0	
MCB	102.800	234252.000	424253.000	1.709	5532888.0	1920273.00	1180670.00	13018487
					00	0	0	
MCB	104.414	241212.000	421621.000	1.570	5831709.0	1288636.00	1841542.00	4417017
					00	0	0	
MCB	106.288	267648.000	474254.000	1.795	6180935.0	1082689.00	1789970.00	4495308
					00	0	0	
MCB	109.597	257741.000	448256.000	3.113	6559308.0	1261957.00	2129719.00	4331428
					00	0	0	
MCB	111.385	253883.000	453698.000	1.631	7206109.0	1358134.00	799480.000	18500670
					00	0		
MCB	111.970	244641.000	457235.000	0.525	7615771.0	1305987.00	1931411.00	5228839
					00	0	0	
MCB	113.844	282773.000	492620.000	1.674	7991888.0	1840440.00	794005.000	5872185
					00	0		
MCB	117.347	269672.000	487547.000	3.077	8081786.0	1597265.00	2003051.00	5279940
					00	0	0	
MCB	121.326	286309.000	541922.000	3.391	8097150.0	1267599.00	830800.000	21308035
					00	0		
MCB	125.869	301550.000	689167.000	3.744	8188185.0	1916485.00	1738492.00	5758587
					00	0	0	
MCB	135.868	384633.000	793848.000	7.944	8747842.0	938733.000	1632298.00	4870476
					00		0	

MCB	146.119	389507.000	801532.000	7.545	11150243.000	1639961.000	2935404.000	8006249
MCB	150.858	347760.000	664475.000	3.243	11957554.000	1296261.000	2081643.000	8365172
MCB	151.299	313567.000	557624.000	0.292	13002372.000	1688081.000	2802054.000	6237969
MCB	156.075	354811.000	701580.000	3.157	12847323.000	1069887.000	2459269.000	5450734
MCB	161.694	370853.000	626129.000	3.600	12350121.000	1183049.000	2618126.000	5964293
MCB	165.893	394322.000	702531.000	2.597	13422095.000	1813836.000	3186322.000	23349146
MetroPol	96.769	220078.000	328279.000	1.8732	862429.000	190313.000	227335.000	392349
MetroPol	99.357	251688.000	366252.000	2.674	978305.000	149635.000	244176.000	411124
MetroPol	101.073	249446.000	391031.000	1.727	1208098.000	256955.000	248103.000	568147
MetroPol	102.800	234252.000	424253.000	1.709	1309724.000	329863.000	257490.000	660109
MetroPol	104.414	241212.000	421621.000	1.570	1479687.000	316302.000	268544.000	352913
MetroPol	106.288	267648.000	474254.000	1.795	1614156.000	314728.000	297058.000	485391
MetroPol	109.597	257741.000	448256.000	3.113	1722448.000	361613.000	294132.000	477456
MetroPol	111.385	253883.000	453698.000	1.631	2472832.000	735958.000	490364.000	1827038
MetroPol	111.970	244641.000	457235.000	0.525	2867164.000	625361.000	594034.000	1045182
MetroPol	113.844	282773.000	492620.000	1.674	2862171.000	754158.000	563408.000	1033182
MetroPol	117.347	269672.000	487547.000	3.077	2994026.000	772134.000	617315.000	1031298
MetroPol	121.326	286309.000	541922.000	3.391	3260190.000	1024053.000	479258.000	1094236
MetroPol	125.869	301550.000	689167.000	3.744	3393338.000	731993.000	709647.000	1019579
MetroPol	135.868	384633.000	793848.000	7.944	3744444.000	1254639.000	856259.000	1298209
MetroPol	146.119	389507.000	801532.000	7.545	4284788.000	953924.000	853729.000	1289857
MetroPol	150.858	347760.000	664475.000	3.243	4447602.000	1332908.000	814149.000	1132465
MetroPol	151.299	313567.000	557624.000	0.292	4633263.000	890102.000	909837.000	1405910
MetroPol	156.075	354811.000	701580.000	3.157	5055316.000	1017730.000	821698.000	1140420
MetroPol	161.694	370853.000	626129.000	3.600	5480499.000	926673.000	934197.000	1348496
MetroPol	165.893	394322.000	702531.000	2.597	6207181.000	867824.000	964115.000	318816
My bank	96.769	220078.000	328279.000	1.8732	206215.000	63490.000	112713.000	454646
My bank	99.357	251688.000	366252.000	2.674	262517.000	63287.000	144417.000	97461
My bank	101.073	249446.000	391031.000	1.727	277238.000	62133.000	139525.000	91381

My bank	102.800	234252.000	424253.000	1.709	280030.00	60821.000	142972.000	56464
					0			
My bank	104.414	241212.000	421621.000	1.570	357511.00	90696.000	123990.000	489833
					0			
My bank	106.288	267648.000	474254.000	1.795	436037.00	118430.000	169681.000	195603
					0			
My bank	109.597	257741.000	448256.000	3.113	416084.00	170369.000	146837.000	212111
					0			
My bank	111.385	253883.000	453698.000	1.631	476178.00	72743.000	171040.000	201745
					0			
My bank	111.970	244641.000	457235.000	0.525	641482.00	135702.000	164401.000	279623
					0			
My bank	113.844	282773.000	492620.000	1.674	719271.00	299932.000	171621.000	252670
					0			
My bank	117.347	269672.000	487547.000	3.077	778245.00	269710.000	219267.000	225088
					0			
My bank	121.326	286309.000	541922.000	3.391	768077.00	205216.000	177932.000	177197
					0			
My bank	125.869	301550.000	689167.000	3.744	838695.00	232698.000	196575.000	367726
					0			
My bank	135.868	384633.000	793848.000	7.944	931590.00	328463.000	224943.000	774512
					0			
My bank	146.119	389507.000	801532.000	7.545	1029172.0	200515.000	233217.000	760825
					00			
My bank	150.858	347760.000	664475.000	3.243	841330.00	180972.000	276277.000	-1071230
					0			
My bank	151.299	313567.000	557624.000	0.292	838216.00	38862.000	277028.000	-503042
					0			
My bank	156.075	354811.000	701580.000	3.157	928997.00	155409.000	234736.000	57951
					0			
My bank	161.694	370853.000	626129.000	3.600	878279.00	103245.000	273607.000	-2156512
					0			
My bank	165.893	394322.000	702531.000	2.597	722726.00	86242.000	307404.000	635984
					0			
NBP	96.769	220078.000	328279.000	1.8732	6288512	1664603	2499971	17198065
NBP	99.357	251688.000	366252.000	2.674	7856564.0	2043410.00	3130037.00	18103227
					00	0	0	
NBP	101.073	249446.000	391031.000	1.727	6822321	2132659	2209612	19056028
NBP	102.800	234252.000	424253.000	1.709	12666338	3583953	3617017	6629547
NBP	104.414	241212.000	421621.000	1.570	9839170	2953210	2968026.00	26310577
							0	
NBP	99.357	251688.000	366252.000	1.795	10782215.	2937045.00	3197733.00	6681734
					000	0	0	
NBP	109.597	257741.000	448256.000	3.113	11025805	4131236	3182125.00	7319857
							0	
NBP	102.800	234252.000	424253.000	1.631	12453744	2141401	4286601.00	22180027
							0	
NBP	111.970	244641.000	457235.000	0.525	11715333.	1570075.00	3370679.00	28060501
					000	0	0	
NBP	113.844	282773.000	492620.000	1.674	12321091.	2540200.00	3509713.00	7000580
					000	0	0	
NBP	117.347	269672.000	487547.000	3.077	12369804.	4742906.00	3712171.00	12673707
					000	0	0	
NBP	121.326	286309.000	541922.000	3.391	14163253.	4691664.00	3798516.00	19000776
					000	0	0	
NBP	125.869	301550.000	689167.000	3.744	13555183.	4107736.00	4628810.00	23000998
					000	0	0	
NBP	135.868	384633.000	793848.000	7.944	14461388.	3453941.00	4160872.00	6303222

					000	0	0	
NBP	146.119	389507.000	801532.000	7.545	15210356.000	5023705.000	5037170.000	9689846
NBP	150.858	347760.000	664475.000	3.243	17715871.000	3830480.000	5675228.000	15000074
NBP	151.299	313567.000	557624.000	0.292	18796238.000	3658541.000	5120529.000	10331047
NBP	156.075	354811.000	701580.000	3.157	18472192.000	3308363.000	5560015.000	11584566
NBP	161.694	370853.000	626129.000	3.600	18663111.000	4273206.000	5469814.000	12584562
NBP	165.893	394322.000	702531.000	2.597	22016156.000	7785247.000	7363539.000	9652314
NIB	96.769	220078.000	328279.000	1.8732	315604.000	39143.000	107426.000	46569
NIB	99.357	251688.000	366252.000	2.674	330477.000	45357.000	171327.000	36081
NIB	101.073	249446.000	391031.000	1.727	468459.000	58101.000	181000.000	29542
NIB	102.800	234252.000	424253.000	1.709	602377.000	93558.000	253301.000	27001
NIB	104.414	241212.000	421621.000	1.570	657700.000	102204.000	254081.000	9527
NIB	106.288	267648.000	474254.000	1.795	807271.000	112129.000	305449.000	14812
NIB	109.597	257741.000	448256.000	3.113	977727.000	107272.000	327988.000	83903
NIB	111.385	253883.000	453698.000	1.631	1056580.000	146487.000	336164.000	223996
NIB	111.970	244641.000	457235.000	0.525	1299036.000	110698.000	418733.000	202037
NIB	113.844	282773.000	492620.000	1.674	1540302.000	175519.000	492571.000	265429
NIB	117.347	269672.000	487547.000	3.077	1939560.000	214527.000	524859.000	204523
NIB	121.326	286309.000	541922.000	3.391	2220990.000	98027.000	570798.000	197550
NIB	125.869	301550.000	689167.000	3.744	3452171.000	688990.000	1234729.000	34306
NIB	135.868	384633.000	793848.000	7.944	3696298.000	1015834.000	1527635.000	207072
NIB	146.119	389507.000	801532.000	7.545	4188970.000	293532.000	1575844.000	351272
NIB	150.858	347760.000	664475.000	3.243	3862252.000	423520.000	3826033.000	352654
NIB	151.299	313567.000	557624.000	0.292	4748072.000	370369.000	1319563.000	750647
NIB	156.075	354811.000	701580.000	3.157	4621294.000	311897.000	1119517.000	257579
NIB	161.694	370853.000	626129.000	3.600	4367641.000	603081.000	1270303.000	1327939
NIB	165.893	394322.000	702531.000	2.597	4535356.000	396486.000	1533056.000	644071
UBL	96.769	220078.000	328279.000	1.8732	3499403.000	983925.000	1858286.000	1695864
UBL	99.357	251688.000	366252.000	2.674	4442094.000	909319.000	1946117.000	2268137
UBL	101.073	249446.000	391031.000	1.727	5907220.000	1486308.000	2026692.000	2852346

UBL	102.800	234252.000	424253.000	1.709	6309443.000	1633480.000	2385393.000	1695864
UBL	104.414	241212.000	421621.000	1.570	7068356.000	1670476.000	2227166.000	3508710
UBL	106.288	267648.000	474254.000	1.795	7995864.000	1577086.000	2695616.000	4915313
UBL	109.597	257741.000	448256.000	3.113	8698947.000	1402182.000	2672391.000	892464
UBL	111.385	253883.000	453698.000	1.631	9228436.000	2298644.000	3609395.000	14291756
UBL	111.970	244641.000	457235.000	0.525	9646981.000	2058632.000	2968199.000	4574169
UBL	113.844	282773.000	492620.000	1.674	10084442.000	2155630.000	3432431.000	4398605
UBL	117.347	269672.000	487547.000	3.077	10463677.000	2164783.000	3413281.000	3413281
UBL	121.326	286309.000	541922.000	3.391	10850443.000	2613306.000	3860777.000	13004974
UBL	125.869	301550.000	689167.000	3.744	11156658.000	2972904.000	3731671.000	4440740
UBL	135.868	384633.000	793848.000	7.944	12013168.000	3061508.000	4076999.000	4456798
UBL	146.119	389507.000	801532.000	7.545	14042114.000	3153584.000	4633353.000	4839781
UBL	150.858	347760.000	664475.000	3.243	15041421.000	1213398.000	4123321.000	13874424
UBL	151.299	313567.000	557624.000	0.292	16308130.000	2106318.000	3998067.000	3943244
UBL	156.075	354811.000	701580.000	3.157	15511604.000	3674712.000	4423314.000	2825399
UBL	161.694	370853.000	626129.000	3.600	14667856.000	1945775.000	4387012.000	3182955
UBL	165.893	394322.000	702531.000	2.597	14369445.000	3942756.000	4904541.000	3256912
Alfalah	96.769	220078	328279	1.8732	2032710	553632	842918	606273
Alfalah	99.357	251688	366252	2.674	2599402	386189	969856	1275264
Alfalah	101.073	249446	391031	1.727	3573046	541094	1201193	787071
Alfalah	102.800	234252	424253	1.709	4041653	764455	1330285	606273
Alfalah	104.414	241212	421621	1.570	4856868	802065	1326896	512001
Alfalah	106.288	267648	474254	1.795	5204180	742574	1441738	610008
Alfalah	109.597	257741	448256	3.113	5475961	789062	1627746	776624
Alfalah	111.385	253883	453698	1.631	5654461	890938	1521671	2565945
Alfalah	111.970	244641	457235	0.525	5798804	1001690	1788029	967094
Alfalah	113.844	282773	492620	1.674	6229642	1093079	1981987	848635
Alfalah	117.347	269672	487547	3.077	6812965	2849807	2381250	2574047
Alfalah	121.326	286309	541922	3.391	6942460	1093890	2137845	4535552
Alfalah	125.869	301550	689167	3.744	6782493	1239920	2262040	1432984
Alfalah	135.868	384633	793848	7.944	6979084	1659379	2649895	1295172
Alfalah	146.119	389507	801532	7.545	8128444	1274697	2758129	927717
Alfalah	150.858	347760	664475	3.243	9156562	1071431	2952675	1794720
Alfalah	151.299	313567	557624	0.292	8636883	1625754	2499147	665181
Alfalah	156.075	354811	701580	3.157	9274618	1227542	2750028	738583
Alfalah	161.694	370853	626129	3.600	8727217	1244574	2753268	575316
Alfalah	165.893	394322	702531	2.597	8922594	1084383	2999099	561806

Fig 3.2 – Raw Data of Eleven listed Banks

Dependent Variable: PROFIT

Method: Panel EGLS (Cross-section random effects)				
Date: 01/23/12 Time: 03:08				
Sample (adjusted): 2005Q2 2009Q4				
Periods included: 19				
Cross-sections included: 11				
Total panel (balanced) observations: 209				
Swamy and Arora estimator of component variances				
	Coefficient	Std. Error	t-Statistic	Probability
C	320780.7	256018.6	1.252958	0.2117
ADVANCES	0.024553	0.007321	3.353778	0.001
EXPENSES	0.352712	0.358913	0.982722	0.3269
INTEREST INCOME	-0.6531	0.327265	-1.995631	0.0473
NON-INTEREST INCOME	-0.358003	0.298593	-1.198967	0.2319
SIZE	-0.005761	0.006888	-0.836394	0.4039
CREDIT RISK	1.870129	125605	14.88897	0.000

Fig 4.1 – Internal Variable – Regression Analysis

Dependent Variable: PROFIT

Method: Panel Least Squares				
Date: 01/23/12 Time: 03:58				
Sample (adjusted): 2005Q2 2009Q4				
Periods included: 19				
Cross-sections included: 11				
Total panel (balanced) observations: 209				
	Coefficient	Std. Error	t-Statistic	Probability
C	-146167.7	549042.5	-0.266223	0.7903
CPI	1.44531	142552.8	1.01388	0.3118
DISCOUNT RATE	-324394.5	477975.3	-0.678685	0.4981
EXPORT	-12.42735	13.60469	-0.91346	0.3621

Fig 4.2 – External Variable – Regression Analysis

ADVANCE CREDIT DEPOSIT EXPENSE INTEREST NONII SIZE

ADVANCE	1	0.10286258	0.52116229	-0.0047467	0.05422874	0.05645319	0.50974037
CREDIT	0.10286258	1	-0.0222573	-0.0980502	-0.0502606	-0.0059776	-0.0008004
DEPOSIT	0.52116229	-0.0222573	1	-0.0100397	0.13215217	-0.0679228	0.91604583
EXPENSE	-0.0047467	-0.0980502	-0.0100397	1	0.23021926	0.02400512	-0.0035596
INTEREST	0.05422874	-0.0502606	0.13215217	0.23021926	1	0.1413202	0.17338744
NONII	0.05645319	-0.0059776	-0.0679228	0.02400512	0.1413202	1	-0.0402845
SIZ	0.50974037	-0.0008004	0.91604583	-0.0035596	0.17338744	-0.0402845	1

Fig 4.3 – Correlation Internal Variables

	EXPORT	IMPORT	CPI
EXPORT	1	0.8903179	0.2498875
IMPORT	0.8903179	1	0.126283
CPI	0.2498875	0.126283	1

Fig 4.4 – Correlation External Variables