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Why Foreign Banks Fail in Emerging Economies: Risk Management Perspective from Pakistan

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Abstract: The tenacity of this paper is to understand the concept of 'relative efficiency' as an alternative measure to assess bank performance, and to investigate the progressive performance of foreign and domestic banks in Pakistan. A very steady growth is observed in assets of foreign banks in Pakistan although Pakistani banking sector has very limited contribution of foreign banks but its historic contribution is much accountable towards economic growth. The significance of this study is that we have conducted the study in Pakistan which was not explored earlier. A research design is the structure for investigation and way of finding out the answer of research question (Huizinga, 1999). We have conducted this research under the umbrella of Quantitative paradigm. Our preferred methodology is CAMELS. This system was developed by ACCION (Americans for Community Co-operation in Other Nations) in 1980's to help regulator banks of North America (hUallachain, 1994). CAMELS methodology adopted by North America Bank regulators to know the financial and managerial reliability of commercial lending institutions. For sample selection of the banks, we used criteria sampling method that is a type of non-probability sampling. We took sample data of 16 banks working in Pakistan from the period of 2014-2016. Groups are structured according to their ownership status. After assessment of CAMELS rating system in the context of Pakistan banking industry, it is observed that CAMELS is an internal rating system and its results are not available to the general public but to the regulators and the directors of the banks, so we implement its ratios to avail the result of the sample banks. Results of international credit rating agencies such as S&P, Moody's and Fitch should also be compare for similarities with CAMELS or any of the supervisory rating systems implemented in different countries. It would be productive research to study adoptability of CAMELS rating system in the context of Islamic banking system..

Keywords: Globalization, foreign banks, bank performance, Pakistan banking sector, CAMELS rating system.

JEL Classifications: G32

1. Introduction

The outline of WTO treaty introduced the new era of globalization of financial industry. Foreign banks represent 18% of all banks in developing countries (Lee, 2002). Foreign banks lead to develop off-shore businesses and subsidiaries across globe. This has been boosted through legislative framework and welcoming response from regulators and policy makers. Different economies repelled verily to these financial giants, some of them welcome these institutions wholeheartedly to upgrade local economy and to attain foreign investments, foreign reserves and employment (Stijn Claessens, 2008). Actually these global banks introduced new meanings of banking to the domestic financial markets including innovative products of personal loans, treasury market tools, HR policies, service quality

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techniques, customers and staff feedback implementations, etc. Such innovative measures helped in upgrading the domestic financial markets to international benchmarking. Contrary to this, some of the economies neglect the importance of foreign banks in their domestic markets and impose indirect restrictions, sustaining the pressure of WTO implementation, for global financial institutions like restrictions on profit shifting, minimum capital requirements, nonperforming loans standards, money market regulations and establishment of joint ventures with local investors. However, foreign banks have also been targeted to developing economies after exploring domestic markets of their based economy. Gritten (2011) concluded that many multinational corporations especially retailers have entered in credit market through launch of discount cards and other such products.

There are various reasons for exploring foreign markets like profitability, early bird edge, exhaustive exploration of domestic market, stiff competition or limited growth in domestic markets, tax rebates and subsidies to foreign investors, etc. Some more authors like Glindo et. al concluded in 2003 that foreign banks penetration to new markets depends upon the similarity of social and institutional characteristics and attitudes.

Study on performance of foreign and domestic banks have been conducted by various researchers in different aspects and have concluded varied results of their study like Hasan and Morton (2003) analyzed for Hungarian banks that foreign banks are always step ahead of domestic counterparts; similar results were found by Zaim, Isik and Hassan (2002) for Turkish banks; (Lee, 2002) reflected that foreign banks bring better risk management practices, new products, improved services from parent countries. Whereas Sathey (2001) concluded contradictory results and concluded that there is no comparative advantage to foreign banks.

2. Literature Review

2.1. Determinants of foreign banks entry

Many reasons are quoted by varied studies for foreign banks entry to markets. Some of them link it with economical patterns; some link it with social patterns and some with diplomatic relations.

Higher profitability: (Huizinga, 1999) and (Fotios Pasiouras, 2007) analyzed the pattern of foreign banks in economies and concluded that foreign banks earn higher profitability in developing countries than domestic banks, while latter have stands in victory in industrial countries. The globalization wave boosted the theorem when emerging economies penetrated by foreign banks on large scale. Inflation is found to have direct relations with bank interest spread (Hanson and Rocha, 1986). The other factors effecting net profitability are corporate taxation, overheads expenses and nonperforming loans (NPLs).

Economic associations: Along with the basic assumption of higher profitability search in emerging economies, Lee (2002) presented another reason of foreign banks entry to developing markets based on colonial links, especially British colonial economies penetrated by foreign banks in last decade of 20th century with a growth rate of 60%. Another major reason during this particular phase is the raise of globalization during last decade of 20th century. Moreover, assets share of foreign banks found larger than the presence or number share in developing market.

Global financial services: hUallachain (1994) deduced that global financial services related to financial and non-financial transactions urge banks to explore international markets. Such banks sometimes provide corresponding financial services to parent country and its currency. Other associated services including visa-processing, educational and business-entry processing are also used through such banks.

Emerging Market: Pería (2007) argued that emerging market trend evolved from industrialization, technological advancement, derivatives and money market compel, clientele movement rend indulge foreign banks to follow the lead and enter into other economies consequently.

Corporate benefits: the curse of FDI in host countries expose foreign banks to enjoy tax holidays and no bar over profit shifting to controlling office in parent country. Relan˜o (2011) concluded that foreign banks integrate to new economies with perception of benefiting from comparative economic pluses, like lesser salaries and administrative costs, advanced technological and money markets, emerging stream, etc.

2.2. Modes of foreign banks entry

Foreign banks adopt different modes of entry into host countries. Majors of such modes are categorized as:

Mergers and acquisitions: one way of foreign banks' entry in host countries is the acquisition of banking and financial institutions. Latin American states have welcomed foreign banks in this mode, especially in Mexico where foreign banks earned share of 83% till 2002 in eight years (Clarke, Cull, Peria, & Sánchez). Developing economies usually accept this mode of foreign banks entry.

Branches: foreign banks used to open local branches in host countries to gauge business opportunities thereof. This mode of entry is considered experimental since it allows these banks to expand or restrict their business according to available opportunities.

Subsidiaries: foreign banks use another mode of entry in host countries by developing a local subsidiary company thereof. These subsidiaries have more than 90% stake by foreign entrepreneur and have strong controlling influence by parent company. Sometime such companies are entitled with identical corporate entity to represent group recognition. Some of its vigilant examples are Faysal bank across globe.

Careful stake: foreign banks often enter in host countries by acquiring careful stake in some domestic institution. This careful stake is not controlling ownership which means it is below 50% of stake in equity. It provides a measure to parent company for conscious growth in other country.

Cross-border lending: foreign banks in some instances do not particularly exist in host countries but provide lending arrangements to some large size projects in these countries. Such mode provides indirect entry of foreign entities to domestic markets.

2.3. Effects of foreign banks on domestic market

Many researchers have discussed the entry of foreign and domestic banks in varied perspectives of market entry like HR performance, financial results, risk management, social responsibility, etc. We have segmented a number of factors that arise in result of foreign banks contribution to the domestic market.

Social and macroeconomic contributions: Fan (2010) while studying foreign banks in one of Chinese commercial city observed yield growth rate of more than 20% in 2009 and studied contributions of foreign banks in employment, offered products and services, innovative programs, services fees and key characteristics of foreign banks including focus on high-end customers, improved risk management tools, quality-assets resulting in better profitability and controlled bad-loans.

Banking performances: Fan (2010) highlighted issues include concentration of retail network in well-off areas, limited penetration to the market, impacts of global financial crisis since only 8 of 291 foreign banks in China earned profit in 2009. They also recommended cooperation among foreign

banks with domestic financial institutions and regulating authorities to explore the maximum potential of market. Lee (2002) in a similar study also highlighted the issue of market penetration which becomes hurdle for foreign banks to digest larger scoop of credit market share. Banks' ownership and size effect the decision and policy division and market exposure since domestic banks can sustain poorer loans performance results comparatively (Berger, Klapper, Peria, & Zaidi, 2006).

Banking relationships: Factors affecting firms' decision for selection of main stream line bank include internal factors like limited products and competitive rates offerings by banks and external factors like unconcentrated banking sectors, economical level of development (Berger, Klapper, Peria, & Zaidi, 2006). Controlling office strict adherence to policies results in strengthening banking performance or weakening banker-customers' relationships (Berger, Klapper, Peria, & Zaidi, 2006).

Regulatory framework: Regulating agencies play vital role in making supportive legislations and amendments in regulating infrastructure. Major examples are Indian banking legislative amendments in 1990 and Chinese Foreign banks regulation in 2006. Other regulations include minimum capital requirements for foreign registered banking institutions, profits shifting to controlling office or based country and domestic banking controlling regulations like nonperforming loans benchmarking, taxation

Risk management: Foreign and domestic banks have different perception of business in off-shore locations which may be affected by domestic regulations, clientele and business base line. The differential among foreign and domestic banks may also affected by policies devised by controlling offices of foreign banks. However, (Al-Mazrooei, 2007) worked on analysis of risk management among foreign and domestic banks focusing in UAE and concluded that banks face foreign exchange, credit and operating risks respectively and there is no difference identified in practice among foreign and domestic banks for risk identification, assessment, analysis, monitoring and controlling.

Improved banking standards: another impact requisite from foreign banks entry to domestic market is improved banking standards through information technology, innovative financial products, human resources policies, structured cash management arrangements, etc. (Wang, 2004).

2.4. Detriments of foreign banks

Some researchers have also highlighted some of the detriments caused by foreign banks in domestic markets:

Risks exposure: usually foreign banks do not generate new deposit or advances in the market. Resultantly, foreign banks share in the available market capacity of domestic market.

Self-priorities: foreign banks follow their own strategic instructions from controlling office, which turn down the segmented and industrial priorities set by local government.

Profiteering exports: foreign banks detain the profits according to provisioning and expansion plans, remaining profits are exported to controlling office in parent countries.

2.5. Snapshot of Pakistani banking sector

Story of Pakistan's banking sector started since its independence from India in 1947. Habib Bank was established in 1946 (pre-independence) and opted to develop itself in Pakistan after partition. Many foreign banks contributed towards development of banking sector in Pakistan like ABN AMRO Bank, Grindlays Bank, Bank of America, etc. Later on, Government promoted establishment of foreign and domestic banks in Pakistan like United Bank, MCB Bank, etc. and established Government owned National Bank of Pakistan. First legislative phrase was developed in 1962 through promulgation of Banking Companies Act, which was later rephrased in 1984 in translation of Islamic financial movement. Later part of 1970s deduced nationalization of financial institutions and development of

only 5 banks with very limited number of foreign banks in Pakistan. Today banking assets of Pakistan worth Rs.7 trillion with profitability growth rate of 23% and profits total Rs.111 billion. Foreign banks enjoy share of 3.3% in total banking assets of Pakistan in 2010 (SBP, Quarterly banking survey Q-4, 2010).

Table 1. Foreign banking business in Pakistan with base country

Sr	Bank	Base Country	Sr	Bank	Base Country
Foreign banks *(local branches)*					
1	Barclays Bank	UK	2	Burj Bank	UAE
3	Citibank	USA	4	Deutsche Bank	Germany
5	HSBC Bank	UK	6	Ind. Commercial Bank	China
7	Oman International Bank	Oman	8	Bank of Tokyo-Mitsubishi	Japan
Local subsidiaries of foreign banks *(with more than 90% stake)*					
1	Al-Baraka Bank	Bahrain	2	Bank Alfalah	UAE
3	Dubai Islamic Bank	UAE	4	Habib Metropolitan Bank	Switzerland
5	Faysal Bank	Bahrain	6	SAMBA Bank	Saudi Arabia
7	Standard Chartered Bank	UK			
Stakes/interests of foreign banks					
1	MCB Bank	Malaysia	2	NIB Bank	Singapore
3	Silk Bank	Japan			

Currently, Pakistani banking sector comprises of 42 banks (excluding 12 DFIs and specialized banks), of which 8 are foreign banks' local branches (Barclays Bank, Burj Bank, Citibank, Deutsche Bank, HSBC, Industrial and Commercial Bank of China, Oman International Bank, Bank of Tokyo-Mitsubishi), 7 local subsidiaries of foreign banks with more than 90% stake which is also considered as foreign entity (Al-Baraka Bank, Bank Alfalah, Faysal Bank, Dubai Islamic Bank, Habib Metropolitan Bank, SAMBA Bank, Standard Chartered Bank) and 3 banks have foreign stake in their shareholding (MCB Bank, NIB Bank, Silk Bank) (SBP, 2012). These institutions have interests from varied economies like 6 belongs to GCC and East Asia (Al-Baraka Bank, Bank Alfalah, Burj bank, Dubai Islamic Bank, Faysal Bank, Oman International Bank and SAMBA Bank) while rest of foreign interests include USA (Citibank), UK (Barclays, HSBC and Standard Chartered), Germany (Deutsche Bank), China (Industrial and Commercial Bank of China), Japan (Bank of Tokyo-Mitsubishi and Silk Bank), Switzerland (Habib Metropolitan Bank), Malaysia (MCB Bank) and Singapore (NIB Bank).

Table 2. Assets composition in banks of Pakistan (SBP, Quarterly banking survey, 2015)

(Percentile)	Local Banks	Foreign Banks	Specialized Banks	All Banks
Market Share	94.7	3.3	2.0	100.0
Cash & Bank	10.2	15.8	12.2	10.4
Lending to FI	2.7	15.6	0.0	3.1
Investments	30.3	34.2	10.2	30.0
Advances	47.2	28.1	65.5	46.9
Other Assets	9.6	6.4	12.1	9.6
Total Assets	100	100	100	100

Table-2 depicts that foreign banks invest more in assets as compare to other banks, and very less in advances comparatively.

Table 3. Total Assets by type of banks(SBP, Quarterly banking survey, 2015)

(billion-PKR)	CY07	CY08	CY09	CY10
Local Banks	4,872	5,262	6,135	6,762
Foreign Banks	173	234	241	234
Specialized Banks	127	130	140	142
All Banks	5,172	5,626	6,516	7,138

A very steady growth is observed in assets of foreign banks as reflected in table-3. Since above statistics reflect that Pakistani banking sector has very limited contribution of foreign banks in Pakistan but its historic contribution towards economic growth is much accountable.

Table 4. Composition of total deposits of Pakistani banking industry

(Percentile)	Local Banks	Foreign Banks	Specialized Banks	All Banks
Market Share in Deposits	96.8	2.9	0.3	100.0
Customers	96.3	97.6	95.8	96.3
Fixed Deposits	30.6	51.3	18.9	31.1
Saving Deposits	35.6	25.3	39.1	35.3
Current accounts – Remunerative	3.1	0.4	0.9	3.0
Current accounts - Non-remun.	26.3	20.3	35.3	26.1
Others	0.7	0.3	1.7	0.7
Financial Institutions	3.7	2.4	4.2	3.7

(Percentile)	Local Banks	Foreign Banks	Specialized Banks	All Banks
Remunerative Deposits	2.5	1.5	4.2	2.5
Non-remunerative Deposits	1.2	0.9	0.1	1.2
Total Deposits	100	100	100	100

Another aspect of study reflects that foreign banks access fixed deposits in highest terms in comparison with other counterparts of industry, and have least composition of non-remunerative deposits. This analysis may reflect the comparatively higher interest/mark-up cost for foreign banks in Pakistan.

Table 5. Trend analysis of NPLs in Pakistani banks

(billion PKR)	CY07	CY08	CY09	CY10
Local Banks	184	327	411	508
Foreign Banks	1	3	6	7
Specialized Banks	33	29	28	32
All Banks	218	359	446	548

Looking from another perspective to Pakistani banking industry, it is revealed that foreign banks have exposed lesser to nonperforming loans (NPLs) as compared to other domestic banks.

Table 6. Assets quality indication in Pakistani banks (SBP, Quarterly banking survey, 2015)

(percentile)	Infection Ratio	Net Infection Ratio	Provision Coverage	Net NPLs to Capital
Local Banks	14.3	5.2	66.9	24.6
Foreign Banks	9.8	1.4	86.5	2.7
Specialized Banks	28.4	12.5	64.2	335.5

Assets quality indication is the new technique of analyzing financial institutional basis. Table-6 reflects the asset quality indication of banks operating in Pakistan.

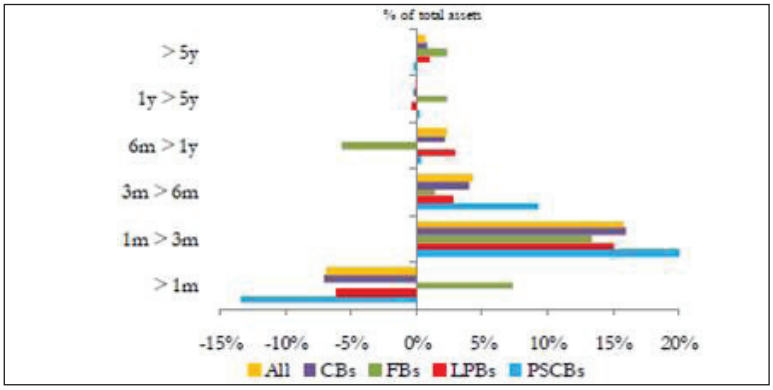

Fig-1: Risk sensitive GAP analysis (SBP, Quarterly banking survey Q-4, 2010)

Figure-1 adds another footstep towards contributive analysis of foreign banks in Pakistan. It reflects that foreign banks enjoy a strong position towards very short-run to medium-run assets.

Table 7. Profitability and solvency ratios of Pakistani banks

(percentile)	Concentration & Profitability				Solvency Ratios		
	ROA (before tax)	ROE (before tax)	ROA (after tax)	ROE (after tax)	Captial to RWA	Tier-1 to RWA	Capital to Assets
Foreign Banks	0.3	2.7	0.1	1.5	24.6	24.3	14.8
Specialized Banks	2.4	-	1.5	-	4.6	(0.9)	3.9
All Banks	1.7	16.7	1.0	9.8	14.0	11.8	9.7

Taking a look on table 7, we observed better solvent results of foreign banks in comparison of other domestic banks.

3. Research Methodology

A research design is the structure for investigation and way of finding out the answer of research question. We have conducted this research under the umbrella of quantitative paradigm through CAMELS rating model.

3.1. CAMELS Rating It is very important to assess the soundness of financial institutions through rating system which is used by federal and state regulators, usually knows as CAMELS rating system. This system was adopted by national Credit Union Administration NCUA in Oct 1987 (Christopoulos, Mylonakis, & Diktapanidis, 2011). CAMELS methodology adopted by North America Bank to know the financial and managerial reliability of commercial lending institutions. To examine the Camels system, information is required from different sources such as financial statements, funding sources, macroeconomic information, budget and cash flow projection, staffing/operation. This model assesses the overall condition of the Bank, its strengths and weakness (Canbas, Cabuk, & Kilic, 2005). CAMELS stand for Capital adequacy, Asset quality, Management, Earning, Liquidity, and Sensitivity to market risk. CAMELS rating system is to be evaluated on the scale of one to five rating in ascending order (Christopoulos, Mylonakis, & Diktapanidis, 2011).

3.2. Composite rating of CAMELS model is categorized from 1 to 5 and reflects as in Table-8.

Table 8. Composite range of CAMELS rating (Heldek, 2010)

Rating	Composite range	Description	Meaning
1	1.00-1.49	Strong	• Basically sound in every respect • Findings are of minor nature and can be handled routinely • Resistant to external economic and financial disturbances • No cause for supervisory concern
2	1.5-2.49	Satisfactory	• Fundamentally sound • Finding are of minor nature and can be handled routinely • Stable and can withstand business fluctuations well • Supervisory concerns are limited to extent that findings are corrected
3	2.50-3.49	Fair	• Financial, operational or compliance weaknesses ranging from moderately severe to unsatisfactory • Vulnerable to the onset of adverse business conditions • Easily deteriorate if actions are not effective in correcting weaknesses • Supervisory concern and more than normal supervision to address deficiencies
4	3.50-4.49	Marginal	• Immoderate volume of serious financial weaknesses • Unsafe and unsafe conditions may exist which are not being satisfactory addressed • Without corrections, these conditions could develop further and impair future viability • High potential for failure • Close supervision surveillance and a definite plan for correcting deficiencies
5	4.50-5.00	Unsatisfactory	• High immediate or near term probability failure • Severity of weaknesses is so critical that urgent aid from stockholders or other financial sources is necessary • Without immediate corrective actions, will likely require liquidations, merger or acquisition

Sampling: For sample selection of the banks for our research, we used criteria sampling method that is a type of non-probability sampling. 16 banks are listed in sample and are arranges in 5 groups on the basis of their origin and establishment in Pakistan. Financial data of sample banks is observed for the financial years ending December 2014 and December 2016 through their audited annual reports. These groups include state-owned banks, big banks, domestic banks, local subsidiaries of foreign banks, and Pakistan operations of foreign banks.

Table 9. Key values related to sample banks (all values in Million Rs except branches)

Bank Name	Group	Branches	Total Assets	Total Equity	Deposits	Advances	Profit after tax
Bank of Punjab (BOP)	State-owned	284	280,998	10,135	237,897	127,130	348
Bank of Khyber (BoK)		50	68,424	9,700	45,548	22,288	1285
First Women Bank Ltd (FWBL)		38	16,128	1,719	13,815	7,701	258
Habib Bank Ltd (HBL)	Big	1,459	1,139,554	109,587	933,631	457,367	22,333
MCB Bank (MCB)		1,132	663,233	88,802	491,189	225,801	19,425
United Bank Ltd (UBL)		1,106	778,060	68,415,065	612,980	325,347	15500
Habib Metropolitan Bank (HMBL)	Domestic	163	288,219	24,236	185,400	109,657	3,281
Bank Al Habib Limited (BAHL)		290	384,525	17,988	302,097	114,863	4,537
Askari Bank Limited (ACBL)		245	343,756	17,776	291,503	150,711	1,628
Faysal Bank (FBL)	Local subsidiaries of foreign banks	257	292,568	17,793	214,615	148,162	1,280
Bank Alfalah Limited (BAL)		397	468,174	22,840	401,248	198,469	3,503
Standard Charted Bank (SCB)		162	356,405	54,589	235953	129620	5,446
Barclays Bank PLC (Barc)	Local operations of foreign banks	15	58,024	6,924	44,665	20,998	445
HSBC Bank (HSBC)		4	59,356	7,506	46,171	20,793	971
Citi Bank (Citi)		6	96,903	10,919	61,678	18,820	1,756
Deutsche Bank AG (DB)		3	22,241	6,047	11,119	2,987	708

4. Data Analysis

As discussed above, CAMELS rating model is applied in this research. This model is based on certain financial ratios which are excerpt from values in the financial statements of banks. The ratios are applied on the data from the financial statements of 2014 and 2016 for horizontal analysis. Financial

closing of banks in Pakistan stands on December 31st every year. Data is observed from the audited financial statements of sample 16 banks which are categorized in 5 groups according to their origin and shareholding structure.

CAMELS rating model: CAMELS rating model is based on six kinds of financial ratios. All six components of CAMELS rating model are rated on the basis of following criteria on the scale of 1 to 5. Component having rating 1 shows strong position while rating 5 indicates worst position of a bank in the particular component. Each component has a well thought out scale of rating based on the prevailing financial and economic conditions (Demyanyk & Hasan, 2010). This rating model was first used by National Credit Union Administration (NCUA) in 1987 and has been updated in 1994 which was later used by number of researchers to evaluate financial institutions (NCUA, 1987). This rating model was also used by US Government through Emergency Economic Stabilization Act of 2008 (Heldek, 2010).

Key ratios of CAMELS rating system to evaluate the rating for different banks are:

Table 10. Evaluation under CAMELS rating system

	Ratio	Weight	1	2	3	4	5
C	Capital Adequacy	20%	≥15%	12% - 14.99%	8% - 11.99%	7% - 7.99	≤6.99%
A	Assets quality	20%	≤1.25%	≤2.5% - 1.26%	≤3.5% - 2.6%	≤5.5% – 3.6%	≥5.6%
M	Management	25%	≤25%	30% – 26%	38% – 31%	45% – 39%	≥46%
E	Earnings (ROA)	15%	≥1%	0.9% – 0.8	0.35 – 0.7	0.25 – 0.34	≤0.24
	Earnings (ROE)		≥22%	17% -21.99 %	10% - 16.99%	7 – 9.99%	≤6.99
L	Liquidity (L1)	10%	≤0.55	0.62 - 0.56	0.68 – 0.63	0.80 – 0.69	≥0.81
	Liquidity (L2)		≥50%	45% - 49.99%	38% - 44.99%	33% - 37.99	≤32%
S	Sensitivity	10%	≤25%	30% - 26%	37% - 31%	42% - 38%	≥43%

1. Capital Adequacy: Capital Adequacy shows the financial strength of a bank, and this financial strength usually shows by bank through Capital Adequacy ratio (CAR). CAR = Tier-I + Tier-II/Risk weighted Assets. This ratio determines the ability of the bank to meet with obligation on time and other risks such as operational risk, credit risk, etc. Tier-I is a type of capital, it is a composed of core capital or can be termed as own capital which consists primarily of common stock, preferred stock, retain earnings. Tier-II is a supplementary form of capital of banks. Items include in tier-II Capital are, undisclosed reserves, subordinate term debt, general provision, revaluation reserves (Christopoulos, Mylonakis, & Diktapanidis, 2011). In Risk weighted Assets, according to the credit risk assets are weighted. For example loans could be more risky than mortgage loans because loans are secured by letter of credit and mortgage loans are secured by collateral.

Table-11 and 12 show ratio of Tier I + Tier II to Risk weighted Assets (Figures in Rs 000)

2. Assets Quality: Quality of banks assets is related to the left side of its balance sheet. Usually top management of the bank is concerned mostly with quality of the loans they provided to their customers as it provides earnings to the bank. Assets quality and loan quality are two words that have same meaning but most often they are used interchangeably. Quality of the assets as its affects both cost to the banks and economies of scales for the bank (Chauhan, Ravi, & Chandra, 2009). Assets that have low quality usually have higher possibility to become a Non-Performing Loan. Non-Performing loans are usually bad debts that are in default or they are near to be in default. There is no specific standard for the banks across the globe that elaborates which assets to be included in non-performing loans, but

in Pakistan those which are in default for more than three months are included in non-performing loans (Burki & Niazi, 2010).

Table-11 and 12 show total advances of the banks, their total non-performing assets and provision provided by the banks to cover theses non-performing loans. Lower asset quality ratio shows higher performance of the bank.

3. Management: It is difficult to determine the sound performance of management of the bank. For individual institution it is not a quantitative factor it is primarily qualitative factor. However to determine the soundness of the management we took the ratio which is, Management expenses/total deposits. The lower the ratio better is for bank since it shows that management has good ability to handle the bank operations (Fethi & Pasiouras, 2010).

Table-11 and 12 show the ratio of Management expenses to total earnings.

4. Earning: It is necessary for the banks to generate sufficient earning to stay in the market for a longer period of time, to make shareholders satisfied, protect and improve its capital (Perera, Skully, & Wickramanayake, 2007). To measure earnings the ratios used are, Return on Assets, and Return on Equity. ROA = Net profit/total assets. This ratio avoids the volatility of earnings linked with unusual items, and measures the profitability of the bank. Higher the ratio, greater is the profitability. The second ratio is ROE = net profit/own capital. This ratio shows the efficiency of the bank, that how the bank uses its own capital in an efficient manner (Christopoulos, Mylonakis, & Diktapanidis, 2011).

Table-11 and 12 show the ratios of Return on Assets and Return on Equity.

5. Liquidity Management: To well manage liquidity of the financial institutions such as banks is a prime objective of its management. Liquidity is ability of a firm to convert its financial assets into cash most rapidly or in a quick succession or we can say availability of the funds to pay off all its financial obligations when they become due. Liquidity of a firm can be calculated by using liquidity financial ratios. There are several ratios that can be used to measure liquidity of the firm but in our research that is based upon the usage of CAMELS system, we used two liquidity ratios. These ratios are Loan to Total Deposits (L1) = Total Loans / Total Deposits and Circulating Assets to Total Assets (L2).

Table-11 and 12 show the liquidity ratios such as loan to deposits ratio and circulating Assets to total assets ratio

Circulating Assets to Total Assets: Circulating Assets / Total Assets to measure liquidity of the sample banks of our research.

6- Sensitivity to market Risk: Earnings and capital of financial institutions can be adversely affected by changes in exchange rate, interest rate, equity price or commodity price. Many financial institutions consider changes in interest rates as market risk. The ratio we used to measure sensitivity of the sample banks in our thesis research is, Total securities to total assets = Total securities/Total assets.

Table-11 and 12 show the ratio of total securities to total assets ratio

Table 11. CAMELS rating applied to sample banks (financial year ended December-2015)

Type of bank	Bank	Capital Adequacy					Assets Quality		Management Quality		Earning Efficiency				Liquidity				Sensitivity to Market Risk	
		Tier-I	Tier-II	RWA	CAR	Rating	AQR	Rating	MQR	Rating	EE1		EE2		L1		L2		TS/TA	Rating
Government	BOP	686,096	1,871,904	130,958,496	1.95	5	39.79	5	1.65	1	(1.81)	5	-61.22	5	0.58	2	35.37	4	24.61	1
	BOK	5,604,119	181,746	30,113,766	19.21	1	5.99	5	2.55	1	1.26	1	10.59	3	0.49	1	57.09	1	39.08	4
	FWBL	1,079,997	13,314	4,013,182	27.24	1	3.29	3	5.23	1	0.21	5	2.21	5	0.62	2	45.60	2	27.00	2
Big	MCB	67,701,274	5,155,086	330,135,367	22.07	1	1.95	2	2.82	1	3.13	1	25.91	1	0.59	2	46.58	2	37.54	5
	UBL	50,006,258	20,721,720	487,384,224	14.51	2	4.51	4	3.25	1	1.69	1	19.85	2	0.61	2	46.17	2	32.14	3
	HBL	78,257,227	17,178,376	649,365,898	14.70	2	2.37	2	3.25	1	1.90	1	21.03	2	0.62	2	43.72	3	27.57	2
Domestic	HMBL	19,730,346	(127,883)	184,312,543	10.64	3	2.92	3	2.60	1	1.15	1	14.14	3	0.75	4	48.03	2	40.06	4
	ACBL	13,327,133	5,133,991	179,308,603	10.30	3	4.17	4	3.05	1	0.33	4	6.75	5	0.60	2	43.78	3	32.49	3
	BAHL	14,662,424	5,911,855	158,447,052	12.98	2	1.00	1	2.49	1	1.33	1	26.93	1	0.50	1	52.85	1	45.47	5
Local subsidiary of foreign	BAFL	17,836,873	8,454,445	249,639,748	10.53	3	3.71	4	3.55	1	0.24	5	4.90	5	0.59	2	43.09	3	27.57	2
	FBL	14,545,110	4,097,991	179,918,604	10.36	3	5.64	5	3.40	1	0.53	3	8.51	4	0.68	5	40.99	3	32.33	3
	SCB	21,075,764	1,916,331	188,174,155	12.22	2	2.49	2	5.83	1	1.14	1	7.78	4	0.63	3	39.75	3	22.56	1
Local branches of foreign	BARC	6,332,518	53,600	21,369,392	29.88	1	0.92	1	7.69	1	(1.76)	5	(11.74)	5	0.51	1	57.50	1	43.53	5
	DB	5,274,097	103,207	32,197,354	16.70	1	(1.78)	1	10.77	1	5.12	1	15.98	3	0.54	1	74.73	1	11.74	1
	CITI	8,586,342	177,362	55,973,093	15.66	1	2.61	3	5.68	1	0.45	3	4.75	5	0.28	1	71.95	1	51.60	5
	HSBC	5,995,644	105,633	30,665,665	19.90	1	1.25	5	4.67	1	0.90	5	8.39	4	0.48	1	57.68	1	11.44	1

Table 12. CAMELS rating applied to sample banks (financial year ended December-2016)

Type of bank	Bank	Capital Adequacy					Assets Quality		Management Quality		Earning Efficiency				Liquidity				Sensitivity to Market Risk	
		Tier-I	Tier-II	RWA	CAR	Rating	AQR	Rating	MQR	Rating	EE1		EE2		L1		L2		TS/TA	Rating
Government	BOP	7,845,482	1,777,774	135,252,185	7.12	4	37.24	5	1.66	1	0.14	5	3.99	5	0.53	1	42.82	3	32.95	3
	BOK	9,634,594	255,566	43,594,414	22.69	1	4.26	4	3.22	1	1.46	1	11.40	3	0.49	1	62.57	1	53.61	5
	FWBL	1,637,824	44,536	4,746,024	35.45	1	4.21	4	4.35	1	1.79	1	18.94	2	0.56	5	48.81	2	29.33	2
Big	MCB	77,029,927	4,983,794	376,442,033	21.79	1	1.92	2	3.17	1	3.18	1	26.23	1	0.46	1	57.10	1	48.47	5
	UBL	58,182,728	21,085,607	555,272,011	14.28	2	3.43	3	3.23	1	2.10	1	23.70	1	0.53	1	52.30	1	37.84	5
	HBL	89,134,265	17,175,924	677,186,462	15.70	1	2.29	2	3.15	1	2.16	1	23.89	1	0.49	1	53.61	1	36.73	3
Domestic	HMBL	23,882,184	154,433	172,553,705	13.93	2	5.01	4	2.66	1	1.21	1	14.52	3	0.59	2	58.15	1	51.17	5
	ACBL	14,929,074	5,482,368	179,840,957	11.35	3	4.88	4	2.96	1	0.49	3	10.39	3	0.52	1	48.80	2	38.88	4
	BAHL	17,803,517	8,848,750	158,102,911	16.86	1	0.18	1	2.52	1	1.32	1	27.63	1	0.38	1	65.75	1	58.02	5
Subsidiary of foreign banks	BAFL	21,855,553	7,382,380	251,005,471	11.65	3	3.41	3	3.45	1	0.80	5	16.46	3	0.49	1	51.82	1	35.57	3
	FBL	15,970,355	4,424,191	191,572,161	10.65	3	6.06	5	5.04	1	0.46	3	7.44	4	0.69	4	39.83	3	31.93	3
	SCB	24,514,731	1,773,317	203,798,906	12.90	2	183.39	5	5.61	1	1.61	1	10.96	3	0.55	1	43.19	3	29.29	2
Branches of foreign banks	BARC	6,709,007	35,168	25,884,285	26.06	1	0.65	1	4.53	1	0.84	2	6.64	5	0.47	1	58.95	1	41.00	4
	DB	6,035,799	66,727	23,334,176	26.15	1	-0.78	1	6.83	1	3.57	1	12.51	3	0.27	1	80.28	1	25.12	5
	CITI	10,569,408	118,870	47,277,697	22.61	1	0.26	1	6.49	1	1.81	1	17.51	2	0.31	1	72.11	1	62.33	5
	HSBC	7,065,805	93,709	31,027,647	23.07	1	2.89	3	5.29	1	1.67	1	14.17	3	0.45	1	62.77	1	37.27	5

Components rating analysis:

1. Capital Adequacy Rating (CAR): State Bank of Pakistan has set minimum CAR as 14%. Analysis reflects that in year 2014 and 2016, Government banks group have 1 rating except Bank of Punjab which is at 5 in 2014 and 4 in 2016. Big banks group maintained their good rating in the years 2014 and 2016. In domestic banks group, Habib Metropolitan Bank improved to 2 in year 2016 from 3 in 2014 and Bank Alhabib from 2 to 1 while Askari Bank maintained 3. Local subsidiaries of foreign banks maintained their satisfactory rating. Last group of branches foreign banks enjoys highest rating of 1.

2. Assets Quality Rating: Management of the banks is usually concerned with the quality of their assets due to its vital role in profitability of bank. Banks having large amount of non-performing assets usually need to maintain larger provisions. Our analysis reflects that Government banks group reflect lowest rating of 4 and 5. Big banks group maintain good rating of 2 in this analysis. Domestic banks show varied results where Bank Alhabib is most strong and Askari Bank reflects unsatisfactory rating of 4 and Habib Metropolitan Bank shows bitter results in 2016. Subsidiaries of foreign banks also show varied results where Faysal Bank maintains worst rating of 5, Bank Alfalah improved from 4 to 3 in 2016 and Standard Chartered Bank declined from 2 to 5. Branches of foreign banks show very good results except HSBC Bank which maintains 5 rating. This rating reflects strength and vision of Credit Risk department of bank.

3. Management Quality Rating: All banks reflect the very good rating of 1 in years 2015 and 2016. This rating reflects efficient management in expense controls.

4. Earnings Quality Rating: Government banks do not reflect good rating in this test except Bank of Khyber and First Women Bank which reflected good results in 2016. Big banks reflect very good rating in this test. Domestic banks group also reflected improved results in 2016 but remained at satisfactory rating. Group of local subsidiaries of foreign banks show varied results where Bank Alfalah reflects bitter results among group. Group of local operations of foreign banks reflect varied results where Barclays bank reflected bitter results among the group.

5. Liquidity Management Ratings: Liquidity management rating of all the banks irrespective of group show good rating specially branches of foreign banks show very good results.

6. Sensitivity to Market Risk Rating: Sensitivity to market risk shows exposure of the bank assets to the risk associated with its investment in the marketable securities. All banks reflect average results in this test where MCB Bank, Barclays and Citibank reflect worst rating of 5 in both years.

Table 13. Analysis of CAMELS and Credit ratings

Type of bank	Bank	2015			2016		
		CAMELS rating	Credit Rating		CAMELS rating	Credit Rating	
			Rating	Agency		Rating	Agency
Government	BOP	3	AA-	Pacra	3	AA-	Pacra
	BOK	2	BBB+	JCR-VIS	2	A-	JCR-VIS
	FWBL	2	BBB+	Pacra	2	BBB+	Pacra
Big	MCB	2	AA+	Pacra	2	AA+	Pacra
	UBL	2	AA+	JCR-VIS	2	AA+	JCR-VIS
	HBL	2	AA+	JCR-VIS	1	AA+	JCR-VIS

Type of bank	Bank	2015			2016		
		CAMELS rating	Credit Rating		CAMELS rating	Credit Rating	
			Rating	Agency		Rating	Agency
Domestic	HMBL	2	AA+	Pacra	2	AA+	Pacra
	ACBL	3	AA	Pacra	3	AA	Pacra
	BAHL	2	AA+	Pacra	1	AA+	Pacra
Local subsidiary of foreign	BAFL	3	AA	Pacra	2	AA	Pacra
	FBL	3	AA	JCR-VIS	3	AA	JCR-VIS
	SCB	2	AAA	Pacra	2	AAA	Pacra
Local branches of foreign	BARC	2	AA-	Fitch	2	AA-	Fitch
	DB	1	AA-	Fitch	2	AA-	Fitch
	CITI	2	A+	Fitch	1	A+	Fitch
	HSBC	2	AA-	Fitch	2	AA-	Fitch

Extracted from our findings, CAMELS rating is compared with credit rating of financial institutions, which resulted that CAMELS rating give entirely different snapshot as compared with credit rating. Table-13 reflects that comparison in transparency. Credit ratings of sample banks are observed from reports published by State Bank of Pakistan.

5. Conclusion

Consolidated financial analysis of banks reflect a different picture as depicted by credit rating agencies, although their criterion is quite varied from CAMELS. Still, time and again questions have been raised regarding the credibility and reports given by credit rating agencies. We have concluded that ownership structure of banks impact on the financial performance and results of institution. Government and big banks have larger book size but their assets quality is affected by the loans provided under influence of resource persons. Such loans may result in bad performance of assets quality. Similarly, branch and subsidiaries of foreign banks show responsible results but are constrained with instructions from local and parent country regulators. Domestic banks follow the lead of big local banks and act according to the local market and economic circumstances.

Recommendations: Regulators should devise a monitoring threat over credit rating agencies, as their drafted reports are not reliable from managerial performance perspectives. Secondly, regulators may define their own assessment criteria to monitor risk management practices in banks. Foreign banks should be encouraged to operate and expand in local market as they bring new technology and innovative products as well as foreign exchange.

Further research suggestions: CAMELS rating analysis may be applied to comparative study of conventional and Islamic financial institutions in Pakistan. Similar study may be conducted between banking and non-banking financial institutions.

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