

BANKING SECTOR'S PERFORMANCE IN BANGLADESH- AN APPLICATION OF SELECTED CAMELS RATIO

Submitted by:

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Agenda of the Presentation.

- ❖ Objectives of the Study.
- ❖ Methodology of the Study.
- ❖ CAMELS evolution and Rating interpretation.
- ❖ Banking Sector in Bangladesh.
- ❖ Scenario of types of Banks in Bangladesh Based on Different ratios.
- ❖ Cross country comparison based on different ratios.
- ❖ Correlation between some ratios with interest income.
- ❖ Correlation between different ratios with GDP contribution by Financial Intermediaries.
- ❖ Conclusion and Recommendation.

Objectives of the Study

- To study the category wise performance of all scheduled banks operating in Bangladesh on the basis of selected CAMELS ratio.
- To compare the performance of Banking sector in Bangladesh with some selected developed and emerging countries on the basis of selected CAMELS ratio.
- To analyze how the fluctuation of different ratios affects the net interest income of banks.
- To analysis the co-relation between different ratios with GDP contribution by financial intermediaries.

Research Methodology

- Secondary time series data is used.
- Data sources are Bangladesh Bank, Central Bank of different countries, World Bank etc.
- For trend analysis, different figures like Scatter chart, Line graph, Pie-Chart etc. have been used.
- Correlation is used to find out the effect of different ratios on GDP by Financial intermediaries.

Evolution of CAMELS rating system.

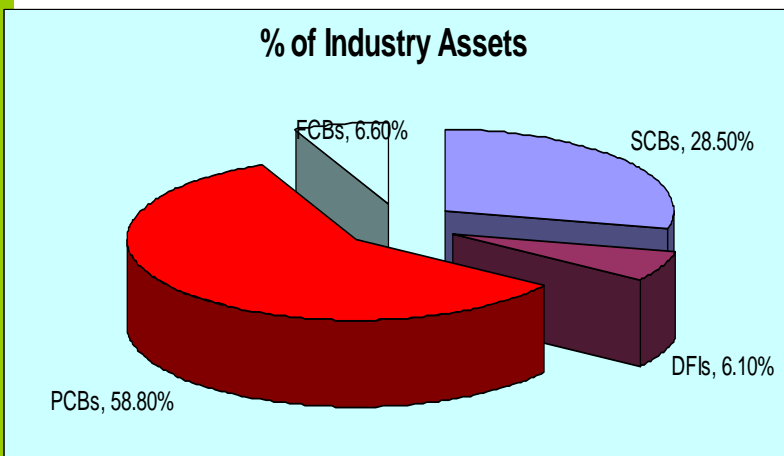
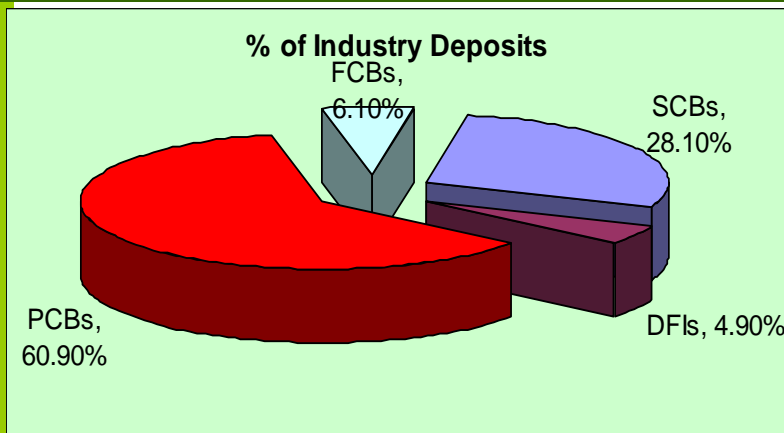
US Federal Reserve System implemented The Uniform Financial Institutions Rating System (UFIRS) in 1979 in the US banking institutions which was renamed as CAMEL later on. In 1995 a new components 'Sensitivity' was added to incorporate market risk.

BB introduced CAMEL Rating System in 1993. New components 'Sensitivity to market risk' was added and BB implemented CAMELS in 2006.

CAMELS rating system: C – Capital Adequacy, A – Asset Quality, M – Management (Efficiency), E – Earning (Capacity), L – Liquidity (Management), S – Sensitivity to Market Risks

- Rating “1”= strong performance.
- Rating “2”= above average performance that adequately provides for the safe and sound operations of the banking company.
- Rating “3”= performance that is flawed to some degree.
- Rating “4”= unsatisfactory performance. If left unchecked, such performance could threaten the solvency of the banking company.
- Rating “5”= very unsatisfactory performance, in need of immediate remedial attention for the sake of the banking company’s survival.

Banking sector's Assets-Deposits scenario in BD



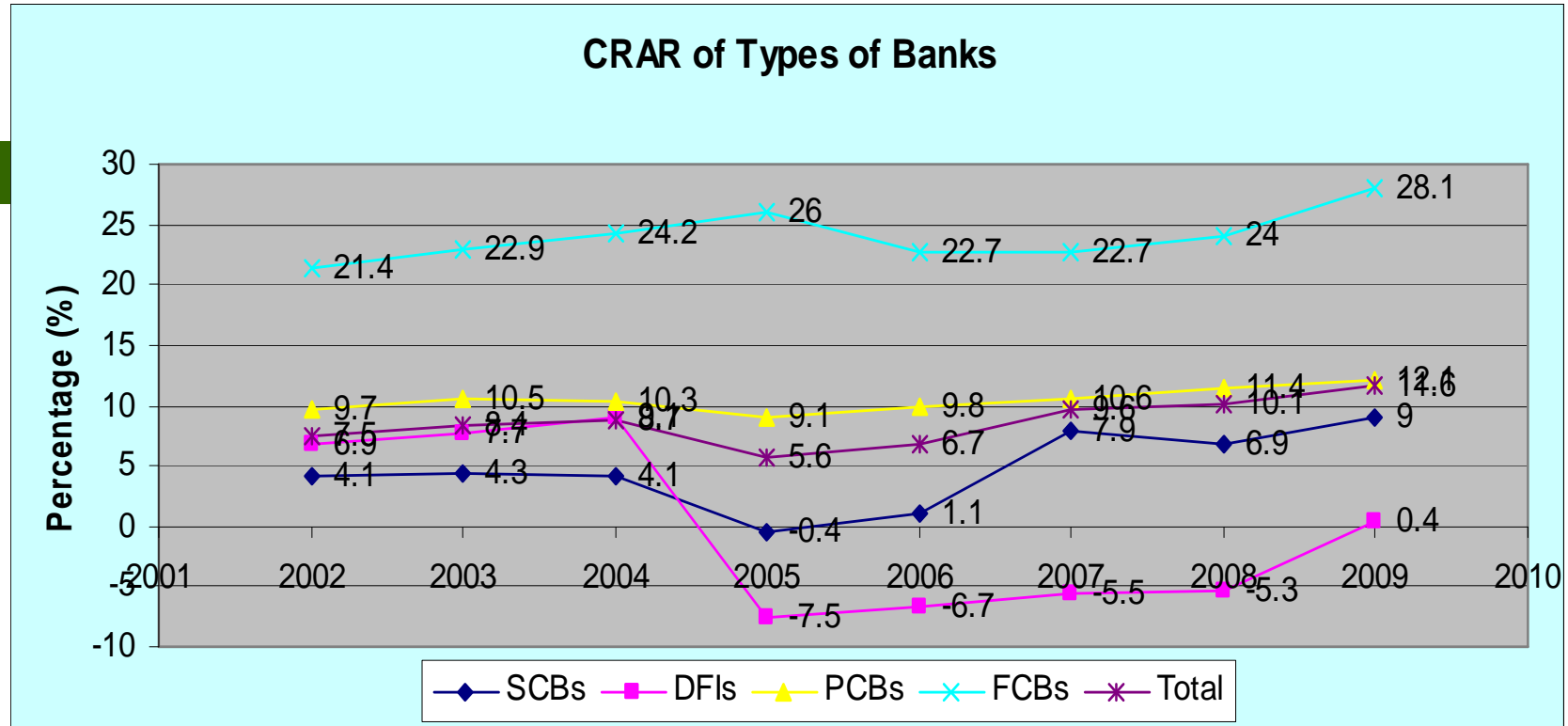
Bank types	2010 (June)			
	(billion Taka)			
	No. of Banks	No. of branches	Total Assets	Deposits
SCBs	4	3394	1272.64	952.72
DFIs	4	1366	291.37	177.90
PCBs	30	2427	2539.27	1967.78
FCBs	9	59	308.70	230.68
Total	47	7246	4411.98	3329.08

Source: BB Annual Report (2010)

Per branch assets and deposits of PCBs is much higher that of SCBs and DFIs but lower than FCBs.

PCBs dominating banking industry in Bangladesh.

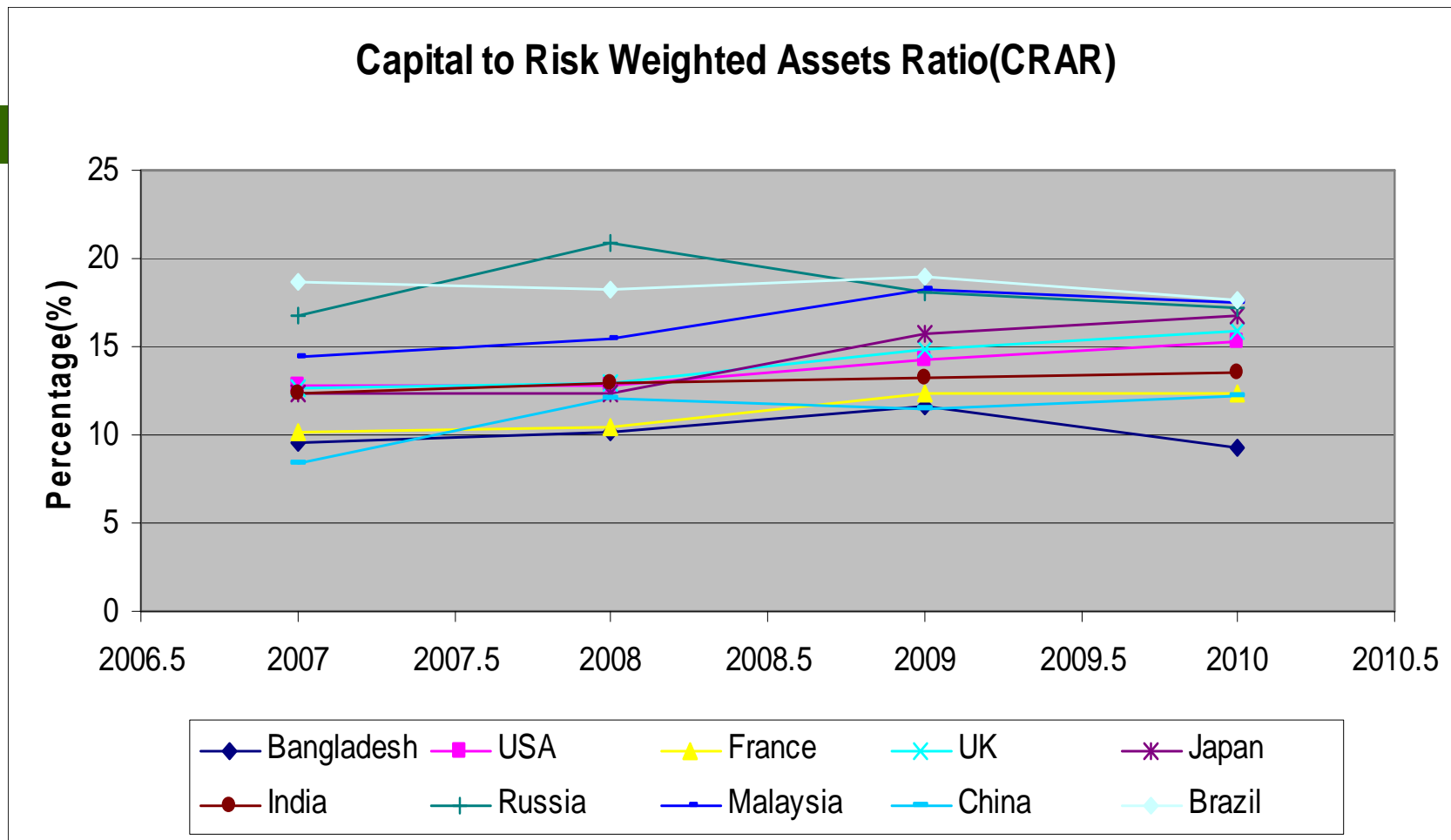
Capital to Risk Weighted Assets Ratio (CRAR) by types of Banks.



Source: BB Annual Report (2002-2010)

- Increase trend of CRAR among all types of Banks.
- DFIs shows the negative CRAR due to the adjustment of huge loss.
- Industry CRAR is in down turn in 2005 due to the loss adjustment by SCBs and DFIs.
- SCBs shows a significant increase after 2006 in CRAR due to the increase of capital by creating goodwill which has to be adjusted within 10 years during the corporatization of three SCBs.

CRAR of Some Developed and Emerging Economy. Percent (%)

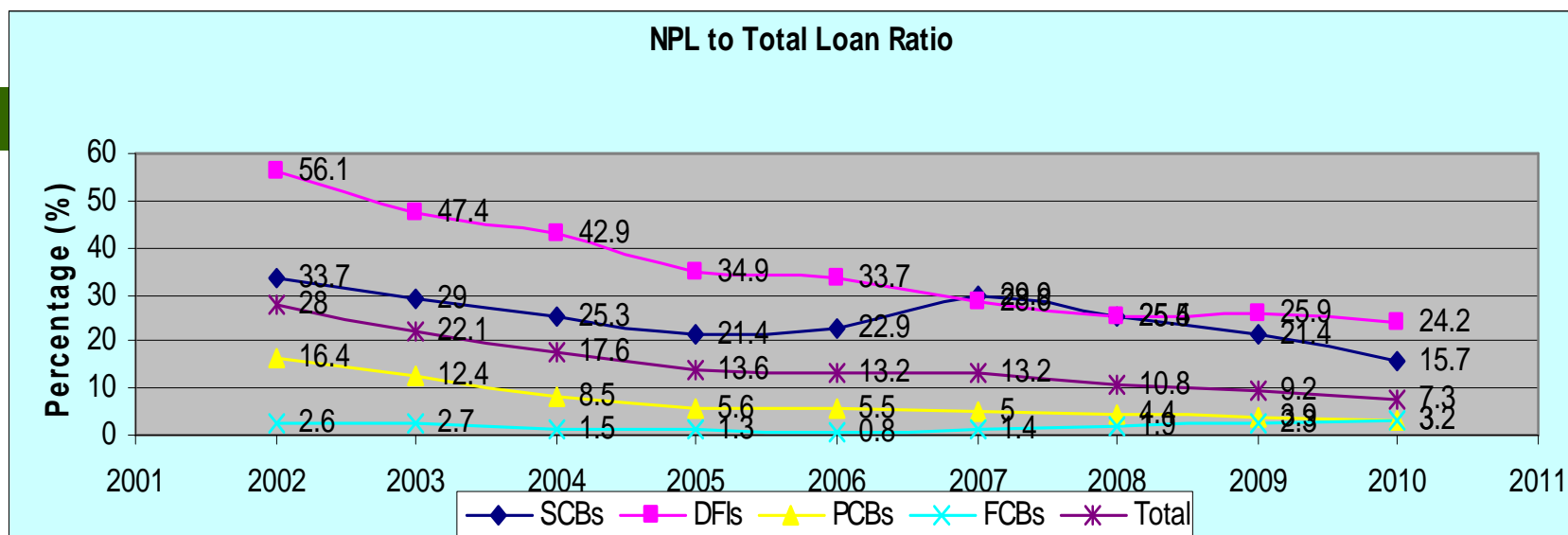


Source: BB, RBI, et. Al. (2011)

CRAR is still low in BD compared to other countries due to small capital base.

NPLs to total loans ratios by types of banks

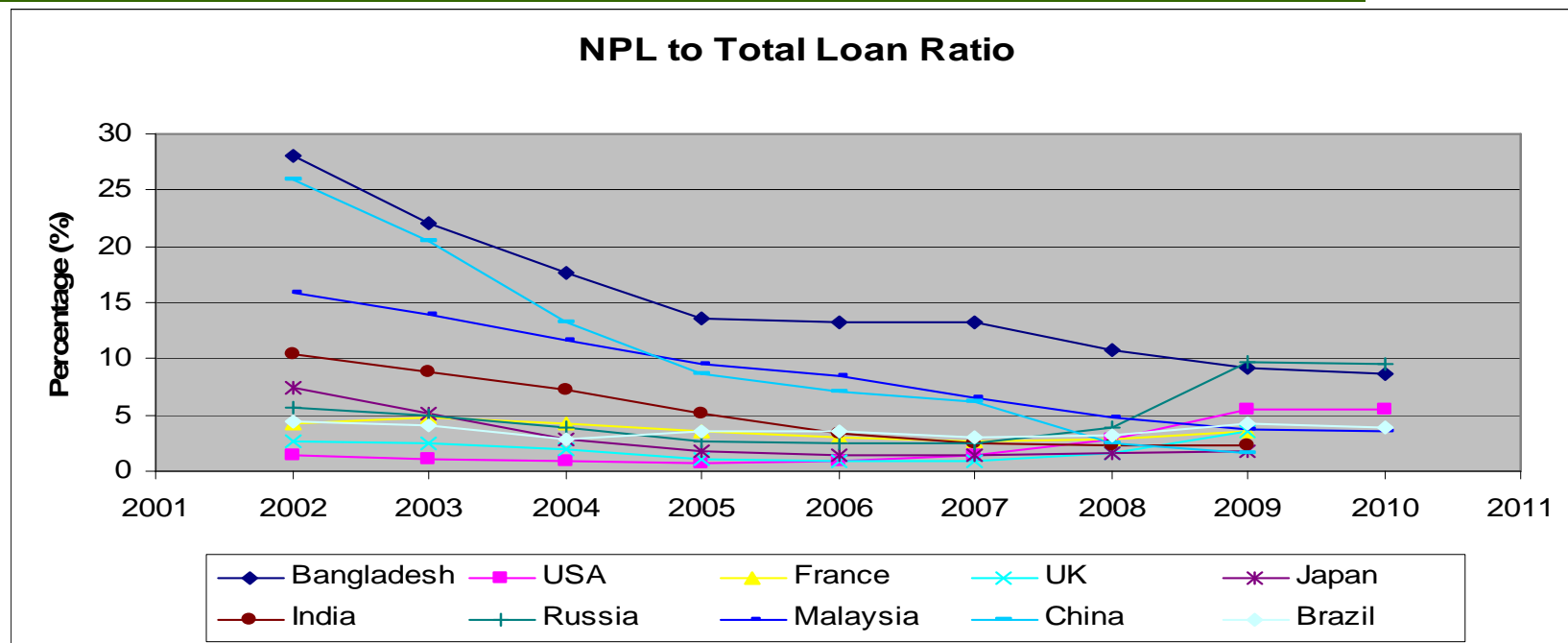
Percent (%)



Source: BB Annual Report (2002-2010)

- **DFIs & SCBs NPL ratio is very high. During 1980s SCBs and DFIs served the government purpose other than commercial purpose. They are reluctant to write-off historical bad debts (BB,2007).**
- **Poor loan Appraisal, inadequate follow up and weak supervision also responsible for high NPL in SCBs and DFIs.**
- **PCBs succeeded in reducing NPL ratio due to proper loan management. Supervision of central Bank is also a part of this success.**
- **In FCBs, there is a slight increasing trend in NPL ratio after 2006.**
- **Industry NPL ratio shows a declining trend because of mature management, supervisory control and regulations and sound management system.**

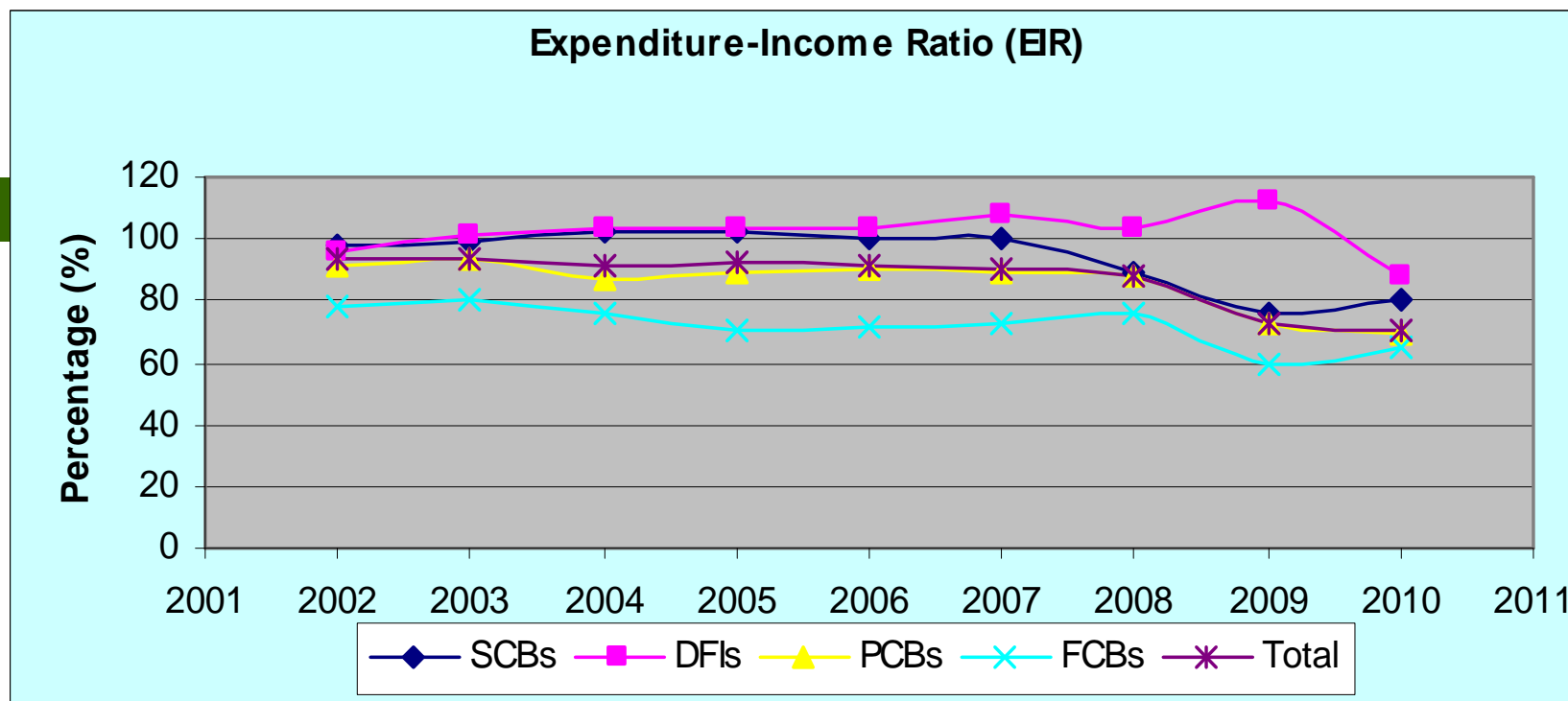
NPL to total Loan Ratio of Some Developed and Emerging Economy. Percent (%)



Source: World Development Indicators, WB, (2011).

Due to economic recession, NPL ratio increases among all developed countries but the shock is not so severe among the emerging economy. Initially, Bangladeshi banks suffered from high NPL ratio but there is a clear sign of improvement.

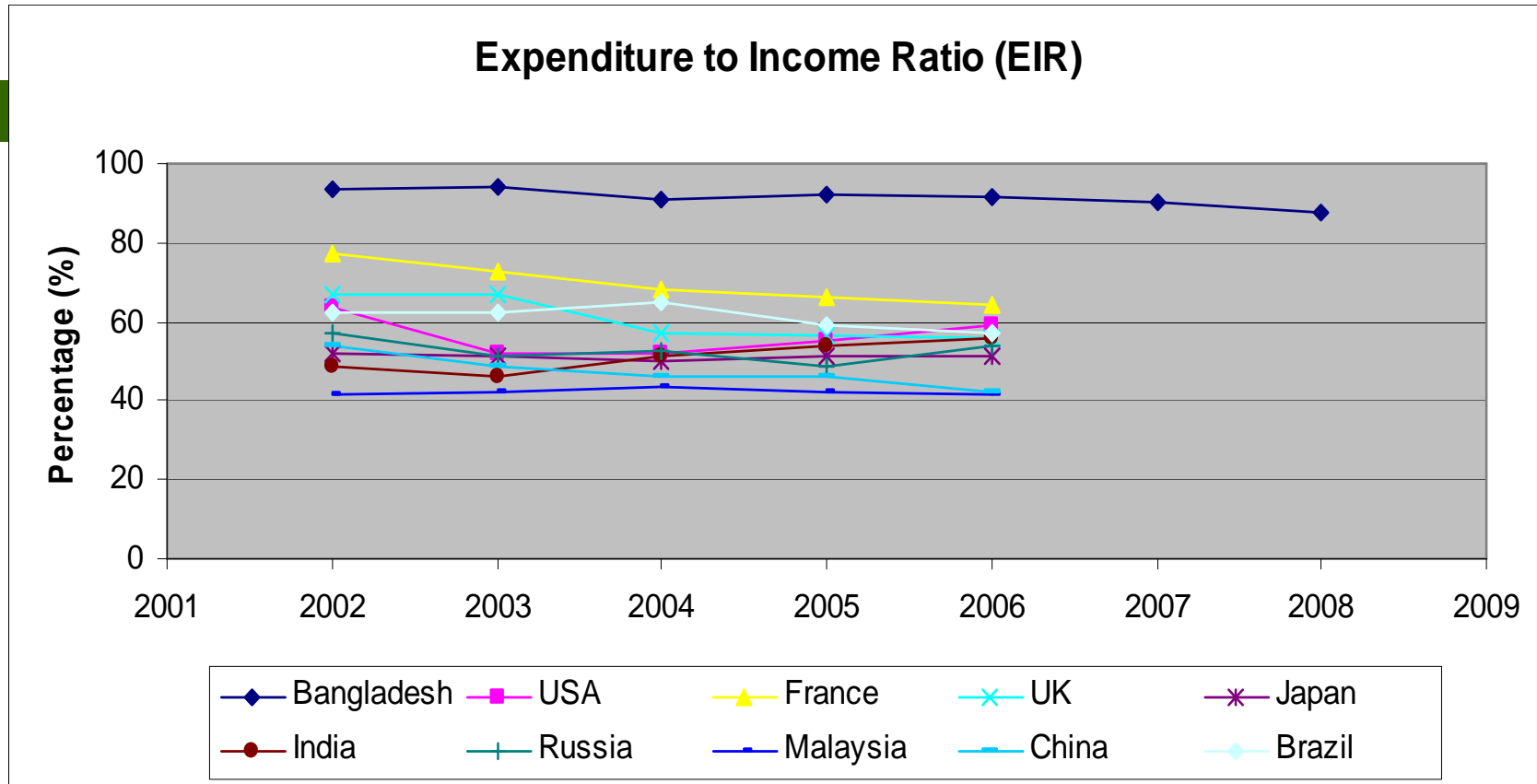
Expenditure-Income Ratio (EIR) by Types of Banks Percent (%)



Source: BB Annual Report (2002-2010).

- SCBs and DFIs shows high EIR due to interest suspense and high operating expenses for huge manpower. Most of the time, DFIs incur losses.
- Internal control system, mature management contributes to lower the EIR in PCBs.
- FCBs operation is basically based on big cities and their operating cost is low for which they have low EIR.
- Industry EIR is in declining trend due to the success of market leader PCBs success.

Expenditure-Income Ratio (EIR) of Developed and Emerging Economy Percent (%)

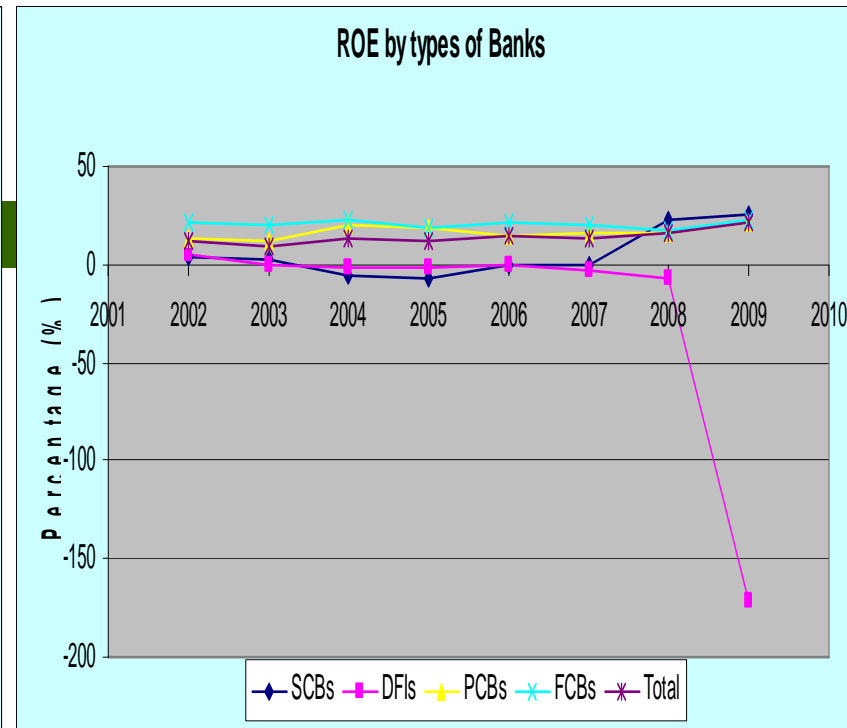
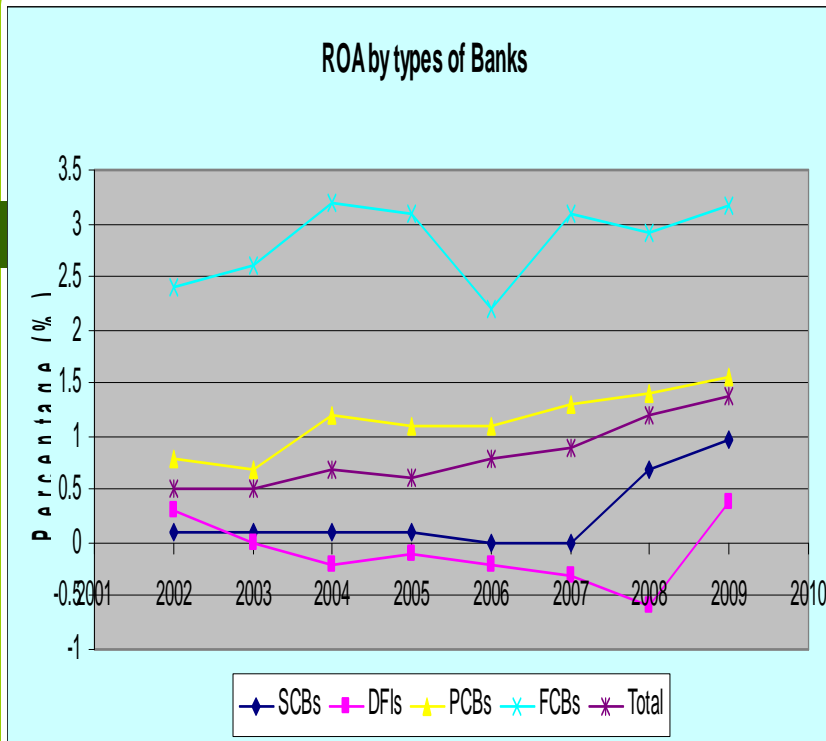


Source: BB, RBI, et. Al. (2007).

.Malaysian banks achieved lowest EIR among all other nations.

EIR is too high in Bangladesh. High EIR reflects operational inefficiency .

ROA & ROE by types of banks. Percent(%)

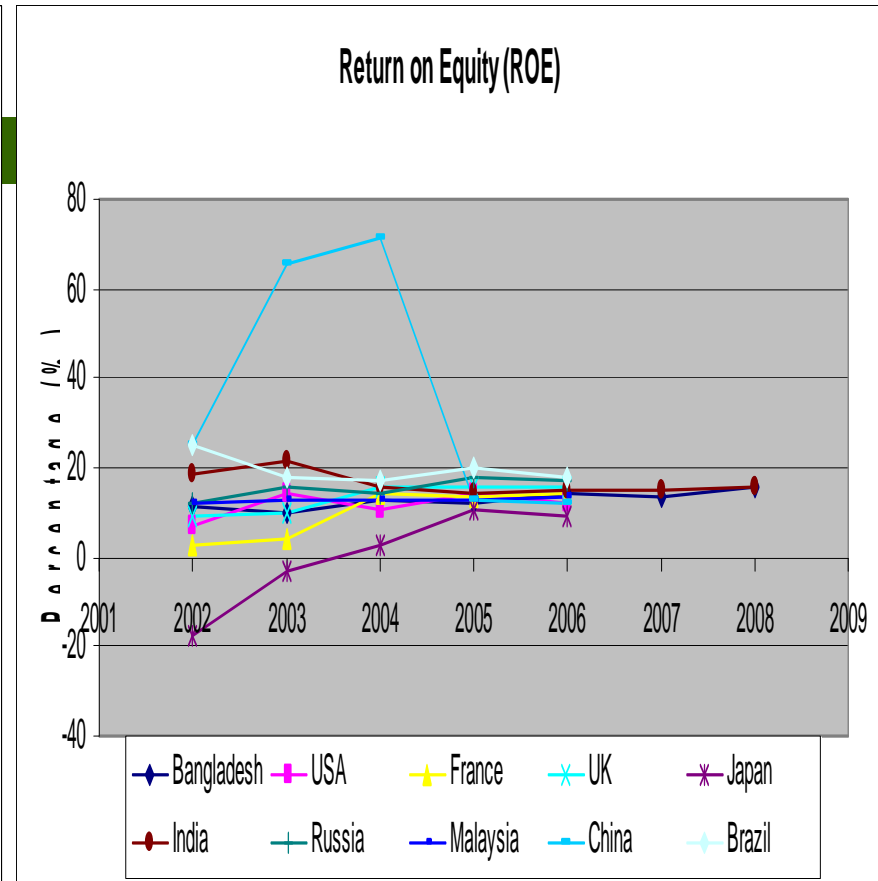
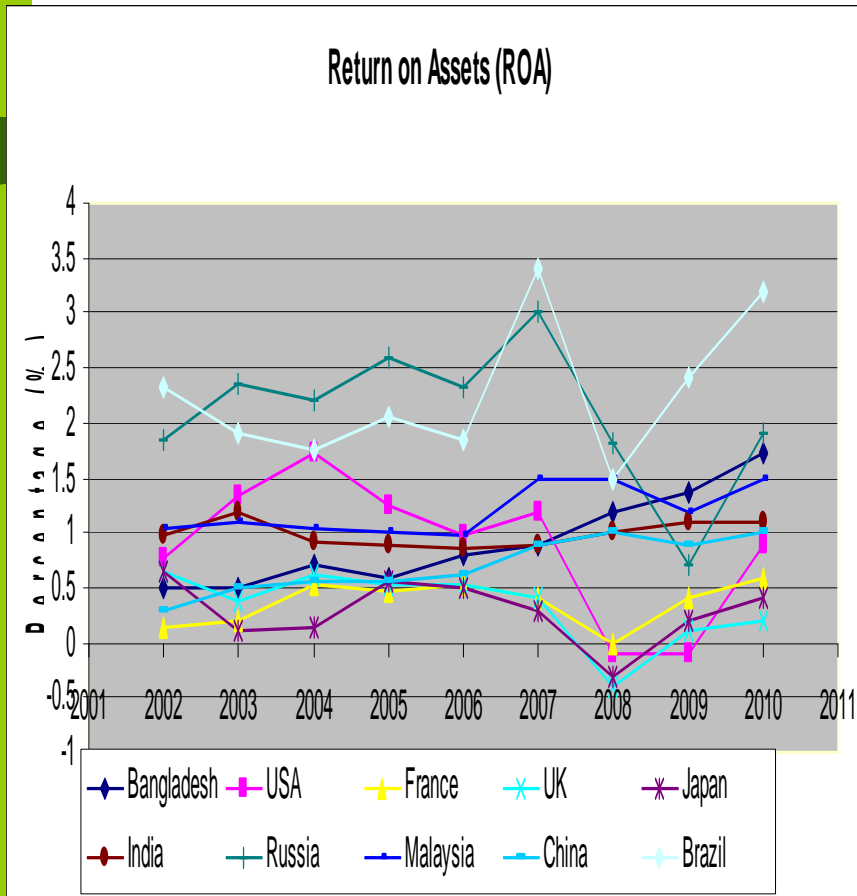


Source: BB Annual Report (2002-2010).

In 2006 and 2007, ROA is zero in SCBs due to huge provision shortfall. But the situation improved later on. After incorporatization of 3 SCBs, ROE increases sharply in SCBs.

- DFIs incur loss most of the time for which ROA was negative. The reasons for loss are huge operating expenses and loan loss provision. In 2009, one of the DFIs incur huge loss for which ROE is exceptionally huge negative.
- Low NPL ratio and low operating cost aids to increase ROA & ROE in PCBs and FCBs.
- Industry ROA & ROE shows a consistent increase over the period due to high return and low operating cost by mostly PCBs and FCBs.

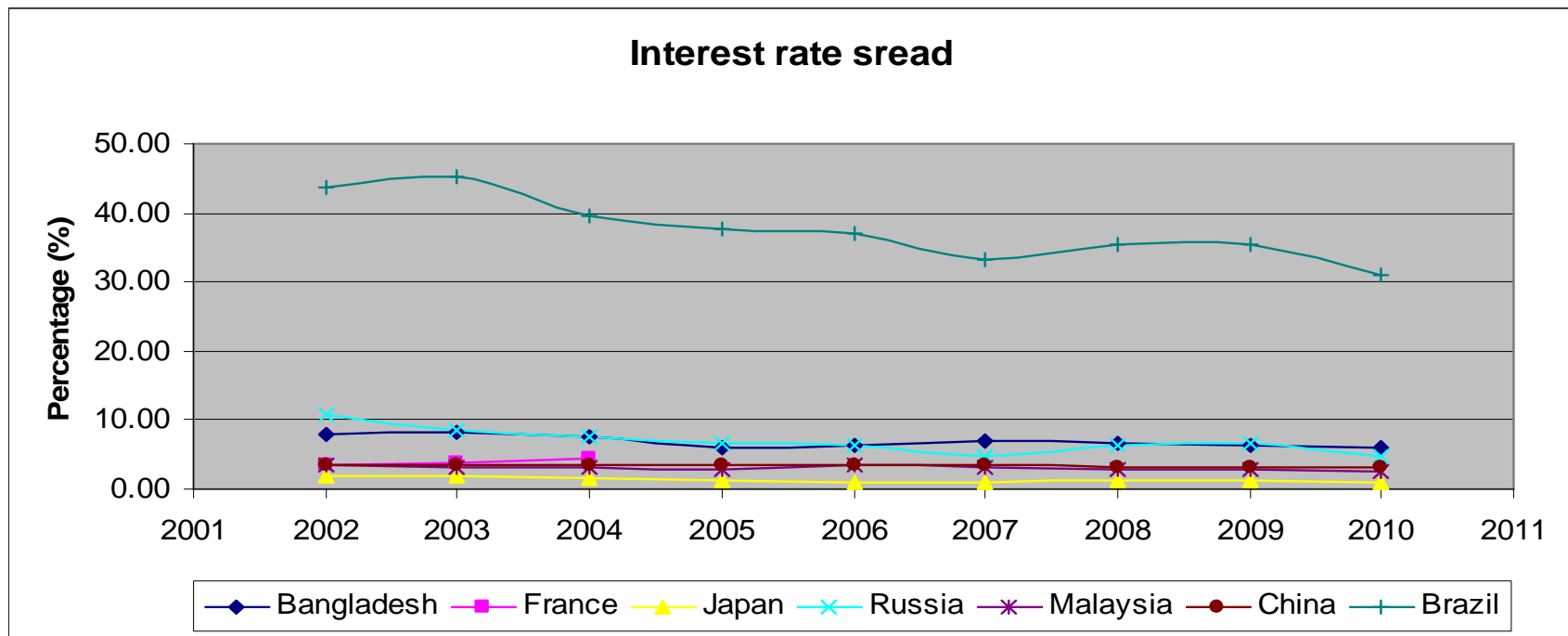
ROA & ROE of Developed and Emerging Economy. Percent (%)



Source: World Development Indicators, WB, (2011), BB, RBI.

ROA is more in Bangladesh than other countries. So, profitability of Bangladeshi banks is better. ROE in Bangladeshi banks is almost similar to other countries.

Interest Rate Spread of Different Economy Percent (%)



Source: World Development Indicators, WB, (2011).

- In Japan, interest rate spread is below 2% whereas in Brazil, interest rate spread is exceptionally high.
- Interest rate spread is much higher in Bangladesh which impedes investments.

Excess Liquidity by Types of Banks.

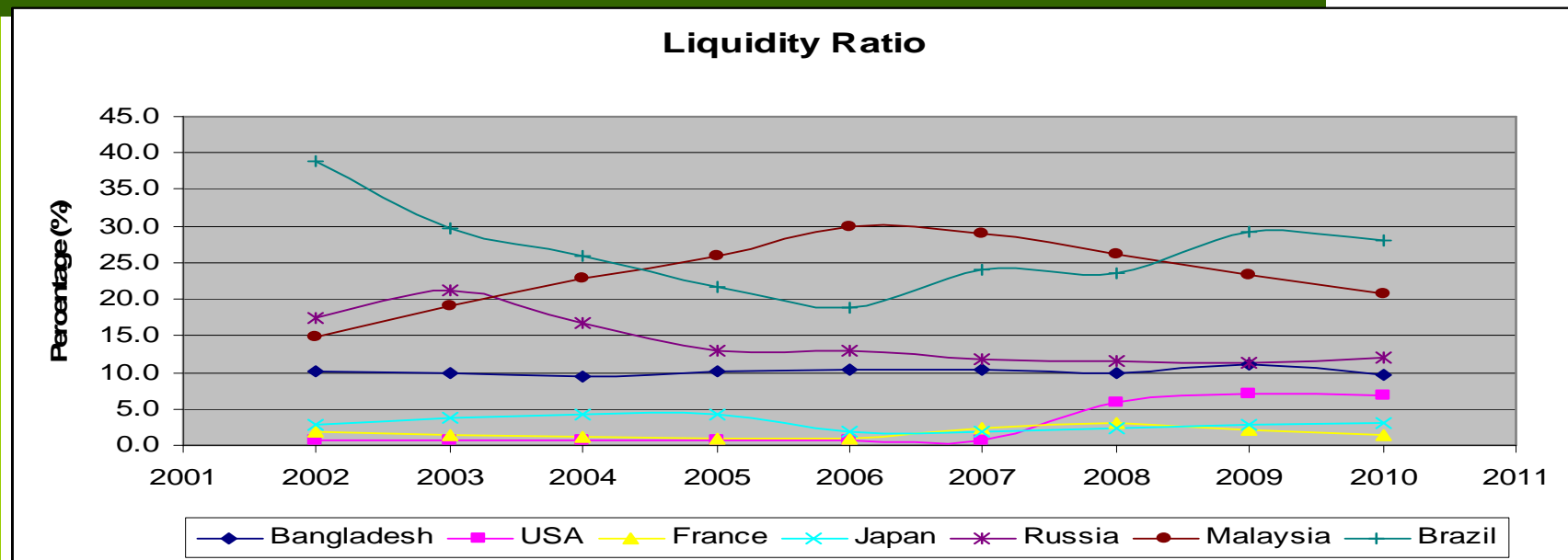
Percent (%)

Bank Types	2002	2003	2004	2005	2006	2007	2008	2009	June, 2010
SCBs	7.3	8.4	6.8	2	2.1	6.9	14.9	17.6	17.9
DFIs	6.9	5.8	4.7	6.2	3.8	5.6	4.9	7.1	13.8
PCBs	8.5	9.8	8.8	5.1	5.6	6.4	4.7	5.3	5.2
FCBs	21.8	21.9	21.9	23.6	16.4	11.2	13.3	21.8	17.7
Total	8.7	9.9	8.7	5.3	5.1	6.9	8.4	9	8.8

Source: BB Annual Report (2002-2010).

- SCBs are the call money market dominator for their excess liquidity for the last 3years.
- DFIs are exempted to maintain 18% SLR but have to maintain 5% CRR of their demand and time liabilities. For this reason, DFIs has excess liquidity.
- Among PCBs, seven are operating as Islami banks. They have to maintain only 10% SLR of their demand and time liabilities.
- FCBs maintain high liquidity historically.
- Industry experienced a fluctuation of excess liquidity over the period.

Liquid Asset of Developed and Emerging Economy. Percent (%)



Source: World Development Indicators, WB, (2011).

- Here, liquid assets means deposits with the monetary authority.
- Among the developed economy, liquid assets is much lower than emerging economy.
- In Bangladesh, liquid assets is near 10% over the period.

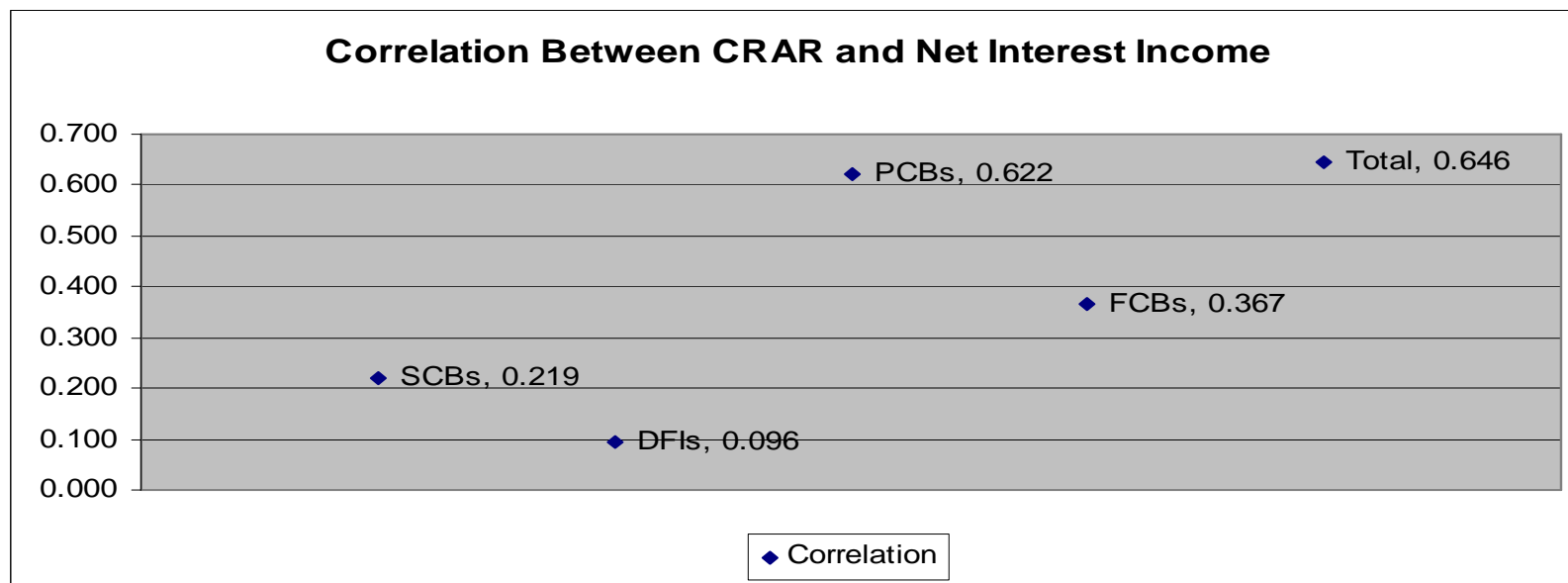
CAMEL (2002-2005) & CAMELS (2006-2009) rating of all Banks in Bangladesh

Rating	2002	2003	2004	2005	2006	2007	2008	2009
1 or Strong	9	15	12	13	3	6	2	3
2 or Satisfactory	21	11	15	16	31	29	28	32
3 or Fair	7	11	10	8	7	5	10	7
4 or Marginal	10	10	8	6	5	6	4	4
5 or Unsatisfactory	2	2	4	5	2	2	4	1
Total	49	49	49	48	48	48	48	48

Source: BB annual report (2002-2007).

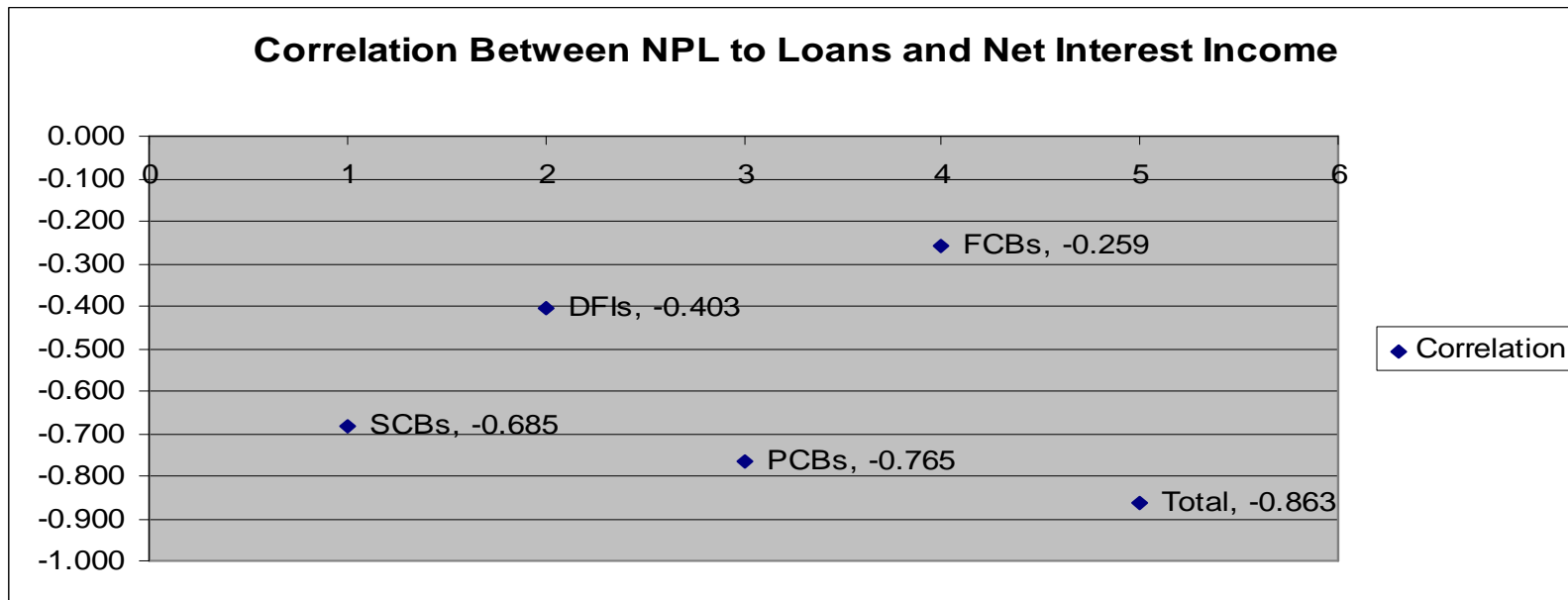
- Rating 1 or strong achiever banks were more upto 2005 but it decreased sharply after the implementation of revised CAMELS rating system.
- Rating 4 and 5 are brought under Early Warning Systems for close monitoring.

Correlation between CRAR and Interest income (2002-2009).



- Increased capital base facilitates more lending and it contributes higher income. So, theoretically there should have a positive correlation.
- From the analysis, a positive correlation is found but it varies across types of banks.
- DFIs and SCBs has got an insignificant correlation whereas PCBs has the significant correlation.

Correlation between NPL ratio and Interest income (2002-2009).



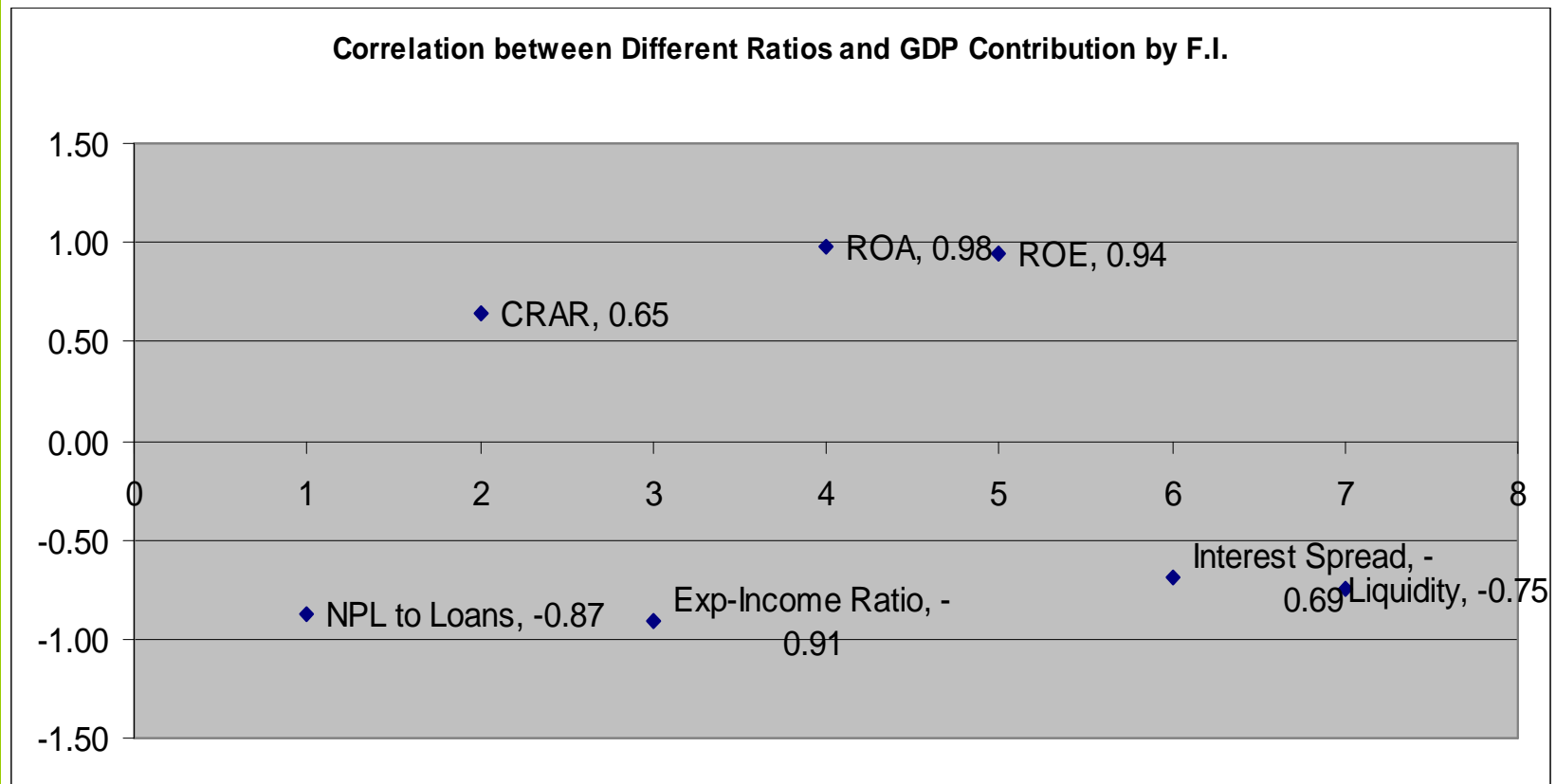
If NPL ratio decreases then no interest suspense and increase interest income.

Theoretically there should have a negative correlation between NPL ratio and interest income.

From the analysis, it has been found negative correlation among these two factors.

FCBs is insignificantly correlated as its NPL ratio increases during the last few years.

Correlation between Industry's Different Ratios and GDP contribution by Financial intermediaries (2002-2009).



Correlation between Industry's Different Ratios and GDP contribution by Financial intermediaries (2002-2009).

CRAR is positively correlated with GDP as high capital base facilitates productive investments which contributes to GDP. In the analysis, we also find a positive significant correlation between CRAR of banking industry and GDP contribution by financial intermediaries. So, it can be said that high capital base contributes to GDP.

Theoretically if NPL ratio decreases then GDP should be increased. It is found in the analysis that NPL ratio is significantly correlated with GDP contribution by Financial intermediaries.

EIR is negatively correlated with GDP contribution by Financial intermediaries. ROA and ROE should be positively correlated with the GDP which is also found in the analysis.

On the other hand, interest spread and liquidity are negatively correlated. Decrease in liquidity and interest spread means more utilization of fund at a lower cost.

So, it can be said that theoretical assumption has been proved in the analysis and the result is significant.

Conclusion and Recommendation

- ❖ DFIs has been found more vulnerable compared to the rest of three categories.
- ❖ Performance of banking sector in Bangladesh is still far behind than that of some developed and emerging economy.
- ❖ Significant correlation between CRAR and NPL ratio with interest income in some cases whereas less significant in other cases.
- ❖ Correlation between some CAMELS ratios of the industry and GDP contribution by financial intermediaries is also found identical with the assumption.
- ❖ The performance of SCBs and DFIs needs to be improved.

THANK YOU