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Banking Profitability and Performance Management

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Executive Summary

Amidst heightened concern about the future of regulatory requirements, cost of funds, fast changing consumer preferences, intensifying competition and profitability pressures, profitability modelling based performance management assumes greater importance in the banking world.

Accentuated by the still ripe memory of the global banking crisis, this trend is driven by certain key elements:

- Renewed appreciation for prudent management of capital
- Improved focus on sustainable growth, product portfolio/ business segment profitability
- Need to link financial metrics with operational drivers and lead indicators in order to have a better lever on costs and be more nimble footed in more complex and evolving business environments.

Introduction

The banking scene in India has undergone a transformation in the past decade, with the rapid globalisation and opening up of markets ; on both fronts of wholesale and retail banking ; given the expanded business opportunities across the globe and the increasing savviness and expectations of the corporates and the enhanced purchasing power of the middle class Indian.

Given the economic background and the field attracting many new players ; jostling for an increased presence has led to rapid expansion and a plethora of products to woo the customer whilst walking the tight rope between compliance, regulation and fast changing consumer demands.

Against this backdrop ; there is a fair share of myths, beliefs and biases surrounding the twin questions of 'what drives performance in banking?' and 'how to drive performance in banking?'. Many financial institutions spend too much time focussing on the "how " without the overarching aegis of the "what".

Our study of Banks operating in India (using Profitability based measurement) busts many popular myths, in addition to providing insights for better performance management.

Why Profitability based performance measurement?

Traditionally, a common metric used to measure performance has been Net Income. However, it does not totally serve the purpose of measuring how effectively a bank is functioning in relation to its size and does not truly reflect its asset efficiency. Net Interest Margin captures the spread between the interest costs and earnings on bank's liabilities and assets and indicates how well the bank manages its assets and liabilities. But it fails to measure the operational efficiency of a bank.

Profitability based measurement on the other hand can serve as a more robust and inclusive means to measure the performance by gauging the extent of operational efficiency as well as capturing the nuances of bank's diversifying earnings through non-interest income activities and management of their costs.

Some of the major profitability based performance measurement metrics are:

Parent Metric	Name	Derivation	Basis	Purpose
ROA	Return on Assets	Net Profit after Tax / Assets	Assets	Asset Management without Risk Impact
RAROA	Risk Adjusted Return on Assets	Economic Profit/ Assets	Economic	Asset Management with mitigated Risk adjustment
ROE	Return on Equity	Net Profit after Tax / Equity	Equity	GL Return on Equity without Risk Impact
RAROE	Risk Adjusted Return on Equity	Economic Profit/ Equity	Economic	Return on Equity with mitigated Risk Impact
RAROC	Risk Adjusted Return on Capital	Economic Profit/ Economic Cost	Economic	Fully Risk based Profitability
EVA	Economic Value Added	Economic Profit – Net cost of Economic Capital	Economic	Fully Risk based Profit

ROA has been used for illustrative purpose in this paper for further analysis

Findings: profitability, growth, market value

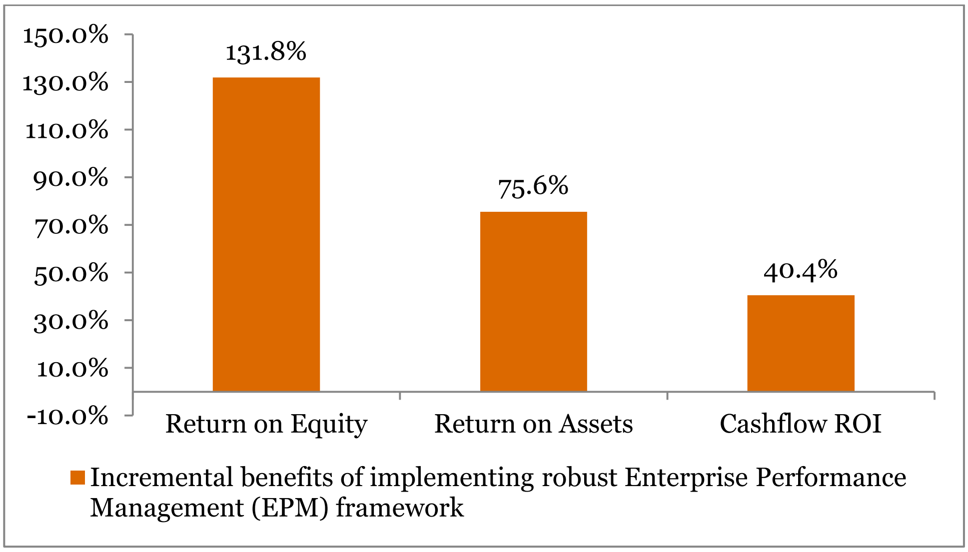
- Profitability is not correlated with balance sheet size
- Only two large banks figure in the top 10 banks ranked in terms of profitability – although as a group, smaller banks exhibit wider dispersion of profitability compared to larger peers
- Banks with profitability>= average have a relatively lower share of assets in Corporate/ Wholesale Banking segment vis a vis the rest
- The listed banks, that that deliver better profitability experience higher valuation – measured in terms of Price/ Book (P/B) multiple at which their shares trade

High-performance banks and banks dedicated to improving their performance care about profitability-oriented performance measurement and management. Profitability-oriented performance management is necessary, both to know what a bank can do to affect profits and to benchmark the effect of any such moves.

Power of Performance Management

A robust performance management framework brings proactive focus on value addition and profitability that translates to better actual performance. Implementing such an Enterprise Performance Management (EPM) framework has recorded benefits in the range of 40% - 130% over a 3 year period across key profitability metrics such as Cash flow ROI, Return on Assets and Return on Equity.

Chart 1: Analysis of 3 year performance of firms with robust EPM vis-à-vis firms with no EPM



Cross-sectional Analysis of Profitability in Banking using ROA[1] as the Parent Metric

Detailed findings and key takeaways

ROA and Balance Sheet Size

Analysing the Pearson's correlation coefficient for banks operating in India, across the years 2005 – 2010, reveals a very low correlation between balance sheet size and ROA distribution.

Chart 2: Correlation co-efficient between ROA and balance sheet size

2005-06	2006-07	2007-08	2008-09	2009-10
0.088	-0.019	-0.013	0.002	0.038

Ranking the banks operating in India based on magnitude of ROA, shows that there are only two large banks present among the top 10. Majority of the banks that clock high ROAs are small sized. While foreign banks clock the highest ROA, the largest category representation is from Indian private sector banks. Old private sector banks although typically smaller than new private sector banks, have an equal representation, on par with the latter, on the ROA scale. This is possibly the result of rapid modernisation efforts embarked upon by old private sector banks during this decade that are beginning to bear fruit.

Chart 3: Characteristics of Banks with high ROA

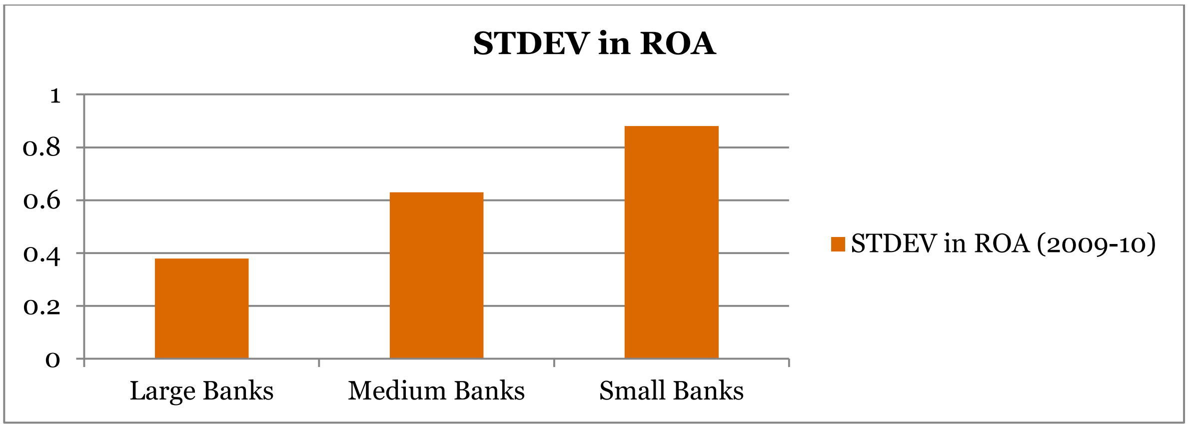
ROA Rank	Size	Category
1	Medium	Foreign Bank
2	Small	Foreign Bank
3	Small	New Private Sector
4	Small	Old Private Sector
5	Small	Foreign Bank
6	Small	New Private Sector
7	Small	Old Private Sector
8	Large	New Private Sector
9	Large	Nationalised
10	Small	Old Private Sector

The downside to smaller banks achieving higher ROA appears to be a wider dispersion in ROA within this group. This is an indication of the variability of outcome among smaller firms in general.

Against the backdrop of the recent crises, flight of clientele to safer and bigger banks decreases the odds of consistent performance. Extended periods of poor performance could lead to weaker banks becoming takeover candidates for acquisitions.

[1] ROA is used for illustrative purpose. The analysis can be extended for other profitability based measurements

Chart 4: ROA standard deviation



The above findings imply that –

Neither does scale necessarily translate to profitability nor is it a necessary factor to achieve profitability in banking (at least in the Indian context)

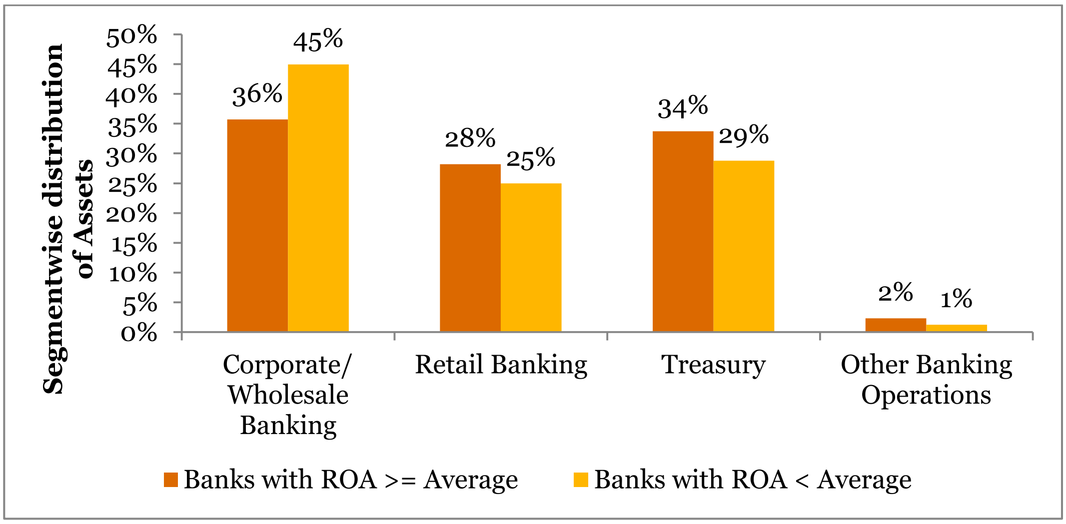
ROA and Portfolio

Studying the asset portfolio mix across business segments for two silos viz. Banks with less than average ROA and Banks with greater than average ROA brings out the following key findings:

Compared to Banks with ROA< average, Banks with ROA>= average have

- Lower share of assets in Corporate/ Wholesale Banking
- Higher share of assets deployed in Retail Banking
- Higher share of assets deployed in Treasury operations

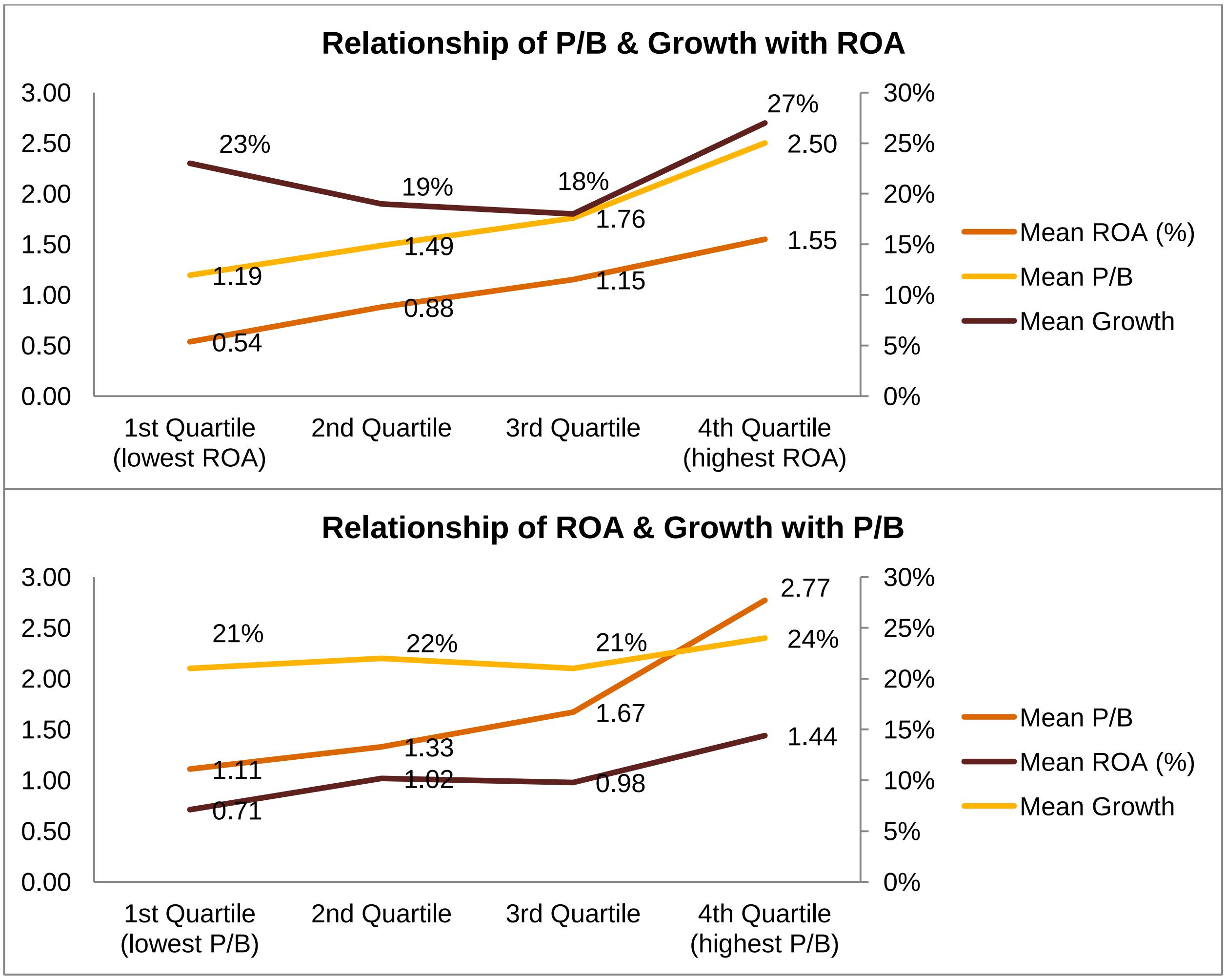
Chart 5: Impact of portfolio on ROA



ROA and Valuation

Our analysis reveals that listed banks, grouped into quartiles based on ascending order of ROA, exhibit progressively increasing P/B multiple in terms of quartile mean and median. ***Banks in the lowest quartile of ROA have a mean P/B multiple of 1.19*** *while* ***firms that belong to the highest quartile of ROA have a mean P/B multiple of 2.5***

Chart 6: Impact of ROA on valuation



Looking at banks within a quartile set; the ones with the lowest ROA also reflect the lowest P/B (1.19) vis a vis , the banks which clocked a high average ROA (1.55) reflect a higher P/B of 2.5.

Turning this over ; viewed through the lens of P/B ; banks with a low average P/B of 1.11 also reflect a low ROA of .71 while those clocking a higher P/B ratio of 2.77 , reflect a much higher mean ROA at 1.44 . The growth aspect is not significant across these quartiles reflecting a few percentage points.

The market rewards banks that can raise capital at higher rates of return by valuing their existing equity base at a higher premium compared to peers that compound capital at relatively lower rates of return. The implication of this is lower cost of capital and less dilution of equity for future fund raising initiatives of banks that are superior managers of capital.

The corollary - while the market expects banks to grow, growth for growth's sake without a handle on profitability may in fact be value eroding in terms of market multiple commanded by the bank.

Conclusion

While ROA and market capitalisation appear to be in tandem , what drives ROA appears to be a mixed bag , busting a few myths and highlighting the benefits of managed growth with a keen eye on profitability.

We believe that a keen eye on profitability is a must during the ideation and implementation of both strategic growth plans and operational plans. This is where **Enterprise Performance Management (EPM)** is crucial.

A **profitability** based performance management framework will translate organisational strategy into appropriate functional level goals, which can be tracked and monitored at the right levels and frequency, to deliver predictable improvement in metrics like ROA and thereby valuation.

Profitability based Performance Management

To improve ROA and reduce variability in performance, banks need to take a forward looking windshield based approach to performance management rather than a backward looking rear-view mirror based one. This would include:

- Clear business and financial model across its portfolio of businesses/products to create the roadmap for ROA improvement
- Strong framework and planning cell in the CFO's office that translates growth, pricing, profit and capital improvement initiatives into plans and budgets
- Periodic report and review mechanism that a)distinguishes between routine operational plans and strategic growth plans b) effectively tracks budget variance and converts them into actionable items
- Strong measurement framework that deploys ROA improvement targets through the management structure of the organisation
- A SMART (Specific, Measurable, Achievable, Relevant and Timely) KPI framework and hierarchy for each business
- Linkage of ROA targets to lower level financial goals (lag indicators) and operational parameters (lead indicators), and mapping them to the organisational hierarchy
- Improved linkage between ROA improvement and the compensation and reward structure
- Activity based costing

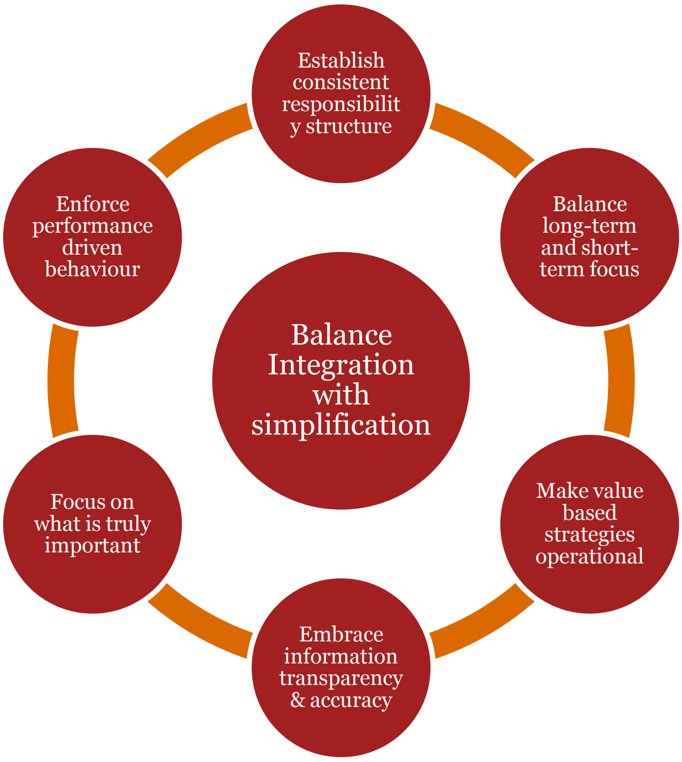
PwC's Enterprise Performance Management (EPM) Framework

Chart 7: PwC's Enterprise Performance Management Framework enables banks to deliver predictable contribution to sustained value creation

Our world-class performance management framework helps to design, cohesively link and align multiple sub-components that drive value creation

- strategy development
- strategy translation
- budgeting/ target setting
- performance measurement
- performance reporting and review
- KRAs and incentive compensation

Chart 8: Our Enterprise Performance Management framework can help banks overcome typical challenges in performance management



As part of our EPM framework, we can help build and deploy a customized KPI tree, across organisation levels that can help drive, monitor and proactively correct decisions impacting performance (proactively).

We can customize our EPM framework based on the following parent metrics for measuring profitability:

Parent Metric	Name	Derivation	Basis	Purpose
ROA	Return on Assets	Net Profit after Tax / Assets	Assets	Asset Management without Risk Impact
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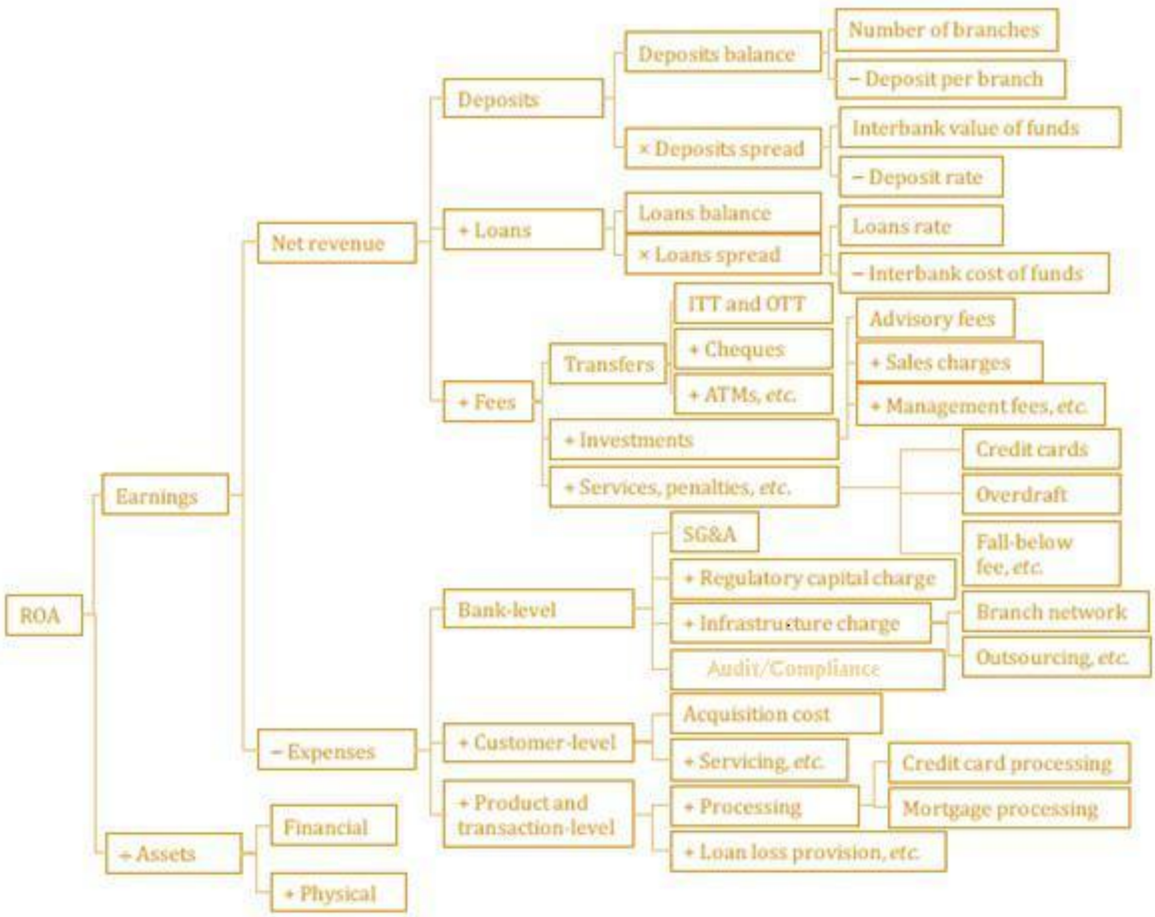
Illustrative examples of what implementing Profitability based EPM framework entails

Following are samples of various aspects that are typically part of implementing an EPM framework in a Financial Institution. *Please note that these are purely for illustrative purposes only and are neither comprehensive nor entirely standardized.* An effective EPM framework is one that is tailored to the client organisation based on specific objectives, needs and business dynamics.

Chart 9: Mapping of performance drivers (for illustrative purposes - not comprehensive/standard)

Measure of bank performance	Financial characteristics influencing performance	Decisions affecting Financial characteristics
ROA	Net Interest Margin	Deposit rate decisions
		Loan rate decisions
		Loan services offered
	Non-interest revenues	Overhead requirements
	Non-interest expenses	Efficiency
		Advertising & Marketing spend
		Risk level of loans provided
	Loan losses	

Chart 10: High level ROA Tree for Retail Banking



ROA trees can be viewed using multiple lenses to manage performance across various dimensions:

- By business unit/ desk/ product
- By transaction/ counterparty/ customer type
- By geography

Risk adjusted Return on Capital (RAROC) can be used along the above dimensions for:

- Pro-actively tracking and forecasting performance
- Achieving safety
- Pricing
- Strategic/ Business decisions
- Capital allocation to business units or portfolios.

Chart 11: Even though a Bank may be achieving its ROA/ RAROC target on average, many segments/ products may actually be destroying value

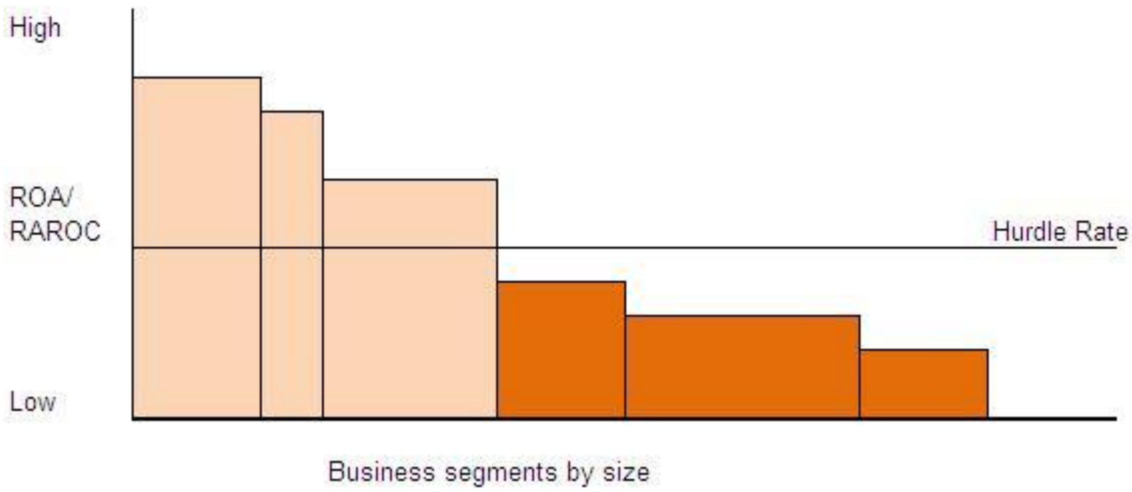
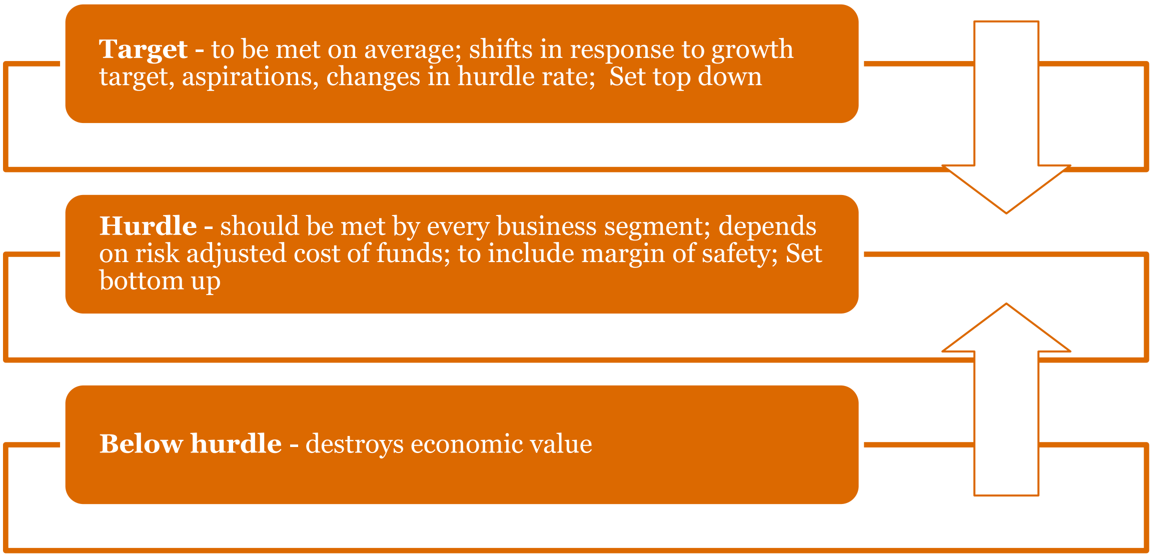


Chart 12: Different businesses could have different capital requirements and hurdle rates

Retail Lending Mortgages	Private Banking Asset Management	Corporate Lending Credit Cards	Advisory/ finance for M&A Proprietary Trading

Chart 13: Setting ROA/ RAROC based Targets and Hurdles



Appendix

Source, Assumptions and Data Sets used for Analysis

Master sample:

Source: RBI data, Bank Annual Reports, PwC Analysis.

RBI list of scheduled commercial banks operating in India having atleast 10 branches as on Mar '10

No. of banks in sample set - 54

Balancesheet size proxy - asset base

Profitability proxy - ROA

Asset base, ROA - annual figures for FY 10

Chart 1:

Source: Study by Gubman EL, The Talent Solution, Aligning Strategy and People to achieve Extraordinary Results - McGraw Hill 1998

Dataset: Performance Management Process and Financial Results of 437 publicly traded firms were analyzed. Of the sample 232 companies said they had no formal process of EPM and 205 did.

An analysis of 3 years performance was done on the following factors:

TSR-Total Shareholder Return

ROE - Return on Equity

ROA-Return on Assets

CF-ROI - Cash Flow ROI

Growth in Sales

Growth in Number of Employees

Chart 2:

Correlation co-efficient used – Pearson

Correlation performed across master sample using annual ROA numbers

Chart 3:

Size classification based on balance sheet size

Total assets used as proxy for balance sheet size:

Large > 100,000 cr

Medium > 50,000 cr

Small < 50,000 cr

Category classification - based on RBI guidelines

Ranking of Top 10 banks based on ROA from a sample set of 54 banks

Chart 4:

Bar Plot based for FY 10

Chart 5:

Sample size - 38, only listed banks in India

Chart 6:

Sample size - 38, only listed banks in India

Price to book multiple computed based on

Book value - at end of FY 10

Market cap - six months average as on Jan 21st 2011

Growth – represents growth in the total assets in 2010

Chart 7:

PwC Enterprise Performance Management framework

Chart 8:

PwC Point of view - challenges in performance management

Chart 9:

PwC Point of view - illustrative table

Chart 10:

PwC Point of view - illustrative ROA tree

Chart 11:

PwC point of view - illustrative Business Segments/ Product portfolio prioritisation

Chart 12:

PwC point of view – Hurdle rates

Chart 13:

PwC point of view - illustrative levels used for mapping profitability of business segments/ products

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