

Regulatory Opportunities in Banking

Pravin Burra, November 2018



About Bankers

Reality may be changing faster than perceptions



Annual Focus

Profit measures have mostly been annual in nature..

Improved understanding of lifetime value



ROI

Bankers have been exceptional in understanding the cost of money and hence the return on investment.

2 | November 2018



Data Rich

Transactional account data provides amazing insight into the life of the customer – assuming that anyone is paying attention.

Improved customer focus



Investment

Banks have traditionally spent on bricks and mortar infrastructure as well as people and systems.

Business model evolution/ design thinking



Threats

Banks are under pressure from shadow banking and the emergence of fintech.

Bank Risk

Domains of risk management in a bank

Credit Risk

The potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms.



Fraud Risk

Know your customer, anti money laundering, anti terrorism funding, fraud.



Market Risk

The possibility of an investor experiencing losses due to factors that affect the overall performance of the financial markets.



Customer Risk

The risk of becoming irrelevant to your customer.



Operational Risk

The prospect of loss resulting from inadequate or failed procedures, systems or policies.



Evolution Risk

Move from a legacy bricks and mortar bank to a digital bank.



3 Lines of Defense

01.

Business

Functions that own and manage risk

Risk

Functions that oversee or specialize in risk management & compliance

02.

03.

Validation

Functions that provide independent assurance.

3 Lines of Defense

Audit Committees will also play an essential and unique role in ensuring that banks have a high-quality estimates of ECL/CECL.

Auditors have a responsibility to objectively evaluate and challenge the reasonableness of accounting estimates.

The increase of judgement in estimates increases the reliance on experts.

Experts are defined as individuals with particular expertise and knowledge that may be relevant to the estimates at hand.

3 Lines of Defense

Are foundational elements of high quality and fit for purpose?

- Accounting policies
- Operational procedures and systems of control
- Data and IT systems
- Estimation models

Risk of Material Misstatement

- Complexity of estimating expected losses
 - A high number of inputs and assumptions which are subject to judgement – e.g. forward looking assumptions
- Increased estimation uncertainty.
 - Multiple scenarios based on unstable patterns
- Potential magnitude of estimates relative to audit materiality
 - Scope to influence audit standards
- **Skills** required
 - Credit risk, modelling, economic forecasting, data, IT & programming
 - **Knowledge** of banking
 - **Resources**

Typical Responses

- Completeness of solution
 - Key drivers of risk
- Integrity of controls
- Development of independent estimates
 - Problem of reconciliation to internal estimates
- Model performance
 - Back testing
 - Sensitivity analysis
 - Volatility of measures & approach (models & definitions)

Judgement

- Data deficiencies
- Modelling deficiencies
- Outcome deficiencies
- Forward looking estimates
- Segmentation
- Definitions
- Simplifying assumptions

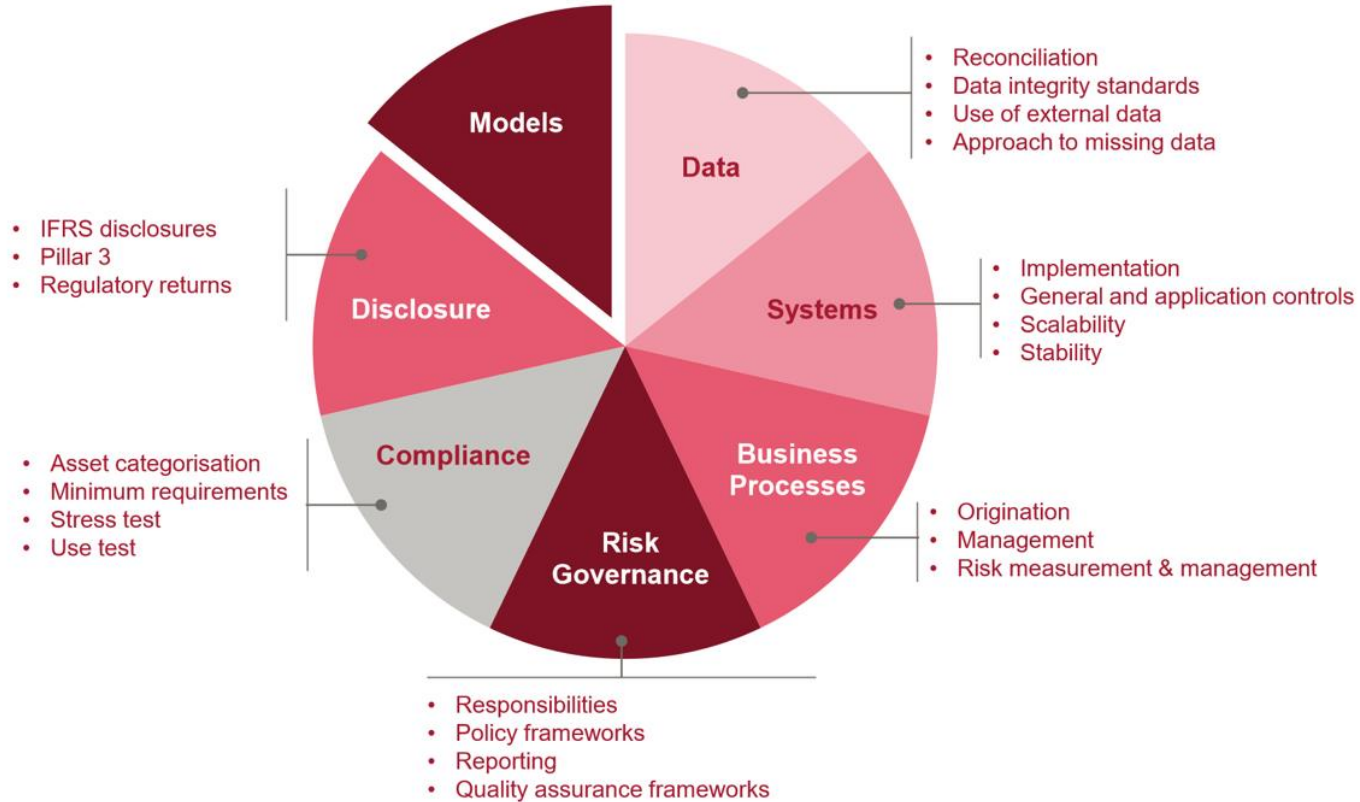
Internal Controls (ECL)

- Completeness, Accuracy, relevance & reliability of information
- Appropriateness of accounting policies
 - Segmentation
 - Significant increase in credit risk
 - Definition of default and loss
 - Treatment of multiple defaults
- Development, validation & monitoring of models
- Adjustments and overrides
- Development of economic scenarios
- Reasonableness of estimates
- Disclosure



**The following are extracts from a
previous talk on common findings
from the review of regulatory capital
models at banks**

Background



Data Principles

1. Data definition

- Crude mortality rate, standardised mortality rate, central mortality rate

2. Reconciliation & validation

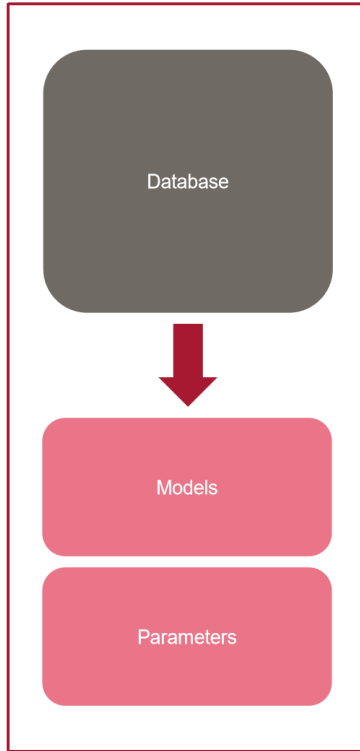
- Treatment of incomplete or missing data
- The fact that data is missing may in itself be a rating factor

3. Use of external data

- Appropriateness

4. Weaknesses in the data and methods to overcome them

Data Modelling



1. Correspondence

- Consistency between numerator & denominator
- Consistency between base population and applied population

2. Population stability

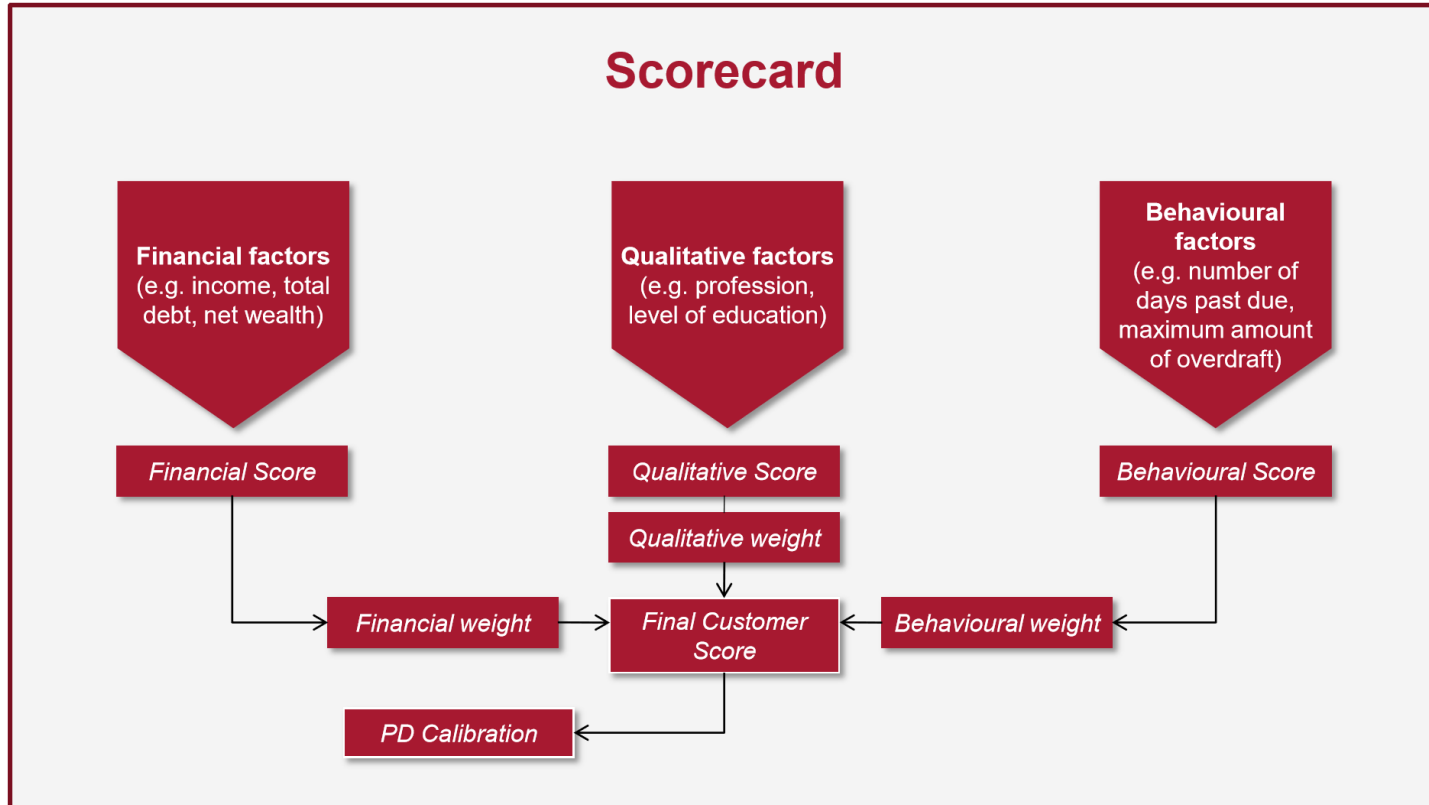
- Population stability tests
- Migration matrices
- Graphs & distribution functions

3. Base period for calibration

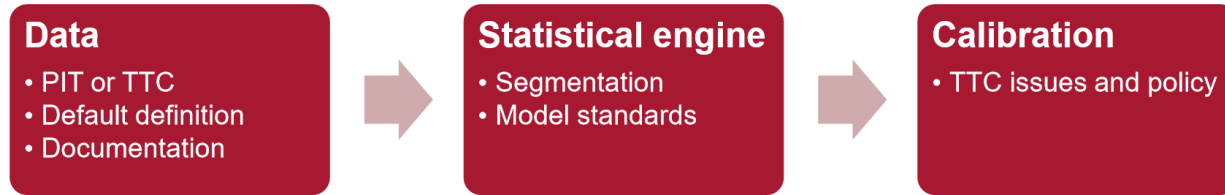
- Full economic cycle
- Include period of stress

4. Weaknesses and methods to overcome them

Data Modelling



Data Modelling



- Overall considerations different to causal modelling
- Discipline and documentation
- Basic compliance boxes not always ticked
- Less issues in retail than corporate
- Learnings from out-of-time and out-of-sample testing
- Use of expert input
- Lack of application of “best practice”

Key Governance Issues

1. Strength of technical validation unit

- Independence
- Quality and depth
- Evidence of challenge
- What is the message?

2. Documentation

- Adequate developmental evidence
- Ability to recreate results
- Version control

3. Address all critical areas of compliance

4. Other

- Are adjustments supported?

5. Technical issues

- Are adjustments supported?
- Do the grades discriminate risk?
- How does actual compare with estimates?
- How do estimates compare both internal and external estimates
- Evaluate appropriateness of use?
- Change management and governance
- Consistency and relevance



Questions



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Over 25 years of analytics experience

Ex partner at big 4 audit firm

Previous executive head of customer analytics at leading retail bank



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