Credit Risk Management

Presented by

Kwaku Duah Berchie

John Graystone… The Knowledge Hub

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Credit Risk Management

Introductions and Course Overview

Session 1

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Session Objectives

- Get to know all participants, their organisations and their roles within their S&Ls
- "Ground rules" and training outline
- Introduction to the major themes of the training
- Expectations after the workshop

Handout 1.1: Training Outline

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Participant's Introduction

Introduce yourself

- Your name, organisation and designation
- How much credit risk management have you done?
- One thing nobody in this room knows about you
- What can you bring to the session?

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Suggested Ground Rules …

- Brainstorm freely; disagree openly, but courteously… it stimulates discussion & helps others 'think aloud'!
- Speak up, or you'll be called upon to speak!
- Give a fair chance to all to participate
- Avoid side conversations, let all participants benefit!
- Keep discussions and comments relevant
- Don't leave the room unless you must
- Be prompt – arrival, breaks, lunch….
- Don't interrupt
- Speak up with interesting & relevant ideas that will add value
- Switch off/vibrate cell phones!!!
- Others?

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Useful Reading

- Nimal A. Fernando. *Managing Microfinance Risks - Some Observations and Suggestions* (ADB, 2008).
- Soumya Harsh Pandey. *MicroSave Briefing Note # 121. Risk Management for S&Ls - I* (June 2012).
- CGAP. *Microfinance Consensus Guidelines*, 2003.
- SEEP, *Pocket Guide to the Microfinance Financial Reporting Standards Measuring Financial Performance of Microfinance Institutions*, 2010.
- *Risk Management*, Frankfurt School of Finance & Management
- *The 2021 CSFI survey of the risks facing banks Covid special*. Centre for the Study of Financial Innovation (CSFI)
- Churchill, C. "Client Focused Lending: The Art of Individual Lending
- Pikholz, Lynn, and J. Carpenter. "Lending Training Course.
- Ledgerwood, Joanna. "Training and Technical Assistance Manual"
- Brown, Introduction to Risk Management. Boulder Microfinance Training
- Reuhmer, Building Risk Management. Boulder Microfinance Training
- *MicroSave*. Toolkit for Individual Lending for Credit Managers.

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How *John Graystone* Training Works

- *John Graystone* is firmly committed to practice-based training
- For all trainings *John Graystone* follows the same basic approach:
- 2-3 days in the classroom introducing topics and beginning to work on outline plans/solutions
- 3-5 days on-site at participants' institutions working on the issues
- (Sometimes) 1-2 days later on to process and wrap-up

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Session Objectives

- Understand more of the implications of a proactive risk management program for your S&L
- Understand more about the typical risks faced by S&Ls
- Understand what influences credit risk in an S&L
- Understand how credit function influences institutional risk profile
- Learn more ways to manage and measure non-credit risks inherent in the lending function
- Understand more about specific credit risks
- Understand how credit risks can be mitigated through the Step by Step lending process
- Learn more about need for Managements to be involved in monitoring
- Learn methods of effective monitoring

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Call Out

What is a Vision Statement?

What is a Mission Statement?

What are values?

Why are they important?

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Mission Statement

- Guide to conducting a well run business
- Guide to mitigate the risk of mission drift
- Explains what an organization aims to achieve at the present time, as well as in the future
- States the organization’s core values and purpose for being in operation
- A written statement with its core values, goals, objectives and vision for the future
- Clearly written and easily understood
- Be VISIBLE.

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Mission Statement cont'd……

- The Mission Statement should address three key questions:

1. What is the purpose of our organization?
2. What is the business of our organization?
3. What are the core values of our organization?

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Vision - Sun
Mission - Road
Values - Signs
dreamstime

6 Key Ingredients to Successful Lending

- Capital
- Staff
- Strong lending methodology
- Customer focus
- Supportive operations, management and MIS teams with adequate reporting mechanisms
- Proactive risk management strategies

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What is Risk Management?

What is Proactive Risk Management?

What are its Benefits?

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Risk Management

- Risk Management:
- Process of implementing policies and an overall strategy to diminish risks faced by an organization in accomplishing its mission.
- Educated decisions about how;
- much risk to tolerate
- to mitigate those that cannot be tolerated
- to manage the real risks that are part of the business

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Risk Management

- One of the core functions in financial institutions
- Reduces the likelihood of losses
- Includes the prevention of potential problems
- Early detection of problems
- Corrective measures

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Top 10 Reasons for Car Accidents – This Class

1. Speeding
2. Reckless/careless driving
3. Distractions
4. DUI
5. Bad roads
6. Unqualified drivers (gross indiscipline & lack of road education)
7. Mechanical faults/lack of maintenance
8. Fatigue
9. Running red light
10. Poor weather

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Top 10 Reasons for Accidents

- Distracted Driving
- Speeding
- Drunk Driving
- Reckless Driving
- Rain
- Running Red Lights
- Running Stop Signs
- Motor Bike Driving
- Night Driving
- Road Defects

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Risk Management is like Driving a Car

Risk Culture
Experience, discipline, training help steering through problems

Risk Structure & Policies
A well built car with the right safety components allows to drive safer and faster

Risk Monitoring
A reliable and clear dashboard helps assessing the performance

Regulatory Environment
Streets of good quality with traffic management systems

Competition
Driving becomes more challenging with traffic

Responsibility
As a bus driver, you have more responsibility than when driving alone

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Five Levels of Risk Culture

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Top 10 Reasons for Loan Defaults – This Class

1. Poor/improper appraisal
2. Character of customers
3. Diversion of funds
4. Poor monitoring
5. High interest/inflation rates
6. Poor business practices
7. Accident/sickness/death of customer
8. Delay in loan disbursement
9. Lack of experienced/trained staff
10. Economic decline

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Reasons for Credit Defaults

- Compromise of credit principles
- Incomplete credit information,
- Ignorance of warning signals
- Verbal information
- Timid dealing with clients with strong personalities, friends, celebrities
- Influenced by inadequate salary incentives
- Lack of adequate supervision
- Optimistic interpretation of known weaknesses
- No adequate supervision of old/familiar borrowers

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Top 10 Risks Facing Financial Institutions – This Class

1. Credit Risk
2. Liquidity Risk/challenge
3. Governance Risk
4. Fraud by staff/management
5. Breaching regulations
6. HR Risk/weak Management oversight
7. Cyber crime/security risk
8. Granting loans bigger than the S&L could afford/single obligor breaches
9. Weak internal controls
10. Strategic risk

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Banana Skins 2021
(2015 ranking in brackets)

- 1 Crime (2)
- 2 Macro-economic environment (1)
- 3 Technology risk (4)
- 4 Security risk (-)
- 5 Credit risk (7)
- 6 Quality of risk management (6)
- 7 Business model (10)
- 8 Business practices (8)
- 9 Reputation (12)
- 10 Sustainability (24)
- 11 Corporate governance (19)
- 12 Culture (-)
- 13 Political risk (5)
- 14 International trade (-)
- 15 Interest rates (14)
- 16 Regulation (3)
- 17 Management incentives (20)
- 18 Pricing of risk (9)
- 19 People risk (22)
- 20 Liquidity (18)
- 21 Compliance risk (-)
- 22 Capital availability (13)
- 23 Currency (17)

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Risks Faced by Financial Institutions

RISKS

Operational Risks	Financial Risks
HR Risks	Credit Risk
Organisational Risks	Liquidity Risks
Legal Risks	Market Risks
Reputation Risks	Capital Adequacy Risks

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How others See Risks

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Components of Risk

STRATEGIC RISKS

- Corporate Governance Risk
- Commercial Mission Risk
- Social Mission Risk
- Execution Risk
- Dependency Risk
- Compliance Risk
- Reputation Risk
- Growth Risk

OPERATIONAL RISKS

- Transaction Risk
- Information Technology Risk
- Credit Administration Risk
- Human Resources Risk
- Disaster Recovery
- Security Risk
- Fraud Risk

FINANCIAL RISKS

- Credit Risk
- Portfolio Risk
- Liquidity Risk
- Market Risks:
    - Interest Rate Risk
    - Foreign Exchange Risk
    - Investment Portfolio Risk

EXTERNAL RISKS

- Regulatory Risk
- Competition Risk
- Political Risk
- Macroeconomic Risk
- Product Risk
- Technological Risk
- Systemic Risk
- Physical Environment Risk

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Benefits of Proactive Risk Management

- Implementation strategies to diminish risks
- Allows you to better anticipate risks, rather than react to them
- S&Ls should not discourage risk taking, but rather encourage prudent risk taking.
- Early warning system for potential problems
- More efficient use of capital
- More cost-effective treasury management
- Better new product development and roll out

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- ***Operating an S&L a is Risky Business:***

- ***What Makes Your S&L Vulnerable to Risk ?***

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What Makes S&Ls Vulnerable?

- Many transactions
- Big ticket loans; skillset and capacity often lacking
- Rapid growth
- Inadequate training
- Pressure to cut costs
- Lack of or insufficient application MIS
- Weak internal controls
- High employee turnover
- Multiple loan products

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Risk Management Feedback Loop

1. (Re) Identify, (Re) Assess and (Re) Prioritise Risks

2. Develop strategies to manage risk (ATAC)

3. Develop tactics to mitigate risks

4. Assign responsibility and implement

5. Test effectiveness and evaluate results

Handout 1.2: Risk Management Feedback Loop

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Ten Guidelines for Risk Management

1. Lead the risk management process from the top
2. Incorporate risk management into process and systems design
3. Keep it simple and easy to understand
4. Involve all levels of staff
5. Align risk management goals with the goals of individuals
6. Address the most important risks first
7. Assign responsibilities and set monitoring schedule
8. Design informative management reporting to board
9. Develop effective mechanisms to evaluate internal controls
10. Manage risk continuously using a risk management feedback loop

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Who is Responsible for Risk Management?

- Board of Directors
- Senior Management
- Accounting Department
- Internal Auditor
- Credit Management & Other Staff
- What are the key risk management responsibilities for each of these roles?

Handout 1.3: Responsibilities of the Board of Directors
Handout 1.4: Institutional Roles in Risk Management

Techniques to Mitigate Risks

• Top level controls	• Segregation of duties
• Activity Controls	• Policies and Procedures
• Physical controls	• Diversification
• Compliance with exposure limits	• Conversion
• Approvals and authorizations	• Enforcement
• Verifications and reconciliations	• Reporting and Testing

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Call Out

Why and How do we Measure Risk?

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Call Out

What is this?

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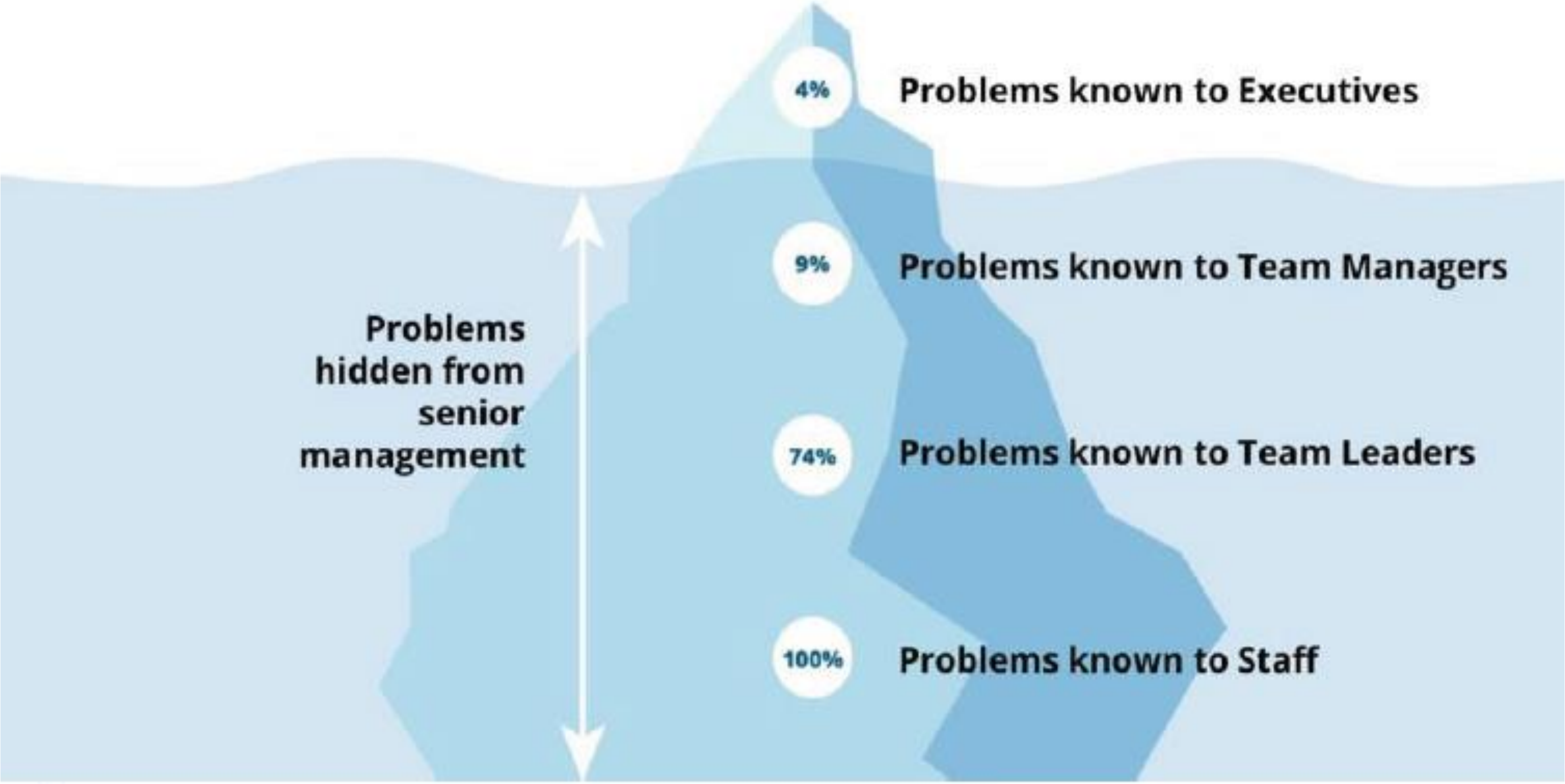
The Iceberg of Ignorance



*Yoshida, Sydney, "The Iceberg of Ignorance," 1989.

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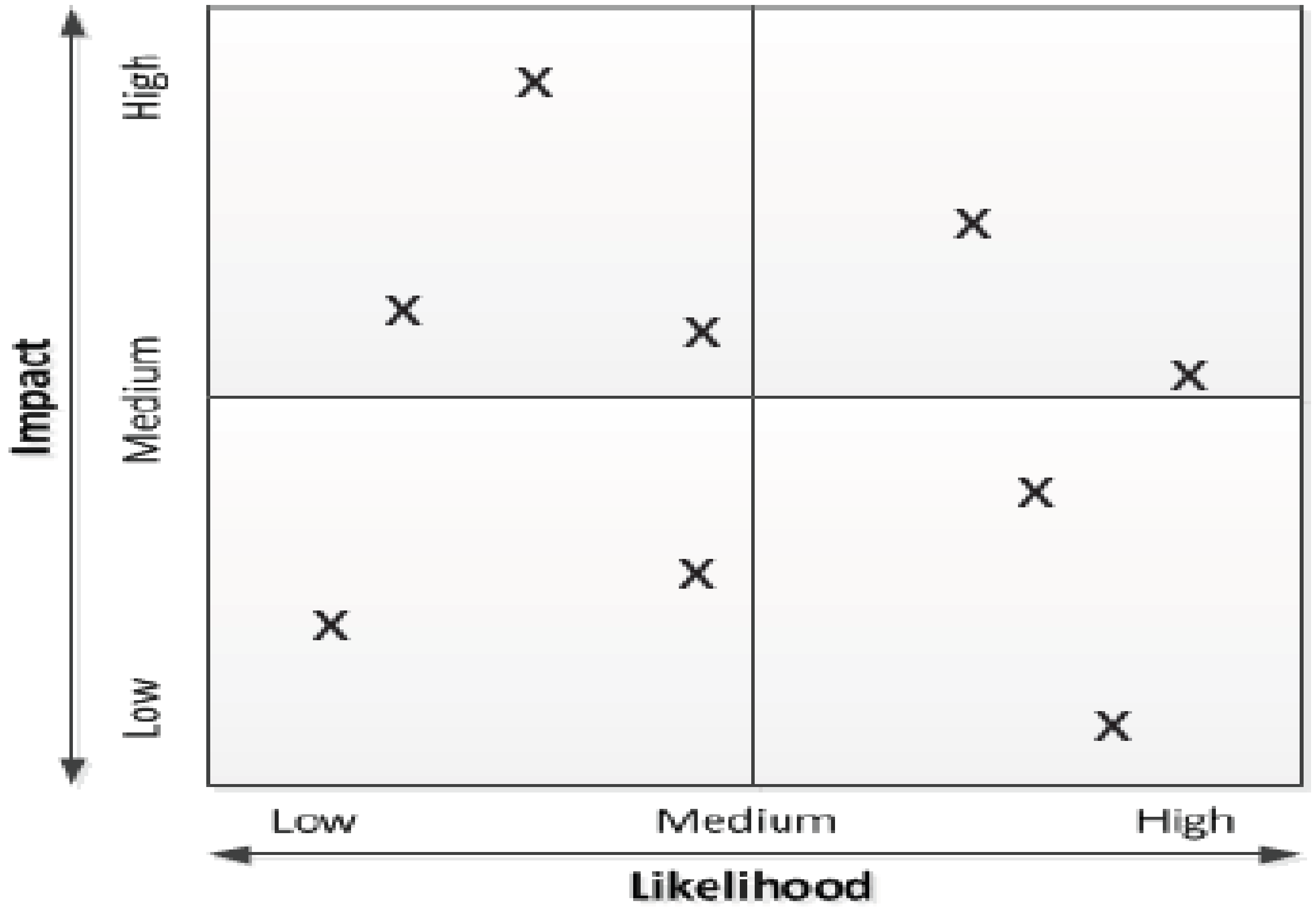
How Risk is Measured



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ATAC

IMPACT

High Avoid	Avoid/ Transfer	Transfer
Medium Avoid/ Control	Control/ Transfer	Transfer/ Accept
Low Control	Medium Control/ Accept	High Accept

LIKELIHOOD or FREQUENCY

Reasons for Measuring Risk

- To assess effectiveness of what we are doing in controlling risk to acceptable levels
- Is the cost of controlling a risk less than the cost of accepting the risk?
- To price products

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How Do We Measure Risk?

- We develop indicators and report on them
- Through financial ratios and benchmarks (e.g. CAMEL(S))

What tools do you use in your S&L?

Handout 1.5: Risk Indicators
Handout 1.6: CAMEL Risk Ratio Definitions
Handout 1.7: Risk Ratios and Benchmarks

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Some Ratios Used to Measure Risk

Credit Risk

- Portfolio at Risk ratio, Reserve Ratio, Write---Off Ratio, Impairment Expense Ratio (Provision Ratio), Risk Coverage Ratio

Liquidity Risk

- Equity-to-Asset ratio, Operating liquidity ratio, Adjusted quick ratio

Market Risk

- FX Exposure

Operating Risk

- Operating cost ratio, Cost per client, Active Clients per Credit Officer, Personnel Productivity Ratio,

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Exercise 2.1: Performance Indicators

Discuss the typical performance indicators (ratios) for credit risk?

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Sample Benchmarks for Credit Risk

- PAR 30 < 5%, PAR 90<2.5%
- Effective Repayment Rate >= 97%
- Number of Late Payers to Total Payers for Month – start tracking and then determine acceptable tolerance level.
- Concentration –as no more than 1% of total portfolio to any individual and no more than 5% of total portfolio to group or related parties.
- Branch Concentration – review concentration if any one branch's portfolio is greater than 30% of total loan portfolio.
- Loan Loss Reserves - must be a minimum of 1% of Loans Outstanding.

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What Influences Risk Levels in an S&L?

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Influences on S&L Risk Levels

- Rapid growth
- Ownership/ governance
- Management style and changes
- Reporting
- Government intervention and policies
- New product development
- Responding to competition

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Exercise 1.1: Managing Growth

Please read the scenario and answer these questions:

- What should MY S&L's management do?
- How should they react to this situation?

Time: 20 minutes

Please be prepared to share your results verbally with the group.

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What are the Various Types of Risks that an S&L Faces?

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Types of Risk

- Operational
- Liquidity
- Credit
- Compliance risk
- Regulatory/ Legal risks
- Strategic risks
- Reputation risk

Handout 1.8: Risks Classification

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Ex. 1.2: Credit Operations and Institutional Risks

Reviewing Handout 1.8 (Risks Classification), give 2 examples of how credit operations affect institutional risk profile with regard to each risk category (except credit risk).

Time: 20 minutes

Policies and Procedures

Internal controls, policies and procedures should be:

- Written
- Understandable and clear
- Relevant
- Readily available
- Implemented and enforced

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Operational Risk

"The risk that financial losses occur from employee negligence, system failures, and human failures."

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Employee Related Risk

MONITORING / VISIT

- The team visited the Techiman branch and whilst there took the opportunity to visit major customers. One of the backbones of the Techiman branch by name Auntie Adwoa actually stopped her account operations.
- **Reason:** She requested and was granted a facility of GH¢30,000.00 for six months. Unfortunately the loan officer by name Joe Boy did not give her the loan contract cum agreement form, as a result when she thought the facility was for 12 months and could use some of the funds, she was told that it was for 6 months. She was advised that since it has expired she should put in a new application. In her desperation, she went to Procredit who inspected the document covering her newly put-up storey building and without hesitation granted her a facility of GH¢150,000.00 to expedite the importation of her stock in trade.
- **REMEDY:**

The C.O.O has mandated the risk manager, marketing and Head, Ops Northern sector to pay her a visit and woo her back. **Part of Risk Report in February, 2012 by an S&L**

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The Soup Nazi - Seinfeld

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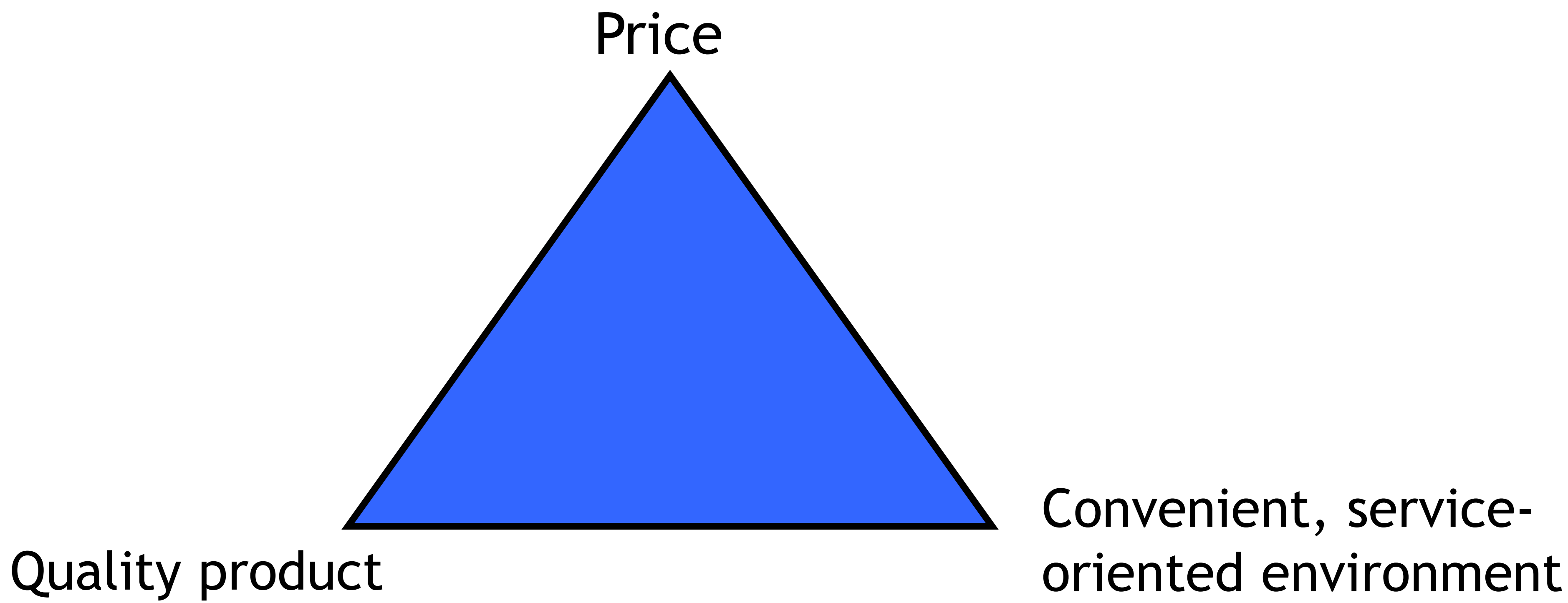
Identifying your Competitive Advantage



Never get stuck in the middle!

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Operational Risk Strategies

- Policies and procedures at the branch level to minimize the frequency and scale of the risk (e.g. dual signatures required on loans or disbursements of savings).
- Technology to reduce human error, speed data analysis and processing.
- Management information systems that provide accurate, timely and relevant data so Managements can track outputs and detect minor changes easily.
- Separate lines of information flow and reconciliation of portfolio management information and cash accounting in the field to identify discrepancies quickly.

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Types of Operational Risk

- Transaction Risk
- Legal/Compliance Risk
- Human Resource Risk
- Fraud

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Operational Risk: Human Resource

Components of a transparent HR Policy include:

- Code of Conduct, agreed to by all new staff, and renewed annually for all staff.
- Training to reinforce expected levels of performance and behavior.
- Promotions driven by periodic performance appraisals demonstrate commitment to advancement of qualified staff.
- Competitive compensation programs that include incentives motivate and reward outstanding performance, through appropriately structured incentive systems.
- Disciplinary actions send a message that violations of expected behavior will not be tolerated.
- Clear job descriptions

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Operational Risk: Fraud

"The risk that assets are diverted for unintended purposes…"

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What Does an Institution do in Case of Fraud?

- Act quickly and decisively
- Have a plan for responding to all incidences of fraud
- Suspend or fire the employee in question (if applicable)
- Engage in legal proceedings
- Identifying a person to be in charge of implementing policy changes if needed
- Documenting and communicating changes to all affected personnel;
- Request feedback from employees regarding the changes

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Handling Fraud

Most importantly, whatever the size or scope of the misdeed, management must act quickly.

- Have plan in place to respond;
- Make effort to recoup losses;
- Explain problem to clients; and
- Address the problem with Board.

What do you do in your S&L?

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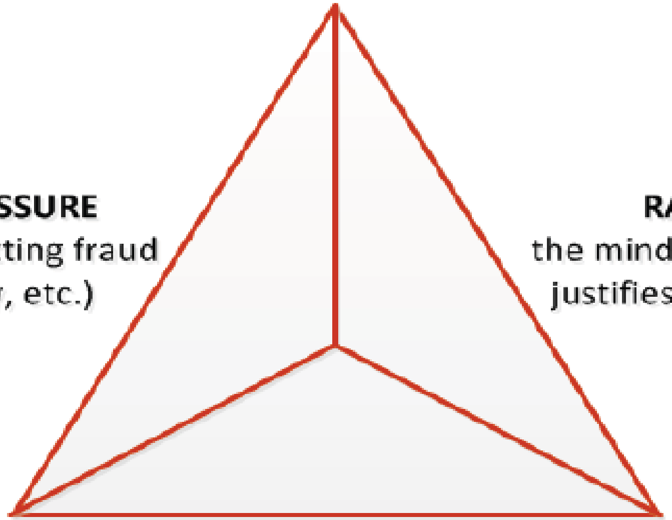
THE FRAUD TRIANGLE



MOTIVE OR PRESSURE
the need for committing fraud
(need for money, etc.)

RATIONALIZATION
the mindset of the fraudster that
justifies them to commit fraud

OPPORTUNITY
the situation that enables fraud to
occur; often when internal controls
are weak or nonexistent

Attributed to Dr. Donald Cresseny

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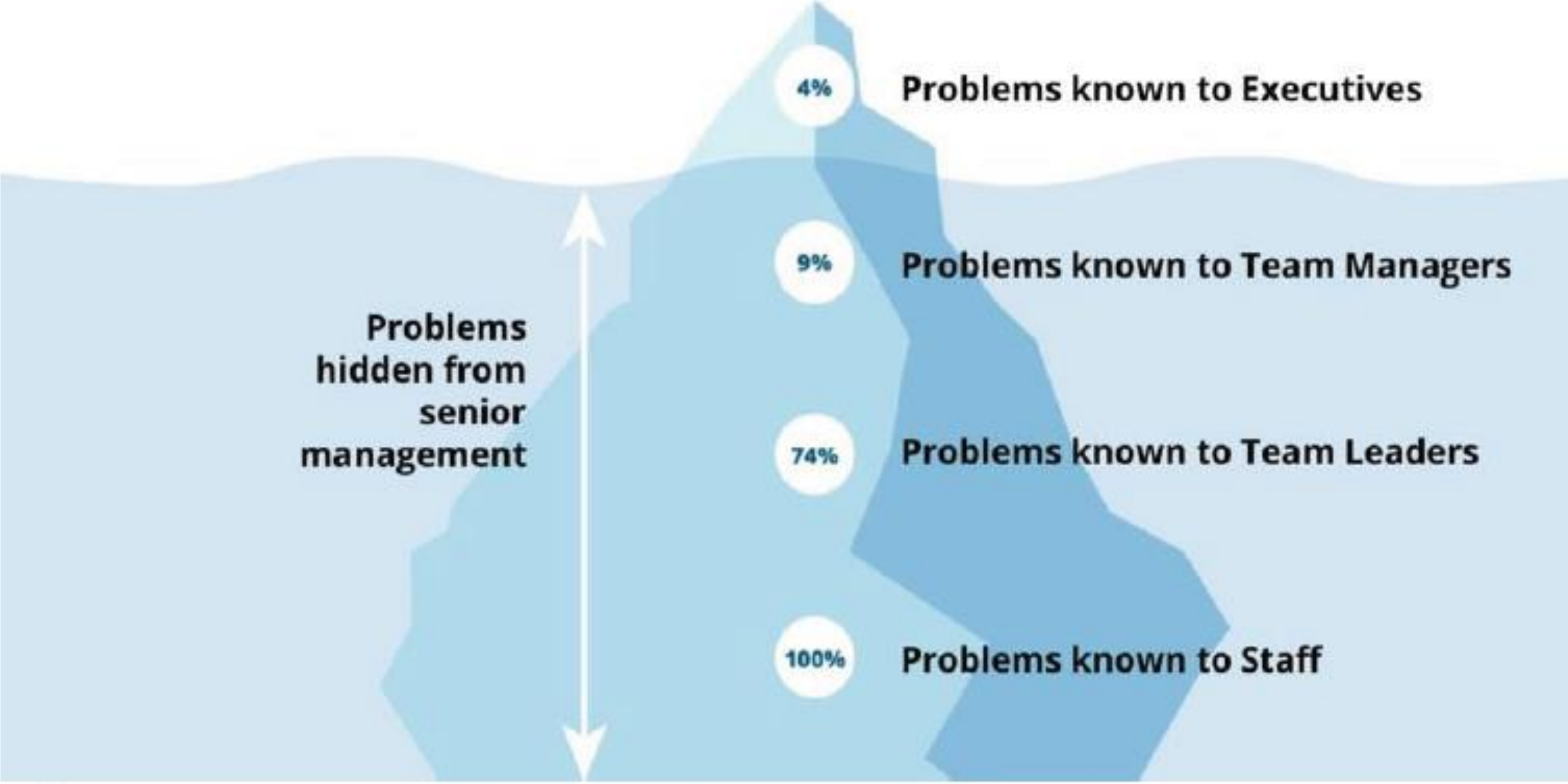
The Iceberg of Ignorance



*Yoshida, Sydney, "The Iceberg of Ignorance," 1989.

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Liquidity Risk

"The risk of not having sufficient cash to lend based on client demand or sufficient cash to pay obligations. These include loans (perhaps savings) and operational expenses."

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Some Principles of Liquidity Management

- Maintaining detailed estimates of projected cash inflows and outflows (notably, larger loan disbursements, investing, and asset acquisition) for the next few weeks or months so net cash requirements can be identified.

- Using branch procedures to limit unexpected increases in cash needs, for example, limits on large savings withdrawals

- Maintaining investment accounts that can be easily liquidated into cash, or lines of credit with local banks to meet unexpected needs.

- Anticipating the potential cash requirements of new product introductions or seasonal variations in deposits or withdrawals.

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External/Market Risks

- Are more often out of the S&L’s control but must be recognized and mitigated: regulatory, competitive, demographic, macroeconomic;
- Includes interest rate risk
- Includes foreign exchange risk

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Reputational Risk

- The risk that legal disputes, unenforceable contracts, *negative* publicity and *negative* perceptions *negatively* impact the institution

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Regulatory Risk

"Regulatory risk is **the ri**sk that regulations may change in a way that adversely affects the FI's operations and competitive viability"

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Strategic Risk

"The current and prospective impact on earnings or capital arising from adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes"

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Credit Risk

- The risk that credit is being extended inappropriately based on defined market segments and client risk profile.
- The risk that a borrower will not repay a loan according to the terms of the loan, either defaulting entirely or making late payments of interest or principal.
- Credit risk is defined as the possibility that a borrower or counterparty (guarantor) will **fail to meet their obligations** in accordance to the agreed lending terms.
- Financial institutions need to manage two types of credit risk:
  - entire **credit portfolio**
  - **individual loans**
- Credit risk management consists of three major components:
  - **Product design,**
  - **loan cycle management,** and
  - **loan portfolio management**

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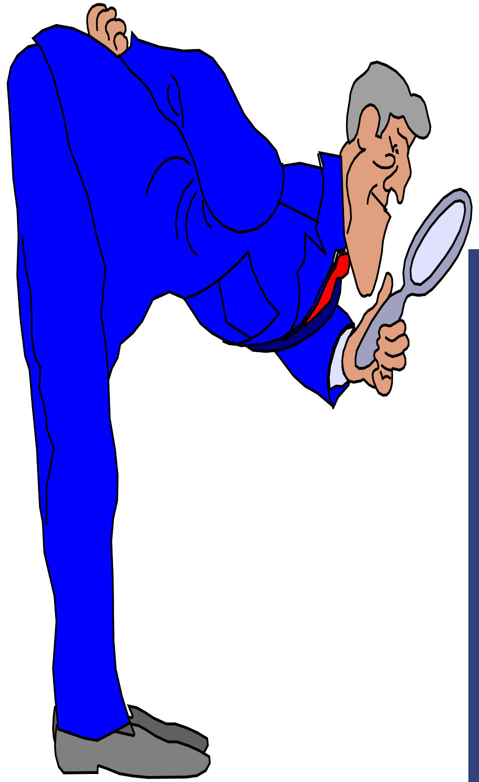
Credit Risk

- There are two types of defaulters:
- **Wilful defaulters** may be able to repay a loan but are not willing to do so.
- **Unwilful defaulters** may not be able to repay but willing.
- Core problem in lending is **information.**
- Unequal (asymmetric) distribution of information between the borrower and the lender.
- Information gap produces a **moral hazard** problem.
- Moral hazard: borrower in a position to influence a credit relationship to his own advantage and at the expense of the lender.

Character Assessment: “10-80-10 Rule”



- Remember the “10-80-10 Rule”: 10% of people are always honest, 10% try to cheat and 80% follow the rules as long as they have to.
- First objective: screen out the 10% cheaters (potential wilful defaulters).
- Second objective: screen out possible failures (potential unwilful defaulters)

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Structure and Categories of Credit Risk

- Credit Risk
  - Single Borrower
    - Unwilling to pay
    - Unable to pay
      - Financial Risk
      - Operating Risk
        - External Risk
        - Industry Risk
        - Internal, Company Level Risk
  - Portfolio

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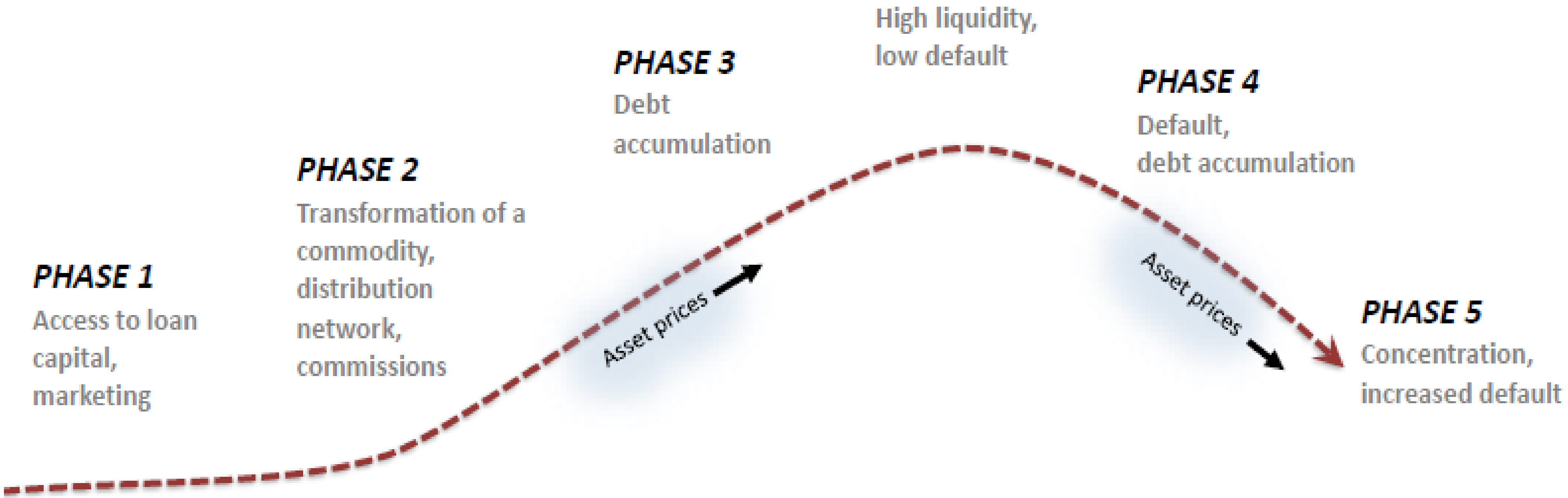
Credit Market Cycles



- *Transformation into a commodity and marketing drive strong growth*
- *High liquidity masks the difficulties caused by the debt -> low level of default*

** CGAP: FOCUS NOTE No.83*

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Phases

I

Phase 1 – Pre expansion conditions

A few pioneer institutions with efficient credit methodologies reach segments that are insufficiently covered or that have little access to finance.

- Low cost models for the selection of clients, disbursement and loan management
- Leveraged access to funding organized for future growth
- Information technology
- Effective loan recovery processes

II

Phase 2 – Marketing and Expansion

- Success attracts new participants
- Development of distribution networks continues
- Aggressive incentive structures promote growth
- High returns attract commercial investors
- Growth requiring a fast increase of loan portfolio and market share to obtain expected revenue

III

Phase 3 – Debt Accumulation

- As the market enters a fast growth pace, competition undermines credit methodologies and finance norms
- Clients may have access to different lenders and end up "bicycling" these funds
- High liquidity keeps PAR30 levels surprisingly low for a long period of time, even as the general levels of debt increase

* CGAP: FOCUS NOTE No.83

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Phases con'td…..

IV

V

Phase IV – Increasing levels of unpaid loans and market contraction

- Loan repayment levels decrease, pushed by unsustainable levels of indebtedness in families and, in extreme cases, economic deceleration
- Borrowers have less access to new loans and prioritize the repayment of existing loans
- Household liquidity contracts, leading to higher default rates

Phase V – Institutions crash and possible contagion effect

- Default rates may affect many borrowers, including banks, either through their own financing activities or by providing loans to smaller lenders
- Depending on the bank's leverage and exposure to risk, this could result in bankruptcy

* CGAP: FOCUS NOTE No.83

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To govern well, S&L leaders need to understand that

There is a list of high-level **drivers**...

...which result in a predictable set of organizational **consequences**...

...which build **risk** over time...

...until a **trigger** sparks a crisis.

Drivers	Consequences	Risk	Triggers
Within the organization: • Rapid growth • Profit push • Hubris Within the market • Excess liquidity • Increasing competition	• Deteriorating methodology • Increasing loan sizes • Lax controls / ineffective oversight • Strained MIS • Too many new loan officers • Insufficient training • Staff rotation	• Credit risk • Operational risk • Financial risk • Reputational risk • Market risk	• Currency devaluation • Natural disasters • Recession • Political instability • Disruptive technology

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Learning Takeaway (1)

S&Ls' policies and procedures must include serious efforts to minimize risks.

S&Ls are very vulnerable to many types of risk due to the nature of the business; thus reporting and monitoring within the organization need to be continuously carried out.

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Learning Takeaway (2)

Incidents of fraud must be acted upon quickly in order to minimize damage to the organization.

Failing to use proper controls will significantly increase chances for fraud, leading to losses for the organization.

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Wrap Up

- In order for an S&L to remain sustainable, the Management must establish direction, allocate resources, manage risk, and be held accountable for success or failure.
- Managements cannot do this by themselves, so support from all staff is highly important.
- Risk Management crosses functional boundaries. You have a role in many types of risks faced by your S&L, not just credit risk.
- Identify your key risks, develop indicators to detect risk, and measure risk

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Credit Risk Management

Managing Credit Risk Through the Lending Process

Session 2

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Session 2 : Objectives

- Understand more about specific credit risks
- Understand how credit risks can be mitigated through the Step by Step lending process
- Learn more about need for Managements to be involved in monitoring
- Learn methods of effective monitoring

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Perspective

- Effective approaches to managing credit risk in S&Ls include:
- Well-designed borrower screening, careful loan structuring, close monitoring, clear collection procedures, and active oversight by senior management. Delinquency is understood and addressed promptly to avoid its rapid spread and potential for significant loss.
- Good portfolio reporting that accurately reflects the status and monthly trends in delinquency, including a portfolio-at-risk aging schedule and separate reports by loan product.
- A routine process for comparing concentrations of credit risk with the adequacy of loan loss reserves and detecting patterns (e.g., by loan product, by branch, etc.).

Example of One Institution’s Lending Process

1. Client introduction and screening (eligibility)
2. Appraisal (visit and financial analysis)
3. Loan structuring
4. Loan approval (supervisory scrutiny of 1-3 above)
5. Disbursement
6. Repayment and Monitoring

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5 Steps of The Lending Process

1. New Customer Introduction

2. Loan Appraisal

3. Loan Approval

4. Disbursement

5. Monitoring

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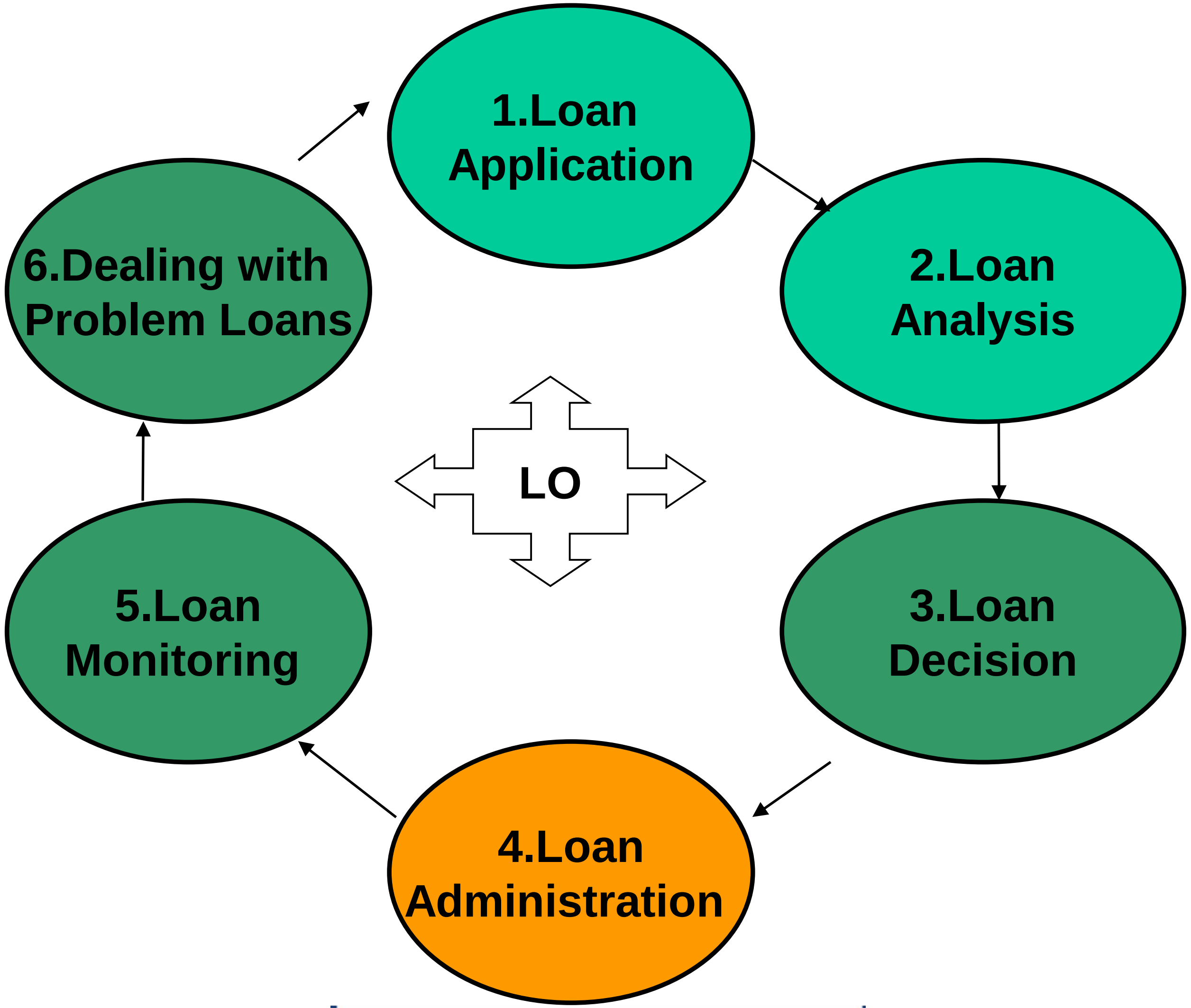
LO/Credit Department Involved Throughout



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Looking at Processes

- Thinking through the five lending processes is vital to manage lending risks.
- Process maps are a great way to understand and manage process related risks.
- A process map outlines a process in a graphic form, with text under the picture.
- The easiest way to show this is to demonstrate a process map and then have you work on one!

Exercise 2.1: Draw a Processes Map for the 5 steps

Ex. 2.1: Understanding Process Risk

- Reading through the process map in Exercise 2.1 detail the potential risks that you can see in the process.

- You have 20 minutes

Now Lets Think Through the Processes…

1. Client introduction and screening (eligibility)

2. Appraisal (visit and financial analysis) and loan structuring

3. Loan approval (supervisory scrutiny of 1-3 above)

4. Disbursement

5. Repayment and Monitoring

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Step 1

Client Introduction and Screening

John Graystone

What are Your Operational Risks?

In buzz groups….

Discuss the risks involved in client introduction and screening?

Time: 10 minutes

John Graystone

Client Introduction and Screening Risks

- Attracting wrong clients if marketing is not appropriately targeted
- Non efficient use of resources; failure to identify applicants unlikely to succeed
- Inadequate initial character assessment
- Failure to collect pertinent information for future follow up or marketing
- Inadequate use of good existing clients to attract new clients

John Graystone

Client Introduction and Screening Risks

- One S&L experienced old non performing clients reapplying for loans under new names and getting them... They only found out when other S&Ls came looking for the client!

- Another S&L discovered that three relatives from the same household had all successfully applied for loans from different branches!

John Graystone

Step 2
Client Appraisal

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John Graystone

What are Your Operational Risks?

In groups of 5…

List the inherent risks associated with client appraisal?

Time: 10 Minutes

John Graystone

Risks Associated With Client Appraisal

- Failure to detect fraudulent intention/ misrepresentation on the part of loan applicants
- Credit Officer fraud
- Poor collateral valuation
- Reputation (and eventually credit) risk from officers demanding inducements from clients
- Incomplete information and documentation

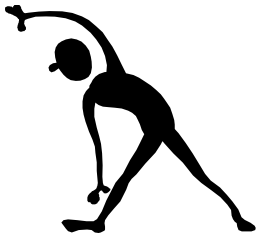
John Graystone

Client Business and Residence Visit

- Ensure visits are facilitated and made per policy to mitigate compliance and fraud risks
- Develop methods to deal with Inadequate formal business records in collecting Asset-Liability (balance sheet), profitability, and cash flow positions
- Financial analysis: simplicity, automation, interpretation of ratios

John Graystone

“Games” Clients Play



“Games” refers to clients testing the controls, exploiting weaknesses in the S&L’s system or testing the S&Ls capacity to live up to its promises.

In groups of 5…

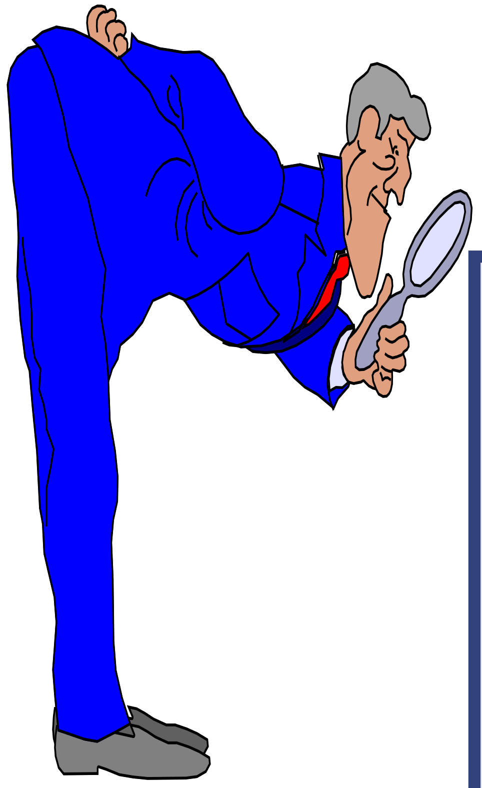
List from your experience the ‘games’ that clients play to access credit from S&Ls. What measures can you implement to curb these Risks?

Time: 20 minutes

Games Clients Play

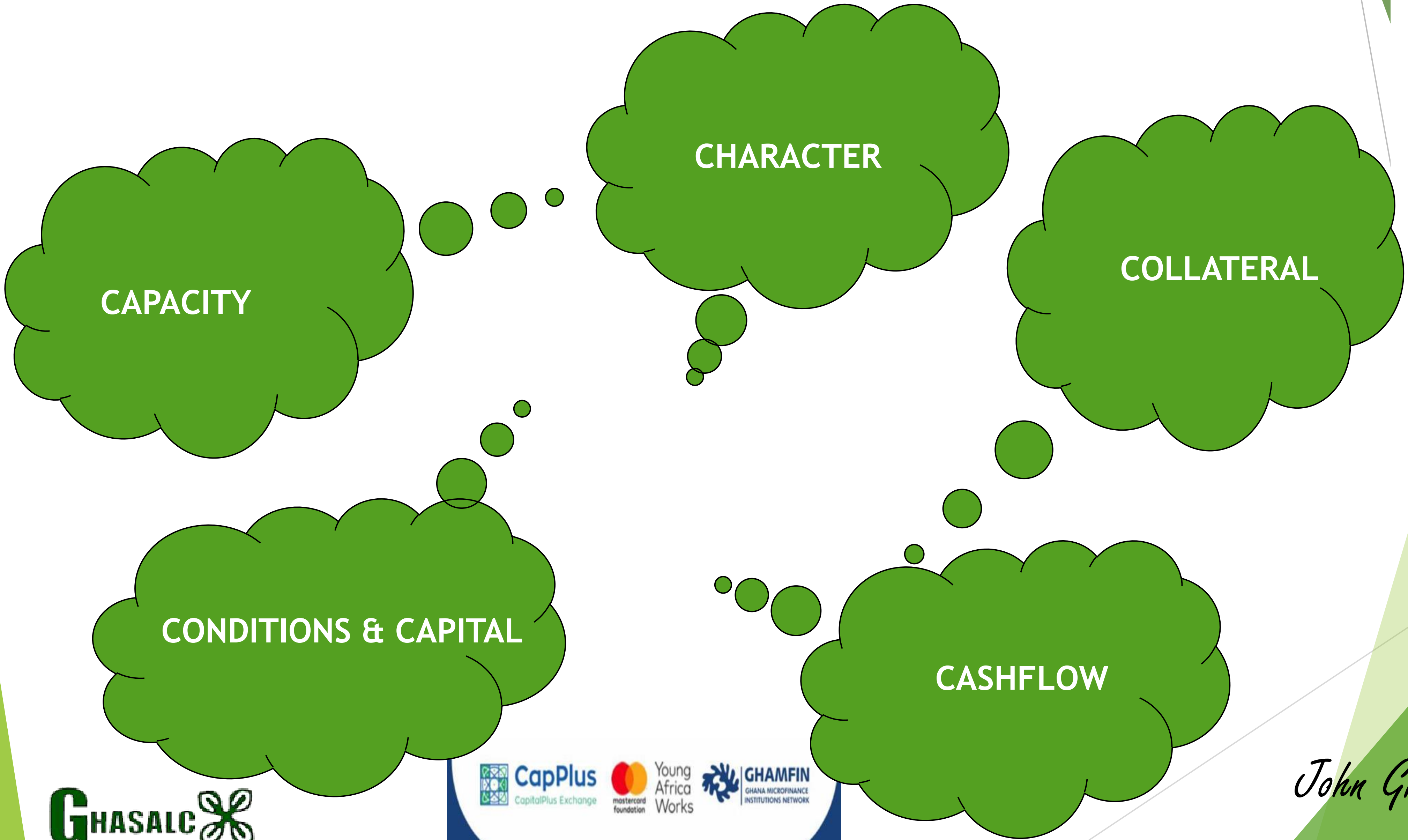
John Graystone

Character Assessment: “10-80-10 Rule”



- Remember the “10-80-10 Rule”: 10% of people are always honest, 10% try to cheat and 80% follow the rules as long as they have to.
- First objective: screen out the 10% cheaters (potential wilful defaulters).
- Second objective: screen out possible failures (potential unwilful defaulters)

5 C's of Lending



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CAMPARI

1. Character
2. Ability
3. Margin
4. Purpose
5. Amount
6. Repayment
7. Insurance

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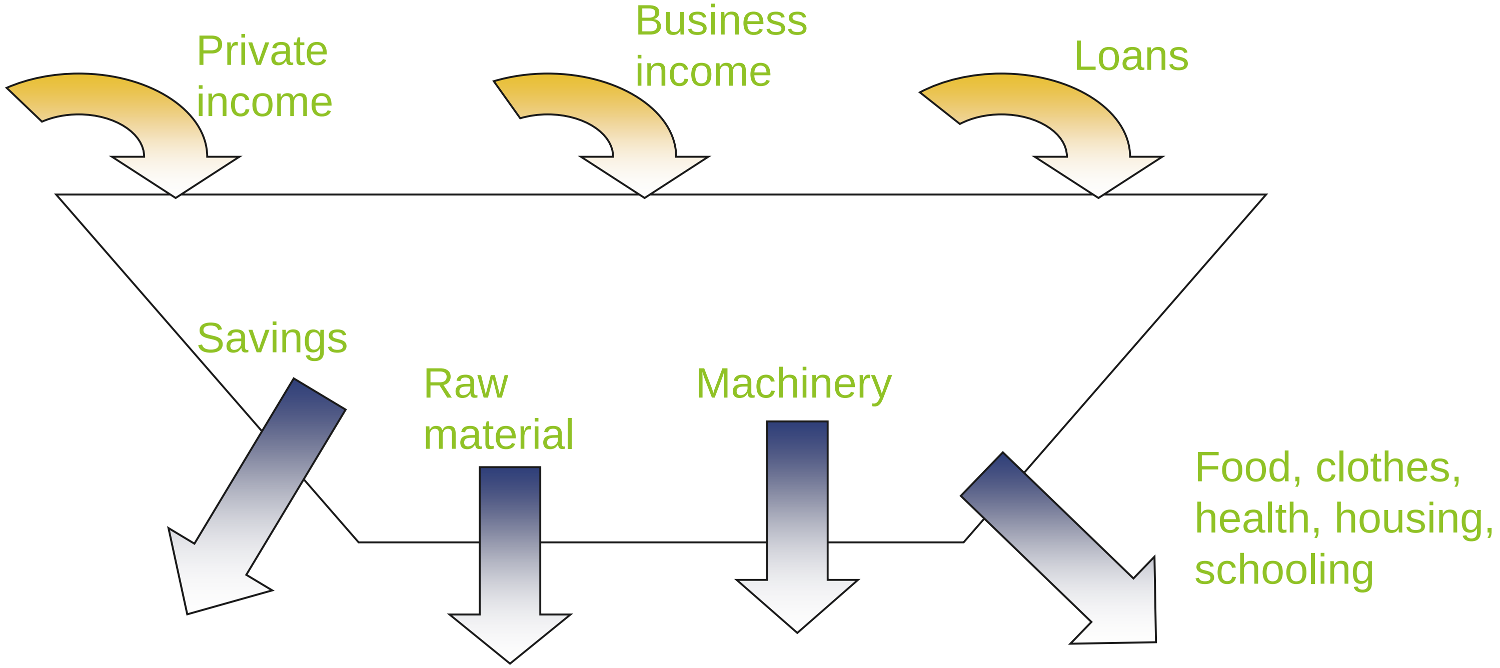
Purpose – Real Reason for Borrowing

- =>Remember the Bath-Tub: Money is fungible!



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What are the 3 M's of Credit?

- Market
- Management
- Money

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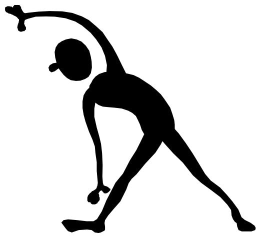
Celebrity Comes to Town



- Discuss the pros and cons of this loan application
- If you were the MD, what would be your response?
- What are the Risk(s) involved in this application?
- What would be the possible outcome if this loan is granted?

John Graystone

Collateral Assessment and Acceptance

John Graystone

Call Out

How Effective/ Practical is Collateral Realisation For Your S&L?

John Graystone

Factors Influencing Collateral Policy

Policy - Influencing Factors

- Institutional Mission, value and culture
- Loan Size
- Income Level of Clients
- Type of Business
- Type of Loan
- Registration of the Business
- Legal Environment
- Land Tenure System
- Character/Status of the Borrower
- Any others

John Graystone

Call Out

List a Few Prudent Safeguards with Respect to Collateral

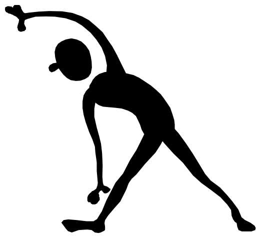
John Graystone

Collateral Policies to Mitigate Credit Risk (1)

- Use professionals or trained staff to value collateral, especially for land and property.
- Value according to real market values using comparison data and update comparison data regularly.
- Be consistent in the method and procedures used
- Have a prudent collateral to loan value coverage ratio
- Credit staff should reassess collateral value during monitoring visits.
- Have an effective guarantor arrangements where applicable
- Conduct regular compliance (audit/ compliance) checks on collateral valuation
- Perfect collateral where legally required. Think of ways to reduce perfection time and costs to clients

John Graystone

Exercise: Loan Structuring



In groups …

Refer to the Exercise and prepare the cash flow analysis and decide

1. If you will give Joe a loan for the new freezer
2. If yes, how you would structure the loan

Time: 30 mins

Exercise : Loan Structuring

On Completion: Solution on Loan Structuring

John Graystone

Loan Structuring (1)

- Loan structuring is the last and one of the most important steps of analyzing a loan
- It can determine good repayment or delayed repayment/non-payment
- A well structured loan's terms and conditions match with the needs and cash flows of the business and will prevent default
- Term of loans should not compromise institutional liquidity
- Proper loan structuring reduces the risk to the lender and the borrower

Loan Structuring to Mitigate Risk

- Appropriate loan amount
- Appropriate loan period
- The right conditions being set for disbursing
- Appropriate payment frequency in relation to business' operating/cash cycle
- Appropriate grace period
- Improved loan terms for good repeat borrowers
- Appropriate penalties for poor performance

John Graystone

Loan Structure-Policy and Procedure Guidelines

- Keep interest-only periods to a minimum
- Grace periods are NOT recommended
- Don’t set overly tough conditions for the client
- Train client to make repayments on time.
- Match repayment terms to cash flow, business, and loan purpose

John Graystone

Penalties in Loan Structure

- Standardise
- Build the penalties into the MIS so that they are automatically calculated.
- Make sure that all clients understand the penalties and know they must pay them.
- Set precedent of late clients to pay the penalties
- Management can over ride in extreme cases, but must document and internal audit should review these over rides.
- Set a reasonable period where penalties will not accrue as the penalties could become so large that it deters the client from ever repaying

John Graystone

Portfolio Management

Includes:

- Developing a sound lending methodology
- Putting sound lending methodology into practice
- Approving high quality loans
- Monitoring
- Work out of problem loans
- Using appropriate tools and reports to monitor the process

John Graystone

Portfolio Management – Key Element-Risk Management

Includes all steps in the loan process from:

- Making high quality loans and enforcing no tolerance for delinquency from the very early stages to:

Monitoring

- There is no substitute for direct contact with the borrower
- Frequent visits are important
- **Managing risks** along the way to prevent problem loans

John Graystone

Importance of a Sound Lending Methodology

- To mitigate risk, policies and procedures must be in place for systematised lending procedures
- Standardised credit operations: less room for individual negotiation of terms and fraud
- Standardised products: multiple loan products or non-standardised products also leave room for client-staff negotiations

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Step 3

Loan Approval

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John Graystone The Knowledge Hub

John Graystone

Call Out

What are the factors to having an effective credit committee?

Who should be on the committee?

John Graystone

Mitigation of Risk through Approval Committee

- Appropriate composition of the committee to competently review applications.
- Objectivity and Independence of committee members
- Adequate but not excessive documentation for review.
- Proper conduct of a credit committee meeting or individual review process.

Who should be on the committee?

Credit Committee Operations

- Start and end meeting on time and limit total time to allow staff attend to customers.
- Limit the number of loans to review in one session & Set time limit for presentations
- All write-ups on loan applicants are to be received in advance
- Standardize Credit Officers' presentations
- Meeting minutes including decisions made and underlying reasons are documented and all members sign.

John Graystone

Common Credit Committee Problems

1. Credit committees that have too few members
2. Credit committee has too many members
3. Failure to properly review the loan files
4. Documents not checked for consistency and completeness before the meeting.
5. Wrong people on committee.
6. A “gotha” attitude of a the committee

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Call Out

What Problems have you Experienced with your Credit Committees and What Solutions do you have?

John Graystone

Step 4
Loan Disbursement

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Call Out

What are the Risks in the Disbursement Process?

John Graystone

Disbursement Risks

- Contractual documents being legally incomplete, compromising enforceability.
- Lack of dual control can result in fraud.
- Lengthy process can frustrate the customer as a result of lengthy disbursement.
- Incorrect account set up in system can compromise reporting.
- Failure to check completeness of client loan documentation compromising follow and monitoring.

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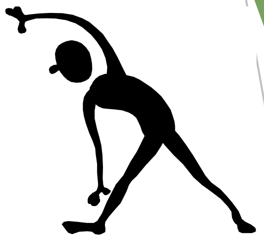
Ex. 1.3 Case Study on Loan Disbursement



In groups of 5…

Read the case study given to you and answer the questions.

Time: 15 Minutes

Exercise 1.3: Case Study on Loan Disbursement

John Graystone

Step 4: Loan Documentation

- Documentation errors can lead to losses and considerable extra time in approvals
- You can control this
- Tool: Documentation Checklist

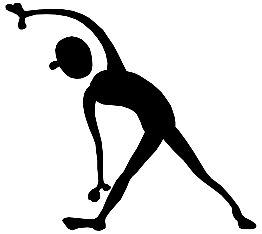
John Graystone

A Real Example

- In one case a review of 50 loan files showed considerable differences in the level of documentation provided for approved loans. Common errors included:
  - Incomplete or inconsistent cash flows
  - No documentation of field visits – a photo of each visit at the clients premises was supposed to be on each file.
  - Limited documentation of securities
- This resulted in many larger loans sent to head office for approval being returned for further documentation.
- The problem was not the existence of the documentation checklist but compliance to it!

John Graystone

Documentation Checklist



- In your institutional groups…
- Develop a Cover Sheet and Loan Processing Check list and discuss it in the context of your institution.
- Do you follow all the steps mentioned?
- Is there anything that you do very differently?

Time 15 mins

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Step 5: Monitoring

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Call Out

- What is the role of a monitoring visit?
- What should the lender accomplish at a monitoring visit?
- Decide the appropriate monitoring schedule for an individual loan.

Role of Monitoring

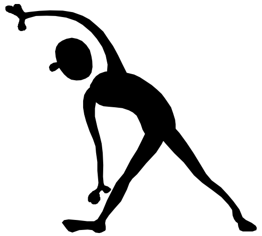
1. Catch any potential problem early
2. Document information gained to update the credit file
3. Marketing
4. Build a relationship with both the credit officer and the client
5. Check the product, policies and procedures to make sure everything is in order accordingly

John Graystone

When to Monitor?

- Decided by the Credit Officer and Manager
- During loan disbursement
- According to policy
- Tailored to the type of business, loan purpose and key risk events

Ex 6.10 Problems Related to Monitoring



In buzz groups …

Discuss the problems or challenges an S&L faces with monitoring?

Time: 15 minutes

Monitoring Tips

1. Look at business physical condition, inventory, raw materials, etc.
2. Sales trends and trends in inventory stocks, accounts receivables and payables (if applicable)
3. Overall cash flow (sales and expenses) compared to analysis
4. Changes in assets and liabilities
5. Major sums in or out of the business – purchases/sales
6. Major increases/decreases in receivables, payables or inventory
7. Competition
8. Suppliers and buyers
9. Collateral condition

Be sure to document the visit!

Create a loan monitoring tool for documentation

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Monitors

- Internal Audit/Control
- Compliance
- Risk
- External Audit
- Self-audits by:
  - Credit Managers
  - Loan Administration
  - Loan Review

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On a Monitoring Visit the Manager Should

1. Be open and talk to the client to find out about his/her current situation
2. Collect current financial information
3. Compare reality with the original analysis
4. Ask additional probing questions checking the client' and credit officer's performance
4. Watch for warning signs and observe the workplace for anything different (could be better or worse) than prior visit
5. Market the S&L/sell your next loan
6. Make sure that what the credit officer is saying is correct and there are no problems

Handout 2.1 Sample Credit Manager Monitoring Tracking Form

John Graystone

Wrap Up

- Every step of the lending process is about reducing risk
- Policies and procedures must guide Credit Officers to achieve S&L's objectives to reduce risk
- Use of different types of collateral with the individual lending product introduces new risks that need to be identified and managed through different monitoring tactics
- Credit staffing will change with individual lending in response to risk management in the back office, collateral, and problem loans
- There are various ways to monitor the portfolio. It does not matter how it is done, just that it gets done!

John Graystone

Wrap Up

- Monitoring according to schedule will help catch problems early
- To remain sustainable, the Manager must establish direction, allocate resources, manage risk, and be held accountable for success or failure.
- Managers cannot do this by themselves; support from all staff is highly important.
- Management should strive for a proper balance being struck between the ‘small picture’ detail of credit analysis and the ‘big picture’ consideration of issues relating to the markets and economical conditions.

John Graystone

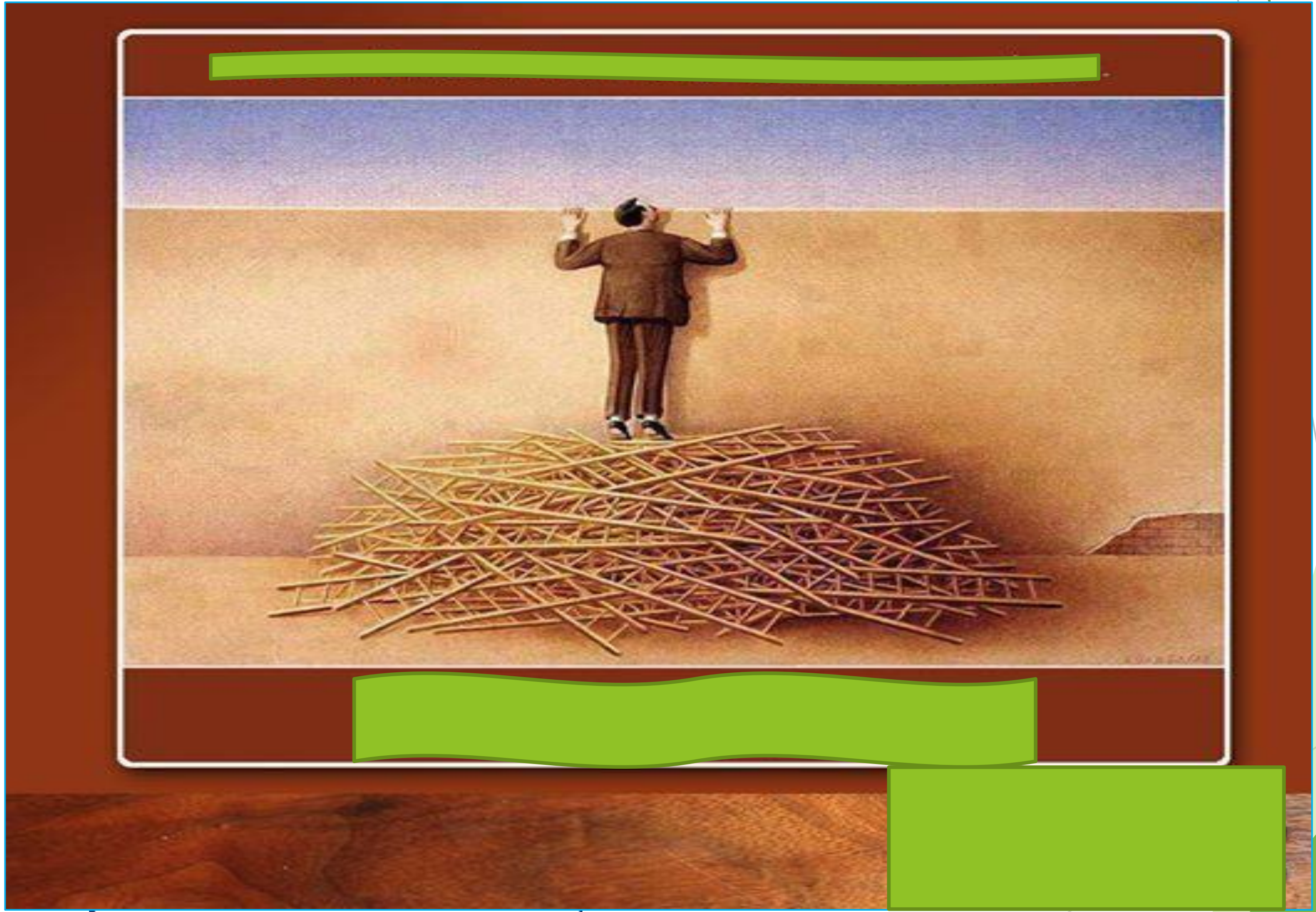
Risk and Analytics

- MIS
- Reporting
- Credit Scoring
- Digitization

John Graystone

What is your take on this illustration?

It does not matter how much resources you have, if you do not know how to manage them they will not benefit you



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Call Out

Why is an MIS crucial to credit risk

John Graystone

Reporting

	NUMBER OF ACTIVE CLIENTS				
			Growth in Active Clients		
BRANCH	30-06-20	16-07-20	Actual	Target	%age Achieved
1	448	454	6	24	24.68%
2	499	499	0	24	0.00%
3	1085	1066	(19)	110	-17.24%
4	354	357	3	17	17.26%

	Disbursement		NEW ACCOUNT ROLL-DOWN		
	30-06-20	16-07-20			
BRANCH	Number	Volume	No of Loans	Volume	%age Vol
1	32	250,500	6.00	16,535.54	0.48%
2	23	396,000	7.00	171,911.18	5.89%
3	46	111,800	6.00	6,633.63	0.54%
4	5	26,500	9.00	14,633.95	0.76%

	Outstanding Portfolio				
			Growth in Outstanding Portfolio		
BRANCH	30-06-20	16-07-20	Actual	Target	%age Achieved
1	3,447,180.56	3,489,645.63	42,465.07	127,227.64	33.38%
2	2,917,953.04	3,113,252.88	195,299.84	114,612.42	170.40%
3	2,852,456.89	2,754,449.18	(98,008)	73,854.76	-132.70%
4	1,919,956.10	1,821,041.52	(98,915)	84,470.80	-117.10%

	PAR Above 30 Days			% PAR Above 30 Days	
BRANCH	30-06-20	Net Growth	16-07-20	30-06-20	16-07-20
1	913,509.13	13,525.73	927,034.86	22.61%	22.71%
2	594,531.49	137,330.64	731,862.13	18.22%	20.99%
3	585,185.85	(55,910.77)	529,275.08	18.61%	17.37%
4	360,243.18	15,675.54	375,918.72	16.25%	17.68%

4% Tolerable PAR>30days

6% Tolerable PAR 1-30days

5% Reserve ratio (Cum Provision/ Outst Portfolio)

	Recoveries	Collections	Reserve ratio	Deposits - Loan Clients	
				Vol	
BRANCH	Principal, Int., &Penalty	This month	% age	GHS	Deposit/ Loan ratio
1	51,974.94	208,034.93	30.7%	3,693,361	105.84%
2	61,617.88	200,700.16	23.8%	3,577,171	114.90%
3	73,034.55	209,807.71	14.1%	5,893,650	213.97%
4	38,476.84	125,414.58	25.9%	2,271,820	124.75%

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Ranking of Branch, Manager, & Officer

PROVISION				
For the Month	*Cumulative*	*Cum Provision/ Outs Principal*	*Profitability- Net Income*	*LO Profitability Ranking*
4,414.0	236,289.0	22%	29,201	2
(1,234.7)	145,134.3	16%	41,440	1
(3,621.3)	21,541.4	7%	19,332	5
(417.5)	62,724.1	16%	13,049	31
(426.0)	43,127.9	12%	14,564	4
(112.2)	4,049.8	4%	3,426	6

4% Tolerable PAR>30days

6% Tolerable PAR 1-30days

5% Reserve ratio (Cum Provision/ Outst Portfolio)

John Graystone

Sum of Bal1	Column Labels									
Row Labels	Current	1-15	16-30	31-60	61-90	91-120	121-150	151-180	>180	Grand Total
New	3,716,001									3,716,001
Current	22,695,164	2,657,756	212,173							25,565,093
1-15	1,030,347	30,960	1,013,127	7,775						2,082,208
16-30	10,231	208,768	990	529,934						749,923
31-60	2,639	28,344	47,581	474,206	354,957					907,728
61-90	8,750			138,399	726,354	323,211				1,196,713
91-120				568	42,511	346,498	198,994			588,570
121-150				2,953		19,938	244,589	192,475		459,955
151-180							3,559	117,764	110,847	232,170
>180								2,730	3,163,268	3,165,998
Grand Total	27,463,132	2,925,827	1,273,871	1,153,834	1,123,822	689,646	447,142	312,969	3,274,115	38,664,359

Legend:	**Vol**				
	5,601,248	*Further deterioration in delinquency aging*	**PAR**	**7,001,529**	**18.11%**
	5,104,628	*No change in aging bracket*	**NPL**	**4,723,872**	**12.22%**
	495,351	*Roll-back of days late, though client is still in arrears*	**PAR1+**	**11,201,227**	**28.97%**
	27,463,132	*No arrears*	**Current**	**27,463,132**	**71.03%**

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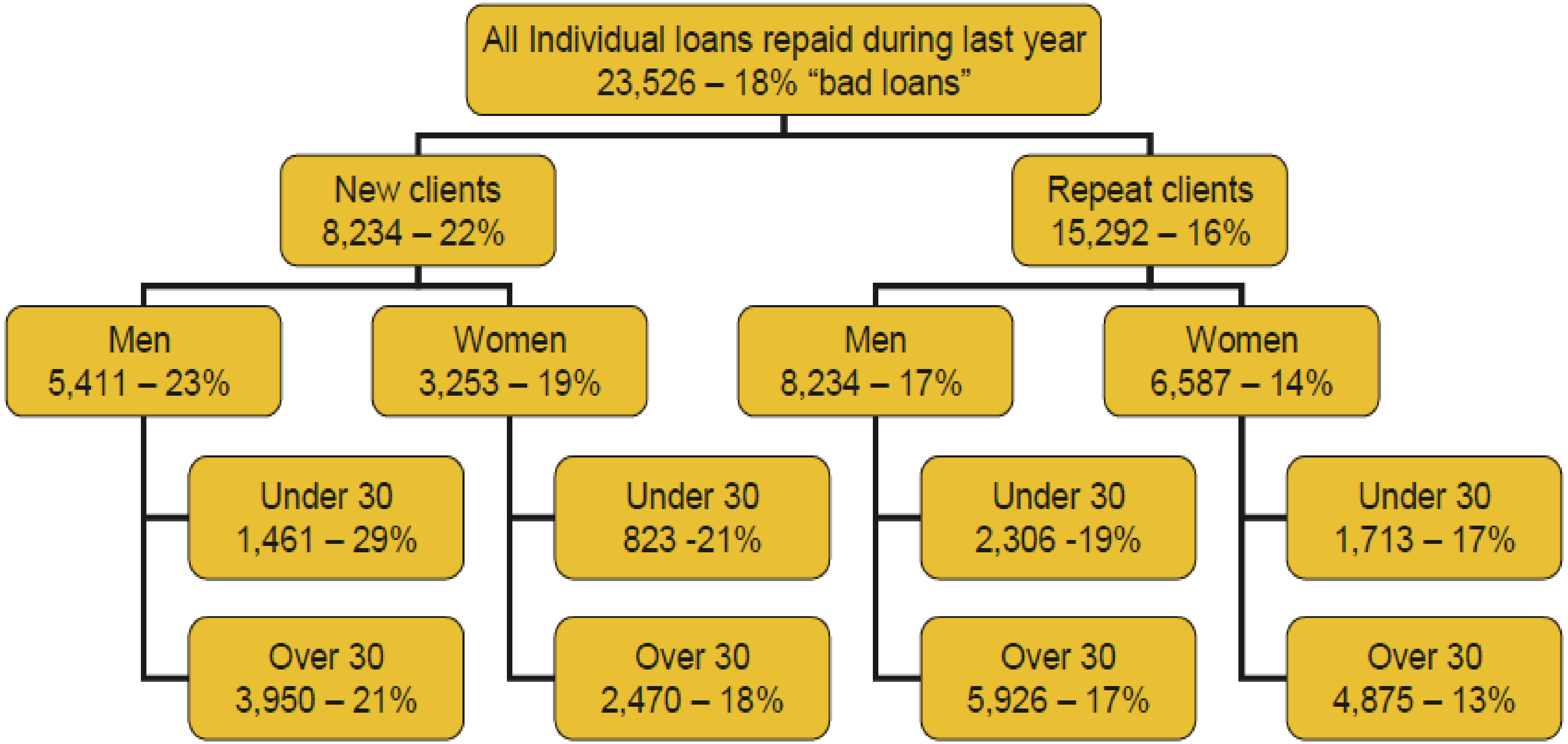
What is your take on this illustration?



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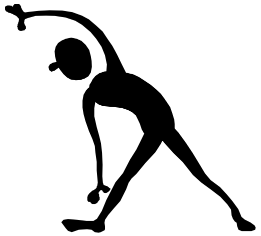
Credit Scoring & Data Tree

- New male clients below the age of 30 carry the highest risk of loan default (29%)
- New female clients under the age of 30 (21%)
- New male clients over the age of 30 (21%)
- In the scoring model;
- Categories could be used as criteria;
- “new client” or “repeat client”
- “man” or “woman”
- “under 30 years age” or “over 30 years age”
- with high scores for the criteria “repeat client”, “woman” and “over 30 years age”
- low scores for “new client”, “man” and “under 30 years age”.

John Graystone

Credit Scoring & Data Tree



- All Individual loans repaid during last year 23,526 – 18% "bad loans"
  - New clients 8,234 – 22%
    - Men 5,411 – 23%
      - Under 30 1,461 – 29%
      - Over 30 3,950 – 21%
    - Women 3,253 – 19%
      - Under 30 823 -21%
      - Over 30 2,470 – 18%
  - Repeat clients 15,292 – 16%
    - Men 8,234 – 17%
      - Under 30 2,306 -19%
      - Over 30 5,926 – 17%
    - Women 6,587 – 14%
      - Under 30 1,713 – 17%
      - Over 30 4,875 – 13%

John Graystone

Key Points to Scoring

- Scoring works best in mature financial sector environment;
- Significant sample size is important to make results statistically meaningful;
- Fewer but useful variables are better than too many variables;
- Build the scoring system on institutional knowledge and pre-test scoring system before using it in day-to-day operations;
- Update scoring systems regularly and be aware of changes in the environment.

John Graystone

Maturity Profile for Term Deposits

	2018		2019				
	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Term Deposits	696,081	2,326,067	751,360	911,030	1,373,497	429,347	185,950
Avg Int Rate	11.12%	11.30%	11.33%	11.80%	11.95%	12.07%	12.05%
Max Int Rate	13.50%	16.00%	21.25%	16.00%	17.00%	13.50%	13.50%
Min Int Rate	10.00%	10.00%	10.00%	10.00%	11.25%	11.25%	11.25%

Maturity Profile for Term Deposits

	2019							Grand Total
	Apr	May	Jun	Jul	Aug	Sep	Oct	
Term Deposits	185,950	121,600	77,500	147,500	62,680	97,500	23,000	7,203,112
Avg Int Rate	12.05%	12.25%	11.94%	12.19%	11.88%	12.07%	12.44%	11.61%
Max Int Rate	13.50%	13.50%	13.50%	14.00%	13.50%	13.50%	12.75%	21.25%
Min Int Rate	11.25%	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%	10.00%

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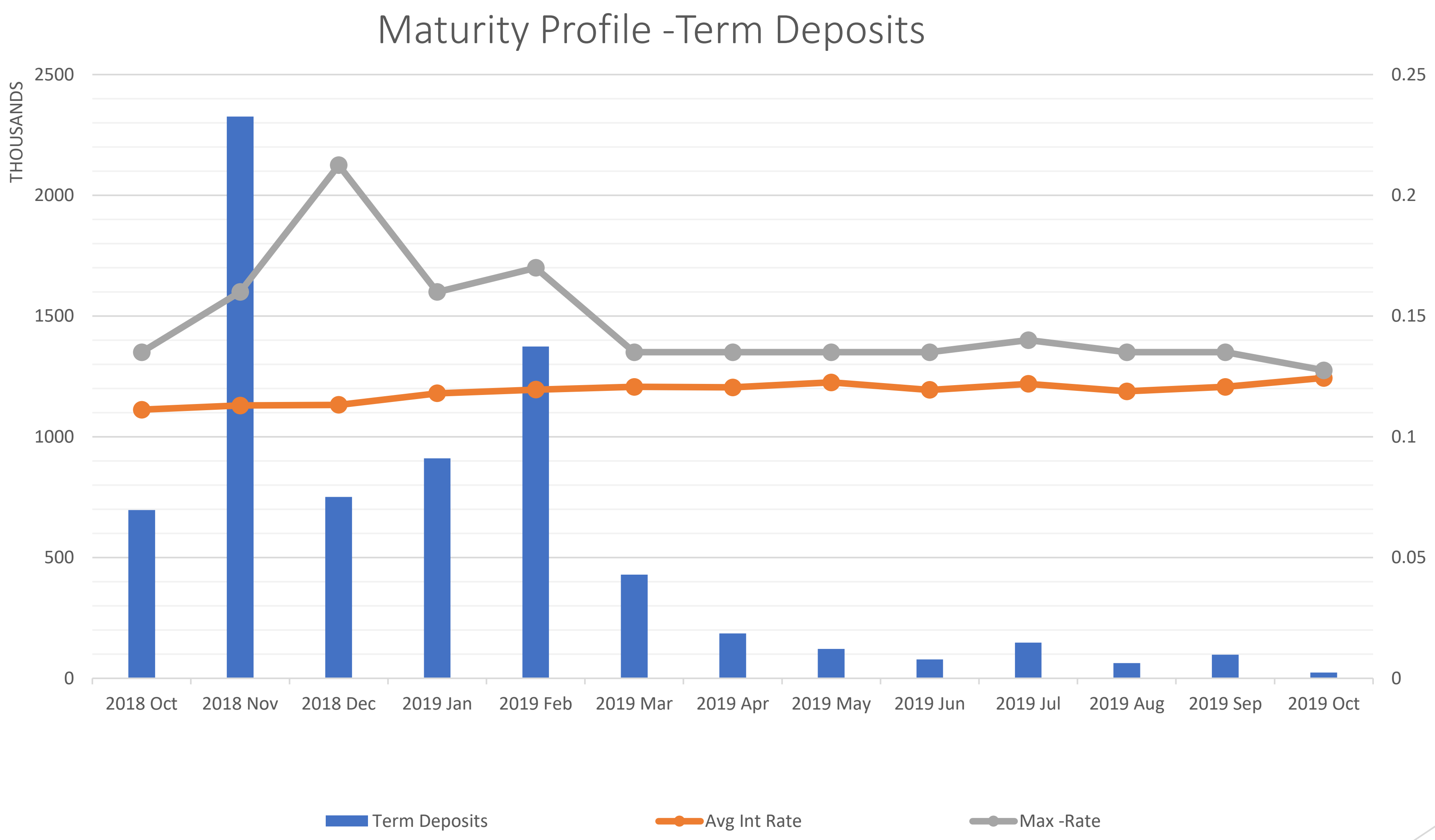

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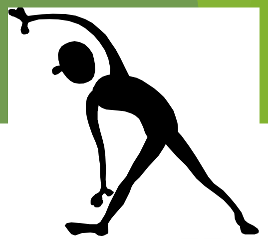
To what kind of risk categories do the following examples belong?



- An S&L has taken a foreign currency loan of one million USD at 5% interest p.a., fixed for three years. However, the S&L disburses micro-loans in local currency.
- An S&L has 10,000 outstanding loans of which 75% are for cattle purchasing.
- An S&L has granted 500 farmer loans, using their land as legal collateral. However, the new government decided that land of small farmers must not be foreclosed in case of loan default.
- An S&L has approved a large volume of new loans. However, the borrowers have to wait several weeks until they can withdraw their loans because the S&L has a temporary cash problem.

John Graystone

Solutions

- (1) Interest rate risk and foreign exchange rate risk;
- (2) Loan portfolio risk;
- (3) Capital adequacy risk and credit risk (capital requirement increases because risk weight of farmer loans increases, and loan portfolio risk increases because the farmers may feel less obliged to repay their loans);
- (4) Liquidity risk (not enough cash to pay out loans)

John Graystone

John Graystone


THANK
YOU!

John Graystone