

Consumer Banking

Reading Material

I. Understanding Our Lines of Business

Bank of America operates under a customer-centric philosophy as articulated by Chairman & CEO Brian Moynihan:

- Focus on core customer groups and keeping them satisfied
- Serve segments large enough to generate profits without risky behaviour
- Three main customer segments: **People, Companies, and Institutions**

Lines of Business Structure

1. Eight Lines of Business (as reported in Annual Report):

- Retail Banking
- Preferred Banking
- Merrill
- Private Bank
- Business Banking
- Global Commercial Banking
- Global Corporate & Investment Banking
- Global Markets

2. Four Main Reporting Segments:

- Consumer Banking** (People)
- Global Wealth & Investment Management** (People)
- Global Banking** (Companies)
- Global Markets** (Institutions)

II. Consumer Banking Fundamentals

Key Features of Consumer Banking

1. Standardization

- No "special" customer treatment in consumer banking
- Product offerings are standardized for all segment members
- Example: Self-employed doctors segment might receive:
 - Free funds transfers
 - No minimum balance requirements
 - \$10,000 overdraft facility

2. Small Ticket Sizes

- Checking/Savings accounts: Few tens of thousands of dollars
- Personal loans: Tens of thousands of dollars
- Mortgages: Largest by value (\$300,000 to \$808,000)

3. Standardized Processes

Well-defined inputs, processes, and outputs Example account opening process:

- Input: Application form, ID proof, address proof, \$1,000 deposit
- Process: Verify completeness, check documents, open account
- Output: Welcome kit with letter, check book, ATM/debit card

4. Large Numbers

- Each customer segment must be sufficiently large
- Volume-based business model

III. Retail Banking Products

1. Deposit & Transaction Accounts

Checking Accounts:

- Transaction-oriented daily use account
- No interest paid
- Free with minimum balance or direct deposit
- Monthly service charges: \$3-\$25 without meeting requirements

Savings Accounts:

- Interest-bearing deposit account
- Not transaction-oriented
- Limited to 6 transfers/withdrawals per month
- Only 3 of 6 transactions via check/debit card

Term/Fixed/Certificate of Deposits:

- Money deposited for specific time period
- Minimum 7-day period
- Higher interest rates based on deposit duration
- Early withdrawal penalties apply
- "Laddering" strategy: Multiple CDs with different maturity dates

Overdraft Protection:

- Automatic, temporary unsecured loan facility
- Costly form of credit
- Prevents Non-Sufficient Fund (NSF) charges
- Interest charged on overdrawn amounts

2. Specialized Deposit Products

Money Market Deposit Accounts:

- Higher minimum balances required
- Interest rates higher than regular savings
- Online banks offer high-yield versions Transaction limitations apply

Individual Retirement Accounts (IRAs):

- Investment account/vehicle for retirement
- Can invest in stocks, bonds, mutual funds, CDs, annuities
- Cannot invest in insurance, speculation, closely-held businesses, artwork Investment choices decided by account holder

High Yield Accounts:

- Heavy restrictions to afford higher rates
- Local customers only
- Deposit ceilings and minimum thresholds
- Electronic statements only

3. Loan Products

Personal Loans:

- Unsecured loans
- Typically 6 months to 5 years duration

Student Loans:

- Education financing for students

Auto Loans:

- Vehicle financing with vehicle as security

Mortgages:

- Home financing with property as security

Credit Cards:

- Unsecured loan facility when and where needed - loaded on the card!

IV. Deposit Insurance Protection

US FDIC Coverage

- Federal Deposit Insurance Corporation protects depositors to the extent of US\$ 250,000/- per account.
- Bank failures occur regularly (recent example: Silicon Valley Bank, March 2023)
- FDIC intervention ensures depositors recover funds
- Failed banks typically merged with healthy institutions

India DICGC Coverage

- Deposit Insurance and Credit Guarantee Corporation (DICGC)
- Subsidiary of Reserve Bank of India
- Insurance up to ₹5 lakh per depositor, per bank
- Covers principal and interest on savings, fixed, recurring, current accounts
- Automatic coverage, no separate registration required

V. Transaction Banking

Card Banking Systems

A. Getting a Card ATM/Debit Card Issuance

Automatic Issuance:

- Issued automatically with checking/savings account opening
- No credit risk to bank
- Customer can only spend existing account balance

B. Credit Card Issuance

Credit Assessment Process: Bank evaluates multiple factors before issuing credit cards:

1. Credit Scores

- Credit bureau provides comprehensive credit history
- Includes address history, employment history, loan records
- Past payment performance tracked
- Aggregated into numerical credit score

2. Global Credit Bureaus:

- USA:** Experian, Equifax, TransUnion
- UK/EU:** Different scoring systems
- Singapore:** Localized credit scoring **India:** CIBIL and other bureaus

3. Credit Score Ranges:

- USA:** 750+ good (300-900 scale)
- UK:** ~1625+ good (1000-2000 scale)
- Regional variations:** Each country has different thresholds

4. Earning Capacity

- Income sufficiency for living costs
- Employment stability
- Length of employment with current employer
- Determines credit limit amount

5. Delinquency History

- Past loan defaults or skipped payments
- Poor credit risks unlikely to receive cards
- Credit bureau maintains delinquency records

6. Number of Existing Credit Cards

- Total available credit limits considered
- Unused card limits count toward debt capacity
- High existing limits may prevent new card issuance

7. Total Indebtedness

- All existing loan obligations evaluated:
 - Overdrafts
 - Credit cards
 - Personal loans
 - Student loans
 - Auto loans
 - Mortgages
- High total debt prevents new credit card approval

C. Secured Credit Cards

Purpose:

- Solution for individuals without credit history
- Particularly important in USA credit system Helps immigrants and first-time borrowers
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Process:

- a. Individual deposits money with bank
- b. Bank issues secured credit card
- c. Credit limit equals deposit amount
- d. Monthly bills paid to build credit history
- e. Demonstrates credit management ability
- f. Builds credit score over time

D. Card Usage and Transaction Processing

1. Basic Card Transaction Flow

Initial Setup:

1. Bank issues card to customer
2. Customer may/may not have account with issuing bank
3. Bank makes credit decision
4. Issuer updates interchange company with cardholder details

Transaction Participants:

- Cardholder:** Individual using the card
- Merchant:** Business accepting card payments
- Issuer:** Bank that issued the card
- Acquirer:** Bank that installed merchant's payment terminal
- Interchange Company:** Network facilitating transactions

2. Transaction Process

Step-by-Step Flow:

1. Cardholder shops at merchant establishment
2. Card swiped at Electronic Data Capture (EDC) machine
3. Cardholder provides validation (signature, PIN, or CVV)
4. System checks card validity and available credit
5. Transaction validated or declined
6. Transaction slip generated
7. Merchant receives payment (minus interchange fees)
8. Cardholder's account charged
9. Separate billing and payment process between cardholder and issuer

3. Validation Methods:

- Method 1:** Swipe & Sign
- Method 2:** Swipe & Enter PIN
- Internet:** Card details entry plus CVV code

4. Transaction Blocks:

- Card reported stolen
- Fraudulent/fake card detected
- Incorrect PIN/code entered
- Insufficient credit limit

5. Card Usage Methods

Traditional Methods:

- Swipe & Sign:** Oldest method with charge slip signature
- Swipe & PIN:** PIN validation with/without printed slip
- ATM Cash Withdrawal:** Direct cash access

Modern Methods:

- Mobile Payments:** Smartphone apps linked to card accounts
- Internet Payments:** Manual card detail entry on websites
- Contactless/NFC:** Near Field Communication for tap payments
- Virtual Cards:** Online-only card details for specific amounts

6. Special Usage Scenarios

Tolerance for Gratuities:

- Cards can handle tip additions
- Final amount may exceed initial authorization

Commute Cards:

- Transit system integration
- Prepaid or linked to credit/debit accounts

Subscriptions:

- Recurring payment processing
- Automatic billing cycles

Hotel Bookings:

- Authorization holds for incidentals
- Final settlement upon checkout

7. Card Operations Implications

Each usage method has specific operational considerations:

- Risk Assessment:** Varies by transaction type and environment
- Fraud Prevention:** Different security measures for each method
- Settlement Timing:** Batch vs. real-time processing
- Dispute Resolution:** Method-specific procedures
- Regulatory Compliance:** Channel-specific requirements

VI. Retail Assets: Loans

1. Loan Classification Overview

- Secured Loans:** Backed by assets (collateral)
- Unsecured Loans:** Not backed by assets
- Revolving Credit:** Can be used repeatedly up to limit
- Installment Loans:** Fixed payments over set period

2. Consumer Credit Classification

- Revolving:** Credit cards, overdrafts
- Installment:** Personal loans, auto loans, mortgages
- Secured:** Asset-backed loans
- Unsecured:** No collateral required

3. Revolving Credits

- Mechanism:** Borrower can draw up to limit minus used amount
- Repayment:** As money is repaid, it becomes available again
- Interest:** Charged periodically on outstanding balance
- Limit:** Must not exceed approved credit limit
- Examples:** Credit cards, overdrafts

4. Key Loan Terminologies

- Principal:** Actual loan amount excluding interest
- Loan Term:** Time between loan start and end
- Interest:** Daily periodic rate applied to outstanding principal
- Fixed Rates:** Interest rate doesn't vary with market conditions
- Variable Rates:** Interest tied to index and fluctuates
- Fully Amortizing:** Paid off completely at term end with equal monthly payments
- Balloon Payment:** Large final payment substantially larger than regular payments
- Credit Limit:** Dollar amount assigned to open-end credit
- APR:** Annual Percentage Rate - yearly cost of credit including all charges

5. Loan Parameters Framework

- Security Type:** Secured vs. Unsecured
- Payment Structure:** Revolving vs. Installment
- Collateral Details:** Type, value, loan-to-value ratio
- Terms:** Minimum and maximum loan amounts and tenors
- Interest Rates:** Fixed or variable
- Prepayment:** Permitted periods and penalty rates

VII. Understanding Mortgages

1. What is a Mortgage?

- Definition:** Pledging real estate property to lender as security for debt
- Parties:** Homeowner pledges property, lender provides funds
- Advantage:** Allows use of future income to own home immediately
- Alternative:** Could save from future income first, then buy home

2. Mortgage Life Cycle

- i. **Origination:** Sales process, getting the application
- ii. **Processing:** Basic checks, documentation gathering
- iii. **Underwriting:** Decision to lend
- iv. **Closing:** Finalizing loan documentation
- v. **Warehousing:** Financing arrangement for smaller lenders
- vi. **Servicing:** Information sharing throughout loan life
- vii. **Secondary Market:** Sale of mortgage bundles to investors

3. Key Mortgage Components

i. The Borrower

- Credit History:** Clean track record of previous loan payments
- Income:** Steady income to support loan repayment
- Credit Score:** FICO score ranges from 300-850
 - 300-629: Bad
 - 630-689: Fair
 - 690-719: Good
 - 720-850: Excellent

ii. The Repayment (PITI)

- Principal:** Loan amount repayment
- Interest:** Cost of borrowing (fixed or variable)
- Taxes:** Property taxes
- Insurance:** Property insurance
- Collection:** Bank collects all components to ensure payments

iii. The Mortgage Terms

- Duration:** Up to 30 years
- Down Payment:** At least 20% of property value
- Conforming Limit:** \$806,500 for 2025 (easier processing)
- Jumbo Loans:** Above conforming limit, higher rates

iv. The Property

- Appraisal:** Professional property valuation
- Value Determination:** Lower of appraised value or sale price
- Location:** Easy-to-process homes within conforming limits

4. Home Equity Concepts

i. Home Equity Calculation

- Initial:** Down payment amount
- Ongoing:** Home value minus outstanding loan balance
- Growth:** Increases as loan is repaid and/or property appreciates

ii. Home Equity Products

- Home Equity Loan:** Fixed amount based on available equity
- Home Equity Line of Credit (HELOC):** Revolving credit based on equity
- Usage:** Can be used for any purpose
- Risk:** Second lien position if from different lender

5. Mortgage Risk Factors

1. **Property Value:** Current market value
2. **Down Payment:** Initial equity investment
3. **Income:** Borrower's earning capacity
4. **Mortgage Payments:** Monthly PITI obligations
5. **Other Debt:** Existing loan obligations

6. Loan-to-Value Ratios

- Simple LTV:** Loan amount ÷ Property value
- Combined LTV:** All liens ÷ Property value
- High Combined LTV (HCLTV):** Used for multiple mortgages

VIII. Mortgages & Climate Risk

1. Climate Risk Considerations

- Physical Risks:** Fire, floods, earthquakes, storms
- Property Data:** Location in flood zones, coastal areas, wildfire-prone regions
- Historical Data:** Past natural disasters in the area
- Projections:** Sea-level rise, extreme weather trends
- Building Quality:** Construction materials and energy efficiency

2. Insurance Requirements

- Property Insurance:** Protects lender's interest in property
- Flood Insurance:** Mandatory in high-risk flood areas (FEMA designated)
- Mortgage Insurance:** Required if down payment less than 20%
- Coverage:** Must cover outstanding loan balance
- Escrow:** Premiums often included in mortgage payments

3. Risk Profile Changes

- New Borrowers:** Higher risk if property destroyed early in loan
- Seasoned Borrowers:** Lower risk due to equity build-up
- Insurance Impact:** Adequate coverage crucial for both parties
- Recovery:** Depends on insurance adequacy and borrower equity

IX. Consumer Banking Regulation

1. Regulatory Focus Areas

- a. **Disclosures:** Clear information to customers
- b. **Rate Clarity:** Transparent pricing
- c. **Excessive Charges:** Protection from unreasonable fees

3. Mortgage-Specific Regulations

a. Real Estate Settlement Procedures Act (RESPA)

- Focus:** Disclosure requirements
- Prohibitions:** Kickbacks, fee-splitting, referral fees
- Escrow:** Rules for tax and insurance collection accounts
- Service Providers:** Cannot force use of particular providers

b. Home Ownership & Equity Protection Act (HOEPA)

- Triggers:** High-rate or high-fee mortgages
- Thresholds:** APR > Treasury rate + 8%, or fees > 8% of loan
- Protection:** Enhanced disclosure and restriction requirements

c. Home Mortgage Disclosure Act (HMDA)

- Purpose:** Detect lending discrimination
- Data Collection:** Borrower demographics, income, loan terms
- Reporting:** Annual disclosure requirements

d. Fair Housing Act

- Prohibition:** Discrimination in housing-related transactions
- Advertising:** Must be sensitive to fair housing principles
- Compliance:** Lenders must display fair housing logos

X. Universal Loan Regulations

1. Truth in Lending Act (TILA)

- Disclosure:** APR and finance charges
- Timing:** Both at origination and closing
- Fee Restrictions:** No fees before initial disclosures
- Originator Rules:** Compensation cannot be tied to loan terms

2. Equal Credit Opportunity Act (ECOA)

- Prohibition:** Discrimination based on race, religion, sex, age, etc.
- Application:** All credit decisions
- Enforcement:** Requires fair treatment regardless of demographics

3. Fair Credit Reporting Act (FCRA)

- Purpose:** Ensure accuracy and privacy of credit reports
- Rights:** Consumer access to credit information
- Dispute Process:** Mechanism for correcting errors

4. Product-Specific Regulations

Credit Card Accountability Act (CARD Act)

- Notice:** 45 days advance notice for rate increases
- Options:** Right to decline increases and pay off balance
- Statements:** 21 days minimum for payment processing

Durbin Amendment

- Scope:** Interchange fees for debit cards
- Cap:** 21 cents per transaction plus 5 basis points
- Implementation:** Effective since 2015

Fair Debt Collection Practices Act (FDCPA)

- Communication:** Rules for contacting defaulting customers **Restrictions:** Time, place, and method constraints
- Prohibitions:** False representations and unfair practices

XI. Understanding Fraud in Banking

Fraud is one of the most significant risks faced by banks, especially in consumer banking where millions of transactions occur every day. Fraud affects customers, banks, merchants, and the broader financial system. In simple terms, **fraud refers to the use of deception to gain an unfair or unlawful financial advantage.**

According to **Black's Law Dictionary**, fraud is defined as:

A knowing misrepresentation of truth or concealment of a material fact intended to induce another person to act in a way that causes them financial loss.

The **Association of Certified Fraud Examiners (ACFE)** also describes fraud as:

Any intentional act designed to deprive another person or organization of money, property, or legal rights through deception or unfair means.

In banking, fraud may involve:

- False documentation
- Identity impersonation
- Unauthorized transactions
- Theft of financial information
- Manipulation of systems or records

Fraud can be committed by **customers, employees, merchants, third parties, or organized criminal networks.**

1. Fraud as Part of Operational Risk

Fraud is classified under **Operational Risk** in banking.

Operational risk refers to losses resulting from:

- Failed internal processes
- Human error
- System failures
- External events
- Fraudulent activities

Operational risk categories typically include:

- Internal Fraud
- External Fraud
- Employment Practices & Workplace Safety
- Clients, Products & Business Practices
- Damage to Physical Assets
- Business Disruption and System Failures
- Execution, Delivery and Process Management

Among these, **internal fraud and external fraud are directly related to financial crime.**

2. Internal Fraud

Internal fraud occurs when **a bank employee or insider participates in fraudulent activity.**

These acts usually involve misuse of authority, access, or knowledge of internal systems.

Examples include:

- Unauthorized trading
- Manipulating records
- Theft of funds
- Embezzlement
- Forgery
- Insider trading
- Bribes or kickbacks

- Account manipulation
- Misappropriation of assets

Internal fraud is particularly dangerous because employees often have **system access and operational knowledge**, making detection harder.

Banks therefore maintain strict controls such as:

- Segregation of duties
- Internal audits
- Monitoring of transactions
- Employee background checks
- Mandatory leave policies

3. External Fraud

External fraud occurs when **a third party commits fraud against the bank or its customers**.

Examples include:

- Identity theft
- Forgery
- Account takeover
- Credit card fraud
- Phishing attacks
- Cyber attacks
- ATM theft
- Check fraud

External fraud often uses technology and social engineering to manipulate victims.

4. The Fraud Triangle

One of the most widely accepted explanations for fraud behavior is the **Fraud Triangle**.

It identifies three conditions that must exist for fraud to occur:

a. Opportunity

Fraud becomes possible when there are weaknesses in controls.

Examples:

- Poor internal controls
- Lack of supervision
- Weak authentication systems
- Access to financial systems without oversight

b. Pressure (or Motive)

Fraudsters often face financial or personal pressure such as:

- Debt
- Lifestyle expectations
- Gambling problems
- Drug or alcohol addiction
- Financial distress

c. Rationalization

Fraudsters justify their actions to themselves.

Common rationalizations include:

- "I deserve this money."
- "The company underpays me."
- "I will repay it later."
- "Everyone does it."

Understanding the fraud triangle helps banks **design controls to reduce opportunity and detect early warning signals**.

5. Types of Fraud in Banking

Frauds in banking are often classified into **traditional frauds and modern frauds**.

Traditional Frauds

These existed even before digital banking.

Examples:

- Stolen cards
- Lost checks
- Forged signatures
- Check kiting
- Merchant collusion

Modern Frauds

Technology-driven frauds.

Examples:

- Cyber crime
- Identity theft
- Phishing
- Malware attacks
- Online banking fraud

6. First-Party Fraud

First-party fraud occurs when **the customer himself commits fraud**.

Examples include:

- Providing false information in loan applications
- Intentionally defaulting on loans
- Using fake income documents
- Taking loans with no intention to repay

7. Soft Fraud

Soft fraud is a milder form of first-party fraud.

Example:

A customer may manipulate income documents to qualify for a credit card or loan.

Although the customer may intend to repay the loan, the bank's lending criteria classify them as **high risk**.

This often results in **future defaults and losses for the bank**.

8. Hard Fraud

Hard fraud is deliberate fraud.

Here, the fraudster never intends to repay the loan.

Typical pattern:

1. Fraudster submits false documents
2. Establishes positive transaction history
3. Gains bank trust
4. Receives higher credit limits
5. Defaults intentionally

Fraud analytics are often used to detect such patterns early.

9. Payment Card Fraud Ecosystem

Card fraud typically involves several participants:

- Issuer (Bank issuing the card)
- Cardholder
- Merchant
- Payment network
- POS machine

Fraud may occur through:

- Card cloning
- Card skimming
- Account takeover
- Counterfeit cards

Sometimes merchants may collude with fraudsters by:

- Processing fake transactions
- Sharing card information
- Providing cash in exchange for card swipes

10. Cyber Crime in Banking

Modern fraud increasingly involves cyber crime.

Common cyber fraud techniques include:

Phishing

Fraudsters create fake websites that resemble bank websites to steal login details.

Email Spoofing

Fake emails pretending to be from banks trick customers into sharing confidential information.

Malware

Malicious software infects devices and steals passwords or banking credentials.

Identity Theft

Personal information is stolen and used to open accounts or conduct fraudulent transactions.

Data Breaches

Sensitive customer information is stolen from banks or other institutions.

11. Best Practices for Online Banking Safety

Customers can reduce fraud risk by following basic security practices.

Important precautions include:

- Install antivirus and malware protection
- Use strong passwords
- Avoid public Wi-Fi for banking transactions
- Verify website security certificates
- Enable OTP authentication
- Avoid sharing personal information online

Customer awareness is one of the most effective tools against fraud.

12. Consumer Protection Laws

Several laws protect banking customers from fraud.

Electronic Fund Transfer Act (EFTA)

Limits liability for unauthorized electronic transactions if reported quickly.

Truth in Lending Act (TILA)

Limits credit card fraud liability to \$50.

Fair Credit Reporting Act (FCRA)

Allows consumers to dispute fraudulent information on credit reports.

Gramm-Leach-Bliley Act (GLBA)

Requires banks to protect customer financial data.

13. What Customers Should Do When Fraud Occurs

Customers must act quickly if fraud occurs.

Steps include:

- Inform the bank immediately
- Freeze affected accounts
- File a police report
- Change passwords and PINs
- Report fraud to regulatory agencies
- Monitor credit reports

Prompt reporting reduces financial loss.

14. Bank Responsibilities in Fraud Cases

Banks have several legal responsibilities.

Investigate Fraud

Banks must conduct a formal investigation of reported fraud.

Provide Provisional Credit

If investigation takes longer than expected, banks may temporarily credit the customer's account.

Restore Customer Accounts

If fraud is confirmed, banks must:

- Refund stolen money
- Reverse fees
- Restore lost interest

15. Liability and Responsibility

In most fraud cases:

- The **bank bears the burden of proof**
- The **customer's liability is limited**

However, liability may shift to customers if **negligence is proven**.

Examples:

- Writing PIN on card
- Sharing passwords
- Failing to report fraud for long periods

16. Shared Responsibility in Fraud Prevention

Fraud prevention requires cooperation between banks and customers.

Bank Responsibilities

- Monitor suspicious activity
- Protect customer data
- Maintain secure systems
- Investigate fraud cases

Customer Responsibilities

- Protect passwords
- Review bank statements
- Report suspicious activity immediately
- Safeguard physical cards

Additional Reading References

- *Federal Reserve Bank Publications: Consumer banking regulations and trends*
- *FDIC Resources: Deposit insurance and bank safety information*
- *Bank of America Annual Reports: Detailed financial performance and strategy*

Transaction Banking

- *NACHA Operating Rules: Complete ACH system regulations*
- *Federal Reserve Payment System Research: Modern payment system evolution*
- *Check 21 Implementation Guides: Electronic check processing standards*
- *Card Banking*
- *Credit Bureau Resources: Understanding credit scoring systems*
- *Interchange Company Documentation: Visa, MasterCard operational guides*
- *Payment Card Industry Standards: Security and compliance requirements*

Global Payment Systems

- *Bank for International Settlements: International payment system comparisons*
- *Central Bank Publications: Country-specific payment system documentation*
- *Financial Stability Board: Global payment system risk management*

External References for Further Reading

Retirement Planning

- *IRS Publication 590: Individual Retirement Arrangements*
- *Department of Labor ERISA guidelines*
- *Social Security Administration retirement planning resources*

Mortgage Information

- *Federal Housing Finance Agency (FHFA) conforming loan limits*
- *Consumer Financial Protection Bureau (CFPB) mortgage guides*
- *FEMA flood insurance requirements*

Credit and Banking

- *Federal Reserve consumer credit data*
- *FICO credit scoring methodology*
- *FDIC consumer protection resources*

Climate Risk

- *FEMA flood maps and risk assessments*
 - *National Weather Service climate data*
 - *Insurance industry climate risk reports*
- ### Regulatory Resources
- *Consumer Financial Protection Bureau (CFPB) regulations*
 - *Federal Reserve regulatory guidance*
 - *Office of the Comptroller of the Currency (OCC) banking regulations*