



Introduction to **Banking**

Course Objectives



Understand the different types/structures of financial services firms



Determine the different types of banking services that are provided



Understand who the customers are for each type of service



Learn how a bank makes money



Differentiate the various banking career paths



Categories and Types of Financial Institutions

Main Categories of Financial Institutions

There are four main categories of financial institutions:



Central Banks

Oversee and manage
all banks in their
respective country and
set monetary policy



Retail Banks

Provide products and
services to individual
consumers



Commercial Banks

Work with businesses
to serve their financial
needs



Investment Banks

Operate in the capital
markets to help clients
raise capital through
underwriting and
issuance of securities

How Financial Institutions Are Organized



1. Universal Banks



2. Large Banks



3. Investment Banks



4. Community Banks



5. Online Banks



6. Credit Unions



7. Building Societies

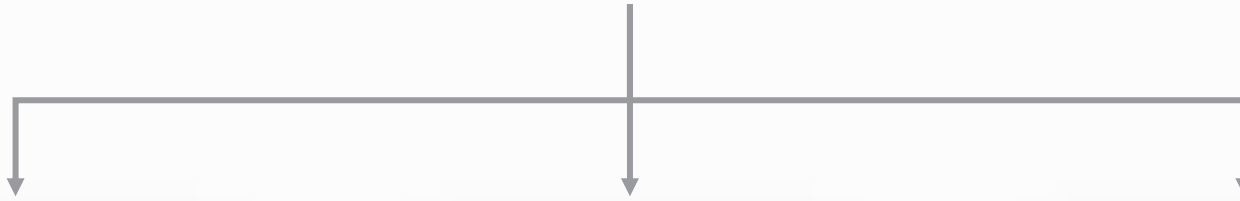


8. Savings & Loans Associations

1. Universal Banks



Universal Banks



**Retail
Banking**



**Commercial
Banking**



**Investment
Banking**

Examples:



CitiGroup



HSBC Group

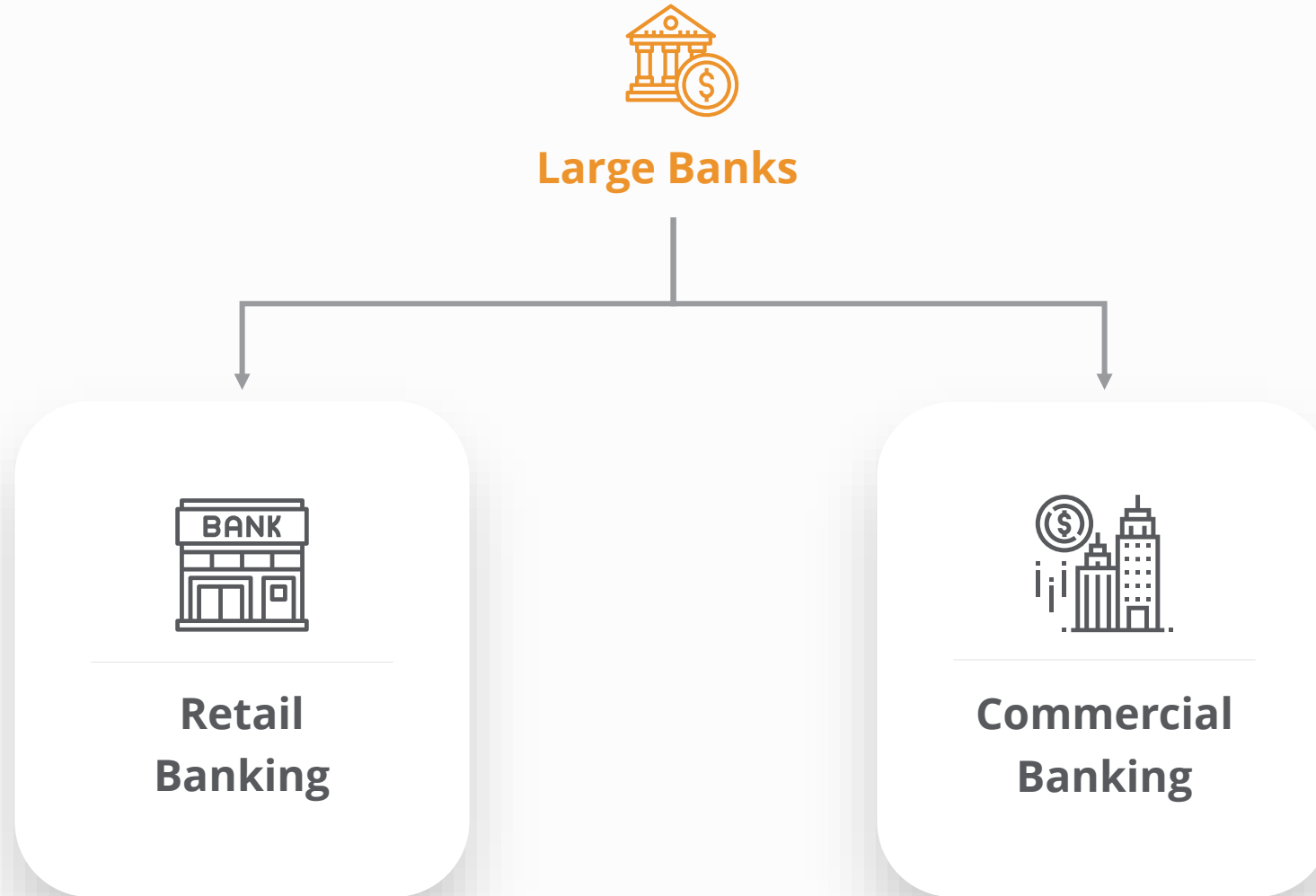


Deutsche Bank



ICBC Bank of China

2. Large Banks



Examples:



Wells Fargo



Bank of America



Lloyds Bank



Banco Santander

3. Investment Banks



Investment Banks



**Investment
Banking**

Examples:



Goldman Sachs



Barclays



Credit Suisse

4. Community Banks



Community Banks



**Retail
Banking**



**Small Business
Banking**

In US:

- Over 18,000 community banks — majority have < \$250MM in assets

In India:

- Created by members of a local community — pooling capital resources and lending to the members

In Nigeria:

- Community banks exist as the Credit Development Division — making credit more accessible in rural areas

5. Online/Digital Banks



**Retail
Banking**



**Small Business
Banking**

Examples:



Digibank



Hello Bank



Ally Bank



Mashreq Neo

6. Credit Unions



Credit Unions



Retail Banking



Small Business Banking

Credit unions serve a specific demographic and are member-owned. Clients are members who hold shares of the credit union.

Guidelines on who can be a member might be:

- The member needs to live in a specific geographic area.
- The member must be part of a specific segment of society such as teachers or military.

7. Building Societies



Building Societies



**Retail
Banking**

Only found in the UK and Australia, building societies are owned by members and primarily offer home mortgages.

Example:



Nationwide Building Society

8. Savings & Loans Associations



Savings & Loans Associations



**Retail
Banking**



**Small Business
Banking**

Also referred to as mutual savings banks, these associations are primarily found in the United States.

It is possible to be a joint-stock company:

- Membership component
- Publicly traded

Thrifts can have no more than 20% of their lending in commercial loans.



Banking Services: What They Are and Who Uses Them

Banking Services

Banking services are structured by the type of client and the complexity of their needs:



Type of Client

- Individuals
- Entities
 - Businesses
 - Governments
 - Institutions



Complexity of Needs

- Cash management requirements
- Complexities arising through supply chain management
- Amount of financing required

Banking Services



**Retail
Banking**



**Business
Banking**



**Corporate
Banking**



**Private
Banking**



**Commercial
Banking**



**Investment
Banking**

Retail Banking

Retail banking is the provision of banking services to all individual consumers.

Examples of retail services:



**Checking and
Savings Accounts**



Mortgages



Personal Loans



**Debit and Credit
Cards**

Private Banking

Private banking is a subset of retail banking that caters to high-net-worth and ultra-high-net-worth individuals.



High-Net-Worth

Liquid net worth of over
\$1MM (cash or easily
convertible assets)



Ultra-High-Net-Worth

Liquid net worth of over
\$5MM

Customer service is provided on a personal basis through a dedicated relationship manager. Services include retail banking products, asset management, brokerage, and limited tax advisory.

Business Banking

Business banking refers to banking services provided to small businesses that are owner-operated and have annual revenues of up to \$5 million.

These businesses have very simple banking needs:



**Business
Checking and
Savings Accounts**



**Working Capital
Management**



**Merchant
Services (e.g.
Debit and Credit
Cards Payment)**



**Line of Credit or
Loan (< \$1MM)**

Business Banking

Businesses using business banking services could include:

- Mechanic repair shops
- Plumbing and heating companies
- Hair salons
- Owners of a franchise
- Dentist offices
- Small law and accounting firms



Business Banking

What are the likely reasons for financial support to small businesses from the bank?

Working Capital

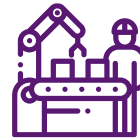
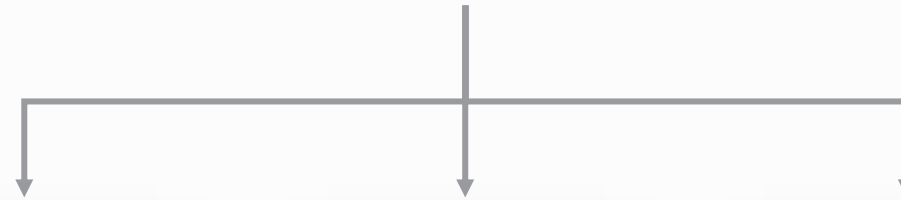


Buying raw materials/
stock
(inventory)



Financing
customers
(receivables)

Capital Investment



Building new
operating
facility plant &
equipment



Buying new
property



Buying another
business

Commercial Banking

Commercial banking is larger in scale than business banking and serves clients with more complex needs.

Clients are typically:



1. Medium-sized (~500 employees)



2. Multiple locations and possibly various geographic locations



3. May include other financial institutions and local / regional governments

Commercial Banking

The needs of commercial banking clients are focused around:



**Operating Accounts and
Loan Finance Products**



**Transaction Banking
(Cash and Treasury
Management)**



**Trade Finance and
Foreign Exchange**

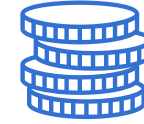


Advisory Services

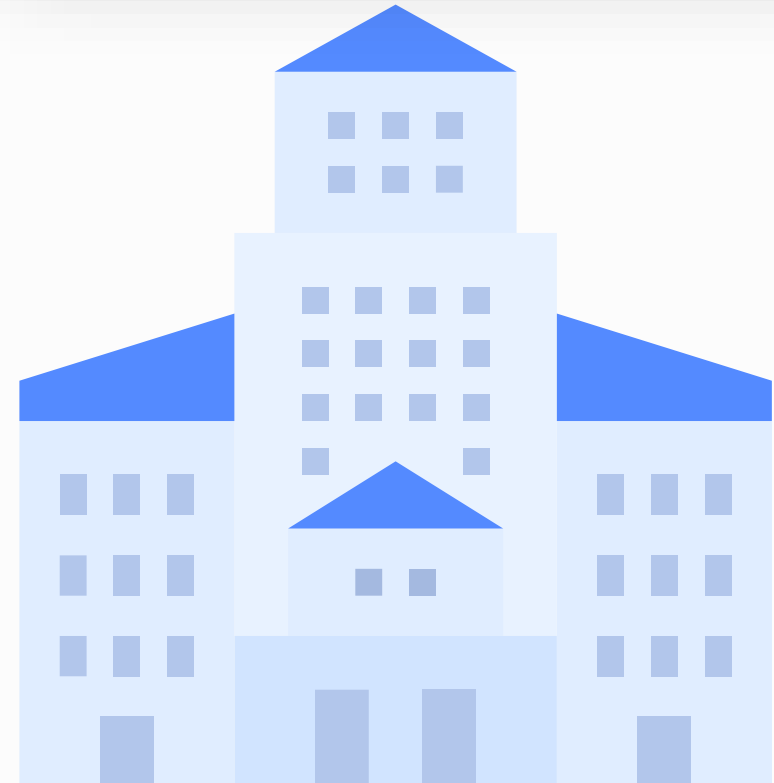
Corporate Banking

Corporate banking services are for those clients whose needs are even more complex than in commercial banking.

- ✓ Mid-sized companies
- ✓ Companies growing through mergers and acquisitions
- ✓ Publicly traded companies
- ✓ Large domestic and multinational corporations
- ✓ Financial and other institutions
- ✓ Governments



Revenue of \$100MM – \$1B



Corporate Banking

Corporate banking services are largely credit-related with an advisory component and act in between the commercial banking services the client will be using.



**Provide credit
expertise**



**Assist with deal
execution of over
\$100MM in value**



**Structure
complex needs
around working
capital
management**



**Help accessing
debt capital
markets
products**

Investment Banking

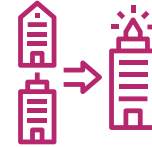
Investment banks do not offer traditional banking products and are non-deposit taking.

They serve large, publicly traded corporations, institutions, and governments looking for banking services associated with large or complex financial transactions in:



Corporate Finance

- Mergers & acquisitions
- Advisory services

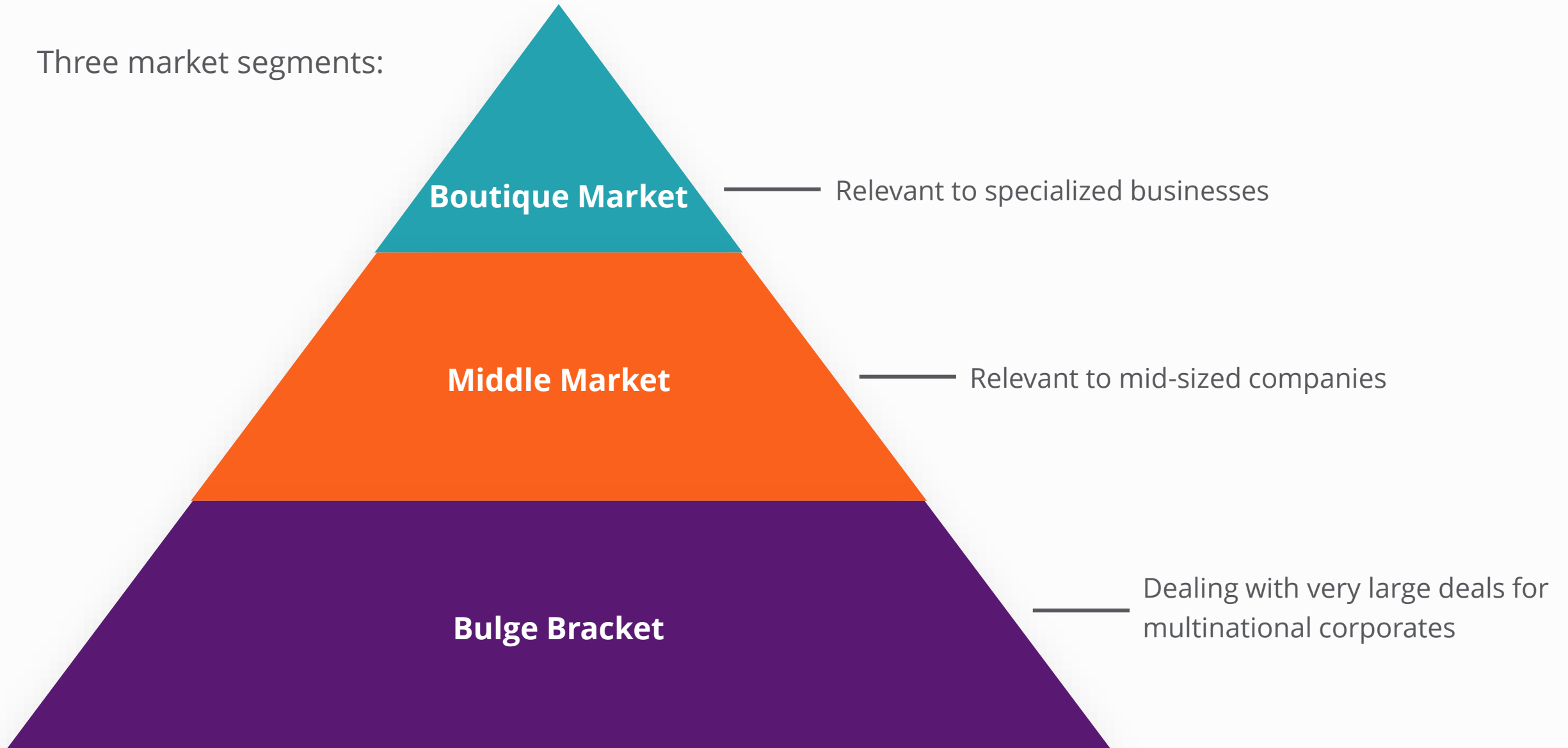


Capital Markets

- Underwriting
- Research
- Sales and trading

Investment Banking

Three market segments:



Investment Banking



Corporate Banking

- Act as an intermediary
- Maintain banking relationship with clients

VS.



Investment Banking

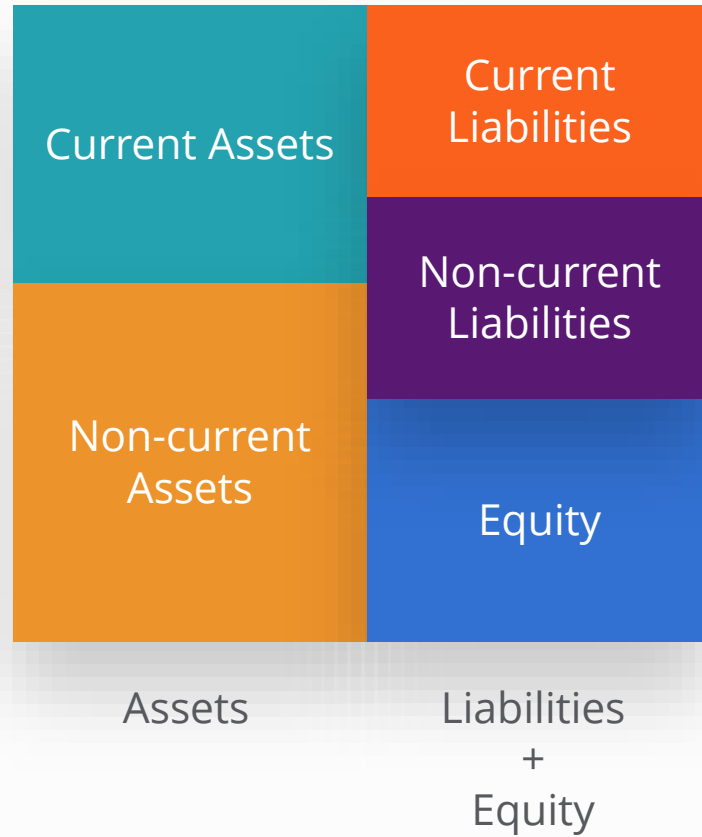
- Directly offers advisory services for M&A transactions and structuring of capital markets products
- Assisting organizations to raise capital through equity or debt
- E.g. Initial public offering (IPO)



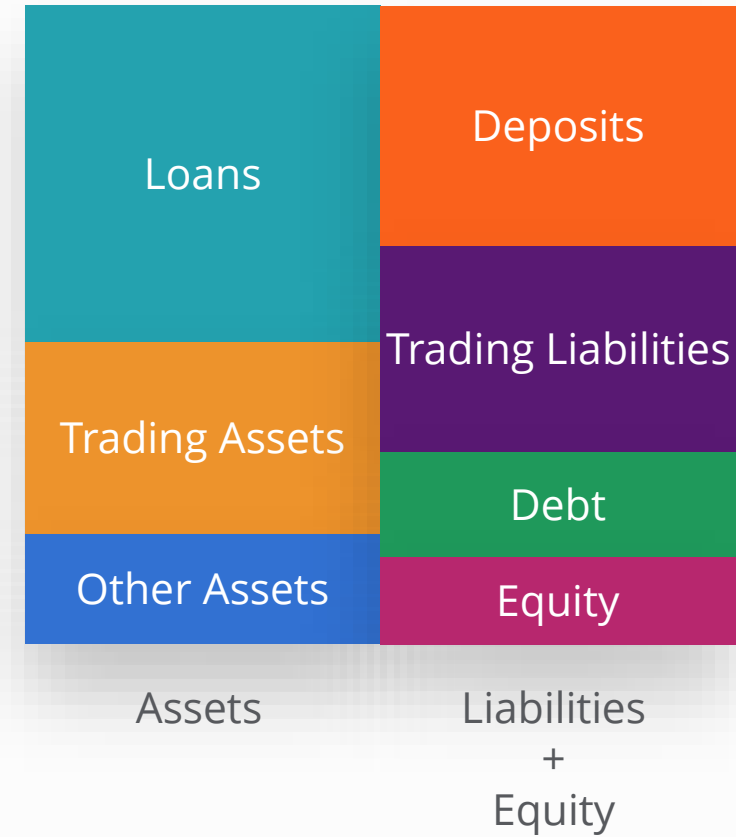
How Financial Institutions **Generate Return**

A Bank's Balance Sheet

A Typical Non-Bank



A Typical Bank



A Bank's Balance Sheet

A typical bank classifies its financial assets and liabilities into the following categories:



1. Loans & advances to clients



2. Financial assets and liabilities at fair value through profit and loss



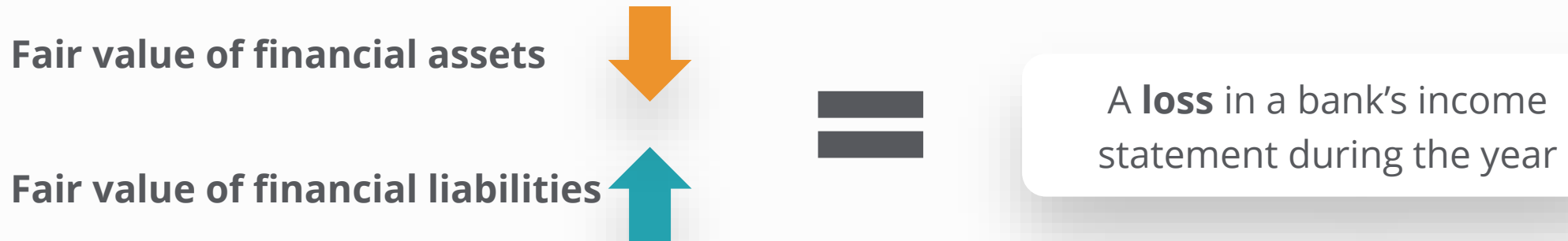
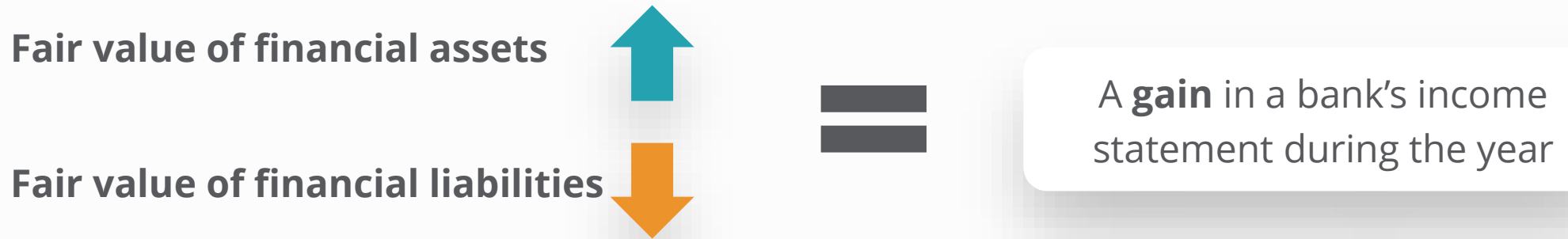
3. Financial assets and liabilities held for trading



4. Financial assets and liabilities held to maturity/ at amortized cost

A Bank's Balance Sheet

The value of the financial assets and liabilities changes during the year:



A Bank's Income Statement

Net Interest Income	<i>(Interest Income – Interest Expense)</i>	X
Non-interest Revenue		X
Total Interest and Similar Income		X
Provision for Credit Losses		(X)
Net Gains/(Losses) on Financial Assets and Liabilities		(X)
Total Non-interest Expense		(X)
Income Before Tax		X
Income Tax Provision		(X)
Net Income		X

Net Interest Income

Net interest income is a key metric used in the banking industry that is closely monitored internally and externally.

$$\text{Net Interest Income} = \text{Interest Earned on Customer's Advances, Loans, and Trading Assets} - \text{Interest Paid on Customer's Deposits, Trading Liabilities, and Long \& Short-term Debt}$$

Net Interest Income – Example

Assets	\$MM	Yield
Loans to Customers	2,000	5.5%
Trading Assets	500	3.0%
Deposits with Banks	200	4.5%
Property	100	
Total Assets	2,800	

Liabilities & Equity	\$MM	Yield
Deposits	1,300	3.0%
Trading Liabilities	1,100	3.0%
Long-term Debt	200	4.5%
Equity	200	
Total L&E	2,800	

What is the net interest income?

Net Interest Income – Example

Assets	\$MM	Yield
Loans to Customers	2,000	5.5%
Trading Assets	500	3.0%
Deposits with Banks	200	4.5%
Property	100	
Total Assets	2,800	
Liabilities & Equity	\$MM	Yield
Deposits	1,300	3.0%
Trading Liabilities	1,100	3.0%
Long-term Debt	200	4.5%
Equity	200	
Total L&E	2,800	

Interest Income	\$MM
Interest on Loans (5.5% x 2,000MM)	110
Interest on Trading Assets (3% x 500MM)	15
Interest on Deposits with Banks (4.5% x 200MM)	9
	134

Interest Expense	\$MM
Interest on Deposits (3% x 1,300MM)	(39)
Interest on Trading Liabilities (3% x 1,100MM)	(33)
Interest on Long-term Debt (4.5% x 200MM)	(9)
	(81)

Net Interest Income	53
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Components of Total Revenue

Net Interest Income

Interest (Loans and Deposits)	X
Interest Expense	(X)
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Net Interest Income	X

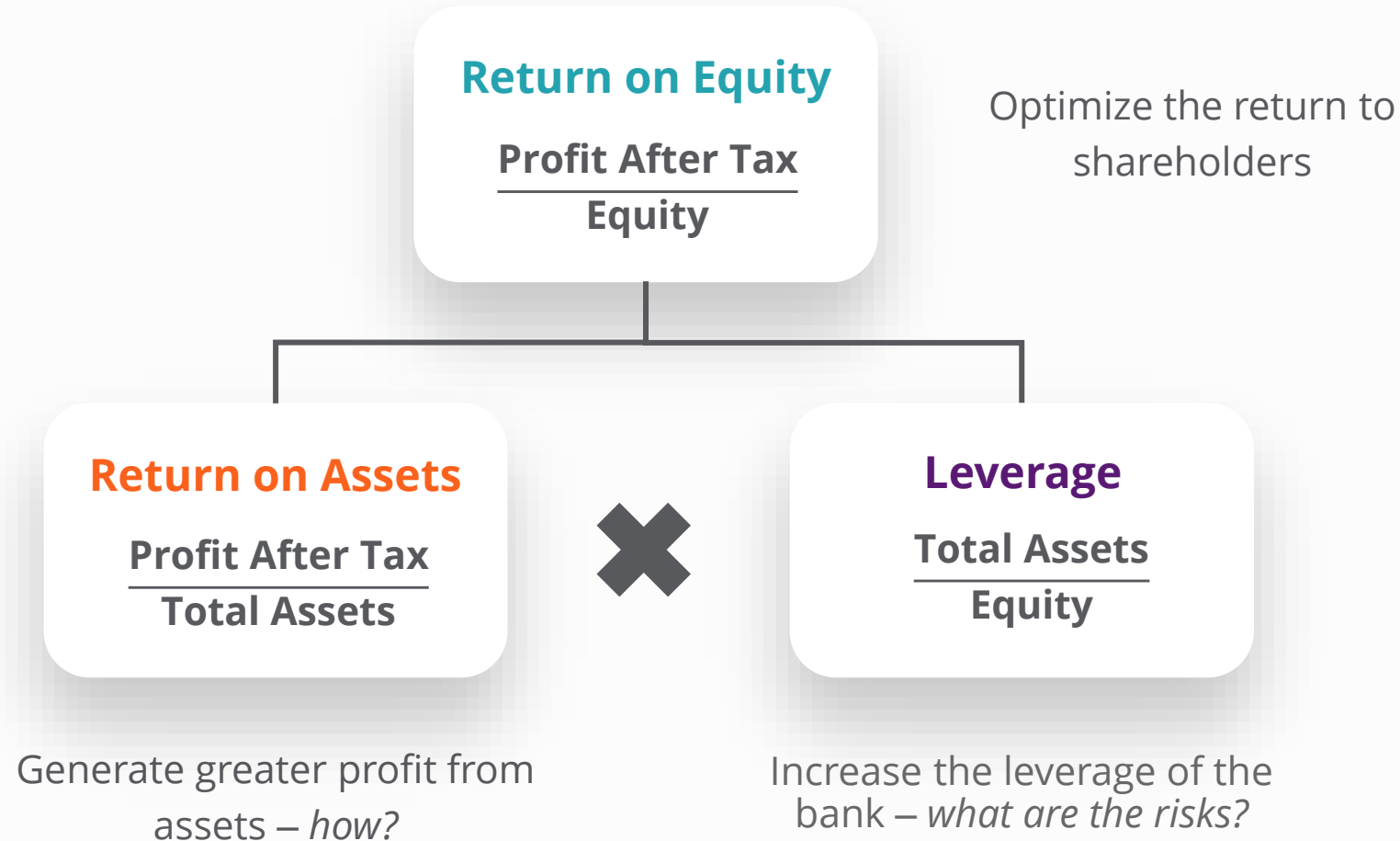
Non-interest Revenue

Commission and Fees from Income	X
Net Commission Broker Fees, Mark-up on Security	X
Underwriting and Other Security Activities	
Profit on Sale of Investments	X
Other Customer Service Fees	X
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Non-interest Revenue	X

Total Interest and Similar Income	X
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Measuring Returns in a Bank

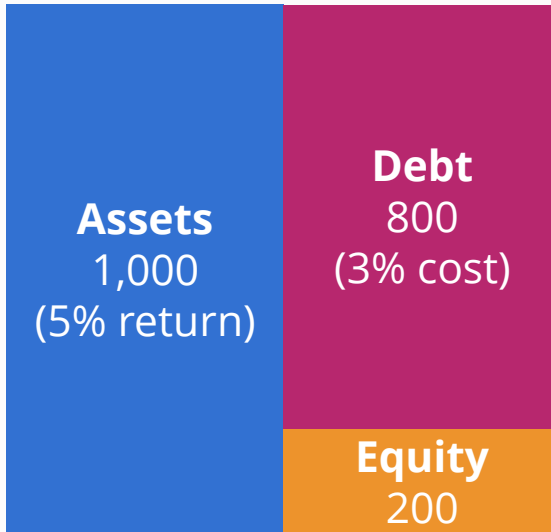
This ratio tree represents the key levers the executives of a bank can use to improve the performance of the bank.



The Impact of Leverage

Let's compare two banks with different levels of leverage:

Low leverage



ROA

$$\frac{50 - 24}{1,000} = 2.6\%$$



Leverage

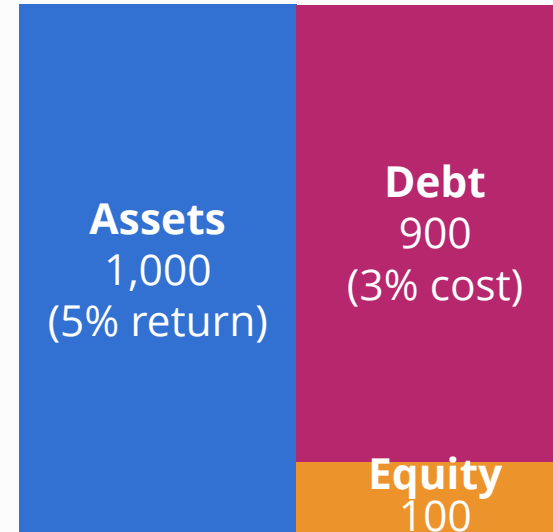
$$\frac{1,000}{200} = 5$$



ROE

13%

High leverage



ROA

$$\frac{50 - 27}{1,000} = 2.3\%$$



Leverage

$$\frac{1,000}{100} = 10$$



ROE

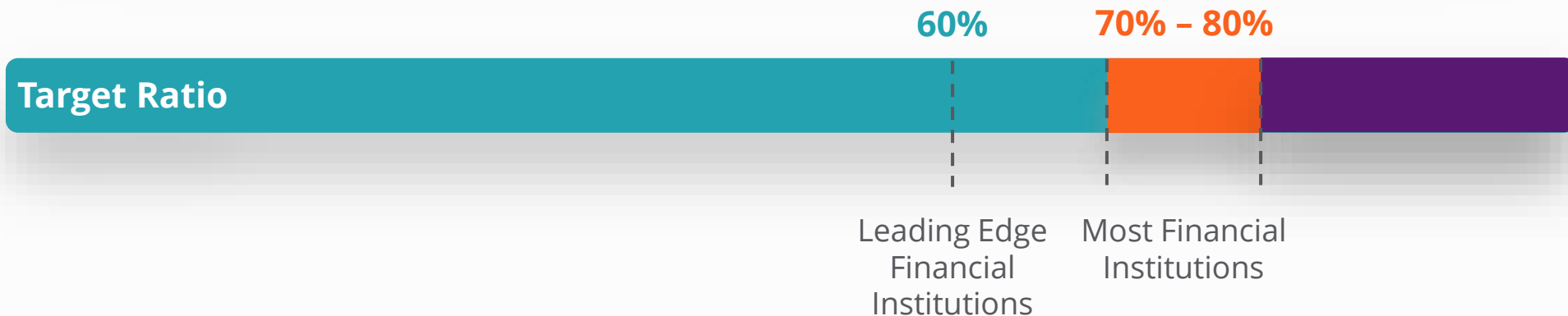
23%

The Importance of Operating Efficiency

The **operating efficiency ratio** shows a bank's efficiency by comparing non-interest expenses to net interest income and other income.

$$\text{Operating Efficiency Ratio} = \frac{\text{Non-interest Expenses}}{\text{Net Interest Income} + \text{Other Income}}$$

Salaries, occupancy costs,
technology expenses, etc.



What Is the Bank's Profit Exercise

What is the bank's **profit** and **operating efficiency ratio**?

Interest Income/Expense	\$MM
Net Interest Income	7,500
Controllable – Bank Salaries	2,000
Controllable – Travel and Meals	500
Non-controllable – Rent, Technology, Utilities, Etc.	2,500

What Is the Bank's Profit Exercise

Profitability:

Interest Income/Expense	\$MM
Net Interest Income	7,500
Controllable – Bank Salaries	2,000
Controllable – Travel and Meals	500
Non-controllable – Rent, Technology, Utilities, Etc.	2,500
Total Expenses	5,000
Net Profit Before Tax	2,500

Operating Efficiency Ratio:

$$\frac{\text{Non-interest Expense } \$5,000}{\text{Net Interest Income } \$7,500}$$

$$= 66.7\%$$

Asset-Liability Matching (ALM)

Asset-Liability Matching is the practice of investing, buying, liquidating, and adjusting one's assets to cover its liabilities when needed.



Treasury managers need to carefully manage assets in a portfolio and ensure there is sufficient liquidity to cover cash needs.

Asset-Liability Matching (ALM)



Reduce interest rate risk and liquidity risk impacting a bank's balance sheet



Ensure the bank can meet its medium- and long-term financing needs



Minimizes the risk of losses due to movement in interest rates

Securitization

Securitization is a risk management tool used to reduce idiosyncratic risk associated with the default of individual assets.



1. The bank combines multiple assets into a single compound asset which generates a return equivalent to the weighted average return of the individual assets.



2. The bank sells the compound asset to third-party investors as securities (bonds / collateralized debt obligations).

One common example of securitization is a **mortgage-backed security (MBS)**, which is a debt security collateralized by a mortgage or a collection of mortgages.

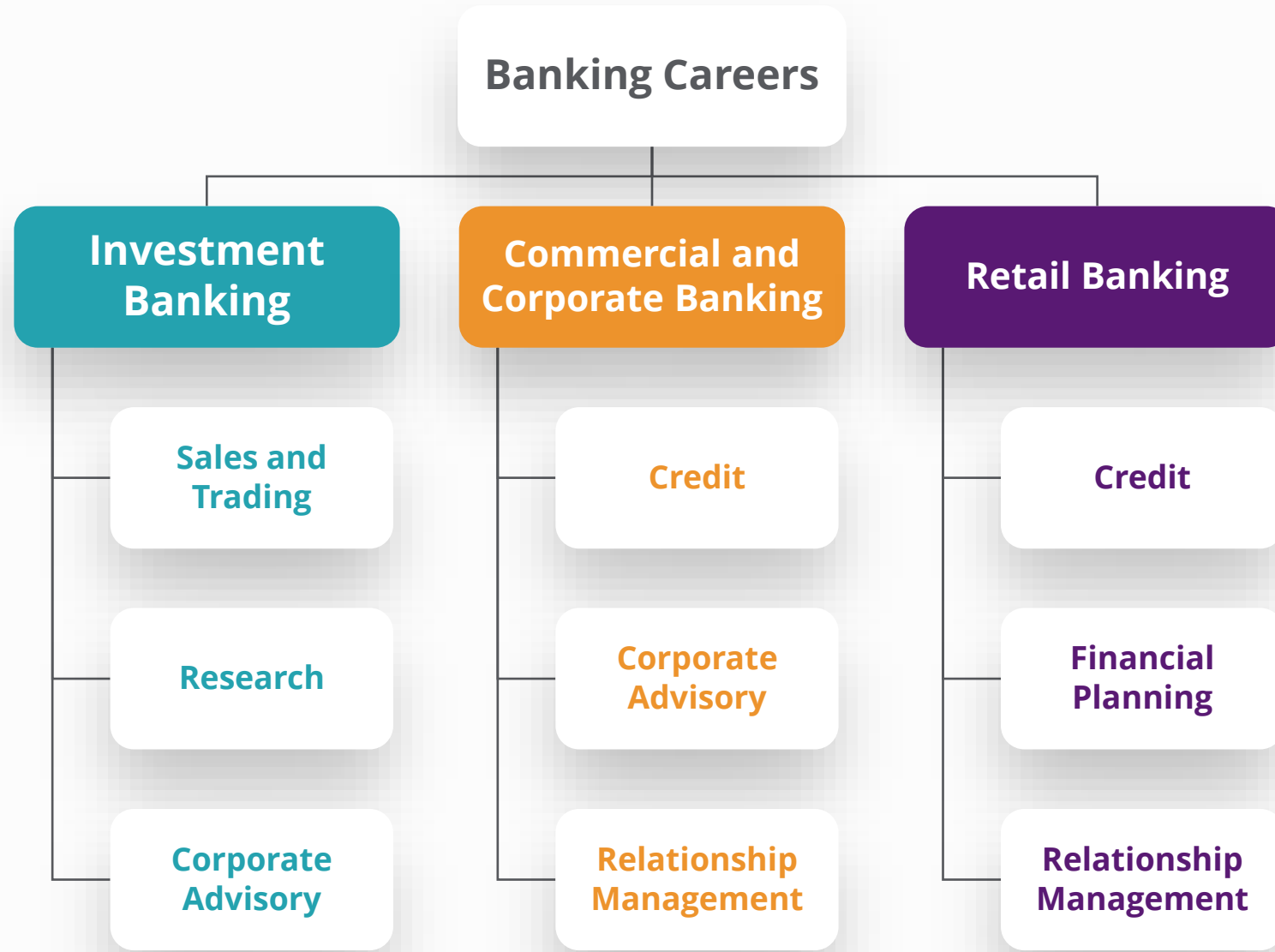


Banking Careers

Career Map



Career Map



Investment Banking Career

Investment banking helps governments, corporations, and institutions raise capital and complete mergers and acquisitions (M&A).

The competition for investment banking positions is intense, compensation is very high, and the work is very high profile.

Common career paths:



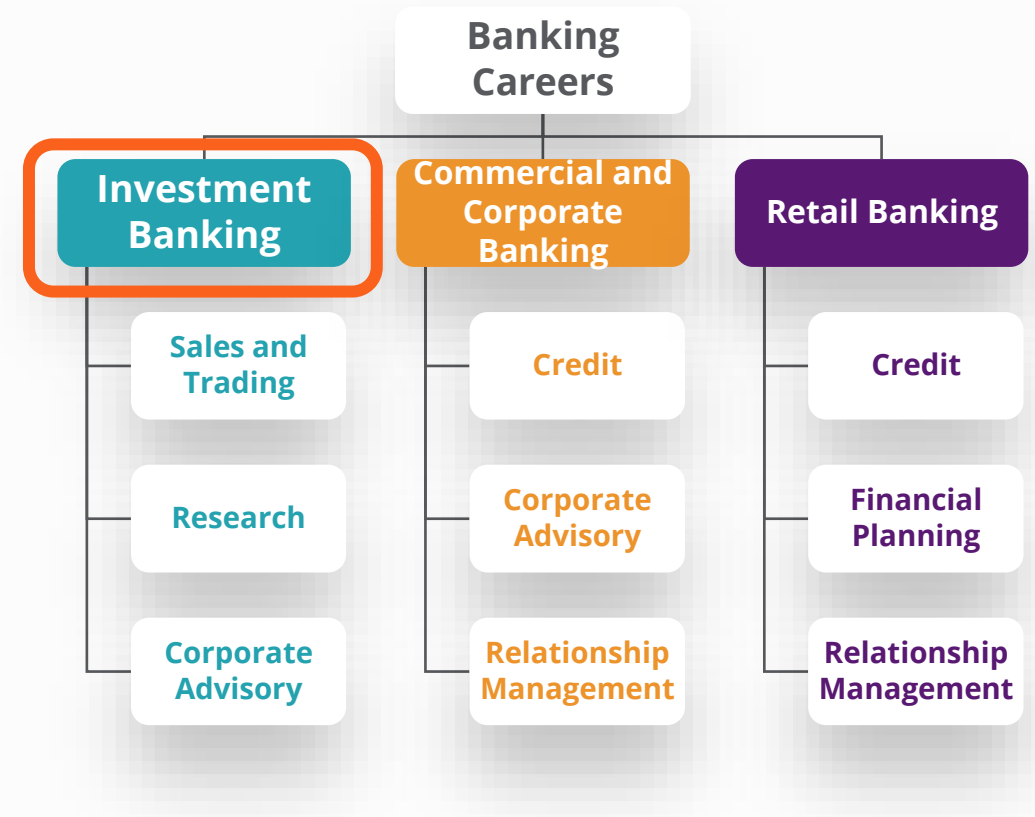
Analyst



Associate



VP / Director /
Managing Director



Sales and Trading Career

The sales and trading division of a bank helps mutual funds, hedge funds, and pension funds facilitate equities transactions.

A career in sales & trading can be extremely strenuous with a very fast-paced environment. The competition for positions is intense.

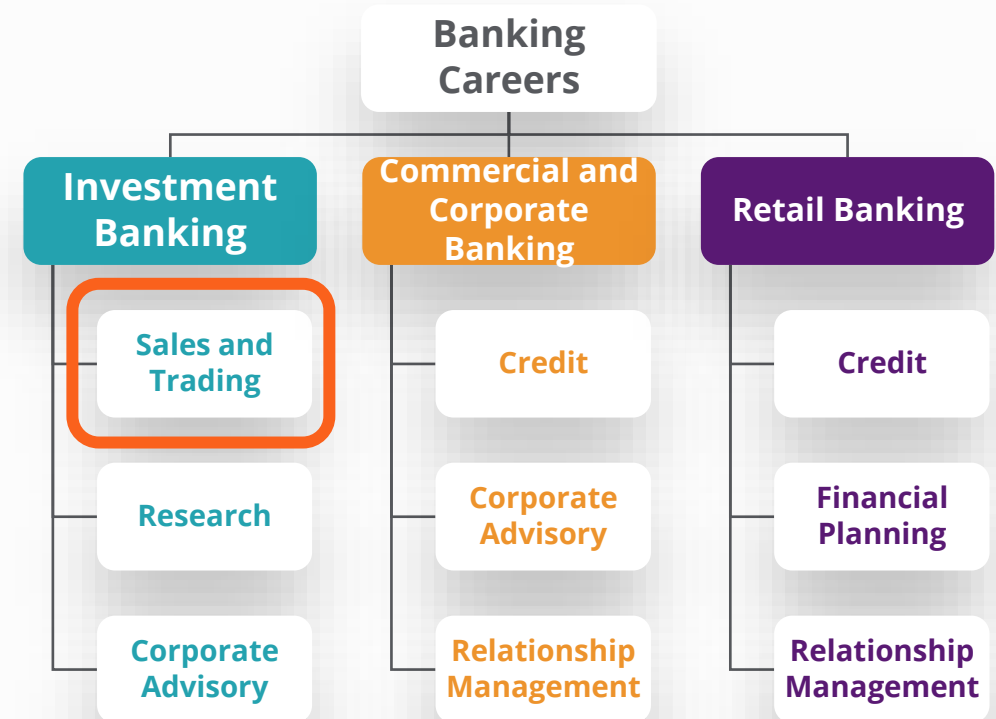
Common career paths:



Associate



VP / Director



Equity Research Career

Equity research roles provide research coverage of public companies and distribute that research to the bank's clients.

It's common for an analyst to move from the sell side to the buy side where they perform similar research to be used by the firm's portfolio managers.

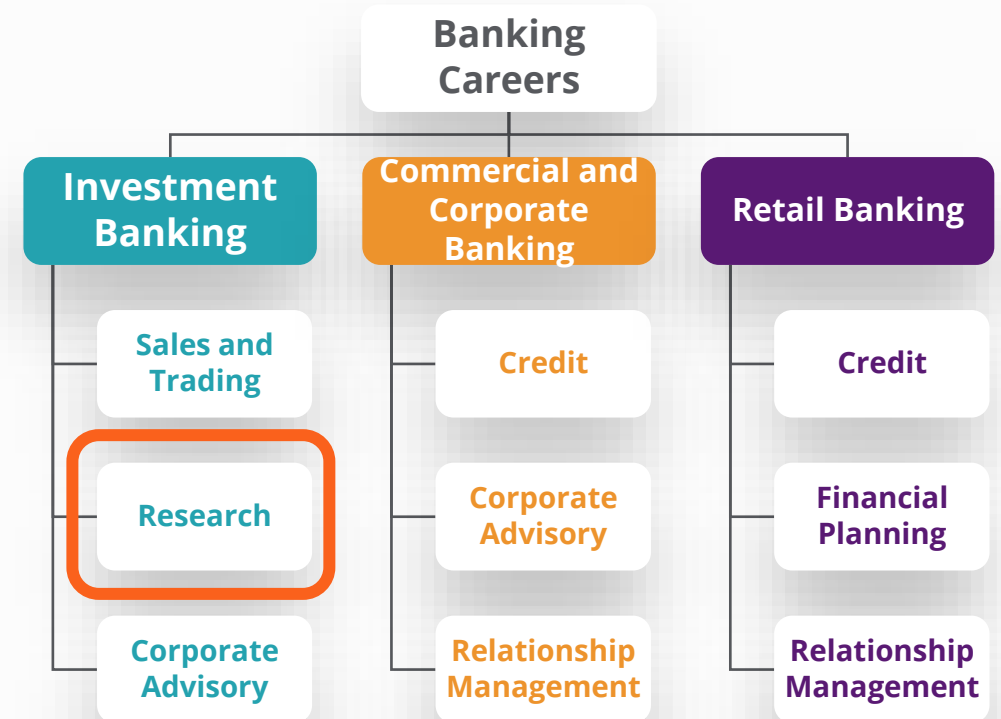
Common career paths:



Analyst



Associate



Commercial Banking Career

Commercial banking provides clients with credit products such as term loans, lines of credit, syndicated facilities, cash management services, and other fixed-income products.

They deliver financial advice and solutions tailored to the clients' needs, such as buying new equipment, funding working capital, and day-to-day banking.

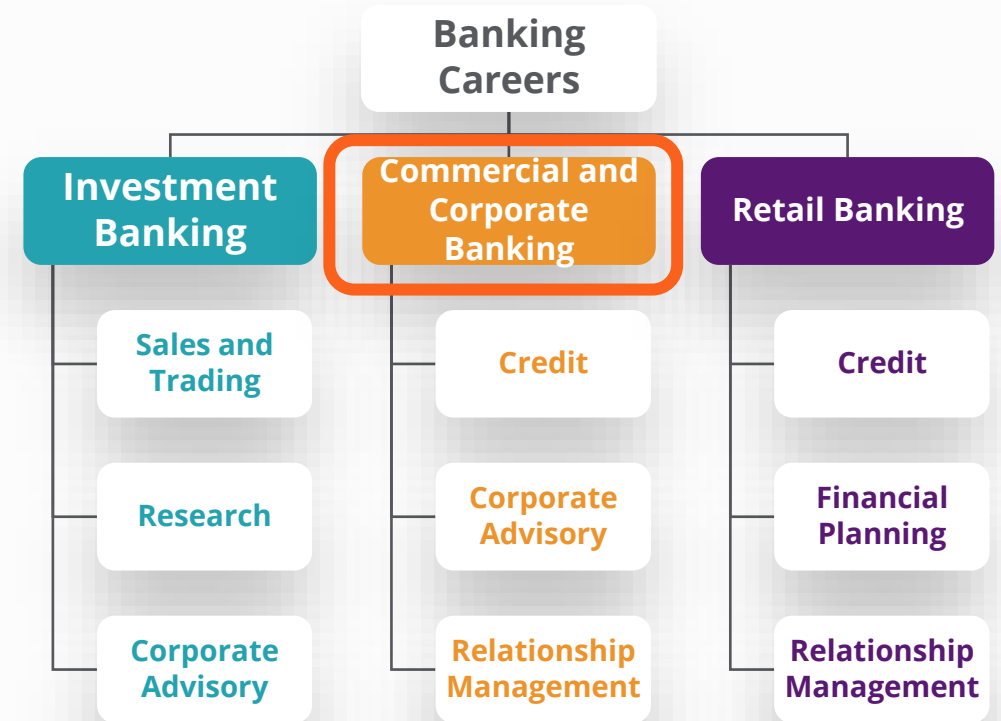
Common career paths:



Credit Analyst



Account Manager



Retail Banking Career

Retail banking provides clients with credit products such as term loans, lines of credit, syndicated facilities, cash management services, and other fixed income products.

They deliver financial advice and solutions tailored to the clients' needs, such as buying new equipment, funding working capital, and day-to-day banking.

Common career paths:



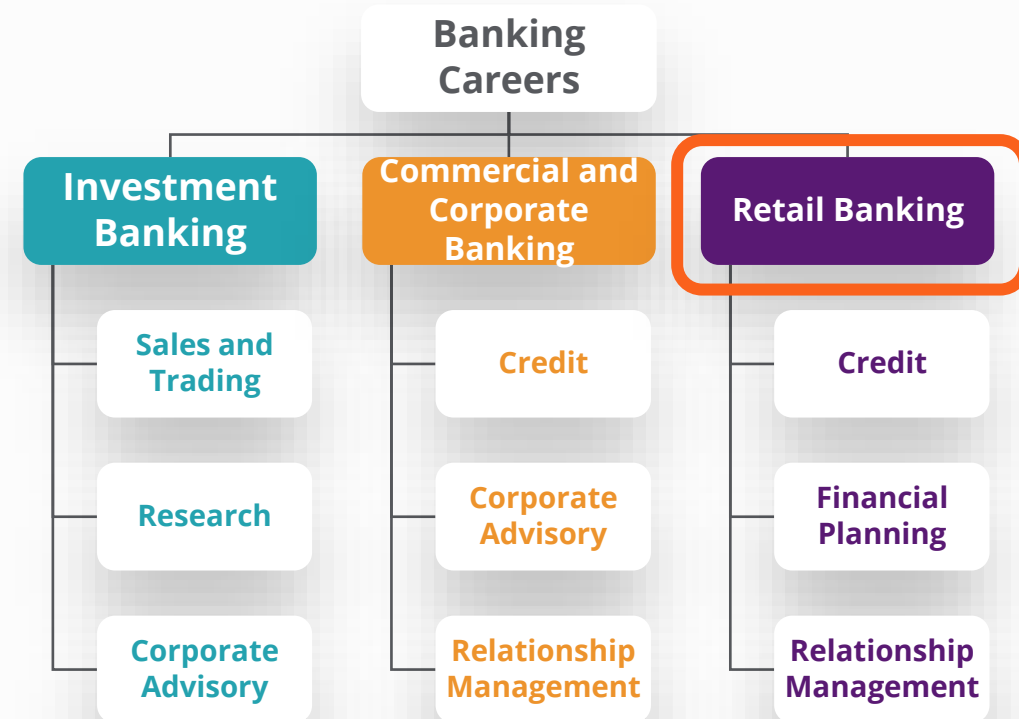
Customer
Advisor



Credit Analyst



Account Manager



Other Roles in Banking – Mid Office and Back Office

Front office:

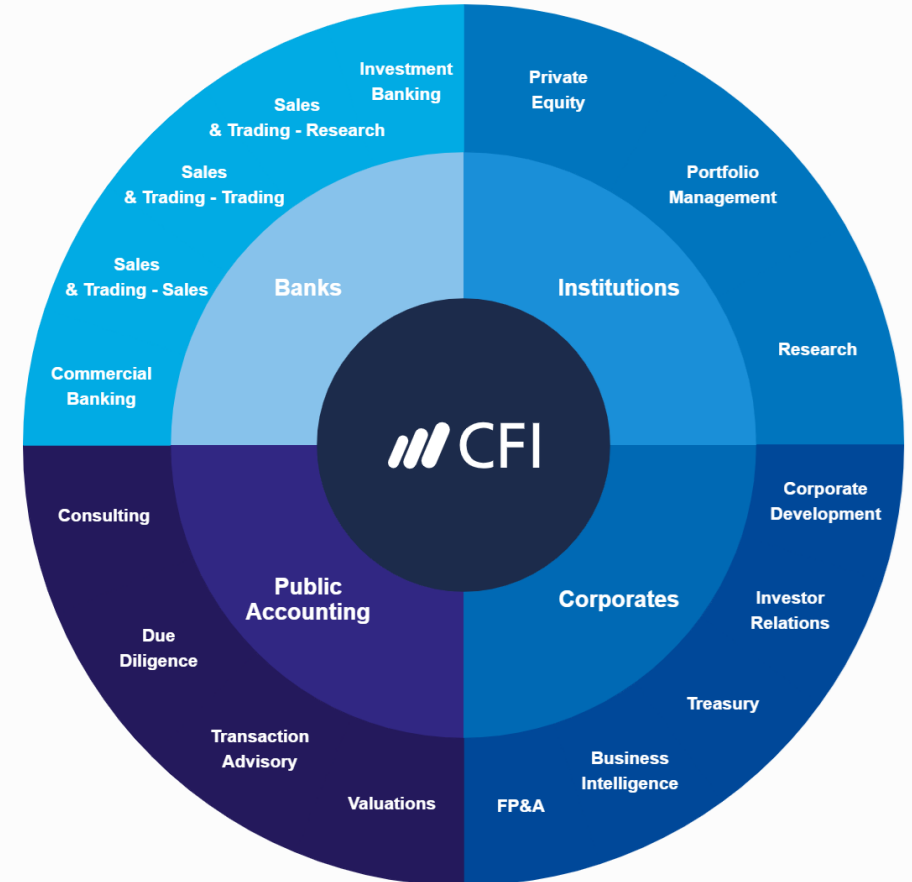
- Client-facing

Middle office:

- Supports the work of front office
- Includes risk management, corporate treasury, internal audit, strategic management, and data analytics

Back office:

- Supports the overall operations of the bank
- Includes financial planning and analysis, regulatory compliance, settlements, and information technology services





Course **Summary**

Course Objectives



Understand the different types/structures of financial services firms



Determine the different types of banking services that are provided



Understand who the customers are for each type of service



Learn how a bank makes money



Differentiate the various banking career paths