1 Deposit-Taking Institutions (DI)

In England, 17th century goldsmiths presented the first known deposits taking institutions. Their notes circulated as media of exchange. Today, deposit-taking institutions are financial institutions, such as banks and near-banks, that are empowered to accept and hold monies from the public.

DI functions are

1. Play a key role in the transmission of monetary policy to the financial markets, to borrowers and depositors.
2. Hold a large share of the nation's money stock in various types of deposits.

1.1 Chartered Banks

To create a Chartered bank, one needs a charter (hence the name). The charter has to pass by the legislative body (both houses). In Canada, the charter has to pass by the Parliament & the Senate (i.e., receive the royal assent) or by letters of patent of the Ministry of Finance. In the U.S. the process of creation of a bank is subject to federal and state laws (more in details later). Originally, Chartered banks were only engaged in commercial lending. They facilitated lending to merchant to finance inventories. For this reason, they are also called 'Commercial Banks'.

Assignment:
Describe the process of the 'Royal Assent'.

Sources of Funds

1. Borrowed funds
   - Equity provided by owners
   - Repurchase Agreement (REPOS)
   - Federal Funds
   - Central Bank Loans
2. Deposits
   - Demand deposits (transaction accounts)
   - Notice deposits
   - Time deposits

REPOS:
The owner of a security borrows funds from a lender and surrenders the security to the lender as collateral. The borrower agrees to buy back the security later at a specific date for a higher price to reflect the addition of interest on the loan.

Demand Deposits:
Non-interest bearing checking deposits held by a chartered bank. The depositor can withdraw the deposits at any time (example: Checking accounts).

Notice Deposits:
Interest bearing deposits that can in practice be withdrawn at any time but in law after a formal prior notice.

Time Deposits:
Interest bearing deposits that must be held at the depository institution for a specific period of time (example: certificate of deposits CD).

For a bank, interest received on its loan is the largest revenue item and interest paid on deposits is the largest expense item.

The following table presents a across country comparison for 1995,

Table 1: A cross-country comparison of the number of banks per residents

Country	Number of 'Banking Offices' per 100,000 Residents
Belgium	1000
Germany/Switzerland	1600
U.S.A.	2500
Japan	2700
Italy/Great Britain	3000
Canada	3891

Source: The Economist (1995, p.62), February, volume 25.

Assignment:
Do these numbers give any indication of a better financial system? How can you explain the difference between Canada and the U.S.? Does that mean that the financial system in Canada is much better than in the U.S.? Explain.

Table 2: World Wide Banks - Ranking by Size.

Note: Figures converted from $US to $CDN using Dec. 31, 1998 closing exchange rate (1.5333).

Asset Rank	Bank	Country (Year End)	Assets ($millions CDN)	Pre-Tax Profit ($millions CDN)	Pre-Tax Return on Assets (%)
1	Deutsche Bank	Germany (12/98)	1,123,194	7,226	0.64%
2	UBS	Switzerland (12/98)	1,051,663	4,534	0.43%
3	Citigroup	U.S. (12/98)	1,025,227	14,212	1.39%
4	BankAmerica Corp.	U.S. (12/98)	947,087	12,340	1.30%
5	Bank of Tokyo-Mitsubishi	Japan (03/99)	918,017	239	0.03%
6	ABN AMRO Bank	Netherlands (12/98)	772,970	5,183	0.67%
7	HSBC Holdings	U.K. (12/98)	743,122	10,106	1.36%
8	Credit Suisse Group	Switzerland (12/98)	726,758	3,129	0.43%
9	Credit Agricole Group	France (12/98)	700,775	5,773	0.82%
10	Societe Generale	France (12/98)	686,221	3,079	0.45%
11	Sumitomo Bank	Japan (03/99)	674,195	-9,666	-1.43%
12	Dresdner Bank	Germany (12/98)	655,119	2,398	0.37%
13	Sanwa Bank	Japan (03/99)	641,491	-8,243	-1.28%
14	Westdeutsche Landesbank Girozentrale	Germany (12/98)	626,157	1,431	0.23%
15	Norinchukin Bank	Japan (03/99)	625,010	1,231	0.20%
16	Dai-Ichi Kangyo Bank	Japan (03/99)	608,220	-8,335	-1.37%
17	Industrial & Commercial Bank of China	China (12/98)	599,847	639	0.11%
18	Sakura Bank	Japan (03/99)	597,119	-8,994	-1.51%
19	Commerzbank	Germany (12/98)	584,738	2,222	0.38%
20	Banque Nationale de Paris	France (12./98)	581,191	2,666	0.46%
21	Industrial Bank of Japan	Japan (03/99)	567,925	-3,263	-0.57%
22	Chase Manhattan Corp.	U.S. (12/98)	560,996	9,169	1.63%
23	Fuji Bank	Japan (03/99)	549,279	-8,461	-1.54%
24	Barclays Bank	U.K. (12/98)	541,818	4,893	0.90%
25	Hypo Vereinsbank	Germany (12/98)	517,024	4,198	0.81%
26	ING Bank Group	Netherlands (12/98)	501,102	1,403	0.28%
27	Fortis Banking Group	Belgium (12/98)	496,125	3,206	0.65%
28	National Westminster Bank	U.K. (12/98)	474,435	5,463	1.15%
29	Paribas	France (12/98)	474,348	2,581	0.54%
30	Bank ofChina	China (12/98)	458,467	652	0.14%
31	Abbey National	U.K. (12/98)	453,483	4,051	0.89%
32	Rabobank Nederald	Netherlands (12/98)	446,732	2,492	0.56%

33	Credit Mutuel	France (12/98)	439,231	1,823	0.42%
34	Bayerische Landesbank	Germany (12/98)	419,606	1,093	0.26%
35	Bank One Corp.	U.S. (12/98)	400,952	6,846	1.71%
36	JP Morgan & Co.	U.S. (12/98)	400,294	2,173	0.54%
37	Landesbank Baden-Wurttemberg	Germany (12/98)	399,501	1,296	0.32%
38	Tokai Bank	Japan (03/99)	387,319	-4,695	-1.21%
39	DG Bank	Germany (12/98)	380,714	619	0.16%
40	Credit Lyonnais	France (12./98)	373,677	902	0.24%
41	Halifax	U.K. (12/98)	368,783	4,348	1.18%
42	Lloyds TSB Group	U.K. (12/98)	368,124	7,691	2.09%
43	First Union Corp	U.S. (12/98)	363,949	6,080	1.67%
44	Groupe Caisse d'Epargne	France (12/98)	361,337	1,365	0.38%
45	Dexia	E.U. (12/98)	356,647	1,703	0.48%
46	Asahi Bank	Japan (03/99)	348,447	-4,818	-1.38%
47	Bankgesellschaft Berlin	Germany (12/98)	338,317	411	0.12%
48	China Construction Bank	China (12/98)	311,438	1,863	0.60%
49	Wells Fargo & Co.	U.S. (12/98)	310,455	5,061	1.63%
50	Groupe Banques Populaires	France (12/98)	291,499	1,662	0.57%
51	Agricultural Bank of China	China (12/98)	291,473	146	0.05%
52	Sanpaolo IMI	Italy (12/98)	284,278	2,945	1.04%
53	Banco Santander	Spain (12/98)	277,282	2,731	0.98%
54	Banca Intesa	Italy (12/98)	274,856	2,226	0.81%
55	**Canadian Imperial Bank of Commerce**	**Canada (10/98)**	**268,823**	**1,527**	**0.57%**
56	Unicredito Italiano	Italy (12/98)	263,314	2,275	0.86%
57	**Royal Bank of Canada**	**Canada (10/98)**	**262,205**	**3,057**	**1.17%**
58	Norddeutsche Landesbank Girozentrale	Germany (12/98)	261,825	676	0.26%
59	KBC Bank	Belgium (12/98)	250,031	1,615	0.65%
60	Zenshinren Bank	Japan (03/99)	244,206	531	0.22%
61	Banca BilbaoVizcaya	Spain (12/98)	239,615	3,005	1.25%
62	**Bank of Nova Scotia**	**Canada (10/98)**	**232,195**	**2,180**	**0.94%**
63	National Australia Bank	Australia (09/98)	229,461	2,711	1.18%
64	**Bank of Montreal**	**Canada (10/98)**	**221,263**	**2,167**	**0.98%**
65	Mitsubishi Trust and Banking Corporation	Japan (03/99)	216,269	-2,282	-1.05%
66	Deutsche Pfandbrief und Hypothekenbank	Germany (12/98)	215,870	494	0.23%
67	Bank Austria	Austria (12/98)	214,909	708	0.33%
68	Royal Bank of Scotland	U.K. (09/98)	204,944	2,574	1.26%
69	Banker Trust New York Corp.	U.S. (12/98)	204,105	-80	-0.04%
70	Banca Commerciale Italiana	Italy (12/98)	202,684	1,584	0.78%
71	Banca di Roma	Italy (12/98)	187,285	653	0.35%

1.1.1 Banks in the U.S.

History
In 1791, Congress issued a 20-year charter to the 'Bank of the United States'. The bank issued paper currency backed by silver and gold. The bank charter expired in 1811. Shortly after, private banks were established and conducted unregulated business. After the war of 1812, in an effort to restore confidence in the banking system in 1816, Congress issued a 20-year charter to a 'Second Bank of the United States'. The second bank collected tax payments for the government and accepted only convertible bank notes. The second bank charter expired in 1836. President Andrew Jackson supported the view of little power to economic concentration. The President pulled the government funds from the second bank and deposited them into politically favored banks. Without the second bank, the states were the only regulatory power to charter banks and the era of 'Free Banking' started. The number of state banks and note issuing exploded. During the following 20 years, many banks were not able to pay Gold and Silver on demand and defaulted. State banks notes became unacceptable as a medium of exchange and confidence in the banking system was shaken. By 1861, the civil war forced the government to borrow from state banks. However, the government would not accept state banks notes as payment. Therefore, the government did set up few national banks that issued the 'Greenbacks' (national banks note that is not convertible on demand). The government accepted only those notes in selling bonds. The greenbacks were declared legal tender. To discourage state bank note issuing, Congress taxed state charted' banks. Many of the state charted' banks converted to a national charter. After the war, the economy slowed and prices declined. The recession resulted in the emergence of two political parties, the 'Greenbacks' and the 'Populists'. The Greenbacks argued a system with paper money, while the Populists supported Gold and Silver coinage. The populists won political victory and the United States moved to adopt the European Gold Standard system by 1900. Paper money was backed by Gold. International Gold flows helped trigger a severe bank panic in 1907. The panic forced Congress to examine the financial system and propose alternatives. In 1913, President Wilson signed into law the Federal Reserve Act. The Federal Reserve took the issue of controlling money out of partisan politics.

The reason for the existence of so many banks in the U.S. dates back to the time of the settling of the West. When pioneers got off the wagon, they set up a general store, a saloon and a bank. The stores and the saloons are gone but the banks remain, protected by state and federal laws.

Size
A comparison between 1934 and 1993 for the total assets of banks in the U.S. reveal a huge size. A 3.7 trillion dollars in assets is a major force in the economy. Banks are very powerful institutions in the U.S.

Table 3: Banks in the U.S.

	Number of Banks' offices	Main Offices	Branches	Total Assets
1934	17,128	14,144	2,984	46.4 Billion $
1993	67,125	10,957	56,168	3.7 Trillion $

Source: Federal Deposit Insurance Corporation FDIC.

In the U.S., banking services, banks source of funds and banks activities are similar to that for Canada. However, a major difference exists in the way banks can open branches.

Branching Restrictions

In the U.S. there are by laws that control the number and the locations of branches a bank can open. Three different branching restrictions dominate these restrictions.

Unit Branching:
Banks are allowed one office as a single entity. Unit branching dominated the banking industry in 1934. Until recently, Texas, Illinois and Colorado applied the unit branching restrictions.

Statewide Branching:
Banks are allowed as many branches anywhere in a specific state. In 1993, forty-one states (including the District of Columbia) applied the statewide branching rule.

Limited Branching:
Banks are limited in the number permitted of branches and in their location. In 1993, 11 states applied the limited branching rule. The states are Arkansas, Colorado, Georgia, Illinois, Iowa, Kentucky, Minnesota, Montana, Nebraska, North Dakota and Wyoming.

The above branching restrictions gave rise to the emergence of 'Bank Holding Companies' (BHC) in 1956.

> Bank Holding Company:
> A bank holding company is an organization (corporation, association) that controls one or more banks in a given country.

The Bank Holding Companies Act of 1956 defined BHC as any organization that owns, controls, holds with power to vote more than 25 percent or more of a banks' voting shares. The Act allowed BHC to circumvent geographic restrictions on branching and allowed BHC to engage in activities not allowed to banks, such as mutual funds sale and loan mortgages. One-bank holding companies (OBHC) resulted to counter activities' restrictions. Multi-bank holding companies (MBHC) resulted to counter branching restrictions.

The Douglas amendment of the BHC Act of 1956 stated that each state must authorize any BHC acquisition of one of its banks. As a result, today there exists no interstate bank throughout the United States. There is no one bank that operates throughout the entire United States.

Bank holding companies (BHC)
BHC were permitted to have offices only in one state (except those exempted through grandfathering) until 1982.
By 1993 only Hawaii prohibited out-of-state holding companies to acquire banks within the state. In 1994, Congress passed legislation to permit interstate banking. The same legislation allows interstate branching, at the states' prerogative (i.e., liberty), as of June 1, 1997.

In 1978, Maine passed a law permitting interstate banking. That law became known as 'Maine Law' and also as 'National Reciprocity'.

> **National Reciprocity**:
> Out of state banks can acquire a Maine' bank if the home state allowed Maine banks to acquire banks in the home state.

In 1982, a wider concept was introduced and labeled as 'Regional Reciprocity'.

> **Regional Reciprocity**:
> Each state in a group of states allows banks from other states in the group to acquire its banks.

By 1990, all but four states allowed at least some cross-border banking purchases.

In 1994, the Riegle-Neal Interstate Banking Act eliminated restrictions on interstate banking.

The following graph presents the status of Interstate Banking in 1993, in the U.S.

The graph is from Clair and Tucker "Interstate Banking and the Federal Reserve: A historical Perspective" Economic Review, Federal Reserve Bank of Dallas, November 1989, pp. 1-20.

The following table reports historical bank failures in the U.S.

Table 4: Bank failures in the U.S.

Year	Number Closed	Insured Deposits at Closing
1984	79	2.3 Billion U.S. $
1985	120	8.1
1986	138	6.5
1987	184	6.3
1988	200	24.9
1989	206	24.1
1990	169	14.5
1991	127	53.8
1992	122	41.2
1993	41	3.1

Source: FDIC Annual Report, 1993.

Assignment:
Are bank failures' procyclical or countercyclical? Leading, lagging or coincident?

Assignment:
Given the banks activities, what is the most important economic variable that influences banks' profits?

1.1.2 Mega: The Consolidation of Financial Institutions

Mergers and Acquisitions

This section investigates and answers the following concerns. What drives the wave of financial consolidation? Is big means better? How does this influence the small customer? How does this influence the efficiency of the financial system? What are the causes and the consequences? To understand the recent wave, one must examine the nature of the causes and classify the participating players in the consolidation.

Recently, in Canada, two bank mergers' proposals were studied and denied. Nine of the ten largest consolidations in U.S. history occurred in 1998. Of these, the largest four were in the banking industry.

The concerns are,

1. Higher fees
   Lower local competition will drive service fees upward.
2. Lower levels of service

Standardization of products and services for easier information sharing will result in lower services.

3. Credit availability
   Lower local competition will restrict credit availability, specifically for small businesses. Usually, smaller banks are the primary source for credit for small businesses. As large banks merge with small banks, who will provide small business with loans?
4. Too-Big-to-Fail
   In the event of a banking crisis, the taxpayers will foot the bill of helping these new mega-institutions.

Table 5: Largest U.S. banking consolidations – Banking Industry - 1998

Citicorp and Travelers
Bank of America and Nations bank
Bank One and First Chicago
Norwest and Wells Fargo

Simply put, the causes that drive the wave of consolidation are,

1. Technological improvements
2. Favorable economic conditions/environment
3. Aiming for a ‘Too big to fail’ status
4. International consolidation of markets
5. The process of financial deregulation

<u>Assignment</u>:
“Technology is the fundamental force driving the merger wave.” Alfred Broaddus, Jr. President of the Federal Reserve of Richmond (1998, p.5). Do you agree/disagree with this statement? Why?

The objectives depend on the type of the economic agent,

Table 6: The Objectives of Consolidation by Economic Agent Type

Economic Agent	Objectives
Participating Financial Institutions	• Maximize shareholder value • Maximize profits • Maximize own-efficiency • Empire-building.
Government	• Maximizes the financial system-efficiency, safety and soundness • Prevents the exploitation of ‘Too big to fail’.
Consumer	• Access to broader range of services • Lower fees • Deposit insurance protection.

Participating financial institutions focus on increasing their market power then setting the price, earning a higher market share and consequently maximizing shareholder value. The government looks at the consolidation from a broader view. This view includes the public general interest and the efficiency and the well being of the financial system.

In general terms, Berger et al. (1998) concluded that financial consolidation results in,
1. Increases in market power
2. Improvement in profit efficiency
3. Improvement in risks diversification
4. Relatively little effect on the availability of services to small customers
5. Improvement in the payment system efficiency.

1.2 Near Banks

Near Banks compete with chartered banks for the collection of deposits and the provision of financial services. By spreading the yield changes from the money market to the rest of the financial system – especially to mortgage lending and term-deposit markets – they are a vital part of the transmission process of monetary policies. Most near banks are relatively specialized in their operations because of laws. Trust companies and loan companies cannot engage in commercial lending. All near banks but trust companies cannot perform trustee' business. Credit unions by creation are local entities that do not compete in international markets as banks.

As time goes by, near banks are becoming less specialized and existing barriers to the terms of operations are being removed.

1.2.1 Trust Companies

Trust companies are the banks' main competitors for deposits. Trust Companies were established initially because corporations and banks were denied to act as trustees or fiduciaries. Trust companies are established to manage others' money.

By law, Trust Companies alone may act as trustees, such as administrators for an estate or deceased person, or for the distribution of stock dividends. Trustee became powerful and known as 'Finance Department Store'.

The functions of a 'Trust Company' are
1. Intermediation function
2. Fiduciary (trusteeship) function.

The latter function mean to administer assets the company does not own, such as estates, trusts and business agencies (ETA function).

There is no limit on ownership of a trust company. One person can own the entire stock of a trust company. This unlimited ownership clause gave rise to problems such as conflict of interest between depositors and owner.

USA
The first trust company was established in 1820.

1.2.2 Mortgage & Loan Companies (M/L Co)

Mortgage and Loan companies surfaced in 1850s. Originally, they were established as co-operative 'Building Societies' in which members pooled their savings so that each member (in turn) could borrow to build a house. The term 'Building Societies' is still in use in the U.K. the birthplace of the M/L companies. Their functions were to acquire land, build homes and develop farms. M/L companies cannot engage in estate, trust and agency business (ETA).

'George Bailey' in the movie 'It is a Wonderful Life' was working out of a M/L company. Guess what was the type of the company?

1.2.3 Thrift Institutions

(Savings and Loan Associations (S&L Assoc.), Mutual Saving Banks (MSB))

The main function of thrift institutions is to provide individuals with saving accounts and mortgage loans. By 1980, S&L associations made 90 percent of the thrift market and the MSB made the remaining 10 percent.

Loans by thrift institutions are made to

1. Mortgages (90 percent of all lending)
2. Consumer and commercial (more types of lending were allowed after 1980)
3. Security holdings (specifically in government securities)
4. Service companies
   Thrift Institutions own these companies to provide services for the thrift, e.g., to collect mortgages and to do the paperwork. By law, thrifts are allowed to invest only 3 percent of total lending in service companies.

1.2.3.1 Saving & Loan Associations (S&L Assoc.)

S&L Associations are self-financed service to the public. They acquired funds by offering the following

1. Savings Accounts: The depositor must wait for 30 days before withdrawing funds
2. Certificate of Deposits (CDs)
3. NOW: A negotiable order of withdrawal is a checking account at S&L.

4. Brokered Deposits:
   Brokered deposits are raised by paying a broker a fee and higher interest to the depositor. Given that S&L must pay higher interest on deposits to attract depositors, they engaged in riskier projects that promised higher returns.
   One of the main reasons for the S&L crisis was the brokered deposit.

Early on, S&L were not permitted to accept business firms deposits. Today, S&L are allowed to offer a range of time deposits, money market deposits accounts (MMDAs) and certificate of deposits (CDs).

Ownership and Type
In the U.S. at the moment of its creation, S&L could seek a federal charter or a state charter. If the S&L seeks a federal charter then it must be a mutual-type S&L. If the S&L seeks a state charter then it maybe mutual-type or stock-type S&L.

A mutual-type S&L is owned by savings accounts holders.
A stock-type S&L is owned by the shareholders, not by the depositors.

Branching
Multi-branching S&L Associations are prohibited only in Montana and West Virginia.

U.S. Regulations
Supervision
S&L Associations are subject to the supervision of the 'Federal Home Loan Bank Board (FHLBB)' system. Membership to the FHLB is mandatory to federally charted S&L. For state charted S&L membership is optional.
Insurer
S&L companies are insured by the 'Federal Savings and Loan Insurance Corporation (FSLIC)'.

1.2.3.2 Mutual Saving Banks (MSB)

The history of saving banks can be traced to the early 1800s. Savings banks used to be required to invest deposits in government securities only. Regulations focused on MSB activities after the Great Depression. Later on, MSB fell under the regulations (supervision and insurance) of the FDIC.
In 1984, the number of mutual saving banks reached 460 in the U.S. They offered interest bearing negotiable order of withdrawal (NOW) accounts and saving deposits to the public. They acquire assets in form of residential mortgages.

U.S.
Mutual saving banks are exclusively charted by state governments. A self-perpetuating board of trustees manages them. Initially, mutual saving banks were permitted to hold limited amount of business demand deposits. They were also permitted to make limited

amount of loans for incorporated businesses. Nowadays, the deregulation of the financial market relaxed this restriction.

Mutual saving banks are insured by the Federal Deposit Insurance Corporation (FDIC) in the U.S. and by the Canadian Deposits Insurance Corporation (CDIC) in Canada.

1.2.4 Credit Unions (CU) "The People's Bank"

A CU is a member-owned, not-for-profit, independent financial institution that is accountable only to its members. The members deposit funds in the CU and determine its lending and investment policies. Voters hold a share and elect board of directors. To become a member, one has to be a depositor. Once a member, the membership entitles a voting right to reflect ownership. Eligibility to membership is based on town, University or cultural society. CUs are DI composed of members who share a common bond. The bond is based on similarity of occupation, religious affiliation or geographical location of its members. In many cases, Credit Unions allow a perpetual membership even if the common bond is broken (e.g., loss of employment, change of occupation). Today, the common bond restriction is removed from most of the existing CUs; they are simply co-operative banks.

In its original form, CUs do not engage in commercial lending. Its main activity is life-insured loans to members. In general, non-deposits sources at the CU are virtually negligible. Today, some credit unions offer safety deposit boxes, travelers' cheques, and foreign exchange.

Deposits at CU are of two types

1. Demand Deposits
   Demand deposits make 20 percent of total deposits. Demand deposits are called 'Draft Accounts'. Members can write drafts to provide immediate payments.
2. Time Deposits
   Time deposits make 80 percent of total deposits. Time deposits are called 'Share Accounts' to reflect the ownership role of each member.

Loans by CU are,

1. Consumer loans (half of total loans are for members)
2. Mortgage loans (25 percent of total loans)
3. Assets in treasury instruments (25 percent of total loans)

DI that emphasizes saving and lending at a local level. In its original form, CUs do not engage in commercial lending.

U.S.

By the end of 1994, there was 17,000 Credit Unions. 75 percent of that number was based on common occupation. CUs are subject to the uniform reserve requirement.

CUs are state or federally charted under the Federal CU Act of 1934. Federal CUs are not required to receive NCUA approval before opening a branch. State CUs require state authority approval before opening a branch.

The 'National CU Share Insurance Fund' founded in 1970 insure federally charted and many state charted CUs. The fund is administrated by the 'National Credit Union Administration (NCUA)'. Shares in some state CUs may be insured by state or state-authorized insurance funds.

Size of DI in the United States
Total DTI in the U.S. numbered 23,000 at the end of 1996. Banks were 9,500 at the end of 1996. Banks' assets were ten times larger than Credit Unions. Credit Unions numbered 11,500 at end of 1996. Thrift institutions were reduced from 3,700 in 1986 to 1,900 in 1996 (because of failures, mergers and takeovers)