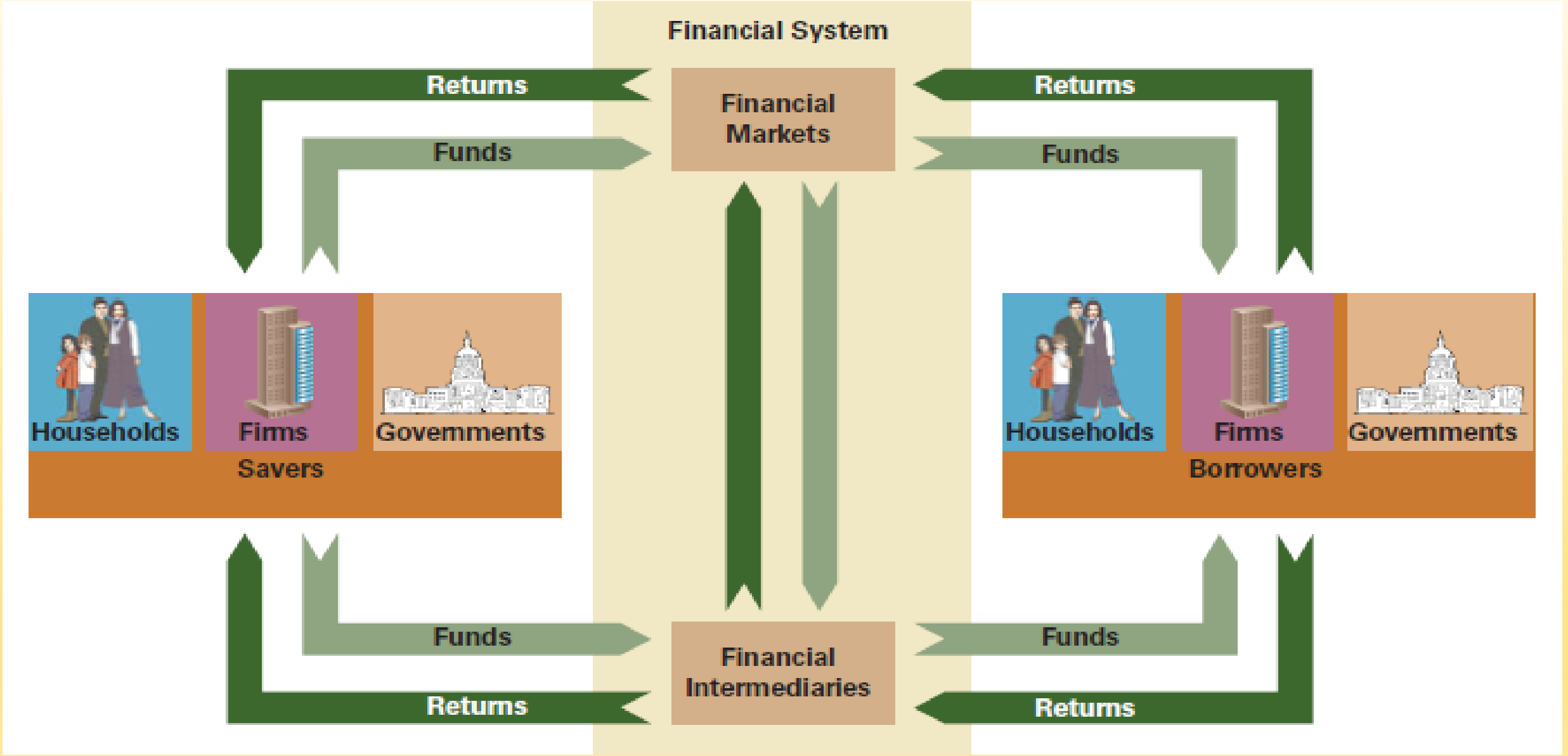
Financial System, Money and Commercial Banking

- A financial system consists of **institutional units** and markets that interact, typically in a complex manner, for the purpose of mobilizing funds for investment and providing facilities, including payment systems, for the financing of commercial activity.
- An **institutional unit** is an entity, such as a household, corporation, or government agency, that is capable in its own right of owning assets, incurring liabilities, and engaging in economic activities and transactions with other entities.
- **Source: https://www.imf.org/external/pubs/ft/fsi/guide/2006/pdf/chp2.pdf**

Financial System: An Overview



Source: Money, Banking, and the Financial System By R. GLENN HUBBARD and ANTHONY PATRICK O'BRIEN

Monetary transmission mechanism (MTM)

- The **MTM** describes the 'mechanisms' by which monetary policy affects economic conditions, such as interest rates, output, employment, and inflation.
- Given the central bank's policy objectives and the current and expected future state of the economy, the central bank chooses a policy (e.g. short-term interest rate target) and implements it through central bank operations.
- The policy actions affect financial variables (such as asset prices, exchange rates), which in turn affect macroeconomic behavior (for example, the behavior of consumption, investment and net exports).
- The monetary transmission mechanism can be studied through the lens of our AS-AD framework.
- **Source: Samuelson, Economics, 19th Edition**

Money & Financial System

Barter vs monetary economy

- Barter: Exchange of goods/services for goods/services Inconveniences: double coincidence of wants, limited size of the market, specialization in production limited by the size of the market. Need for n (n-1)/2 relative prices.
- Introduction of money: splits exchange into M-> goods/services -> M, no need for double coincidence of wants, lubricates the mechanism of exchange, widening the size of the market, need for only n-1 prices if there are n goods including money.

Money

- **Definition of Money:** Anything which serves as a medium of exchange!
- **Evolution of various forms of money**: commodities, paper, bank money, plastic money, traveler cheques, digital money, etc.
- **Functions of money:**
  - **Medium of exchange**
  - **unit of account,**
  - **store of value,**
  - **std of deferred payments.**

Qualities of good money/ desirable properties of money:

1) **Scarcity**
2) **Acceptability**
3) **Divisibility**
4) **Durability**
5) **Intrinsic value**
6) **Easy to handle**
7) **Minimum resource requirement for its production**
8) **Controllability by the Central Bank:** The monetary authority/ central bank should be able to control supply of money as the supply of money is determines other macroeconomic variables, like interest rate (and therefore, growth rate) exchange rate, inflation rate, etc.

Graham's Law and Intrinsic Value of Money :

- Gresham's law: Bad money drives good money out of circulation. Everyone wants to dispose of bad money and hold on to good money and therefore, in effect it is only the bad money which circulates.

- **NOTE: IF INTRINSIC VALUE (MARKET VALUE) OF A COMMODITY WHICH SERVES AS MONEY IS GREATER THAN ITS FACE VALUE THAN SUCH A MONEY WILL BE DRIVEN OUT OF CIRCULATION.**

Measures of Money Stock/ Money Supply:

Narrow money (currency + demand deposits): M1 in India

Broad money (narrow money + time deposits: M3 in India

TABLE 40 : COMPONENTS OF MONEY STOCK (₹ ThousandCrore)

Year	Currency in Circulation	Cash with Banks	Currency with the Public (2-3)	'Other' Deposits with the RBI	Bankers' Deposits with the RBI	Demand Deposits	Time Deposits	Reserve Money (2+5+6)	**Narrow Money (4+5+7)**	**Broad Money (8+10)**
1	2	3	4	5	6	7	8	9	**10**	**11**
2010-11	950	38	912	4	424	723	4866	1377	**1638**	**6504**
2011-12	1067	44	1024	3	356	711	5647	1426	**1737**	**7385**
2012-13	1191	50	1141	3	321	753	6492	1515	**1898**	**8390**
2013-14	1301	55	1246	2	430	812	7458	1733	**2060**	**9517**
2014-15	1448	62	1386	15	466	892	8258	1928	**2292**	**10550**
2015-16	1663	66	1597	15	502	990	9015	2181	**2603**	**11618**
2016-17	1335	71	1264	21	544	1397	10110	1900	**2682**	**12792**
2017-18	1829	70	1760	24	566	1484	10695	2419	**3267**	**13963**
2018-19	2137	85	2052	32	602	1627	11722	2770	**3710**	**15432**
2019-20	2447	98	2350	39	544	1738	12674	3030	**4126**	**16800**

Commercial Banking and Money Supply

- “Creation” of money is an important function of commercial banking.
- Banks provide financial services to the depositors with number of financial instruments. Among these the creation of ‘**bank money**’ is the most important.
- Banks vs Non-bank financial intermediaries (NBFCs):
- Banks issue cheques and hence can create bank money. The NBFCs cannot
- The balance sheet of the commercial has an item on the asset side called ‘**reserves**’. These are funds or assets held by the banks as cash.
- Banks need to maintain ‘**reserves**’ for two reasons:
- To meet daily cash withdrawal requirements.
- To meet ***legal reserve requirements***.

- The purpose of legal reserve requirements is to enable the Central Bank (RBI, in India) to protect depositors and to control credit creation/money supply.
- Since the withdrawals in a day are generally lower than the deposits on that day, banks have ‘excess liquidity’ which they can use for the purpose of creating credit.
- The Process of Deposit Creation/ Fractional Reserve Banking
- The Central Bank of a country decides the reserve ratio of the banking sector.
- The currency plus bank money is the money supply.

The Process of Multiple Creation: Credit Multiplier

- Let's assume the reserve requirement to be 10 per cent i.e. Rs 10 out of every Rs 100 of new deposit is kept aside as reserves.
- Each bank is limited in its ability to extend loans and investments. It can lend only $9/10^{th}$ of deposits received.
- The entire banking sector can, however, lend 10 times the deposit received.
- Bank A receives Rs 100/- as new deposit, it keeps aside Rs 10/- as reserves and lends out Rs 90/-. (r = .1 or 10 %)
- This Rs 90/- gets deposited in Bank B which in turn keeps Rs 9/- and lends out Rs 81.
- This Rs 81/- gets deposited in Bank C which in turn keeps Rs 8.1/- and lends out Rs 72.9/- .
- This chain finally takes the following form.
- Rs 100 + Rs 90 + Rs 81 + Rs 72.9 ……
- = Rs 100 $[1+ 9/10 + (9/10)^2 + (9/10)^3 ….]$
- = 100(1/0.1) = 100(1/r) = Rs 1000. Credit Multiplier = (1/r)
- Primary deposits (100) + Secondary Deposits (900) = Total Deposits (1000)

Credit Multiplier

- Thus the banking sector as a whole can create money ten times their initial (primary) deposits, if reserve ratio is 10 % .
- The ratio of total deposits (primary + secondary) to the reserves is called the money-multiplier. In the above example
- **Credit multiplier = 1/required reserves = 1/0.1 = 10**
- **Leakages in the credit creation process.**

Leakages in the credit creation process.

- Not every individual who receives loan from Bank A will deposit it in another bank. Suppose Rs 10/- leaks out thus then the total money creation will be 90*10= Rs 900/-.

- Banks may keep more than the required legal reserves. Suppose banks decide to keep 12 per cent of the new deposits as reserves rather than 10 per cent; they would be able to lend only Rs 88 and this would hamper credit creation.

Happy Diwali to You!