chapter one

CHAPTER 1

The modern studies of the financial intermediation have shown that a large percentage of all financial transactions must have some kinds of financial intermediation .

To start with, it is of much importance to define the concept of financial intermediation in order to have a clear picture of its functioning and features.

"Financial intermediary creates and distributes new financial claims upon itself".[1] This alteration of the nature of the financial claim is the concept of what we call intermediation.

They act as conduits to the financial markets and provide for the private distribution of financial claims outside the public markets.[2]

To be more clear about the definition of the "Financial Institutions",or "Financial Intermediaries" we can say that they are "investment intermediaries linking the savers and the users of funds".[3] These institutions are interposed between the ultimate borrowers and ultimate lenders to acquire the primary securities of the borrowers and provide other securities for the portfolio of the lenders.[4]

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1. Ghamphell, Tim S. Financial Institutions, Markets and Economic Activity, p. 246
2. Grant, A.T.K,: A Study of The Capital Market in Post-War Britain-London 1973 p. 183
3. Gurlay, J.G and Shaw E.S : Money in A Theory of Finance, Washington 1960 pp. 93-94
4. Gurlay, J.G and Shaw E.S,: Financial Structure and Economic Development

Since our thesis mainly concentrates on the role played by the financial institutions in the economic development of Jordan, it is also of much importance to show what is meant by economic development.

A rise in national income and per capita output, a rise in the per capita availability of capital resources, improvement in skills, efficiency, earning power of labour, development of means of production, transportation, and communications and a rise in the standards of health and education. ... is what we understand by economic development. In this wider sense, they include commercial and cooperative banks too. We are going to use the term in its wider sense so as to cover all types of financial institutions including banks.

Theoretical Framework:

Financial intermediation is a process by which the funds from the savers are collected and made available to the investors. Therefore, financial development consists in the develolpment of financial assets, institutions and markets . Economic development consists in the development of income (GNP) and technology.

Any study of financial development in a developing economy like that of Jordan, has to take into account the relationships that exist between the growth of income and technology and the growth of financial assets, institutions and markets. In the process of development, as the money - income grows the money saving or investible resources tend to increase in the economy since consumption will not absorb

the entire increase in income.

The increased demand for domestic industrial goods provides an opportunity for the domestic industrial investment to expand, and their own resources may not be enough for any large scale expansion. Even if the total savings in the economy are enough to finance the large scale industrial activities, the mobilisation of the scattered, small savings by the individual investors may prove to be costly and risky. Thus there emerges a new class of savers who may not invest directly and a new class of investors who may not be able to save enough, leading to a "division of labour between savings and investment" in the economy.

The modern society is organised on the basis of division of labour and money exists as a medium of exchange and the financial activity takes place due to division of labour between savers and investors.

Finance and Economic Development :

For mobilising the economic surplus to finance the economic development, we have two techniques in hand: Domestic finance and Foreign Finance.

The Domestic Finance provides a way to mobilise domestic savings and use them efficiently for alternative investment projects. The main factors of this technique are:

1. High degree of specialisation between investors and savers,and between savers and intermediaries.
2. Sufficient amount of decentralisation and specialisation in decision making.

3. Provision of the private savings through security markets and intermediaries to both private and governmental uses.

The process of domestic finance comprises of two principal sub-techniques : Self finance and taxation.

The process of self finance takes place within the business units itself. The investing unit for finance relies on its own internal resources. There may be depreciation funds or undistributed profits and surpluses. The experience has shown that the internal sources have been important in the expansion of modern corporation.

On the other hand, governments may finance their investments through taxation and inflation (a fiscal device) ; however, inflation is not considered nowadays as a proper instrument to mobilise resources as it is eventually self defeating.

In the process of foreign finance, saving and investing units are different. Since the savings take place outside, the sources are,therefore, transferred through financial techniques from saving units to investing units.

Financial techniques involve various methods of creating debt-asset system. It is an outcome of division of labour between savers and investors. The problem of mobilising the savings and channelling them into various directions is accomplished essentially through the marekt mechanism, and the market rate of interest is the regulator of the volume and directions of investment.

Economic Development and Financial Accumulation:

Financial accumulation means accumulation of financial assets and debt. It takes place along with the accumulation of capital. "During economic development, as their incomes per capita increase, countries usually experience more rapid growth in financial assets than in national wealth or national product". That is, during the course of economic development, ratio of finantial assets to national income and wealth will rise; such was the experience of the advanced countries[5].

Financial Development and the Division of Labour:

Financial development depends upon the division of labour which can occur only in the context of real development. Finance is associated with the division of labour in the following three ways:

1. Division of labour in production in the modern economic society involves exchange of factors of production and output, which in turn implies use of money..... it seems as a general rule that money-income ratio during the economic developmenmt will increase at a diminishing rate and then reach its secular peak.
2. Finance is also associated with division of labour between savers and investors. Savers give up their claims on consumption and become ultimate lenders, and investors receive these resources and use them for the

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5. Raymond W. Goldsmith : Financial Structure and Economic Development, Yale University Press, 1969 p. 44. John G. Gurly and Edward E. Shaw Opt. P.258.

accumulation of real capital and they become the ultimate borrowers. This will lead to issue of primary securities by ultimate borrowers or investors and to acquisition of financial assets by ultimate lenders or savers. During the economic development, when division of labour between saving and investment becomes more complex, rate of finacial accumulation exceeds the rate of growth of national income and wealth. That is, primary security issue - income ratio will rise and when the institutional evolution approaches its limits, issue - income ratio would get stabilised at a higher level.

3. There is a division of labour which promotes growth in quantity and variety of financial assets and financial intermediaries enter in between ultimate lenders and ultimate borrowers. Financial intermediaries collect savings and pay deposit rate to savers or ultimate lenders.

Financial intermediaries assume responsibility for allocation of savings and they charge rate of interest from the borrowers. Therefore, different types of division of labour lead to different forms of financial developments.

Financial Development : Theory and Process:

We can understand the importance of the relationship between financial development and economic development, from the theory of finance developed by Gurely and Shaw[6].

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6. John G. Gurley and Edward S. Shaw: Money In A Theory of Finance

The study which they have developed explains how financial assets and debts accumulate during the process of development and how financial institutions and financial markets facilitate financial development and through that the economic development. John G. Gurley and Edward S. Shaw have shown the importance of financial development as follows:[7]

Rudimentary Finmancial System:

The important characteristics of rudimentary financial system are as follows:

1. Three sectors economy : Consumer, business and government. They are non-financial spending units.
2. Only one asset in the economy, that is, money.
3. Three markets economy: Labour, current output and money.
4. Money is issued by the government monetary system.
5. Buying of goods and services by the consumer sector is the expenditure of that sector and it gets income by selling services to other sectors.
6. Business sector consists of small business firms, and holds tangible wealth (i.e.) stock of capital and money balances as their only financial assets.

To explain the above we can say that the reason why it is difficult to achieve a satisfactory rate of growth of real output in the rudimentary economy is because prevailing immature financial system in the rudimentary

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7. Much of the following text is based on a part of the text from John.G.Gurley and Edward S. Shaw: Money in a Theory of Finance. The Brookings Institutions, Washington, D.C. 1960

economy is itself an obstacle to economic progress as it puts heavy constraints on the growth of the real output and the existence of such immature financial system does not stimulate saving and investment, it becomes obstacle to rapid economic progress in the rudimentary economy .

If capital formation is to take place in the rudimentary economy, there must be domestic savings to finance it, as Government sector does not have any income, domestic saving must come from the private sector; consumer savings along with some business savings also directed to increase in money balances, necessarily flows to Government sector, and only business savings not allocated to real money balances is available for private investment and it is the only source of private investment.

If we take the possibilities of savings flow to investment, we can see that there are two channels for the flow of savings to investments in such economy. Each firm allocates its savings to investment to the extent of excess of saving. Our real money balances and all the savings by the consumers and firms that is allocated to the accumulation of real money balances flow to the Govt. Sector. There will be no market where firms can compete for private saving and there will be no mechanism for collecting and pooling savings of the spending units to finance investment on large scale. Thus financial system under such economy is inefficient since it does not provide the array of financial assets that will stimulate saving and allocate savings competitively to investment.

Monetary and Non-Monetary Financial intermediation:

Financial intermediaries play an important role in the saving and investment process. They are called financial intermediaries because primary securities are their principal assets, and their principal function is to purchase primary securities from the borrowers and issue indirect debt for the portfolio of the lenders.

Financial intermediaries can be classified into two groups, monetary and non-monetary intermediaries.

First group such as Central Bank of the country Commercial Banks, purchase primary securities and create money, whereas the second group such as insurance organisations, cooperative institutions, financial and investment companies and other specialised financial institutions, perform the intermediary role of purchasing primary securities and creating non-monetary claims on themselves.

Capital Formation:

The main feature of the capital formation is the transfer of "a part of the society's currently available resources to the purpose of increasing the stock of capital goods as to make possible an expansion of consumable output in the future"[8].

This means that there are three inter-related activities in the process of capital formation:

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8. Nurkse Ranger: Problem of Capital Formation in U.D.Cs, O.U.P. 1952 p.1

1. Real savings will tend to increase in order to use the resources(which would have been used for consumption) to be used for other purposes.
2. Mechanism of credit and finance which ensures continuous flow of resources to investors.
3. The act of investment itself in order to use the resources for the production of capital goods[9].

Therefore, the financial institutions help in promoting the process of capital formation by bringing together the supply of savings and the demand for investible funds[10]. Since all the three acts of capital formation, (i.e.) savings, finance and investment, are inter-related, the actual amount of capital stock formation will depend on how efficiently these operations are carried out.

Thus capital formation, as one of the important factors which affect the economic growth, is considered now by all as the major factor of much importance in the process of economic growth[11]. This however, not to undermine the importance of other factors. Economic growth is regarded as a direct function of the rate of capital formation. The history of all the advanced countries shows that their period of expansion have been always characterised by the high rate of capital formation.

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9. Mair Gerald M & Baldwin Robert E.: Economic Development Theory, History and Policy, Indian edition 1964. p. 343

10. Joshi, M.S : Financial Intermediaries in India, University of Bombay, 1965 P.17

11. U.N.O.: Measures for the Economic Development of U.D.Cs. 1961 P.35

Services Provided by Financial Intermediaries:

To begin our discussion on the services provided by the financial intermediaries, we can put one question as follows: What benefits do intermediaries offer to the economy which lead to some markets being dominated by intermediaries and not by others?? or the question may be put in the following form: Why the services of a financial intermediary are needed? The answer to either question is the explanation of the services which the intermediaries do offer to the economy.

1. Diversification of the Portfolio Components:

All the participants in the financial market are interested in reducing the risk through diversification. By choosing a portfolio of investment rather than investing all the sources in a single asset, the total risk that an individual is exposed to can be reduced. The portfolio theory suggests that individuals who have no special knowledge should choose a portfolio which closely approximate the market as a whole.

The shortcoming of this function is that it does not take into consideration the fact that it is costly to buy and sell securities in order to construct such a diversified portfolio. But here comes the role of the financial intermediaries; as they can economise on such costs by providing diversified portfolio for their customers. The financial intermediary pools the funds of a number of investors and acquires a large diversified portfolio. Then it sells claims on the entire portfolio of

assets to indsividual investors. This is more profitable because intermediaries find it less costly to construct a large diversified portfolio and sell small portions of it than would individual investors if they had to construct their own small diversified portfolios.

2. Intermediation Between Maturities:

Financial intermediaries are engaged in borrowing short and lending long. This means that they accept funds from investors who wish to lend their funds for a short period and lend these funds to borrowers who wish to borrow for long period. By doing this, financial intermediaries bear the risk of fluctuations in short-term rates; moreover, the risk involved is not a risk that can be reduced by diversification. The risk borne by an intermediary which borrows short and lend long is the risk that nominal short-term interest rates will rise, and it will have to match these rates in order to retain its funds. The intermediary can perform this function very efficiently, but it must be able to generate some kind of economies by specialising in lending long and borrowing short for large number of borrowers and lenders. These economies come from first individuals who supply funds in small amounts and who cannot easily estimate the risks involved. Second they are able to package short-term liabilities and long term loans in economical units.

Therefore, they find it efficient to utilise the services of the intermediaries in this regard as they are specialised in this function and they are better able to

assess these estimates.

3. Information Production:

One of the important services financial intermediaries can offer to the economy is the production of information about the value of assets. They are not the only type of information producers in the financial markets. The news media, brokerage houses, bond rating agencies..... and others do exist and operate but financial intermediaries do have resources to collect information, procuring and analysing them to find out facts and opinion about the future profits and performance of the firms they finance. The unique aspect of the financial intermediary as an information producer is that it does not re-distribute information to the market as a whole, rather they collect information and use it to guide the investment decisions it makes for those who supply it with funds.

Financial intermediaries also provide other services to the market which goes side by side with their production of information. They are receipients of information from corporate borrowers who seek to protect confidentiality of their information. Firms which seek to protect such confidential information will find it advantageous to finance their activities from internal funds if they can, otherwise, they will find it advantageous to go to sources of financing where the information they have can be revealed in order to secure financing but where confidentiality will be protected. Therefore, financial intermediaries sell financing as well as protection of

confidential information.

4. Mobilisation of Savings:

Financial institutions, or intermediaries are the best instruments in mobilising the surplus funds of the savers by offering them financial claims which are different from the usual primary securities and stocks.

Since the prime consideration for the saver is liquidity, (i.e.) obtaining his funds quickly, along with little risk or loss, financial intermediaries serve in order to provide a higher degree of liquidity to those who prefer to hold liquid money. The financial intermediaries increase the liquidity of securities by standing ready to lend on them, and they create liquidity for savers by issuing to them claims that are more liquid than the securities held by the intermediary. Another interrelated aspect in this connection is that in underdeveloped countries, savings are institution elastic, being responsive to the stimulus of new saving facilities provided by the financial intermediaries, and as a result, the financial intermediaries are able to pool the scattered savings of the public and use them for the purpose of productive investment; when the aggregate output is rising, financial intermediaries can raise the rate of saving by raising rates of interest offered on deposits[12]. In turn this would further raise the incomes of sources, and at least part of it would be expected to flow back to the financial intermediaries as deposits. Normally

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12. Goyal,O.P : Cost for flexible and Realistic Rates of Interest Sourthern Economist Bangalore - August 15, 1970 P.P. 49-52

when the level of savings rises, the level of investment would also go up.

5. Liquidity Management:

One of the most important services, financial intermediaries offer to the economy, is the liquidity management, by offering their customers access to their portfolios with little cost [13].

The reason why financial intermediaries can prosper is because they can offer economies in the costs of transacting to their clients. Since the intermediary is offering this service of providing liquidity, it is thought to be worth discussing the basic approaches to deal with this problem.

As it is known that the main source of profit for the financial intermediaries is from investing in assets which are often not highly marketable, as in the case of commercial Banks, as they cannot sell their loans in secondary market.

Therefore, intermediary has three basic techniques to deal with this problem.

A. First technique is to liquidate existing assets, but this will be a costly affairs if no active secondary market has developed, and the decision on how should be the holding of liquid assets such as Treasury Securities depends upon the costs of holding these securities. The maintenance of reserves of liquid

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13. Ghamphell, T.S.: Financial Institutions, Markets and Economic Activity, McGrow - Hill Inc 1982, P.P 267-270

assets has been the traditional instrument used by financial intermediaries to deal with the liquidity problem, and it is called asset management, because the decision is one of how to split assets between the less and more liquid forms.

B. Second technique is to borrow funds from the money market in the form of short-term funds to satisfy cash requirements, and the risk that the intermediary may bear in depending on the money market is that the cost of obtaining funds in the money market may be high at times when cash flows are most favourable.

C. The third technique available for the intermediary to deal with the problem of liquidity management is the ability to lodge some of the risk involved in the other techniques by using the futures markets.

Types of Financial Intermediation:

As the definition of the financial intermediaries indicates that their principal funtion is to purchase primary securities from the borrowers and issue indirect debt for the portfolios of the lenders. Broadly, we can classify the intermediaries into two groups. Monetary and non-monmetary. The monetary intermediaries, such as Central Bank of a country and commercial banks, purchase securities and create money and by doing this they administer the payment mechanism, the non-monetary intermediaries, such as insurance companies, cooperative institutions, financial and

investment companies and other specialised financial institutions, perform the role of intermediation by purchasing primary securities and creating non-monetary claims on themselves in the form of savings deposits, shares and equities and other obligations.

Survey of the Empirical Literature:

Many economists who are specialised in the field of the fundamental issues involved in the relationship between finance and growth in developing countries, have provided us with a fairly complete and comprehensive review of the theoretical literature. But, there is actually no corresponding survey of the empirical literature[14]. Therefore, it is of much importance to discuss the empirical studies to find out how far can be applied for developing countries with special reference to Jordan.

1. Financial Represession and Financial Deepening:

R.W. Goldsmith[15], I.M.D.Little[16] and A.Roe[17] have defined the financial interrelations ratio as the ratio of a set of financial assets to the total wealth. But a narrower definition has been used by the researchers of the subject in which the numarator is M1 or M2 and the denominator is GNP. But the broader definition is preferable subject to the availability of data.

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14. Major part of the following Text is based on the studies conducted by K.L.Gupta in his Book: Finance and Economic Growth in Developing Countries, GROOM HELM "51 Washington Street, 1984 Dover, New Hampshire 03820 - P.P. 7-34
15. Goldsmith, R.W. 1969
16. Little I.M.D. 1982
17. Roe, A.

The main question in this regard is whether the real rates of interest significantly affect the size of the financial sector.

The real rate of interest is defined as the difference between the nominal rate of return on all of the financial assets which are included in defining the size of the financial sector and the expected rate of inflation. If the above relationship holds, the hypothesis implies that financial repression, in the form of low nominal interest rates combined with high and a stable rates of inflation will retard the process of financial deepening.

Raymond Goldsmith has taken the structuralist view and used a single equation model. He argued that the size of a country's financial structure was determined by its per capita income, its rate of growth and the actual rate of inflation. Using cross-section and time-series data for the period 1880-1963 he tested his model for a set of developed and developing countries. The model was able to explain less than half of the variations in the financial interrelation ratio. Thus by assuming that the actual rate of inflation is a good proxy for the real rate of interest, Goldsmith's results do not provide much support for the repressionist's view. Bhatia[18] and Khatkhate examined the relationship of financial deepening to growth in eleven African countries. As an indicator of financial deepening, they used alternatively, currency, demand deposits, time and saving

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18. Bhatia, R.J. and Khatkhate D.R. 1975

deposits and their total as proportions of G.D.P. It is a bit curious that they did not estimate a simple regression equation to examine the joint impact of the two dependent variables .

McKinnon, R.I., has tested the repressionist hypothesis for Korea and showed that the ratio of M2 / GDP went up from 0.09 in 1964 to 0.33 in 1970, while the real return on one year time deposits changed from -12.6% in 1969 to +12.6% in 1970, and inflation falling from 35% to 9% during the same period of time. He pointed out with much care that since he was using the actual and not the expected rate of inflation in calculating the real rate of return, this seemed to support repressionist hypothesis, but without official statistical tests in appropriately specified model, it is difficult to say what importance can be attached to this observation.

Vogel and Buser [19] tested the repressionist hypothesis for sixteen Latin American Countries using pooled time series data for the period 1950 to 1971. They used three indicators: currency, demand deposits and time deposits, each expressed as a ratio of the GDP In one set of regressions the independent variables were the current and one period lagged values of the actual rate of inflation and real G.D.P. They have used another set of regressions i.e. a simple average of the two period values of the independent variables was used. In both the equatijons, they found that

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19. Vogel, R.C. and Buser S.A. in Mckinnon 1976

inflation had significant and negative effects and concluded that "these high levels of significance confirm the contribution of inflation to financial repression, while the low elasticities for currency and demand deposits strongly support Shaw's view that financial repression may proceed to the point where the willingness to hold those assets that are used for transactions purposes is no longer very responsive to inflation, because of the high costs of reversion to barter"[20]. and because of the small quantitative impact of actual inflation on the ratio of currency and demand deposits to G.D.P, their usefulness for policy purposes is limited. Their model and results suffer from various limitations.

First, although their estimating equations are derived from a portfolio selection model, no effort is made to incorporate a variable measuring uncertainty which appears in the theoretical version.

Second, the real rates of interest are once again approximated by the actual rates of inflation. Patric[21] has suggested that disaggregation of the sample in terms of low, medium and high rates of inflation would be most desirable.

The more extensive results were obtained by Alan Roe[22] who developed a four equation model, one of them being the financial intermediation ratio measured by M2 /GDP. He

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20. Ibid.

21. Patric, H.T. in Mckinnon 1978

22. Roe, A.

estimated the structural equations by ordinary least squares method: his model was estimated for three geographical regions: Asia, Africa and Latin America. He used cross section and time series data for each group. He found that for Asia, neither the actual rate of inflation nor the nominal rate of interest was statistically significant for Africa, both interest rate and the actual rate of inflation exerted a small positive effect, for latin America; non of the variables carried a significant coefficient.

Finally, Moxwell Fry [23], estimated a pooled regression equation for M2 using time series data for ten Asian countries and he found that the expected real rate of return on deposits was positive and highly significant. Lending support to the repressionist hypothesis we can conclude from the above survey that there is no conclusive evidence about the impact of financial repression or financial deepening, and the emperical approximations to the underlying theoretical specifications are not always adequate or properly explained. In addition to that, there are numerous problems with respect to the data used, particularly the interest rate variable.

2. Financial Intermediation, Financial Repression and Capital Accumulation:

The rate of physical capital accumulation has always been accorded a major role as a source of economic

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23. Fry, M.J. 1978, 1981

growth. The most significant hypothesis to emerge from the financial repressionist school is the one relating to the determinants of rate of capital formation.

Regarding the determinants of physical capital formation, two testable hypotheses can be obtained from the two schools of finance (i.e.) repressionist school and structuralist school.

The structuralist shcool maintains that for investment purposes it is the savings in financial assets which are important, if all other factors remain unchanged, an increase in the size of the financial sector leads to an increase in the amount of financial savings available as investible funds and as a result, there is a direct relation between the size of the financial sector and the rate of capital formation.

The second hypothesis is called "complementarity hypothesis" which is due to the represessionists school or more particularly to McKinnon. According to this hypothesis, in a self-financed economy, where indivisibilities in investment are important and the Govt. does not directly participate in capital formation, real cash balances serve as a "conduit" for capital formation; the accumulation of real cash balances must precede accumulation of physical capital. It is clear from the above that the capital formation is a positive function of this rate of return, McKinnon recognised that beyond a certain level this "conduit" effect can be overcome by the neo-classical "asset-competing" effect leading to the familiar negative

relationship between investment and interest rate.

The hypothesis can be explained more rigorously by the capital formation equation as follows[24] :

$$1. \quad \frac{I}{Y} \quad \text{Min } [(1/Y)^* \ , \ (S/Y)]$$

Where

$$2. \quad \left[\frac{I^*}{Y}\right] = F\left(\bar{r}, d - p^*\right) \ , \ F1 > 0 \ , \ F2 < 0$$

$$3. \quad \left[\frac{S^*}{Y}\right] = g\left(\bar{r}, d - p^*\right), \ = F1 > 0 \ , \ F2 > 0$$

The starred variables refer to desired magnitudes, I and S stand for investment and savings respectively, $\bar{r}$ is the average rate of return on capital and $d - p^*$ is the expected real rate of return on real cash balances.

Now both Mckinnon and shaw claim that investment opportunities are abundant in financially repressed economies, so that at low real rates of interest, desired investment exceeds desired savings. In equation (1), the actual rate of capital formation is determined by the desired rate of savings. But in equation (3) we can see that S^*/Y is a positive function of both $\_ r$ and $d-p^*$, so that we can write.

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24. This demonstration is based on Fisher (1981) and Mckinnon (1978)

4. $I/Y = h(\bar{r}, d-p^{*}), F1>0, F2>0$

The sign restriction F2>0 suggests that the relationship between physical capital formation and real cash balance is that of complementarity.

In the empirical literature, hypotheses of both schools have been tested in such a mixed way that it seems to be very difficult to separate them and therefore they will be discussed together.

Fisher has tested both hypotheses. In order to test the financial repressionist hypothesis, he estimated the following equation.

5. $I/y = a0(D+T+S/M)a1.U$

Where I represents total investment D,T and S stand for demand, time and savings deposits respectively and M for total money supply. The ratio (D+T+S/M) was used as a proxy for financial development. This equation was estimated for forty developing countries from 1960 to 1972. This coefficient of the financial development variable was found to be significant in each year except 1962. The model given in equation (5) was extended by incorporating the effect of inflation. This was done by disaggregating the samples according to their inflation experience. His results thus, seem to provide some support for Patrick's[25] suggetion about disaggregating countries according to their inflation experience.

Fisher tested the "represionist" view by estimating a modified version of Mcknnon's complementarity

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25. Ibid.

hypothesis in the form of the following equation :

$$6.\quad IP/Y = a0 + \underset{(+)}{a1}\ Z + \underset{(-)}{a2}\ Pe + \underset{(+)}{a3}\ (Ig/Y) + \underset{(+)}{a4}\ (If/Y) + \underset{(+,-)}{a5}\ (Y)/N$$

Where IP, Ig and IF represent domestic private, govt.,and direct foreign investments respectively, N is population, Z is nominal rate of interest and Pe is the expected rate of inflation. The "complementarity" hypothesis is given by the signs of the coefficients of Z and Pe. Equation (6) was estimated using average of the variables for 1960 to 1972 for the same sample as the one used for equation (5). The results showed that both Z and Pe were statistically highly significant and had the expected signs, thus supporting Mckinnon's hypothesis.

Support for the structuralist hpothesis is also offered by Christian and Pagoulatos.[26] They regressed I/Y on D/M, T/M and F/Y where F stands for the current account balance in nominal terms. Using D/M and T/M as proxies for financial development, they estimated their equation for forty-four developing countries for the period 1963 to 1966 and found that the two proxies had a positive and significant coefficient. Their independent variable has the same problem as Fisher's and since they did not examine the sensitivity of their estimates with reference to inflationary environment, their results are less instructive than Fisher's.

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26. Christian J. and Pogoulatos, E. 1973

In addition to these two studies covering a sizable sample,there are others (Vogel;Buser[27] & Galbis[28]) which are more restrictive in their coverage, concentrate on Latin America; Leff and Soto[29] include just a few Asian and Latin American countries, while Fry concentrates entirely on Asia.

Galbis tried to test the "complementarity" hypothesis for Latin America. His estimation equation was

7. $Ip = a + bpe + CIg.$

This equation which is an abbreviated version of the Fisher's equation, was estimated for sixteen Latin American countries individually and for the entire sample. The explanatory power in terms of R2 was very low; For the pooled sample, the results were as follows:

8. $Ip = 10.98 + .01263\ pe + .1906\ Ig$ R-2 = 0.00
(4.166) (.245) (.386) D.W.= 2.977

(t) values are in parentheses. It is clear that his results offer actually no support for the complementarity hypothesis or the repressionist view.

Fry[30] tested both view for twelve Asian countries using time - series data. Like Leff and Soto also used domestic credit to GNP ratio as the indicator of financial development and the real rate of interest. The dependent variable was the total domestic gross investment rather than domestic private investment. Fry, conclude on the basis of that result that real rate of interest has a positive and

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27. Vogel, R.C and Buser, S.A in Mckinnon 1976
28. Galbis 1979
29. Leff N.H. and Sato, K. 1979
30. Fry (1978,1981)

significant effect for only one country "Indonesia" and the Proxy for financial developement has a positive effect only for "Malaysia" and "Nepal".

His results provide very little support for either the "complementarity" hypothesis or the structuralist position. Fry also rejected the complementarity hypothesis in yet another paper where he estimated a demand for money equation with the ratio; it turned out to be negative.

We can conclude that so far, there is no conclusive evidence about the validity of either the complementarity hypothesis of the effect of financial development on the investment.

Finacial intermediation, Interest Rate and Resource Allocation :

To understand the argument which says that increased degree of financial intermediation will make allocation of resources more efficient, we can consider a two sector model, one a high productivity sector and the other a low productivity sector. If the process of financial intermediation is assumed to be enhanced by higher real rates of return on financial assetes, it leads to a shift of savings from the less to the more productive sector.

Imperical verification of the efficiency effect is a bit tricky. The ideal approach would be to estimate rates of return on capital in different sectors and then to ascertain the extent to which these differences can be ascribed to financial intermediation.

As an alternative, the marginal capital output ratio may be used as a proxy for resource allocation efficiency, and it may be regressed on variables reflecting financial intermediation and repression. Fry[31] used this type of approach for twelve Asian countries using time series data for each country, he estimated the following equation :

9. $V = a + br + C\ FER/Y + d\ (IM - TIM/Y)$

Where V is the marginal output - capital ratio; r is the real rate of interest on deposits, FER foreign Exchange receipts, IM imports and TIM trend imports.

He reported a significant and positive coefficient of $\bar{r}$ for seven Asian countries. He took these results to be a confirmation of the Shaw-Mckinnon hypothesis that financial liberalization was beneficial to investment efficiency.

A more serious problem is the use of the real rate of interest as a determinant of V. By definition V = change in Y/change in k which may be written as V = (change in Y/change in L) (change in L/change in K). In other words , V is the product of the marginal product of labour and the marginal labor-capital ratio. By using a C.E.S.(Constant Elasticity Substition) production function we can easily show that (change in L/change in K) will be a function of the change in the wage-rental ratio. Therefore, assuming that (change in Y/change in L) remains constant, atleast we

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31. Ibid.

must consider not only r but also the wage rate among the determinants of V.

Financial Intermediation and Aggregate Savings:

The positive and direct relationship between finacial intermediation and aggregate savings seems to be based on two considerations.

1. A well developed financial market (i.e.) reducing risk and cost, could increase net real returns which then affect savings.
2. It is asserted that people take time to learn to use financial assets for saving and financial intermediaries facilitate this learning process.

To test this hypothesis, it requires, as Eckaus[32] points out, data on savings both before and after a change in financial structure has accured and a methodology to associate a rise or a fall in aggregate savings to such a change.

A direct test has not been conducted, but some evidence is available using three indirect approaches as follows.

1. It has been argued that since propensities to save are sensitive to sources of income, it has been concluded that financial intermediation has a direct bearing on aggregate savings, more specifically "it has been argued that people who derived their income from property, enterpreneurship, urban sector, or who simply belong to

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32. Eckaus, R.S. 1977

higher income group, have access to a wider choice of investment opportunities, are less risk averse and have a better understanding and appreciation of financial intermediation and its implication".[33] Houthakkar[34] using cross section data for developing countries, reported that the propensity to save out of non-wage income was higher than that out of wage income.

2. TANWAI[35] has estimated two models, one for time series data for individual countries and another one for cross-section data in which he pooled data for various developing countries.

In the first model, he estimated an equation in which the savings ratio was regressed on time and a financial intermediation proxy given by the ratio of a change in financial assets to gross national product (change in F/Y).

In the second model, he used two proxies for financial intermediation: change in F/Y as defined above and the number of bank offices per million of population (BO/N). The model also includes the growth of income, interest rate, actual rate of inflation and foreign inflows. This model was estimated for twenty countries in Latin America and twenty three countries in Asia, Africa and Middle East.

The most ingenious indirect test is the one by Bhalla[36] using data from rural India. He said that the green

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33. Bhalla S.S. 1976
34. Houthakkar H.S. 1965
35. Tanwai, 1958
36. Bhalla, S.S. 1976

revolution and use of the yielding varieties of seeds raised the rates of return from investment which lead to increased profits on both, old and new capital. He estimated the following regression model in order to test his hypothesis:

10. $S = a1 + b1Yp + b2YpIo + b3Yt + b4Ct$

Where Yp = permanent income
Yt = transitory income
Ct = transitory consumption
Io = investment opportunities index = weight average of adopters of new Technology on a direct basis 1969-70.

He tested the basic hypothesis by looking at the sign and the statistical significance of b2. He showed that (1) in the subsistence groups (income less than Rs.500) which corresponded to the "no capital market" case $b2>0$. (2) In the rich group (income over Rs. 1500) which corresponded to the "perfect capital market, case $b2<0$ and (3) in the intermediate group (income Rs. 500-1500) which corresponded to the "imperfect capital market" case, $b2><0$.

The coefficient b2 was positive and significant; for the extreme case $b2<0$, but not significant, and for the intermediate group, the coefficient was negative and significant. He suggested that savings were sensitive to the nature of the capital market or the financial structure.

Rate of Return, Financial Intermediation and the Structure of Savings

It has been suggested that changes in interest rate might merely lead to a substitution of saving in physical assets for savings in physical assets, leaving total savings unchanged. The empirical evidence on this

issue is even more sketchy than for aggregate saving, because of the lack of availability of data on financial savings.

Tanwai37 measured financial savings as the change in financial assets and the assets considered were currency, money, with banks, quasi money with banks, time and saving depoosits with other financial institutions, lands and certificates of banks and other financial institutions, capital accounts and shares of banks and other financial institutions and government debt held by non-financial private sector.

Tanwai specified the following equations to examine the question of substitutability:

11. F/P = F13(i-p,Y/P,t)

12. R/P = F14(i-p,Y/P,t)

13. F/R = F15(R/P,T)

14. R/P = F16(F/P,T)

Where F represents financial savings, R savings in real asets, P the price level, the nominal rate of interest, Y gross national product, P the actual rate of inflation and t the time trend.

Equations (11) and (12) are straight forward. Equations (13) and (14) are specified to test whether real and financial savings were complements or substitutes and whether causation runs from real factor to financial variable or the other way around.

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37. Tanwai, Ibid.

This test of causality cannot answer, the question which it is designed to answer, but the more important point is that the choice between financial and real assets is simultaneous and not a sequential one as implied by equations (13) and (14).The test of substitutability is provided by equations (11) and (12) directly. In a standard portfolio model, we would expect (i-p) to have a positive effect on financial savings and a negative one on the real savings. If we estimate equations (11) and (12), we merely need to look at the coefficient of (i-p); if the coefficients are opposite in sign [plus in (11) and minus in(12)] then the two types of savings are substitutes, but if they are positive in both, then they are complements.

Equations (11) and (12) were estimated for fifty one countries, using time-series data, out of these thirty were developing countries.

Roe, following Tanwai, also examined the question of substitutability in terms of an extended version of eqations (11) and (12) the equation estimated by him was:

15. F/P, R/P = F17 (GDP,GDP2,INT,P,FA)

Where F and P represent financial and real savings, respectively, GDP is real gross domestic product. INT nominal rate of interest, P the actual rate of inflation and FA proxy for financial intermediation defined as the ratio of (money + quasi money/GDP).

He estimated this equation for Asia, Africa, Latin America and for the entire sample, using cross-section of the variables, INT and P were the same as in Tanwai.

The two studies differ in their definations of the dependent variables. Tanwai measured financial savings as the change in total financial assets, but Roe considered only a subset of these assets, he included currency + demand deposits + quasi money with banks.

Money, Production Function and Technical Change:

Two studies have been conducted by Wallich[38] and Jao[39] to estimate production function which include real cash balances as an input, they have used cross-section data, and real estimate single equation models in which rate of growth of G.D.P. (GNP)was regressed on a variety of variables, one of which was the rate of growth of real cash balances,defined both narrowly (M1) and broadly (M2), but they have not included money as an input in their studies.

The hypothesis which was tested by Subrahmanyam and Cosimano[40] suggested that real cash balances act as an input augmenting variable. Using a C.E.S. (Constant Elasticity Substitution) Production function and alternate definitions of real cash balances (M1) and (M2), they reported that in the Indian economy, for the period 1950 to 1970, monetisation caused a labor-saving bias in technical changes. Whether these results hold for other developing countries remains an open issue. But they raise a more fundamental issue, namely, as in the words of G. Subrahmanyam and T.F. Cosimano " What is the mechanesm by

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38. Wallich, H.C. 1969
39. Jao, Y.C. 1976
40. Subrahmanyam, G. and Cosimano T.F. 1979

which increasing monetization causes the increased availability of the "original" factors of Production ?".

Hypotheses

From the analysis of the theory of financial growth as developed by Gurley, J.G. and E.S. show and the recent studies conducted by Prof.K.L.Gupta and others, we can deduce few hypotheses connected with the financial structure and development.

The Hypotheses are as follows:

1. In the course of economic development with the increase in the degree and complxity of savings and investment process, ratio of net issues of primary securities to national income and ratio of outstanding primary securities to national income has a tendency to increase and then get stabilised at a higher level.
2. The external financing ratio (ratio of net issue of Primary securities to gross Domestic Capital Formation) tends to increase in the early stage of economic development.
3. The assets of financial intermediaries to national income ratio tends to rise during the process of financial development of the country.
4. Generally, a country's financial development begins with the monetary system (i.e.) monetary intermediaries. However, as the country's economic development progresses, the relative share of the monetary intermediaries in the total assets of the financial

intermediaries of the country tends to decline and of non-monetary intermediaries tends to increase.

5. In the process of financial accumulation, financial intermediaries mediate between ultimate lenders and ultimate borrowers and the ratio of indirect securities to national income tends to increase.
6. Generally, financial intermediaries tend to purchase an increasing proportion of primary securities during the process of financial development and financial intermediation ratio tends to increase.
7. The share of monetary intermediaries in the purchase of Primary securities tends to be a major one in the initial process of financial intermediation. Over the long run during the process of financial intermediation, the share of the monetary intermediaries in the purchase of Primary Securities tends to decline and that of the non-monetary intermediaries tends to increase.
8. During the process of economic development money-income ratio tends to increase in the begining and then the ratio gets stabilised at a higher level.
9. Repressionist Hypothsis

   The real rate of interest is the difference between the nominal rate of return on all of those financial assets which are included in defining the size of the financial sector and the expected rate of inflation. Does the real rates of interest significantly affect the size of the financial sector ? If this relationship holds namely, that financial repression in the form of low nominal

interest rates combined with high and unstable rates of inflation will retard the process of financial deepening, then it implies that real rates affect financial sector.

10. Structuralist hypothesis:

If all the factors remained unchanged, an increase in the size of the financial sector leads to an increase in the amount of financial savings available as investable funds, therefore, the size of the financial sector contributes directly to the rate of capital formation.

11. Complementarity hypothesis:

In a self-financed economy, real cash balances serve as a conduit for capital formation, (i.e.) accumulation of real cash balance must precede accumulation of physical capital and that capital formation is a positive function of the rate of return, and the demand for real cash balance is postulated to be positively and significantly related to the real rate of return on such balances.

Our thesis mainly concentrated on analysis and examination of these hypotheses and some related aspects of financial structure and economic development.

The various hypotheses which are listed above will be tested by using the techniques of multiple regression, corelation analysis, ratio analysis and in some of the cases the step wise regression will be used.

Objectives and Significance of the Study:

The aim of the present thesis is to examine the hypothesis derived from theory of financial growth in the context of the experience of Jordan economic development during the period, 1964-1985.

The main objectives are as follows:

1. To review and evaluate the existing knowledge on the relationship between monetary and financial structure, and economic growth of an economy.
2. To assess the aggregate contribution of the different types of financial institutions in the vital process of growth in Jordan viz in the mobilisation and promotion of savings, in meeting the credit needs of the different growth sectors of the economy.
3. To study the impact of the Policy, structural and institutional changes occurred during the period of our study (i.e.) 1964 onwards, in the Socio-economic and banking and other financial institutions from the view point of growth requirement.
4. To attempt to fill in the gaps left out in the empirical works.
5. To examine the statistical evidence for Jordan to test the presence or absence of the relationship between monetary and financial structure and economic growth of Jordan.
6. To make suggestions regarding an appropriate monetary and financial policy for Jordan which help the Process of economic development of Jordan.

The approach is highly aggregative in the sense that the thesis would concentrate only on the economy wide implications of monetary and financial institutions and the role they play in the economy of Jordan.

Period of Study:

This study covers the period of about twenty one years begining from 1964 to 1985. We have selected this period because it has witnessed many development programmes and the establishment of the Central Bank of Jordan.

Research Methodology and Data Collection:

The proposed study will use the secondry data published in various monthly and yearly bulletins of Central Bank of Jordan; we are going to use the statistical information provided by the various bulletins by diferent financial institutions in Jordan. For data collection we largely depend on the Published literature of the C.B.J., other financial institutions, Govt. and Semi Govt. agencies and finally on the published literature and statistical data of the Dept of Statistics, Govt. of Jordan.

CONTENTS

First Chapter introduces the subject matter of the study by examining the theoretical relationship between financial institutions and economic Development.

This chapter also discusses the objectives of the study and also develops certain hypotheses to be tested. The

kind of research methodology to be used in the study is also discussed.

Second Chapter is devoted to discuss the role played by commercial Banks in Jorden Economy.

Third Chapter will focus the attention on the institutional framework for industrial financing in Jordan - a critical evaluation.

Fourth Chapter will examine the institutional frame work for Agricultural Financing in Jordan - a critical evaluation.

Fifth Chapter will focus the attention on the roll played by C.B.J. in Jordan's Progress and its contributions to the economic growth of Jordan.

Sixth Chapter will show an aggregate view of the growth of financial structure and economic development in Jorden.

Seventh Chapter will contain the summary and conclusions.

Important Development in The Financial Structure of Jordan From 1970 to 1985 [41]

The dearth of natural resources, the demographic and economic impact of 1948 war, and deficiencies in the Fundamental Socio-economoic structure, the Jordan economy succeeded in stabilising a number of large industrial projects during the 1950s.

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41. This is based on several Publications and annual reports of the Central Bank of Jordan.

In the early sixties, the economy was approaching the take-off stage towards self-sustained growth and realized a rate of growth of exceeding 10% per annum.

The Zionist aggression of 1967 result in the occupation of the West Bank and had far reaching effects in the creating new challenges which impaired development. It showed down economic growth temporarily and aggrevated the population problem by forcing migration from West Bank and Gaza-strip (which were also occupied in 1967).

The Three Year Developement Plan (1973-75) was launched with the objective of neutralizing the economy and restoring the development momentum. The scope of development planning was widened with the launching of the Five - Year Development Plan 1976-80.

Inspite of the Political and Military situation that have prevailed in the region for more than fourty years coupled with the need for extensive efforts to accelerate the process of socio-economic develoment to strengthen capabilities and steadfastness.

Inspite of all there has been vast and important development in the financial structure of Jordan.

(A) Central Bank of Jordan

C.B.J. started its operations on October 1, 1964 replacing the Jordan Currency Board which has been established in 1950 to direct the monetary policy of the country and under takes all the responsibilities that Central Banks in developed countries ordinarily are charged

with. The C.B.J. represents the monetary authority in the Kingdom and enjoys the status of an autonomous corporate body.

The headquarters of the Central Bank are in Amman However, in order to make it easier for Commercial Banks branches and Govt. departments all over the Kingdom to deal with the C.B.J., two branches have been opened, One in Aqaba "in the South "and the other in Irbid. "in the North".

Besides the other functions, the C.B.J, plays an important role in the econimc Development of Jordan. It's development role is mainfested directly in creating monetary and financial institutions capable of mobilizing and chanelling savings for development projects. The Bank is also empowered to subscribe to the capital of banking and Financial institutions that are established in the Kingdom for the development of the financial markets or for insurance of deposits. It can also buy bonds issued by such institutions.

The Bank's indirect role in the economic development of Jorden is embodied in its influence over the activities of commercial banks, especially by controlling the volume, direction and cost of credit. The other aspect of the Bank indirect role lies in the adoption of monetary policies capable of reinforcing internal and external confidence in the strength and stability of the Jordanian economy and, consequently, encouraging savings by citizens and promoting incentives for the utilization of these savings in Production and safe investment, as well as

attracting foreign investments.

(B) Commercial Banks

Commercial banking in Jorden goes back to 1925, when the Ottoman[42] Bank started operation in the country. The Arab Bank, which was established in Jerusalam in 1930 and moved its headquarters to Amman after the 1948 War, was the first local Bank. The Arab Bank was followed by the Jordan National Bank in 1955. In 1960, two new local Banks were established. The Bank of Jordan and the Cairo Amman Bank. Thereafter, nine local and foreign banks were established. The number of commercial banks increased from 4 in 1976 to 11 in 1985, and the number of their branches increased from 13 in 1964 to 232 in 1985. There are two investment banks: The Arab Jordan Investment Bank and the Jordan Islamic Bank for finance and investment in which operates according to a pioneering banking concept based on the profit - sharing dictates of Sharia, Islamic Law.

Banks have to be lincensed by C.B.J. before they can operate in Jordan. They also must comply with the Bank's regulations with respect to their activities and practices as well as the ratio fixed by the Bank for credit, liquidity, cash reserves and capital. Banks may open new branches or merge with other established banks, with the approval of the CBJ.

Arab investors participated significantly in the equity capital of banks and finincial institutions established in the Kingdom.

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42. The name was changed to Grindlays Bank in the Mid Seventies

(C) Financial Companies

There are seven financial companies operating in Jordan: namely; Arab Finance Corporation (Jordan) (1979), Jordan Securities Corporation (1980), National Gernral Investment Company (1981), Jordan Finance House (1981), Islamic Investment House 1981, Finance and Credit Corporation (1982), and Jordan Investment and Finance Corporation (1982); These companies have been established in order to mobilize Financial resources and encourage local investments as well as attract foreign and Arab Financial resources to be invested in Jorean.

To achieve these objectives, financial companies are practicing the following activities :

1. **Money Market Operations** :

The financial companies can accept medium and long-term resident deposits in both local and foreign currencies in accordance with the C.B.J. regulations. The non-resident deposits might be accepted in convertable currencies only.

These companies can issue and deal with certificate of deposits "C.Ds" as well as credit instruments. In addition, they can deal with treasury bills, Govt. boands and in foreign exchange on the basis of both spot and forward exchange rates.

2. **Financial Market Operations**

The financial companies can work as brokers in the Amman Financial Market, they can deal with shares and

securities listed on the (AFM) for their own portfolio or on behalf of their customers. They may also manage and underwrite local issues of securities, corporate bonds and syndicated loans as well as portfolio management for their customers.

3. **Investment and Finance Operations**

They encourage domestic investment directly through direct investment of their financial resources in establishing projects, and autonimous companies, in establishing branches, projects and Companies, in financing economic projects in view of their profitablity and in acting as a leasing company.

4. **Credit Facilities**

Financial companies may extend loans and credit facilities to finance various development projects. These credit facilities should be of medium and long terms, and their maturity should not be, in any case, less than six months. Financial companies may also finance imports of capital equipment pertained to projects financed by them and they may issue letters of guarantee to facilitate acctivities of such projects.

(D) Real Estate Institutions :

There are four real estate institutions operating in Jordan.

1. The Real Estate Finance Corporation "REFCO".
2. Darco for Housing and Investment Co. "DARCO".
3. National Davelopment and Finance Company.
4. Beital-Mal Saving and Investment for Housing "Company".

These institutions aim at mobilizing savings for investment, specially in real estate. They have been established in order to accept saving accounts in accordance with CBJ regulations, and to provide loans and advances for the purpose of building houses and apartments as well as acquisition and selling of real estate, bonds and shares. In addition to issuance real estate letters of guarantee, they can establish companies and autonimous projects within the housing sector as well as estalbishing and managing tourism projects and hotels.

As for their sources of funds, real estate institutions depend mainly on their capital and saving and time deposits as well as revenues from their investments in bonds, securities and corporate bonds.

(E) Specialised Credit Institutions

The reason behind the establishment of the specialised credit Institutions is to provide medium and long-term facilities for different sectors of the economy on easy terms in order to accelerate the economic development process.

The first to be established was the Agricultural Credit Corporation, set up in 1959, and others were established bringing the total number to six, of which are Govt. owned which are the Agricultural Credit Corporation, the Housing Corporation, and the Cities and Villages Development Bank the other three are owned by the public and private sector which are the Housing Bank, the Industrial Development Bank and the Jordan Co-operative Organisation.

The SCIs, extend credit on easy terms to the agricultural, induarial, tourism and housing sectors, as well as to craftsmen and municipal and village councils to assist and promote their development. As for their sources of funds, these institutions depend mainly on their capital and internal and external borrowing, with the exception of the Housing Bank, (the only institution that accepts deposits) which mainly depends on deposits as sources of funds.

The following is a brief description of each of the SCIs.

1. **The Agricultural Credit Corporation (ACC)**

The ACC was established in 1959. It provides concessionary loans for the purpose of promoting and developing the agricultural sector. Interest charged by ACC on medium and long term loans ranges between 6-8.9% according to the nature of the project and the size of the loan. ACC borrows from CBJ, Govt and International institutions at low interest rates.

2. **The Industrial Development Bank (IDB)**

The IDB was established in 1965 with the purpose of providing short and medium term loans to the industrial and tourism sectors as well as providing technical consultation. Interest charged on IDB loans is 6% plus 1% commission charge for rural projects and 7 - 8.25% on loans extended to companies and other projects. IDB relies for additional sources of funds on borrowing from the CBJ as well as from Arab and friendly countries.

3. **The Housing Bank (HB)**

The Housing Bank was established in 1974, its main objective has been the provision of long-term loans for buying or building residential houses and apartments. It extends loans to companies engaged in building housing projects. Besides its capital, the HB relies on deposites for financing its operations. It has successfully introduced promotional schemes, such as prizes on savings deposites to attract depositors. Interest charged by the HB loans ranges between 8.5-8.75%.

4. **The cities and Villages Development Bank (CVDB)**

The CVDB was established in 1979 to replace the Municipal and Village Loan Fund which was established in 1966. It provides loans for financing developmental projects of municipal and villages. Loans extended to municipal council carry a range of interest rate beteen 7.5 - 8.5 and are repaid within ten years whereas those extended to village council carry a range of interest rate between 6-7 % and are repaid within fifteen years.

In addition to providing loans to local institutions, the Bank manages and guarantees the loans of these institutions as well as providing technical consultation to them.

5. **The Jordan Cooperative Organisation (JCO)**

The JCO was established in 1968 to provide guidance and promotion for the cooperative movement in Jordan. In addition to extending loans to cooperative societies for verious terms and at a rate of interest

ranging between 6.5 - 8% cooperative societies in turn charge 8% on loans to their members. The Cooperative Bank carry out normal banking activites for the members of cooperative societies such as accepting deposits, remittances, guarantees and opening letter of cridet.

6. **The Housing Corporation (H.C)**

The H.C was established in 1965 to help in combating the housing problem in the Kingdom by implemeting development housing projects and selling them to the public at payment terms of 20-30 years and at interest rate of 5%.

Since its establishment, the H.C has implemented more than 80 housing projects. The city of Abu-Nusair is the largest housing projects which contains 6500 housing units.

F) Savings and other financial institutions:

a) **Contractual and saving institutions**

The financial sector in Jordan includes a number of institutions devoted to mobilising financial resources and collecting local savings . They are as follows :

1.The Post Office Savings Fund (POSF)

The POSF started its operation in September 1970, with the aim of attracting and collectiong small savings. The Fund started with eight branches in Amman and has since endeavoured to expand its activities and establish branches in other governorates, bringing the total number of branches throughout the kingdom to 281 by the end of 1986 and the number of depositors for the same year rise upto 174.1.

Thousand depositors[43] consequently deposits reached upto JD 7.4 million by the end of 1986[44].

2.The Pension Funds (PF)

The PF was established in 1976 with the aim of shouldering the present and future financial obligations of the Govt. in the field of pension payments, in accordance with the civil service and military pension laws. The fund is attached to the Ministery of finance, it enjoys financial and administrative independence. The PF's resources consist of its capital which reached JD 41.4 million by the end of 1984 and the retirement deductions made in accordance with the civil and millitary pension laws, in addition to return on the fund's investment and any funds allocated to it by the General Budget law or the council of ministers. The Fund employs its resources in both financial and real estate investment including sponsering the establishment of medium and large scale industrial companies and supporting the operations of the financial market.

3.The Social Securities Corporation (SSC)

The SSC was established in 1978, and enjoys financial and administrative independence, it aims at providing the worker and his family with a permanent monthly income to secure them a decent life. The SSC embarked its operations in 1980, and deal with all kinds of social insurance such as

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43. Central Bank of Jordan Twenty Third Annual Report 1986 P.23
44. Central Bank of Jordan Bocklet on (The Financial Structure of Jordan) Department of Research and studies 1986 P.28

insurance against work injuries, occupation diseases, disability, old age and death. As for its source of funds, the monthly salary deductions from all participants considered the main and the only source of funds for the SSC. The SSC has been using its resources in areas which serve the objectives of economic development in the kingdom while maintaining same degree of liquidity to meet its future obligations. At the end of 1986, the assets/liabilities of the SSC amounted JD 179.8 million.

4. Insurance Companies

At the end of 1986 there were 31 insurance companies operating in Jordan; 20 Jordanian - owned and 11 branches of foreign companies.[45] These companies are dealing with all kinds of conventional insurance, including motor vehicale, maritime, Fire and general accident insurance. Thirteen companies offer life inssurance, eight of which are Jordanian. During the last few years, insurance companies have developed their activities in line with the general development and requirements of the Jordanian economy[46].

(B) Other Financial Institutions

There are other institutions, in addition to the above mentioned ones which do not deal with banking activities directly such as representative offices and money changers.

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45. Central Bank of Jordan Annual Report 1986 P. 24

46. Ibid. P. 24

1. **Representative Offices**

Early 1977, special regulations were issued to license and control the activities of representative offices of foreign banks and financial companies. According to these regulations foreign banks and financial companies which have no branches in Jordan can, after obtaining a licence from the CBJ, open offices to represent them before official bodies in Jordan and take care of their interests in the kingdom without seeking profits. The number of licensed offices reached ten by the end of 1986[47].

2. **Money Changers**

Money changers offices are licensed by CBJ, in accordance with the money changing law. Licence are granted to two categories of companies only. Public or Private share holding companies whose capital is no les than JD 50000 and private share holding companies or ordinary public companies whose capital is no less than 25000. The number of money changing offices reaches 73 by the end of 1986, of which 35 are in Amman[48].

G) Amman Financial Market (AFM)

The establishment of the AFM was one of the most important development occuring in the banking sector. The credit for establishing AFM goes to the efforts extended by the CBJ and to the support and encouragement of the Jordan govt., in addition to the technical assistance offered by

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47. Financial Structure of Jordan Dept. of Research and Studies Central Bank of Jordan 1986 P. 29

48. Ibid.

the International Finance Corporation. The AMF started its operation on January 1, 1978 as a public financial institution with legal financial independence, AFM is a market for trading securities as well as a securities exchange commission. It is responsible for the promotion and development of both money and capital markets in Jordan, and regulating market participants and providing them with necessary expertise. The AFM law provide that every Jordanian public shareholding company whose paid-up capital exceeds JD 100,000 must be listed on the AFM. The AFM law permits dealing in shares when 50% of their par value is paid up.

The AFM law also provides for listing all bonds issued by the Govt.of Jordan or by Public institutions with Govt. guarantee, as well as all bills and bonds issued by companies in accordance with the Companies Act.

In its capacity as a security exchange commission, AFM asked certain companies to publish in local news papers financial data which would affect the price of their shares.

In addition, there is the parallel market where shares of unlisted companies are traded; around 8.96 million shares were traded during the year 1986, with a total market value of JD 4.76 million.

One of the salient features of the expansion of institutional investment is that these institutions are performing a basic role in encouraging investments, conducting project studies, and inducing private sector institutions and individuals to invest in Industrial,

tourism and financial projects. It is expected that these institutions will also open the door for investment in agriculture and socio-economic activities.

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