

CHAPTER III

LABOUR MARKET OF JORDAN

3.1 Conceptual Background

Generally labour market is concerned with the activities of hiring and supplying labour to perform certain jobs. It is also concerned with the process of determining how much shall be paid to whom in performing what tasks. In this respect the market for labour is like the market for any other good. However there are significant differences with respect to other factors of production and also product markets.

In the words of Alfred Marshall, human agents of production are not bought and sold as machinery and other material agents of production are. The worker sells his works, but he himself remains his own property.¹

This unique fact is responsible for the worker's decision to accept employment on the basis of various factors such as package of working conditions, job security and opportunities of advancement. Secondly, the demand for labour is a derived demand, dependent upon the state of economy. In order to make a detailed analysis labour market can be classified as i) Local labour market (ii) Regional labour market (iii) Country's domestic labour market iv) Country's urban and rural labour



markets v) External or international labour market etc. However ultimately the analysis of labour market behaviour revolves around demand and supply of labour and wage determination. Such classification helps to capture the distinct characteristics of various labour markets which are useful for framing appropriate labour market policies.

3.1.1 Supply of labour

The 'labour force' consists of persons who are either working or looking for work. It includes the employed and the unemployed, but excludes the minors, students, housewives, old and disabled persons etc. The supply of labour to an economy depends on i) the size and demographic composition of population, ii) the labour force participation rate, i.e., the percentage of working age population which is actually working or seeking work, iii) the number of hours worked per week or year and iv) the quality of the labour force. The supply of each of these components ultimately depends on market wages.

The size of population is the result of birth and death rates and net migration rate. Growth rate of population is low if birth and death rates are high as in the first stage of demographic transition or low as in the third stage of demographic transition when both the rates are low. In many countries where emigration and immigration of population is not difficult by law, the growth of population also gets affected by this factor. The size and composition of labour force is very sensitive to birth and death rates and age composition of net migrants in an economy. The second stage of demographic

transition where birth rates are higher and death rates are low, one finds that population consists of high proportion of dependents in the age groups of below 15 and above 60. This affects the participation rate in an economy. The participation rate is the ratio of the economically active (employed or unemployed) population to the total population. It can also be calculated based on age and sex. Labour force participation rate thus estimates the size of labour reserve within an economy.

There is also another term which is used to understand supply of labour. It is 'labour turnover'. 'Labour Turnover' is the rate at which workers are taken into and moved out of employment by firms in the economy. It is divided into two basic categories:

a) Labour accessions and b) Labour separations. Accessions cover additions to employment rolls whether newly-hired or re-hired employees who are temporarily given layoffs. Separations may be either voluntary (quitting, resigning etc) or involuntary, (lay offs, dismissed etc).

A brief over view of theoretical framework which has been used to study supply and demand for labour is given below.

In the Neo classical framework, the supply of labour in the short run is the result of adjustments which the individuals make in the hours of work or in the labour force participation rate, assuming a given size of population and skill. This is explained in the Work - Leisure Decision model. In which an indifference curve shows the various combination of real income and leisure which will yield a given level of utility to an individual. Indifference curves are convex to origin showing a diminishing

marginal rate of substitution of leisure for income. The budget constraint shows possible combination of real income and leisure which are obtainable at a given wage rate. The effect of change in the wage on hours of work supplied depends on the size of income and substitution effects². In the long run however individuals adjust more completely to changes in the environment. One adjustment is the secular changes in labour force participation in terms of age and sex composition of labour force, where one finds large increases in the labour force participation of married women and decline in the participation rates of older, prime age and younger workers. Another adjustment is the size of population. Thus the long run analysis of labour supply explores the relation between fertility, migration and long run changes in market wages and income. Labour supply in the long run is analysed within the context of Gary S. Becker's model of allocation of time.³ This Neo classical model is more general expansion of the Work Leisure Model. Becker's model provides insights into the labour force participation decision and fertility decisions made by household members.

" However it is argued that ---- labour market transactions possess many dimensions - the wages to be paid, the level of work effort to be applied, the range of activities to which the employee may be directed, the duration of contract and so on - and the particular combination of wages and hours worked represents only a subset of

bundle of items involved in the exchange. It is not at all clear that this subset may be siphoned off from the rest and appropriately characterized by the sort of allocation process that the conventional model applies.⁴

Due to significant changes in the sex composition of labour supply, there have been theoretical developments to explain supply of men and women separately in the last thirty years. In case of male labour supply, the work is based on static model and life cycle models. Life cycle models direct toward the analysis of how an individual will allocate his working hours as he ages in response to the changes in his wage rates. Empirical studies have however indicated that the elasticities of hours of work with respect to wages are very small irrespective of the fact that the study is based on static or life cycle models. This does not mean however that budget constraints have nothing to do with male hours of work. In this case, no single model of labour supply is adequate to account for the behaviour of all the individuals.⁵ Though there is no theory of female labour supply, the static models are however applied to study this incorporating important considerations such as the role of the family, the allocation of time and heterogeneity of jobs. Dynamic labour supply models are those where wages are assumed to be given exogeneously and also those where they are endogeneously determined through human capital accumulation. (For details, see Killingworth)⁶.

Qualitative analytical aspects of labour supply are concerned with the workers supplying different levels of education attainment and skills to the labour market. Any activity which increases the quality and hence productivity of labour may be considered as a result of investments in the human capital, which include expenditure on education, on job training and also expenditures on health and migration. Human capital theory⁷ establishes a relationship between earnings with respects to education, experience, on job training and migration etc. Migration to a higher paying jobs is also a human capital investment in that it involves present sacrifices in order to obtain future earnings. The decision to migrate depends upon the composition of life time earnings to investment costs in terms of transportation expenses, foregone income and psychic costs.

However, this theory is criticised on the ground that it fails to recognize a part of the expenditure on education as consumption rather than investment. Secondly, incremental earnings of college graduates may be due to their increased ability rather than schooling and thirdly, social rate of return on college education is overstated if the portion of incremental earnings of college graduates is attributed to screening.

3.1.2 Demand for Labour

Demand for labour depends on, or is derived from, the demand for the product which it is producing. Thus demand for a particular type of labour will depend upon a) how productive is the labour in helping to produce some product and (b) what is the

market value of that product ? In short, the determinants of demand for labour are labour's marginal productivity and the value of its output. Thus, in the short run marginal value product curve can be regarded as a demand curve for labour under competitive conditions. In the long run, other influences arising from the variability of other factors must be taken into account to determine long run demand curve. Thus the relationship between the elasticity of demand for labour and the ease of substitution between labour and other inputs, the labour's share and the price elasticity of demand for output has to be established. In the last twenty years advances in the estimation include an analysis of substitution within several pairs of inputs, i.e., skilled labour and physical capital, skilled labour and unskilled, and educated labour to less qualified workers. The long run demand for labour is more elastic than the short run demand. The dynamic labour demand models focus on different possible structures of hiring and firing costs and their effects on the time path of employment. Such models can explain another concept in relation to labour demand, viz, that of labour hoarding. When a firm has invested heavily in the hiring and training of a worker, it is reluctant to dismiss that worker during an economic downturn. As a defensive mechanism, the firm thus attempts to retain or hoard that worker in whom specific investments have been made. Therefore at the onset of a recession, labour input is not reduced with the output and during the upturn, increased output can be achieved without a simultaneous increase in the labour input. In such a case, the supply of labour input is increased

simply by raising the labour utilization rate of already employed labour. Thus labour in such a case, becomes a quasi-fixed factor.

Labour market determines the quantity of labour actually employed and the wages paid by different types of labour. The volume of employment and the wages are determined in the market by the interaction of the forces of supply and demand.

3.2 Theories of Demand and Supply : Applicative Implications to Jordanian Labour Market

Jordanian economy is characterised by a product market with poor agriculture and industrial base and a labour market with a mobile labour force. Due to exogeneous factors the sudden out flow and inflow of labour destabilizes the economy in general and labour market in particular. Over and above this, the data base is rather poor. Hence the testing of the theories becomes rather difficult, nonetheless one can indicate the extent of application of these theories to Jordanian economy.

The labour supply theories can be applied to Jordan, to the extent that the decision to migrate within the country or outside is mainly to explore the possibility of getting higher wages in urban areas or in the neighbouring oil rich countries. This is detailed in the later sections of this chapter, as well as in other chapters. Lewis Model as discussed in Chapter II is not applicable here as there is no modern sector which exists in urban areas of Jordan. Secondly, there is no surplus labour which migrates to the urban areas. It is observed that people in

general are not interested in working in agricultural activities and therefore a sizable proportion of immigrant workers undertake agriculture work in Jordan.

Supply of labour basically depends on the demographic characteristics and migration of labour. In case of Jordan the birth and death rates now show a decline, (Table 3.1) and the net migration rate is highly fluctuating in nature. Due to political factors the sudden in and out migration fluctuate the supply of labour and in such a situation one can hardly analyse the labour supply characteristics in a Neo classical theoretical construct.

The product market of Jordan is characterised by the dominance of service sector. In the case of agricultural sector the factors like climatic conditions and the disinterestedness of the labour to work in the agriculture sector have resulted in the migration of people from rural to urban areas. However, as mentioned earlier it is not possible to absorb all the labourers in the industries due to inadequate industrial base. The domestic savings and therefore investment is not sufficient to create substantial job opportunities to absorb the labour force. Keynesian solution of increasing job opportunities through increasing government expenditure is not possible, as Jordan is very much dependent on external aid, which has not been consistent in the last fifty years. Since the demand for labour is a derived demand because of the low levels of agriculture and industrial base, the job opportunities do not persist in Jordan.

Most of the employment which is generated is in the government administration sector and other service sector related jobs. It is thus obvious that the labourers move to the neighbouring countries in search of employment. The type of employment structure is not growth inducing in nature. Over and above this the fall in the wages might also lead to people to outmigrate in search of jobs. However the outflow of skilled workers in turn aggravates the economic problems of Jordan. The labourers therefore have potentials to contribute to the growth of Jordan. Such a vicious circle needs to be broken by strengthening the growth of agriculture and industrial sectors of the economy.

3.3 Labour Market Dynamics

Labourers cannot easily move from one occupation to another or acquire at short notice special type of skills. Thus labour markets are segmented due to non-competing groups. An economist cannot become a surgeon overnight and a carpenter cannot become a plumber or a television repairer within a couple of days. Once people specialise in a particular trade, they become a part of a particular labour segment of submarket. Their wages rise and fall depending upon the changes in the supply of labour in their respective sub-markets. Labourers of a higher skill and lower skill are partial substitutes rather than perfect substitutes. The labour market is therefore composed of partially competing groups. Thus the market is likely to settle towards that equilibrium pattern of wages at which the total demand for each category of labour exactly matches its competitive supply.

Economists in recent years have come to view unemployment as a dynamic phenomenon. Both the theoretical and empirical researches have emphasized the 'Role of turn over' in understanding unemployment. The unemployed are not viewed as a stagnant pool of job seekers awaiting a business upturn. It has been proved that unemployment is the result of people entering and leaving the pool of unemployment⁸.

According to Schiller ⁹, unemployment creates a loss to the economy in which output of goods and services is reduced. Also the human cost of unemployment includes not only financial losses but also social inconvenience, physical, and psychological pain.

The urban educated unemployed are a special group seeking entry only into privileged spheres of the labour market i.e. Management, and highly paid respectable jobs in public and private enterprises. Thus the labour market is concerned with the offer of services and the purchase of those services at a price or wage. It therefore has two sides; a) The employment side and b) the compensating remuneration for employment¹⁰. The decisions of employers and those of employees, their bargains and bids offered, and their formal and informal contracts play an important part as forces to determine the transactions in the labour market.

In order to capture the forces which might have influenced demand and supply of labour and in turn given rise to a particular dynamism to the Jordanian labour market, the following

sections deal with the characteristics of Jordanian labour market.

3.4 Population Growth and Labour Market

In 1947 the population of Trans-Jordan was approximately 3,75,000 and the resident population of that portion of Palestine, which was later incorporated into Jordan, was approximately 4,60,000. In a single year of 1948, about 350,000 persons left the rest of Palestine and entered the area that became Jordan. Thus the population of Jordan doubled¹¹.

The first census in Jordan was conducted in September 1952 which counted the number of houses and households. The second census was conducted in November, 1961, which for the first time, provided the data regarding population, occupation, age, male-female ratio etc. The following are the findings of 1961 and some other government bodies.

Jordan's population was approximately 17.60 lakhs in 1961. The working age group of 15-64 years numbered about 8.56 lakhs or slightly over 50 percent of the total. 45 percent of the population was under 15 years of age¹².

Within working age group the females exceed males by about 16,000. About 63,000 Jordanian citizens residing abroad are not included in the figures of total population. They were predominantly male. The female preponderance is due partly to the

greater number of male deaths during the Arab Israeli conflict of 1948 and 1967 and also due to out-migration of male workers abroad¹³.

Following the 1961 census out of 17.6 lakhs population of Jordan, 9 lakhs resided on the East Bank. By 1975, the estimated population of the East Bank was 19.4 lakhs and that of West Bank was 7.9 lakhs. By the year 1986, it rose to 27.9 lakhs¹⁴ and in the year 1994, it was around 40.95 lakhs¹⁵; which is about two times higher than that in the year 1965. Average rise of population per annum is 20 percent. This has increased the supply of labour as compared to the demand for labour.

Table 3.1 shows the population growth rate during the period 1968-1987, It indicates a high natural birth rate, which decreased slightly during the period 1968-1987 from 49.45 per thousand in 1968 to 44.0 per thousand in 1987. The crude death rate dropped from 15.38 per thousand in 1968 to 10.0 per thousand in 1987. These estimates give a natural rate of increase of population by about 30.5 per thousand per annum, which is one of the highest in the world. In addition, net migration has added over one percentage point to the average annual population growth rate during the twenty years. The migration from the West Bank and the return of workers from abroad have also accelerated population growth. The population in these years increased sharply, because of the influx of refugees and the Jordanian returnees from Gulf countries including Palestinian refugees in 1967 and recently in 1991.

Table 3.1 : Growth Rate of Population, 1968-1987

Years	Birth Rate	Death Rate	Natural Growth Rate	Net-mig- ration Rate
1	2	3	4	5
1968	49.5	15.4	34.1	0.9
1969	49.2	15.1	34.1	0.9
1970	48.9	14.8	34.1	0.9
1971	48.6	14.5	34.1	1.9
1972	48.4	14.2	34.2	1.9
1973	48.1	13.9	34.2	1.8
1974	47.8	13.7	34.2	1.8
1975	47.6	13.4	34.2	9.8
1976	47.3	13.1	34.2	9.8
1977	47.0	12.9	34.2	9.8
1978	46.8	12.6	34.2	9.9
1979	46.5	12.4	34.1	2.9
1980	46.3	12.1	34.1	4.9
1981	46.0	11.8	34.1	4.9
1982	45.8	11.9	34.1	4.9
1983	45.5	11.4	34.1	5.9
1984	45.3	11.2	34.0	6.0
1985	45.0	11.0	34.0	4.0
1986	44.9	11.0	34.0	4.0
1987	44.0	10.0	34.0	2.0
Average	46.9	12.8	34.1	4.4

Source : Royal Scientific Society (RSS),
Current Status and Future Prospect
of Jordanian Labour Market, Vol.3,
1989, (Arabic Origin).

The projection by International Labour Organisation (ILO) shows the change in crude Birth Rate per 1000 as follows :

Table 3.2 : Projections of Birth Rate and Death Rate till the Year 2000 by International Labour Organisation

Annual Rate of change	1980-85	1985-90	1990-95	1995-2000
CBR* per 1000	36.1	34.4	35.4	33.9
CDR** per 1000	6.4	5.6	5.0	4.6

* Crude Birth Rate ** Crude Death Rate

Source :- UNFPA/ILO project No.JOR/88/PO2 : Population, Human Resources and Developments Planning, p.15.

The crude birth rate projection shows that the rate, which was 36 per thousand during 1980-85, which will decrease to 33.9 per thousand during 1995-2000, and the crude death rate would decrease from 6.4 per 1000 during 1995-2000. As the actual for 1980-85 and 1985-90 are very much different from the projected figures, it's unlikely that Jordan will achieve low birth and death rates by 2000.

The table 3.3 shows population by sex and projections by International labour organisation for male and female population for the years 1987-1996. During 1979 to 96 male population is expected to increase by 4.6 and female population by 4.1 per cent, and the overall rate of growth of population will be 4.4 per cent.

Table 3.3 : Population by Sex - 1952-1996 (in '000)

Years	Population			% Change Over Previous Year			% to total Population	
	Male	Female	Total				Male	Female
	1	2	3	4	5	6	7	8
1952*	301.7	284.5	586.2				51.5	48.5
1961**	469.4	431.4	900.8	155.6	151.6	153.7	52.1	47.9
1965	534.6	493.4	1028.0	113.9	114.4	114.1	52.0	48.0
1970	784.3	723.9	1508.2	146.7	146.7	146.7	52.0	48.0
1975	941.5	869.0	1810.5	120.0	120.0	120.0	52.0	48.0
1979***	1115.8	1017.2	2133.0	118.5	117.1	117.8	52.3	47.7
1980	1160.4	1057.9	2218.3	104.0	104.0	104.0	52.3	47.7
1981	1206.8	1100.2	2307.0	104.0	104.0	104.0	52.3	47.7
1982	1255.1	1144.2	2399.3	104.0	104.0	104.0	52.3	47.7
1983	1305.3	1190.0	2495.3	104.0	104.0	104.0	52.3	47.7
1984	1257.6	1237.5	2495.1	96.3	104.0	100.0	50.4	49.6
1985	1409.1	1284.6	2693.7	112.0	103.8	108.0	52.3	47.7
1986	1462.6	1333.5	2796.1	103.8	103.8	103.8	52.3	47.7
1987	1741.0	1473.0	3214.0	119.0	110.5	114.9	54.2	45.8
1988	1768.0	1506.0	3274.0	101.6	102.2	101.9	54.0	46.0
1989	1801.0	1544.0	3345.0	101.9	102.5	102.2	53.8	46.2
1990	1849.0	1593.0	3442.0	102.7	103.2	102.9	53.7	46.3
1991	1915.0	1655.0	3570.0	103.6	103.9	103.7	53.6	46.4
1992	1994.0	1725.0	3719.0	104.1	104.2	104.2	53.6	46.4
1993	2080.0	1802.0	3882.0	104.3	104.5	104.4	53.6	46.4
1994	2167.0	1880.0	4047.0	104.2	104.3	104.3	53.5	46.5
1995	2251.0	1956.0	4207.0	103.9	104.0	104.0	53.5	46.5
1996	2330.0	2031.0	4361.0	103.5	103.8	103.7	53.4	46.6
Anul.Avg.								
Growth	4.6	4.1	4.4					
Rate								
1979-96								

Note : Total population figures show slight variation from the data reported in Table 2.1 due to different source.

- Sources:
1. Department of Statistics, Amman-Jordan.
 2. UNFPA/ILO Project No. JOR/88/P02 : Population, Human Resources and Development Planning (Projected Years, 1987 to 1996).
 3. * Housing Statistics, Oct. 1952.
 4. ** Result of the Population and Housing Census, Nov. 18, 1961.
 5. *** Result of Housing and Population Census on Nov. 10, 1979.

Table 3.4 provides information about the distribution of population in Jordan by age and sex during the period 1961-1995. In 1961, males formed 50.8 percent and females 49.2 percent of total. Most of the population is young as almost three quarter e.g 71.6 percent of the population belongs to the age group of 30 years and below. Population below 15 years formed 45.4 percent to the total. The projection by International Labour Organisation (ILO) during 1980-1995 showed that both the sexes will continue to have almost same ratio in 1995, i.e., 51.0 and 49.0 percent for males and females respectively.

3.5 Regional Distribution of Population

The population of Jordan is concentrated in the Northwestern corner of the country around cities of Amman, Irbid and Zarqa. These are the most fertile and industrialised areas and most of the population of Jordan is supported by them. In 1961 about 64 percent of the population lived outside the nine largest cities (Amman, Zarqa, Nablus, Jerusalem, Hebron, Irbid, Salt, Karak and Ma'an). By 1974 over half the population was living in urban areas. The cities of Amman and Irbid received large number of migrants during the period 1961 to 1975¹⁶. And in 1991 Amman and Zarqa had 55.9 percent of total population in Jordan.

Table 3.5 Indicates the distribution of population in Jordan by Governorates and mode of living in the years 1961 and 1991. In 1961 urban population was 51.52 percent while rural and tents residents had 39.5 and 8.9 percent share respectively. 48.1 percent of total population concentrated in Amman-Zarqa region. 83.0 percent of Amman-Zarqa population was urban and 12.3

and 4.7 percent of population was rural and tent dwellers. Irbid, Ajloun and Mafrag were semi-rural in 1961 as rural population was almost 70 percent, and urban 23.7 percent. Nomads (tent dweller) who mostly concentrate in Mafrag formed 6.6 percent of total population. Other districts e.g Balqa, Karak and Tafilah and Ma'an had 21.4 percent of total Jordanian population in 1961. These governorates are mostly rural as more than 60 percent of the population is concentrated there. Ma'an is the only region where nomadic bedouins (tent dwellers) formed the majority as their percentage was 42.3. The urban and rural percentage shares in 1969 were 51.1 and 39.54 respectively.

In 1991, Amman - Zarqa the industrialized regions continued to be predominant. Their share in total population was 55.9 percent. Urban population was 91.5 percent, and rural and tents dwellers were 6.8 and 1.7 percent of the total population respectively.

Irbid and other cities had 28.4 percent of total Jordanian population in 1961. It is notable from the table that during a period of thirty years the population of Irbid, Ajloun and Mafrag region shifted from rural to urban areas. The rural and tents population decreased to 33.0 percent and 4.7 percent against a rise in urban population from 23.72 percent in 1961 to 62.30 percent in 1991. The same internal migration movement from rural to urban areas also happened in Balqa and Ma'an as the urban population formed 66.9 and 56.9 percent respectively. Karak and Tafilah are the only regions which continued to be rural as the rural population formed 61.78 percent, while urban and tents dwellers were 32.0 and 6.2 percent respectively.

Table 3.4 : Population by Age and Sex During 1961-1995 (in '000)

Years	1961*			1975*			1980		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10
0-4	159.1	146.5	305.6	267.0	258.0	525.0	208.0	196.0	404.0
5-9	129.0	117.3	246.3	215.0	208.0	423.0	190.8	177.8	368.6
10-14	120.7	102.0	222.7	174.0	169.0	343.0	163.8	150.7	314.5
15-19	94.2	92.9	187.1	140.0	130.0	270.0	120.6	113.5	234.1
20-24	67.5	72.5	140.0	117.0	109.0	226.0	74.3	75.4	149.7
25-29	57.4	62.1	119.5	105.0	96.0	201.0	50.2	56.3	106.5
30-34	44.0	46.6	90.6	86.0	82.0	168.0	47.2	52.3	99.5
35-39	37.7	44.0	81.7	72.0	69.0	141.0	49.2	47.3	96.5
40-44	29.8	31.5	61.3	57.0	55.0	112.0	43.2	43.2	86.4
45-49	25.3	25.3	50.6	44.0	44.0	88.0	35.2	32.2	67.4
50-54	25.4	25.8	51.2	30.0	37.0	67.0	27.1	25.1	52.2
55-59	17.5	15.2	32.7	26.0	27.0	53.0	19.1	18.1	37.2
60-64	21.2	19.9	41.1	20.0	21.0	41.0	15.1	14.1	29.2
65-69	12.3	10.7	23.0	16.0	17.0	33.0	11.1	10.0	21.1
70 and Over	26.6	26.5	53.1	22.0	24.0	46.0	20.1	18.0	38.1
Total	867.7	838.8	1706.5	1391.0	1346.0	2737.0	1075.0	1030.0	2105.0

(cont..)

Table 3.4 : Population by Age and Sex During 1961-1995 (in '000)

Years	1985			1990			1995		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10
0-4	202.1	193.0	395.1	234.4	223.6	458.0	291.6	277.7	569.3
5-9	205.3	193.3	398.6	200.3	191.1	391.4	232.8	221.9	454.7
10-14	189.8	176.9	366.7	204.5	192.5	397.0	199.7	190.5	390.2
15-19	162.7	149.8	312.5	188.8	176.1	364.9	203.6	191.8	395.4
20-24	119.4	112.5	231.9	161.4	148.7	310.1	187.5	175.1	362.6
25-29	73.5	74.5	148.0	118.2	111.5	229.7	160.1	147.6	307.7
30-34	49.6	55.5	105.1	72.7	73.7	146.4	117.2	110.5	227.7
35-39	46.5	51.4	97.9	49.0	54.8	103.8	71.9	72.9	144.8
40-44	48.4	46.3	94.7	46.0	50.6	96.6	48.5	54.0	102.5
45-49	41.9	42.1	84.0	47.2	45.3	92.5	45.0	49.6	94.6
50-54	33.6	31.0	64.6	40.3	40.8	81.1	45.6	44.0	89.6
55-59	25.4	23.9	49.3	31.6	29.6	61.2	38.1	39.0	77.1
60-64	17.2	16.7	33.9	23.0	22.2	45.2	28.9	27.7	56.6
65-69	12.9	12.5	25.4	14.8	14.9	29.7	20.0	19.9	39.9
70 and Over	20.7	19.9	40.6	21.3	21.9	43.2	24.2	25.8	50.0
Total	1249.0	1199.3	2448.3	1453.5	1397.3	2850.8	714.7	1648.0	3362.7

Note : * The Population for West Bank are included in the years 1961 and 1975.

Source : UNFPA/ILO Project No. Jor.88/P02 : Population, Human Resources and Development Planning, (Projection During 1980-95).

Table 3.5 : Population by Governorates and Mode of Living,
1961 and 1991 (in '000)

Governor- rate	1961				1991			
	Total	Urban	Rural	Scattered Tents	Total	Urban	Rural	Scattered Tents
1	2	3	4	5	6	7	8	9
1. Amman & Zarqa	433.7 (100)	360.0 (83.02)	53.4 (12.30)	20.3 (4.68)	2174.0 (100)	1990.0 (91.54)	147.0 (6.76)	37.0 (1.70)
2. Balqa	79.1 (100)	16.2 (20.46)	48.9 (61.80)	14.0 (17.43)	239.0 (100)	160.0 (66.94)	79.0 (33.06)	-
3. Irbid, Ajloun & Mafrag	274.0 (100)	65.0 (23.72)	190.8 (69.66)	18.2 (6.63)	1106.0 (100)	689.0 (62.30)	365.0 (33.00)	52.0 (4.70)
4. Karak & Tafilah	67.2 (100)	7.4 (11.00)	51.6 (76.80)	8.2 (12.10)	225.0 (100)	72.0 (32.00)	139.0 (61.78)	14.0 (6.22)
5. Ma'an	46.9 (100)	15.6 (33.15)	11.5 (24.51)	19.9 (42.34)	144.0 (100)	82.0 (56.94)	45.0 (31.25)	16.0 (11.11)
Total Jordan	900.8* (100)	465.1 (51.52)	356.2 (39.54)	80.5 (8.94)	3888.0* (100)	2993.0 (77.00)	775.0 (19.94)	119.0 (3.06)

Note : Figures in brackets show percentage to total.

* Population of West Bank is excluded.

Sources : 1. Labour Law and Practice in Jordan, BLS Report no. 322, U.S. Department of Labour.
2. Ministry of Planning - Plan for Economic and Social Development, 1993-1997, Table No.11, (Arabic Origin).

Internal migration in Jordan is mainly due to the economic factors like better payments and job opportunity in urban areas. Education is the another factor. As most of the people in recent years are well educated, they try to shift from agriculture to industry and services sectors. Thus due to concentration of people in three main governorates, the labour market of Jordan is also concentrated in these areas. Thus most of the population lives in urban cities, without structural transformation of the economy from agricultural to service based economy. As generally expected urbanization and industrialization have not happened hand in hand. Thus the urbanization pattern refutes the theories by Lewis, and structural transformation analyst like Colin Clark etc.

3.6 Structural Characteristics of Jordanian Labour Market

The labour market of Jordan is facing the problem of chronic disequilibrium which is reflected through the growing unemployment rate, external migration of Jordanian labour and immigration of foreign workers, refugees and internal migration.

Expansion of economic activity during Sixties was far from sufficient to absorb working force group and all those displaced by the Arab Israel War. Thus during 1960s the demand for labour remained sluggish and inadequate in comparison with the supply of labour. The labour-market could not grow because of the pre-modern agricultural subsistence conditions. Hence, one third of the labour force was unemployed. The problem was eased to some extent due to the exodus of Jordanians to the foreign countries.

Since 1968 Jordanian labour market has been facing the following problems: a) of low labour participation rate. b) unbalanced sectoral and geographical distribution of labour force and c) general disequilibrium in the labour market.

It can be seen from the table 3.6 that the population growth rate jumped from 3.5 percent in 1968 to 11.0 percent and 12.6 in 1990 and 1991 respectively which is mainly due to Gulf war and the problem of returnee labour force. The unemployment rate decreased from 9.9 percent in 1968 to its minimum 1.6 percent in 1976 which was due to economic prosperity and emigration. After 1976, it started increasing, however it remained single digit till 1988. After 1988, we find a sharp increase in the unemployment rate. The increase to 18.8 percent in 1991 was mainly due to Gulf war and thereafter it has remained at that level.

The labour participation rate in Jordan has been relatively low at about 19 percent per annum during 1968-1991 (Table 3.6). The low labour participation rate has been the result of the interaction of demographic, social and economic factors. The age structure of population is such that about 50 percent of the population is in the age groups of less than 15 and more than 64¹⁷. Apart from this lower female participation rate, high educational enrollment and general economic backwardness are also responsible for the low participation rate.

Table 3.6 : Some Indicators of Labour Market,
1968 -1994.

Years	Popula- tion Growth Rate	Labour Force Growth Rate	Unempl- yoment Rate	Economic Partici- pation Rate
1	2	3	4	5
1968			9.9	26.6
1969	3.5	3.6	11.8	19.9
1970	3.5	3.6	13.7	19.9
1971	3.6	3.6	13.8	19.9
1972	3.6	3.6	14.0	19.9
1973	3.6	3.4	11.0	19.9
1974	3.6	3.3	8.0	19.8
1975	4.4	3.3	4.9	19.6
1976	4.4	3.3	1.6	19.4
1977	4.4	3.3	2.2	19.2
1978	4.4	3.3	2.9	19.1
1979	3.7	3.6	3.5	19.0
1980	4.0	3.6	3.5	18.9
1981	4.0	3.7	3.9	18.9
1982	4.0	3.6	4.3	18.8
1983	4.0	3.7	4.8	18.7
1984	4.0	3.6	5.4	18.7
1985	3.8	3.7	6.0	18.7
1986	3.8	6.6	7.8	19.1
1987	3.6	8.8	8.3	19.2
1988	3.6	4.0	8.9	19.3
1989	3.7	4.0	10.3	19.3
1990	11.0	8.0	16.8	18.2
1991	12.6	7.9	18.8	17.5
1992	3.2	3.8	15.0	17.6
1993	3.5	3.4*	18.8	20.7
1994	3.7	4.1*	15.3	18.6*

Note : * Excluding immigrant labour.

Sources :

1. Department of Statistics, Annual Bulletin, 1989, Jordan.
2. Royal Scientific Society, Current Status and Future of Jordan Labour Market, 1989, Jordan.
3. Ministry of Labour, Annual Reports- 1989, 1992, 1993 Jordan.
4. Central Bank of Jordan, Deptt. of Research and Studies, Monthly Statistical Bulletin, Vol.30, No.8 August 1994, (Years 1990-1994).
5. Amman Chamber of Industry - Jordan Facts & Figures, 1992 - 1994 -1995 Jordan.

Due to sluggish growth of agriculture and industrial sectors the demand for labour has also been sluggish. Government's demand for labour has remained limited to administrative, military and public sector establishments. As long as, the government was receiving financial aid from affluent Arab countries, it was capable of absorbing labour in various projects. However the political crisis always hampered such growth. Over and above this, there is a very little scope for absorption of labour in agricultural and allied activities. In addition to this, there is voluntary unemployment among young people in agriculture¹⁸.

Unemployment is prevalent in all the economic sectors of the country. This is one of the reasons which induces the Jordanian labour to emigrate abroad looking for job opportunities. In 1961 the number of Jordanian workers abroad was equal to about 16 percent of the total labour force. About 50000 workers in Kuwait and other Arab countries, including about 3000 were in West Germany, 5000 in South America and 2500 in the United States. The number increased to 2 lakhs in 1975 and 3.5 lakhs in 1989. Recently it decreased to 2.75 lakhs in 1993. It is a peculiar condition of the Jordanian labour market that in spite of unemployment and underemployment, Jordan had to import and export labour simultaneously. The home labour market therefore, is vulnerable to unemployment in case there is a forced return of the Jordanians working abroad¹⁹.

Due to external migration the Jordanian labour market experienced shortages of labourers in certain occupations, leading to an import of labour from neighbouring Arab countries

and also to an increase in wages. Hence, the number of foreign workers in Jordan increased from 1.53 lakh in 1984 to about 1.75 lakh in 1991. These foreign workers are wanted in the construction, agriculture and services sectors, particularly in the jobs which Jordanians do not like to have.

Since the end of the eighties and ^{the} beginning of the nineties, a pressure is being mounted to employ Jordanian labour in place of foreign labour and also to reduce or retrench foreign labour. The problem has become complicated due to abnormal growth of internal migration of rural labour to the cities. The ratio of urban population to the total population was about 30 percent in 50s, 40 percent in 60s, 59 percent in 1979 but it has become 70 percent in 1989²⁰ and 91.5 percent in 1991. Due to sporadic rise in the supply of labour and its pressure, demand conditions having only marginally improved, there is at present a chaotic condition in the labour market of Jordan witnessing a high supply and a low demand. This has resulted in the disequilibrium in the market. There has been a good amount of progress in general education, college education and vocation oriented training in technical institutes. Therefore, the supply of educated and skilled labour has risen considerably and at the same time, the demand for white collared jobs has remained sluggish. This has created a new problem in the labour market of educated unemployed labour force.

3.7 Regional Distribution of Labour Force

During the sixties agriculture employed more than one third of the total labour force of Jordan. In the industrialized

district of Amman, Agriculture employed less than one seventh of the labour force, whereas in the districts of Balqa and Karak, it absorbed about two thirds of the labour force.

The main reasons behind this concentrated labour markets are; concentration of population in capital city of Amman. Amman being gravitational centre of industrial, commercial, financial, administrative, educational activities and recent migration from rural areas to the capital for job opportunities. The labour market of Jordan virtually therefore means the labour market of the capital city of Amman.

Lewis model therefore as mentioned earlier is not applicable to rural-urban labour migration. Rooted in his model is the belief that urbanization and industrialization are synonymous. However internal migration in many third world countries during 1960s and 1970s happened despite low industrial base in urban areas, urban unemployment and underemployment. Todaro's Model in turn emphasises that migration is an economic phenomenon and inspite of prevalence of limited job opportunities in urban areas, it is quite rational on the part of an individual to migrate. His model postulates that migration proceeds in response to urban-rural differences in expected income rather than actual earnings. The fundamental premise is that migrants consider the various labour market opportunities available to them in the rural and urban sectors and choose the one that maximizes their expected gains from migration²¹. Expected gains are the differences in real incomes between rural-urban works and the probability of getting a job in an urban area. Todaro's model can explain the migration from rural to urban areas in case

model can explain the migration from rural to urban areas in case of Jordan as the main reason for their migration is with the expectation of getting a job and higher earning in an urban area.

Table 3.7 shows the concentration of labour force in Amman region which was 58.4 percent in 1968. Irbid had second place with 22.0 percent of total population residing there. Thus it shows that more than 3/4th labour force settled in a region of the North West corner of the country in the periphery of Amman capital. There is no change in the concentration ratios between 1968 and 1991, as one finds Amman and Abid to be the two major areas of concentration.

The Annual average growth rate of labour force was the highest in Irbid, i.e., 5.0 followed by Karak 4.2 and Amman 3.1 percent.

Table 3.8 shows geographical distribution of Jordan's employed labour force during 1968-1991. Amman district, as the centre of economic activity in Jordan, absorbed the majority of the labour force. The share of employed labour in Amman to that of the total in Jordan was 56.3 percent in 1968. This percentage has almost remained the same till 1991. Irbid absorbed 22.6 percent, while Balqa 8.3 percent, Karak 7.4 percent and Ma'an 5.2 per cent, of total employed labour force in 1968. The share of employed workers decreased in Ma'an, whereas in Karak and Balqa there was some decline. There is an improvement in Irbid, where there was an increase of 28.0 percent in 1991.

The government of Jordan launched rural development programme to strengthen the attachment of people to the land, and to alleviate the pressure of population in the Amman area. However we do not find any significant dent on regional

Table 3.7 Distribution of Labour Force by Governorates, 1968 - 1991.
(in '000)

Years	Governorates					% to Total Labour Force						
	Labour Force											
	Amman	Irbid	Balqa	Karak	Ma'an	Amman	Irbid	Balqa	Karak	Ma'an		
1	2	3	4	5	6	7	8	9	10	11	12	
1968	279.3	163.2	61.4	22.1	18.7	13.9	58.4	22.0	7.9	6.7	5.0	
1969	289.5	171.1	62.2	22.6	19.2	14.4	59.1	21.5	7.8	6.6	5.0	
1970	299.9	179.1	63.1	23.3	19.6	14.8	59.7	21.0	7.8	6.5	4.9	
1971	310.8	187.5	64.1	23.9	20.0	15.3	60.3	20.6	7.7	6.4	4.9	
1972	322.0	196.1	65.0	24.5	20.5	15.9	60.9	20.2	7.6	6.4	4.9	
1973	332.8	204.1	67.5	24.5	21.0	15.7	61.3	20.3	7.4	6.3	4.7	
1974	343.9	210.5	71.3	24.8	21.6	15.7	61.2	20.7	7.2	6.3	4.6	
1975	355.4	216.2	75.9	25.3	22.1	15.9	60.8	21.4	7.1	6.2	4.5	
1976	367.2	221.1	81.3	25.9	22.7	16.2	60.2	22.1	7.1	6.2	4.4	
1977	379.5	224.7	88.0	26.7	23.3	16.8	59.2	23.2	7.0	6.1	4.4	
1978	392.2	227.5	95.7	27.5	24.0	17.5	58.0	24.4	7.0	6.1	4.5	
1979	405.3	229.1	104.5	28.6	25.0	18.1	56.5	25.8	7.1	6.2	4.5	
1980	420.0	234.9	12.9	27.7	27.0	17.5	55.9	26.9	6.6	6.4	4.2	
1981	435.4	242.3	17.1	28.8	28.9	18.3	55.6	26.9	6.6	6.6	4.2	
1982	451.2	248.6	23.6	29.8	30.9	18.3	55.1	27.4	6.6	6.8	4.1	
1983	467.7	259.0	25.3	30.7	33.8	18.9	55.4	26.8	6.6	7.2	4.0	
1984	484.7	268.7	29.2	32.0	35.1	19.7	55.4	26.7	6.6	7.2	4.1	
1985	502.4	279.0	33.2	33.3	36.3	20.6	55.5	26.5	6.6	7.2	4.1	
1986	535.4	301.5	39.1	34.9	38.2	21.7	56.3	26.0	6.5	7.1	4.1	
1987	555.7	313.2	44.1	36.3	39.6	22.5	56.4	25.9	6.5	7.1	4.0	
1988	572.7	322.4	48.4	37.4	40.8	23.2	56.3	25.9	6.5	7.1	4.1	
1989	583.5	328.9	51.3	38.1	41.6	23.6	56.4	25.9	6.5	7.1	4.0	
1991*	680.0	386.9	88.9	46.9	38.1	19.1	56.9	27.8	6.9	5.6	2.8	
Anul.Avg.												
Growth Rate												
1968-89												

Note : * Labour Force of Amman district includes Zarqa, Irbid includes Mafraq, and Karak includes Tafilah.

Sources :

1. Royal Scientific Society, Current Status and Future of Jordanian Labour Market, Vol.3, 1990.
2. Ministry of Labour, Annual Reports, 1988 and 1989.
3. Department of Statistics, Data Bank, Year 1991.

Table 3.8 : Distribution of Employed by Governorates, 1968 - 1991.
(in '000)

Year	Total Employed	Total Employed as % of Labour Force	Governorates						% Employed to Total Employed					
			Amman	Irbid	Balqa	Karak	Ma'an	Amman	Irbid	Balqa	Karak	Ma'an		
1	2	3	4	5	6	7	8	9	10	11	12	13		
1968	251.6	90.1	141.7	57.3	21.0	18.5	13.1	56.3	22.8	8.3	7.4	5.2		
1969	255.3	88.2	143.5	57.9	21.5	19.0	13.4	56.2	22.7	8.4	7.4	5.2		
1970	258.9	86.3	145.2	58.5	22.1	19.5	13.6	56.1	22.6	8.5	7.5	5.3		
1971	267.8	86.2	152.2	59.2	22.7	19.9	13.8	56.8	22.1	8.5	7.4	5.2		
1972	276.9	86.0	159.3	59.9	23.3	20.4	14.0	57.5	21.6	8.4	7.4	5.1		
1973	296.0	88.9	172.2	64.4	23.9	20.9	14.6	58.2	21.8	8.1	7.1	4.9		
1974	316.4	92.0	185.9	69.5	24.5	21.5	15.0	58.8	22.0	7.7	6.8	4.7		
1975	338.1	95.1	200.6	74.8	25.2	22.0	15.5	59.3	22.1	7.5	6.5	4.6		
1976	361.3	98.4	216.3	80.6	25.8	22.6	16.0	59.9	22.3	7.1	6.3	4.4		
1977	371.0	97.8	218.0	86.8	26.5	23.2	16.5	58.8	23.4	7.1	6.3	4.4		
1978	380.9	97.1	219.3	93.6	27.2	23.7	17.1	57.6	24.6	7.1	6.2	4.5		
1979	391.1	96.5	220.4	100.8	27.9	24.4	17.6	56.4	25.8	7.1	6.2	4.5		
1980	405.3	96.5	226.5	108.9	26.6	26.3	17.0	55.9	26.9	6.6	6.5	4.2		
1981	418.4	96.1	232.8	112.9	27.0	27.9	17.8	55.6	27.0	6.5	6.7	4.3		
1982	431.8	95.7	238.2	119.1	27.0	29.8	17.7	55.2	27.6	6.3	6.9	4.1		
1983	445.3	95.2	244.6	122.5	27.5	32.5	18.2	54.9	27.5	6.2	7.3	4.1		
1984	458.5	94.6	253.7	124.0	28.5	33.5	18.8	55.3	27.0	6.2	7.3	4.1		
1985	472.3	94.0	261.3	127.7	29.4	34.5	19.4	55.3	27.0	6.2	7.3	4.1		
1986	492.5	91.9	272.5	133.2	30.6	36.0	20.2	55.3	27.0	6.2	7.3	4.1		
1987	509.3	91.7	281.8	137.7	31.7	37.2	20.9	55.3	27.0	6.2	7.3	4.1		
1988	521.3	91.0	288.7	141.0	32.5	38.1	21.5	55.4	27.0	6.2	7.3	4.1		
1989	523.5	89.7	289.7	141.5	32.6	38.2	21.5	55.3	27.0	6.2	7.3	4.1		
1991	552.0	81.2	310.8	154.6	38.1	31.5	17.1	56.3	28.0	6.9	5.7	3.1		
Anul.Avg.														
Growth Rate														
1968-89														
	3.8		3.5	5.1	1.9	3.8	2.4							

Source : Same as table 3.7

3.8 Sectoral Distribution of Employed Labour

This and the following sections give information about distribution of labour force and employed labour by sector, occupation, education level and sex. Apart from census, various surveys are undertaken to gather data on labour market of Jordan. Labour force consists of ~~the~~ employed and ~~the~~ unemployed. The information on ^{the} employed is not difficult to obtain. The labour force data are available from census. The time series of labour force on the basis of sector, occupation etc. are prepared using the data from occasional surveys and extrapolating population. Thus the analysis which follows is based on the compilation of estimates done by various agencies including Government of Jordan.

The sectoral distribution of labour force has been unbalanced since 1968. The majority of the labour force belongs to the services sector. Tables 3.9 and 3.10 show the distribution of Jordanian labour force by economic activity in absolute terms and in percentages respectively. Over a period of 25 years, i.e., 1968-1993, the percentage of labour force in Agriculture has gone down from 21.9 percent to 6.4 percent in favour of other Sectors. The share of Social services and Mining and Manufacturing increased from 42.5 to 50.6 and 9.5 to 10.5 respectively during the said period. The share of trade increased from 8.7 to 10.5 percent. Thus the main sector where the labour force is concentrated is in Social Services.

It is also clear from the tables 3.9(a) and 3.10(a) that in the case of Jordan the structural change models discussed in Chapter II in which it is expected that an economy transforms itself from agricultural to industrialized economy and finally to service based economy, do not apply as the agricultural structure was not dominant in the early stages of economic growth of Jordan. Secondly the decline in the share of agriculture in total employed [Table 3.10 (a)] which was 22.3 percentage in 1968 to 7.3 percent in 1993, ~~and~~ was not accompanied by increase in the share of manufacturing sector. Out of the total employed it was the social service and defense which had the highest percentage share throughout 1968-1993. Only 9.7 percent of the total employed was engaged in mining and manufacturing in 1968 and this increased to only 10.7 in 1993. The labour force composition of Jordan therefore can be explained more in terms of the result of the institutional and political factors emphasized by International Dependence Models. Domestic factors such as insufficient savings as a factor emphasized in the Linear Stage Models and the new emerging growth theories, can also explain the sectoral distribution of labour force. Structural transformation of Jordanian economy is therefore dependent on the growth of industrial sector because this only above can make growth sustainable alongwith well developed agricultural structure.

Table 3.9 : Distribution of Labour Force by Economic Activities,
1968 -1993 (in '000)

Years	Agric- ulture and Manuf- acture	Mining and Manuf- acture	Electri- city & Water	Con- struc- tion	Trade	Transport & Commu- nication	Finan- cial Services	Social Services & Defence
1	2	3	4	5	6	7	8	9
1968	61.3	26.5	1.5	26.1	24.4	16.0	4.8	118.7
1969	59.9	27.2	1.6	26.9	25.6	17.7	5.0	125.6
1970	58.4	27.9	1.7	27.3	26.9	19.7	5.3	132.7
1971	57.0	28.6	1.8	28.0	28.3	21.9	5.6	139.6
1972	55.6	29.3	2.0	28.7	29.7	24.3	5.9	146.5
1973	54.2	30.1	2.0	31.3	31.1	25.0	6.2	152.9
1974	52.9	30.9	2.1	34.1	32.6	25.6	6.6	159.1
1975	51.6	31.6	2.2	37.2	34.3	26.2	7.0	165.3
1976	50.3	32.4	2.2	40.3	36.0	26.9	7.3	171.8
1977	49.1	33.2	2.3	44.3	37.7	27.6	7.8	177.5
1978	47.9	34.1	2.4	48.3	39.6	28.2	8.2	183.5
1979	46.7	34.9	2.5	52.7	41.5	29.0	8.7	189.3
1980	42.9	37.2	2.8	52.8	42.6	31.2	9.6	200.9
1981	40.6	40.9	3.3	54.6	45.0	34.6	11.0	205.4
1982	37.4	43.8	3.7	55.0	46.3	37.3	12.3	215.4
1983	34.5	46.9	4.3	55.4	47.7	38.9	13.7	226.3
1984	36.8	50.1	4.8	55.7	49.2	43.5	15.3	229.3
1985	39.2	53.1	5.5	55.3	50.2	47.2	17.1	234.8
1986	40.7	57.3	5.9	58.9	53.5	50.7	18.2	250.6
1987	40.3	59.5	9.1	61.1	55.5	52.2	18.2	259.8
1988	41.5	61.3	9.4	62.9	57.2	53.7	18.7	267.5
1989	42.3	62.5	9.5	64.2	58.3	54.8	19.1	272.8
1990	45.9	64.3	8.2	62.4	63.6	53.6	20.2	311.9
1991	50.3	70.0	8.9	66.7	70.0	59.8	21.8	332.5
1992*	44.4	61.8	6.6	60.0	63.0	52.2	19.8	292.2
1993	55.0	91.1	6.0	60.2	129.8	57.6	24.9	434.8
Anul.Avg.								
Growth	-1.6	4.3	7.5	3.7	4.4	4.9	6.7	3.9
Rate								

Note : * Includes the actually employed in 1992, while the total labour force is 706.

Sources :

- 1.Royal Scientific Society, Current Status and Future of Jordan Labour Market, Vol.3, 1989, Jordan.
- 2.Ministry of Labour, Annual Reports, 1988, 1989, 1992, and 1993 Jordan.
- 3.Central Bank of Jordan - Monthly Statistical Bulletin, Vol.31, No.8,
- 4.RSS, Unemployment in Jordan : Dimensions & Prospects, Centre for International Studies.Royal Scientific Society 1993 Amman - Jordan (Year 1990 and 1991).

Table 3.9(a) : Distribution of Employed by Economic Activities,
1968-1989

(in'000)

Year	Agric- ulture	Mining and Manuf- acture	Electri cit, & struc- Water tion	Con- struction	Trade	Transport & Commu- nication	Finan- cial Service	Social Services & Defence
1	2	3	4	5	6	7	8	9
1968	56.2	24.3	1.4	23.9	22.4	14.6	4.4	104.4
1969	53.5	24.3	1.4	24.0	22.9	15.8	4.5	108.9
1970	50.4	24.1	1.5	23.6	23.2	17.0	4.6	114.5
1971	49.1	24.7	1.5	24.1	24.4	18.9	4.8	120.3
1972	47.8	25.2	1.7	24.7	25.5	20.9	5.1	126.0
1973	49.8	27.6	1.8	28.8	28.6	23.0	5.7	130.7
1974	50.4	29.4	2.0	32.5	31.1	24.4	6.3	140.3
1975	50.2	30.7	2.1	36.2	33.3	25.5	6.8	153.3
1976	49.5	31.9	2.2	39.6	35.4	26.5	7.2	169.0
1977	48.1	32.5	2.3	43.4	36.9	27.0	7.6	173.2
1978	46.6	33.2	2.3	47.0	38.5	27.4	8.0	177.9
1979	45.1	33.7	2.4	50.8	40.0	28.0	8.4	182.7
1980	41.4	35.9	2.7	50.9	41.1	30.1	9.3	193.9
1981	39.0	39.3	3.1	52.5	43.3	33.2	10.6	197.4
1982	35.8	41.9	3.6	52.6	44.3	35.7	11.7	206.2
1983	32.8	44.6	4.1	52.7	45.5	37.4	13.0	214.2
1984	34.9	47.4	4.6	52.7	46.5	41.2	14.4	216.8
1985	36.9	49.9	5.2	51.9	47.2	44.4	16.1	220.7
1986	37.4	52.7	5.4	54.2	49.3	46.3	16.7	230.5
1987	37.7	53.5	8.5	53.4	49.7	47.1	17.2	242.2
1988	37.7	56.1	8.5	57.4	52.2	49.2	16.9	243.3
1989	38.0	56.2	8.6	58.4	52.2	49.6	17.2	243.3
Anul.Avg.	-1.0	2.0	3.9	2.1	1.9	2.5	3.3	1.9
Growth Rate								

Sources :Derived from the tables 3.9 and 4.3.

Table 3.10 : Percentage Distribution of Labour Force by
Economic Activities, 1968-1993

Years	Agric- ulture and Manuf- acture	Mining and Manuf- acture	Electri- city & turing	Con- struc- tion	Trade	Transport & Commu- nication	Finan- cial Services	Social Services & Defence
1	2	3	4	5	6	7	8	9
1968	21.9	9.5	0.5	9.3	8.7	5.7	1.7	42.5
1969	20.7	9.4	0.6	9.3	8.8	6.1	1.7	43.4
1970	19.5	9.3	0.6	9.1	9.0	6.6	1.8	44.2
1971	18.3	9.2	0.6	9.0	9.1	7.0	1.8	44.9
1972	17.3	9.1	0.6	8.9	9.2	7.5	1.8	45.5
1973	16.3	9.0	0.6	9.4	9.3	7.5	1.9	45.9
1974	15.4	9.0	0.6	9.9	9.5	7.4	1.9	46.3
1975	14.5	8.9	0.6	10.5	9.7	7.4	2.0	46.5
1976	13.7	8.8	0.6	11.0	9.8	7.3	2.0	46.8
1977	12.9	8.7	0.6	11.7	9.9	7.3	2.1	46.8
1978	12.2	8.7	0.6	12.3	10.1	7.2	2.1	46.8
1979	11.5	8.6	0.6	13.0	10.2	7.2	2.1	46.7
1980	10.2	8.9	0.7	12.6	10.1	7.4	2.3	47.8
1981	9.3	9.4	0.8	12.5	10.3	7.9	2.5	47.2
1982	8.3	9.7	0.8	12.2	10.3	8.3	2.7	47.7
1983	7.4	10.0	0.9	11.8	10.2	8.3	2.9	48.4
1984	7.6	10.3	1.0	11.5	10.2	9.0	3.2	47.3
1985	7.8	10.6	1.1	11.0	10.0	9.4	3.4	46.7
1986	7.6	10.7	1.1	11.0	10.0	9.4	3.4	46.8
1987	7.3	10.7	1.6	11.0	10.0	9.4	3.3	46.8
1988	7.2	10.7	1.6	11.0	10.0	9.4	3.3	46.7
1989	7.2	10.7	1.6	11.0	10.0	9.4	3.3	46.8
1990	7.3	10.2	1.3	9.9	10.1	8.5	3.2	49.5
1991	7.4	10.3	1.3	9.6	10.3	8.8	3.2	48.9
1992*	7.4	10.3	1.1	10.0	10.5	8.7	3.3	48.7
1993	6.4	10.6	0.7	7.0	15.1	6.7	2.9	50.6

Source : Based on tables 3.7 and 3.9.

Table 3.10(a) : Percentage Distribution of Employed by
Economic Activities, 1968-1989

Year	Agric- ulture	Mining and Manuf- acture	Electri city & water struc- ture	Con- struction	Trade & Commu- nication	Transport & Commu- nication	Finan- cial Service	Social Services & Defence
1	2	3	4	5	6	7	8	9
1968	22.3	9.7	0.6	9.5	8.9	5.8	1.7	41.5
1969	21.0	9.5	0.5	9.4	9.0	6.2	1.8	42.7
1970	19.5	9.3	0.6	9.1	9.0	6.6	1.8	44.2
1971	18.3	9.2	0.6	9.0	9.1	7.1	1.8	44.9
1972	17.3	9.1	0.6	8.9	9.2	7.5	1.8	45.5
1973	16.8	9.3	0.6	9.7	9.7	7.8	1.9	44.2
1974	15.9	9.3	0.6	10.3	9.8	7.7	2.0	44.3
1975	14.8	9.1	0.6	10.7	9.8	7.5	2.0	45.3
1976	13.7	8.8	0.6	11.0	9.8	7.3	2.0	46.8
1977	13.0	8.8	0.6	11.7	9.9	7.3	2.0	46.7
1978	12.8	8.7	0.6	12.3	10.1	7.2	2.1	46.7
1979	11.5	8.6	0.7	13.0	10.2	7.2	2.1	46.7
1980	10.2	8.9	0.8	12.6	10.1	7.4	2.3	47.8
1981	9.3	9.4	0.8	12.5	10.3	7.9	2.5	47.2
1982	8.3	9.7	1.0	12.2	10.3	8.3	2.7	47.8
1983	7.4	10.0	1.0	11.8	10.2	8.4	2.9	48.1
1984	7.6	10.3	1.2	11.5	10.1	9.0	3.1	47.3
1985	7.8	10.6	1.2	11.0	10.0	9.4	3.4	46.7
1986	7.6	10.7	1.7	11.0	10.0	11.4	3.4	46.8
1987	7.4	10.5	1.7	10.5	9.8	9.2	3.4	47.6
1988	7.2	10.8	1.6	11.1	10.0	9.4	3.2	46.7
1989	7.3	10.7	1.4	11.2	10.0	9.5	3.3	65.6

Source :Based on tables 3.8 and 3.9(a)

3.9 Occupational Distribution of Employed Labour

The above characteristic is also there in the occupational distribution of labour force in Jordan, where one finds concentration of labour force in productive and unclassified workers which are basically those who have limited skills or are unskilled or employed in such jobs with skills which can be acquired without much training. Most of the workers thus are in the service and in urban informal sector (Tables 3.11 and 3.12).

Tables 3.13 and 3.14 show distribution of the employed labour force by occupation during the period 1968-1993 in absolute and in percentage terms respectively. The tables indicate that more than half of the employed workers are occupied in service sector as productive and unclassified workers. Their percentage share was 52.0 of total employed in 1968. Agriculture comes second which absorbed 22.0 percent. Specialists, technicians and salesmen show almost the same percentage share, i.e., 6.0 percent, services 6.2 percent, clerks 5.6 percent, while the percentage of administrator is the lowest, 1.3 percent. Specialists and technicians showed an improvement after 1973. Their percentage share increased to 13.6 percent in 1989 against a sharp decrease of workers employed in agriculture to 6.2 percent. In 1993 labour force continued to be concentrated in productive and unclassified category. While the share of the specialists improved from 6 per cent in 1968 to 18.5 percent in 1993, ^{and} Other categories show a slight improvement, ^{are} there no major changes in the occupational pattern of the employees during the said period except ^{that of} agriculture and ^{the} specialists. This also reveals that structural transformation of the economy is taking place at a very slow pace.

Table 3.11 Distribution of Labour Force by Occupation, 1968 -1993

(in '000)

Years	Spl. Technicians	Administratives	Clerks	Salesmen	Services	Agricu- lture	Produ. & Unclass- ified *
1	2	3	4	5	6	7	8
1968	16.5	2.7	15.3	19.9	17.1	60.4	147.4
1969	18.3	3.0	16.1	20.1	17.8	58.7	154.7
1970	20.4	3.3	16.9	21.8	18.4	57.1	162.0
1971	22.7	3.5	17.8	22.8	19.1	55.6	169.3
1972	25.2	3.8	18.7	23.8	19.8	54.6	176.6
1973	28.0	4.2	19.7	24.9	20.6	52.6	182.8
1974	31.2	4.6	20.8	26.6	21.3	51.2	188.8
1975	34.7	4.9	21.9	27.2	22.1	49.8	194.8
1976	38.6	5.4	23.0	28.4	22.9	48.8	200.5
1977	42.9	5.9	24.2	29.7	23.9	47.1	205.9
1978	47.7	6.4	25.5	31.1	24.7	45.8	211.1
1979	53.0	6.9	26.8	32.5	25.6	44.6	215.9
1980	55.7	6.9	26.8	34.6	26.6	42.2	227.2
1981	58.6	6.9	26.8	36.8	27.6	40.0	238.7
1982	61.6	6.9	28.9	39.1	28.7	37.8	248.2
1983	64.8	7.0	26.9	41.5	29.8	35.8	261.9
1984	68.1	7.0	26.9	44.2	30.9	33.9	273.7
1985	72.8	7.3	28.9	45.7	32.1	30.6	285.3
1986	80.3	7.5	31.1	48.7	33.7	32.1	302.0
1987	89.4	7.7	32.8	48.9	36.3	37.6	303.0
1992*	130.6	6.9	54.4	62.8	33.9	39.5	367.8
1993*	159.0	20.6	66.5	76.5	41.2	48.1	447.7
Anul.Avg. Growth Rate (1968-89)	8.7	5.5	3.7	49.7	3.8	-0.2	3.7

Note : * A Worker with limited skill or a skill which can be acquired at job.

Source : Same as in Table 3.9.

Table 3.12 : Percentage Distribution of Labour Force by Occupation,
1968 -1993

Years	Spl. Techni- cians	Adminis- tratives	Clerks	Salesmen	Services	Agricu- lture	Produ. & Unclass- ified *
1	2	3	4	5	6	7	8
1968	5.9	1.0	5.5	7.1	6.1	21.6	52.8
1969	6.3	1.0	5.6	6.9	6.1	20.3	53.7
1970	6.8	1.1	5.6	7.3	6.1	19.0	54.0
1971	7.3	1.1	5.7	7.3	6.1	17.9	54.5
1972	7.8	1.2	5.8	7.4	6.1	17.0	54.7
1973	8.4	1.3	5.9	7.5	6.2	15.8	54.9
1974	9.1	1.3	6.0	7.7	6.2	14.7	54.9
1975	9.8	1.4	6.2	7.7	6.2	14.0	54.8
1976	10.5	1.5	6.3	7.7	6.2	13.2	54.6
1977	11.3	1.6	6.4	7.8	6.3	12.4	54.3
1978	12.2	1.6	6.5	7.9	6.3	11.7	53.8
1979	13.1	1.7	6.6	8.0	6.3	11.0	53.3
1980	13.3	1.6	6.4	8.2	6.3	10.0	54.1
1981	13.5	1.6	6.2	8.5	6.3	9.2	54.8
1982	13.7	1.5	6.4	8.7	6.4	8.4	55.0
1983	13.9	1.5	5.8	8.9	6.4	7.7	56.0
1984	14.0	1.4	5.5	9.1	6.4	7.0	56.5
1985	14.5	1.5	5.8	9.1	6.4	6.0	56.8
1986	15.0	1.4	5.8	9.1	6.3	6.0	56.4
1987	16.1	1.4	5.9	8.8	6.5	6.8	54.5
1992*	18.8	1.0	7.8	9.0	4.9	5.7	52.9
1993*	18.5	2.4	7.7	8.9	4.8	5.6	52.1

Source : Based on Tables 3.7 and 3.11.

Table 3.13 : Distribution of Employed by Occupation, 1968-1993
(in '000)

Years	Spl.& Techni- ans	Adminis- tratives	Clerks	Salesmen	Services	Agricu- lture	Produ. & Unclass- ified
1	2	3	4	5	6	7	8
1968	15.1	2.5	14.0	18.2	15.7	55.3	130.8
1969	16.5	2.7	14.5	18.8	16.0	52.9	133.9
1970	18.1	2.9	15.0	19.3	16.4	50.2	136.5
1971	19.8	3.1	15.5	19.9	16.7	48.6	144.2
1972	21.7	3.3	16.1	20.5	17.0	46.5	151.8
1973	24.9	3.7	17.6	22.1	18.3	46.8	162.6
1974	28.7	4.2	19.1	23.9	19.6	47.1	173.8
1975	33.0	4.7	20.8	25.9	21.0	47.4	185.3
1976	38.0	5.3	22.6	28.0	22.5	47.6	197.3
1977	41.9	5.8	23.7	29.0	23.3	46.3	201.0
1978	46.3	6.2	24.8	30.2	24.0	45.0	204.5
1979	51.2	6.6	25.8	31.4	24.7	43.8	207.6
1980	53.5	6.7	25.6	33.4	25.7	41.4	219.0
1981	55.9	6.6	25.3	35.5	26.6	39.1	229.4
1982	58.1	6.4	26.9	37.6	27.7	36.8	238.3
1983	60.0	6.5	24.7	40.2	28.5	34.9	250.5
1984	61.3	6.4	24.4	42.9	29.3	33.0	261.2
1985	63.3	6.6	25.8	44.5	30.0	29.7	272.6
1986	66.9	6.6	27.9	47.5	31.0	31.2	281.4
1987	69.1	6.8	28.9	47.7	31.0	31.8	294.0
1988	70.8	7.0	29.5	48.9	31.1	32.6	301.9
1989	71.0	7.2	29.9	49.0	31.1	32.7	302.6
1992*	130.6	16.9	54.4	62.8	33.9	39.5	367.8
1993*	159.0	20.6	66.2	76.5	41.3	48.1	447.7
Anul.Avg. Growth Rate (1968-89)	7.8	5.0	3.6	5.3	3.7	-2.8	4.2

Note : * Years 1992 and 1993 include Total Labour Force.

Source: Same as in table 3.9.

Table 3.14 :Percentage Distribution of Employed by Occupation,
1968 -1993

Year	Spl.& Techni- cians	Adminis- tratives	Clerks	Salesmen	Services	Agricu- lture	Produ. & Unclass- ified
1	2	3	4	5	6	7	8
1968	6.0	1.0	5.6	7.2	6.2	22.0	52.0
1969	6.5	1.1	5.7	7.4	6.3	20.7	52.4
1970	7.0	1.1	5.8	7.5	6.3	19.4	52.7
1971	7.4	1.2	5.8	7.4	6.2	18.1	53.8
1972	7.8	1.2	5.8	7.4	6.1	16.8	54.8
1973	8.4	1.3	5.9	7.5	6.2	15.8	54.9
1974	9.1	1.3	6.0	7.6	6.2	14.9	54.9
1975	9.8	1.4	6.2	7.7	6.2	14.0	54.8
1976	10.5	1.5	6.3	7.7	6.2	13.2	54.6
1977	11.3	1.6	6.4	7.8	6.3	12.5	54.2
1978	12.2	1.6	6.5	7.9	6.3	11.8	53.7
1979	13.1	1.7	6.6	8.0	6.3	11.2	53.1
1980	13.2	1.7	6.3	8.2	6.3	10.2	54.0
1981	13.4	1.6	6.0	8.5	6.4	9.3	54.8
1982	13.5	1.5	6.2	8.7	6.4	8.5	55.2
1983	13.5	1.5	5.5	9.0	6.4	7.8	56.3
1984	13.4	1.4	5.3	9.4	6.4	7.2	57.0
1985	13.4	1.4	5.5	9.4	6.4	6.3	57.7
1986	14.2	1.4	5.9	10.1	6.6	6.6	59.6
1987	13.6	1.3	5.7	9.4	6.1	6.2	57.7
1988	13.6	1.3	5.7	9.4	6.0	6.2	57.9
1989	13.6	1.4	5.7	9.4	5.9	6.2	57.8
1992*	18.5	2.4	7.7	8.9	4.8	5.6	52.1
1993*	18.5	2.4	7.7	8.9	4.8	5.6	52.1

Source : Based on tables 3.8 and 3.13.

3.10 Employment by Sex

Structural transformation of economies is also characterized by a better participation of women in the labour market. Feminization of labour market is found to be much more pronounced in many developed economies due to the discouraged worker effect. In ^{the} case of Jordan due to social factors the participation of women in the labour market is marginal, a characteristic which one does not find in many other developing economies. Such constraints however are now being incorporated in growth theories which developed in the Eighties and are now emerging in the Nineties.

Table 3.15 shows gender based composition of the Jordanian labour force during the period 1968-1991. The percentage of males to total employed was 94.0 in 1968 against only 6.0 percent of the females. In 1991 the share of females improved to 11.6 percent. Due to certain social values, female participation in labour market is still low. However, the encouraging aspect is that the participation of women has improved in the labour market. Due to low base one finds the growth rate to be as high as 7.3 percent during 68-89.

Table 3.15 : Distribution of Employed by Sex, 1968 - 1991

Years	Labour Force (in '000)		Employed (in '000)		% Employed to Respective Labour Force		% Employed to Total Labour Force		% Employed to Total Employed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11
1968	264.3	17.2	236.6	15.0	90.3	87.2	84.7	5.4	94.0	6.0
1969	271.4	18.1	240.5	14.8	88.6	81.8	83.1	5.1	94.2	5.8
1970	280.8	19.1	244.7	14.2	87.1	74.3	81.6	4.7	94.5	5.5
1971	290.7	20.1	254.1	13.7	87.4	68.2	81.8	4.4	94.9	5.1
1972	300.9	21.1	262.1	14.8	87.1	70.1	81.4	4.6	94.7	5.3
1973	310.5	22.3	279.7	16.3	90.1	73.1	84.0	4.9	94.5	5.5
1974	320.4	22.4	296.9	19.5	92.7	87.1	86.3	5.7	93.8	6.2
1975	330.5	24.9	316.0	22.1	95.6	88.8	88.9	6.2	93.5	6.5
1976	341.1	26.1	337.2	24.1	98.9	92.3	91.8	6.6	93.3	6.7
1977	352.0	27.5	344.6	26.4	98.0	96.0	90.8	7.0	92.9	7.1
1978	363.6	28.6	353.6	27.3	97.2	95.4	90.2	7.0	92.8	7.2
1979	375.5	30.8	362.6	29.5	96.5	95.8	89.5	7.3	92.5	7.5
1980	385.1	34.9	374.4	30.9	97.2	88.5	89.1	7.4	92.4	7.6
1981	395.5	39.5	384.9	33.5	97.3	84.8	88.4	7.7	92.0	8.0
1982	407.9	43.3	395.5	36.3	96.9	83.8	87.7	8.0	91.6	8.4
1983	420.1	47.6	405.9	39.4	96.6	82.8	86.8	8.4	91.2	8.8
1984	432.4	52.3	415.8	42.7	96.2	81.6	85.8	8.8	90.7	9.3
1985	444.9	57.5	426.0	46.3	95.8	80.5	84.8	9.2	90.2	9.8
1986	472.2	63.2	442.3	50.2	93.7	79.4	82.8	9.4	89.8	10.2
1987	489.7	66.0	457.4	51.9	93.4	78.6	82.3	9.3	89.8	10.2
1988	-	-	468.5	53.3	-	-	81.9	9.3	89.8	10.2
1989	-	-	470.0	53.5	-	-	80.5	9.2	89.8	10.2
1991	-	-	488.0	64.0	-	-	71.8	9.4	88.4	11.6
Anul.Avg.										
Growth Rate										
1.3* 3.2* 3.5** 7.3**										

Note : 1. * 1968-1987

2. ** 1968-1989

3. For the years 1988, 1989 & 1991, Estimated Figures of % Employed to Labour Force by Sex.

Sources : 1. Centre of Economic Research, Royal Scientific Society, Current Status and Future of Jordanian Labour Market, Vol. 3-ess-19989, Jordan.2. Rss, Current and Future of Jordanian Labour Market, Vol.3, 1990, Jordan.3. Ministry of Labour, Annual Reports, 1988, 1989, Jordan.4. Department of statistics, Data Bank, 1991, Jordan.

3.11 Distribution of Employed by Education Level

The Jordanian labour market is characterized by an abundance of skilled, qualified and trainable labour. This made Jordan one of the foremost sources of labour supply to other Arab countries. Jordanian technicians and workers have made a sizable contribution to economic growth and prosperity of the neighbouring nations in the last two decades. The demand for educated professional and skilled labour has become more pressing, not only within Jordan, where an ambitious development programme is launched, but also in other Arab countries, particularly in the oil producing states. The emigration of educated professional and skilled workers has consequently assumed a new dimension at a time when Jordan's own need for technical and skilled personnel has intensified owing to the growing requirements of the various economic sectors.

Tables 3.16 and 3.17 provide information about educational status of the labour force in absolute terms and percentages respectively during the period 1968-1989. In 1968 more than 3/4th of labour force had not completed education upto secondary level. Only 9.0 percent had secondary education and 5.4 percent were with graduates degrees. Diploma and post graduate formed only 3.4 percent and 0.5 percent respectively.

Between 1968-1989 we find an improvement at all the levels of education. The percentages of diploma, graduates, post graduates degree holders improved. However still a majority of the labourers have education levels below the general secondary school. Thus much has to be done to improve the human capital component.

Tables 3.18 and 3.19 show educational distribution of the employed labour force in absolute terms and also percentages to total employed in Jordan respectively during 1968-1991. From table 3.17 it is clear that in 1968 majority of employed labour had education below the Secondary school and their percentage share was 81.3. The percentage share of Post Graduate was 0.5, General Secondary 9.2, Bachelor 5.7, and Lower Diploma level 3.5. In 1989 there was a decrease in the percentage of below secondary level to about 51 percent. The General Secondary level increased to 28 percent, Lower Diploma to 12 percent, B.A./B.Sc. to 11 percent and Post Graduate level to 1.0 percent.

This shows that there has been an improvement in the human capital component of the employed labour force. Though the growth has been relatively slow, it does indicate that productivity can be improved because of this feature and Jordanian economy will have to create employment opportunities for educated labour force to reduce emigration of the educated manpower to other countries.

Table 3.16 : Distribution of Labour Force by
Educational Level, 1968-1989

(in '000)

Years	Below General Secondary*	General Secondary	Lower Diploma	B.A./ B.Sc.	Post Graduate
1	2	3	4	5	6
1968	228.0	25.1	9.6	15.2	1.4
1969	235.0	26.4	10.6	15.9	1.6
1970	242.1	27.9	11.7	16.5	1.7
1971	249.5	29.3	12.9	17.3	1.8
1972	256.9	30.9	14.2	18.0	2.0
1973	263.6	32.6	15.6	18.8	2.2
1974	270.5	34.3	17.2	19.6	2.3
1975	277.3	36.2	18.9	20.5	2.5
1976	284.1	38.1	20.8	21.4	2.8
1977	291.2	40.1	22.9	22.3	3.0
1978	298.2	42.2	25.3	23.2	3.3
1979	305.1	44.6	27.8	24.3	3.5
1980	304.4	54.3	31.0	26.8	3.6
1981	302.5	65.4	34.0	29.6	3.9
1982	299.6	77.5	37.1	32.9	4.1
1983	296.1	90.6	40.4	36.3	4.3
1984	291.5	104.9	43.5	40.3	4.5
1985	287.0	119.5	47.4	43.7	4.8
1986	287.3	141.8	52.3	48.8	5.2
1987	283.8	155.1	57.6	53.8	5.4
1988	292.2	159.7	59.3	55.4	5.6
1989	298.0	162.8	60.5	56.5	5.7
Anul.Avg. Growth Rate	1.1	9.9	9.2	6.7	6.7

Note : * Includes uneducated in this and other tables.

Sources :

1. Royal Scientific Society (RSS), Current Status and Future of Jordan Labour Market, Vol.3, 1990.
2. Ministry of Labour, Annual Reports, 1988,1989, Jordan.

**Table 3.17 : Percentage Distribution of Labour Force
by Educational Level, 1968-1989**

Years	Below General Secondary	General Secondary	Lower Diploma	B.A./ B.Sc.	Post Graduate
1	2	3	4	5	6
1968	81.6	9.0	3.4	5.4	0.5
1969	81.2	9.1	3.7	5.5	0.6
1970	80.7	9.3	3.9	5.5	0.6
1971	80.3	9.4	4.2	5.6	0.6
1972	79.8	9.6	4.4	5.6	0.6
1973	79.2	9.8	4.7	5.6	0.7
1974	78.7	10.0	5.0	5.7	0.7
1975	78.0	10.2	5.3	5.8	0.7
1976	77.4	10.4	5.7	5.8	0.8
1977	76.7	10.6	6.0	5.9	0.8
1978	76.0	10.8	6.5	5.9	0.8
1979	75.3	11.0	6.9	6.0	0.9
1980	72.5	12.9	7.4	6.4	0.9
1981	69.5	15.0	7.8	6.8	0.9
1982	66.4	17.2	8.2	7.3	0.9
1983	63.3	19.4	8.6	7.8	0.9
1984	60.1	21.6	9.0	8.3	0.9
1985	57.1	23.8	9.4	8.7	1.0
1986	53.7	26.5	9.8	9.1	1.0
1987	51.1	27.9	10.4	9.7	1.0
1988	51.1	27.9	10.4	9.7	1.0
1989	51.1	27.9	10.4	9.7	1.0

Source : Based on tables 3.7 and 3.16.

**Table 3.18 : Employed Labour by Educational Level,
1968 -1991 (in '000)**

Years	Educational Level				
	Below General Secondary	General Secondary	Lower Diploma	B.A./ B.Sc.	Post Graduate
1	2	3	4	5	6
1968	204.0	23.3	8.8	14.2	1.3
1969	205.5	24.2	9.6	14.6	1.4
1970	207.0	25.1	10.4	14.9	1.5
1971	213.8	25.8	11.3	15.3	1.6
1972	220.9	26.6	12.2	15.5	1.7
1973	232.5	29.9	14.3	17.3	2.0
1974	246.4	32.7	16.4	18.7	2.2
1975	262.2	35.2	18.4	19.9	2.4
1976	279.6	37.5	20.5	21.0	2.7
1977	284.5	39.3	22.5	21.8	2.9
1978	289.4	41.1	24.6	22.6	3.2
1979	295.4	43.0	26.8	23.5	3.4
1980	294.4	51.9	29.6	25.9	3.5
1981	291.7	62.2	32.1	28.6	3.8
1982	288.7	72.9	34.5	31.7	4.0
1983	284.8	85.2	36.7	34.5	4.1
1984	279.9	98.6	38.3	37.6	4.1
1985	276.5	112.0	40.0	39.7	4.1
1986	272.3	131.2	41.7	43.1	4.2
1987	267.6	143.7	46.1	47.6	4.3
1988	273.9	147.3	47.5	48.7	4.4
1989	275.1	147.7	47.4	48.9	4.4
1991*	336.7	80.0	68.5	58.0	8.8
Anul.Avg. Growth Rate (1968-89)	1.8	9.8	9.1	6.5	6.9

Source: 1. Royal Scientific Society, Current Status
and Future of Jordanian Labour Market,
Vol.3, 1990.

2. * Calculated on the basis of percentage from
Demographic Survey - Labour, Unemployment,
Return and Poverty 1991, Department of
Statistics, 1992.

**Table 3.19 : Percentage Distribution of Employed
by Educational Level, 1968 -1991**

Years	Educational Level				
	Below General Secondary	General Secondary	Lower Diploma	B.A./ B.Sc.	Post Graduate
1	2	3	4	5	6
1968	81.1	9.3	3.5	5.6	0.5
1969	80.5	9.5	3.8	5.7	0.5
1970	80.0	9.7	4.0	5.8	0.6
1971	79.8	9.6	4.2	5.7	0.6
1972	79.8	9.6	4.4	5.6	0.6
1973	78.5	10.1	4.8	5.8	0.7
1974	77.9	10.3	5.2	5.9	0.7
1975	77.6	10.4	5.4	5.9	0.7
1976	77.4	10.4	5.7	5.8	0.7
1977	76.7	10.6	6.1	5.9	0.8
1978	76.0	10.8	6.5	5.9	0.8
1979	75.5	11.0	6.9	6.0	0.9
1980	72.6	12.8	7.3	6.4	0.9
1981	69.7	14.9	7.7	6.8	0.9
1982	66.9	16.9	8.0	7.3	0.9
1983	64.0	19.1	8.2	7.7	0.9
1984	61.0	21.5	8.4	8.2	0.9
1985	58.5	23.7	8.5	8.4	0.9
1986	57.6	27.8	8.8	9.1	0.9
1987	52.5	28.2	9.1	9.3	0.8
1988	52.5	28.2	9.1	9.3	0.8
1989	52.6	28.2	9.1	9.3	0.8
1991*	60.0	14.5	12.4	10.5	1.6

Source : Based on tables 3.8 and 3.18.

3.12 Wages in Jordan

Wage rate is one of the major factors which influences labour force participation. Unfortunately the data base is rather poor in this regard, because of which certain theoretical propositions as mentioned earlier cannot be tested. Nonetheless on the basis of the information contained in table 3.20, one can reflect on the labour market situation in Jordan.

The average monthly nominal wages in 1980 for males was 144.7 JD and for females 103,3 JD. In 1985, the males wage reduced to 113,4 JD and females average wage got reduced to 88,5 JD. In the year 1989, there is a further decline in the average monthly wages of males and females both being 98.0 and JD 84.0 respectively. There is a reduction of monthly average wages by 25 percent. Due to an increase in the supply of labour than its demand, the wages are pushed down. Therefore, both the private and government sectors are inclined to pay less as there is a growing supply pressure of labour force.

Table 3.20 : The Average of Monthly Wages by Economic Activities
During 1980, 1985, 1989 (at Current Prices in
Jordanian Dinars)

Economic activity	1980		1985		1989	
	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7
Agriculture	124.9	89.7	80.1	76.3	71.7	63.0
Industry	136.5	78.0	104.0	67.2	92.0	57.2
Trade	136.5	113.4	117.9	88.3	97.9	78.2
Construction	163.4	142.3	131.9	127.1	112.5	98.3
Transport	132.8	141.6	122.3	107.2	110.7	125.1
Finance & Banking	191.9	133.7	171.6	115.6	136.5	118.5
Tourism	104.5	132.8	90.7	112.3	89.7	110.9
Other Services	140.4	83.8	114.1	89.9	96.4	89.1
Average wage of Labour	144.7	103.3	113.4	88.5	98.0	84.0

Source : Social Insurance Amman, 1990.

It can be seen from the table that in all the three years for which the data are available female average wage has been lower than that of male except in the case of tourism. The reason for higher wages for females in this area is mainly due to the nature of jobs which require more females like secretary, attendants etc. Secondly, due to social factors, it becomes necessary for employers to offer higher wages to women to attract them in this occupation. The highest average wage for males is in the sector of finance and banking, whereas in ^{the} case of females it has been in construction except in 1989, where transport, finance and banking and tourism had higher average wage than that of construction. Though, we do not have information for the later years, however from the past trend it can be deduced that the domestic labour market is not very attractive for Jordanians to supply their labour. Emigration therefore is the obvious rational choice. Due to lack of data, estimation of wage elasticity of demand is not possible. In the earlier section it is mentioned that some empirical studies have shown the wage elasticities to be small, however the same may not be true in the case of Jordan. It is quite possible that depending upon education, age and other factors which affect the mobility of labour, wage elasticity of demand might be elastic in case of Jordan atleast in some occupations. If emigration becomes difficult and possibility of getting employment in domestic economy increases, the wage elasticity of demand may turn out to be low in conformity with other studies based on life cycle models.

The following are the major observations in regard to labour market dynamics of Jordan :

■ The demographic structure and migration play crucial role in the functioning of labour market of Jordan. The various migration streams of population from Palestine, returnees of Palestinians and Jordanians workers from Gulf countries affect the employment level in the country and aggravate the unemployment problem.

Almost half of Jordan's population is in the age group of 15 years and below which leads to lower economic participation rate. The natural growth rate of population is high because of advances in medical field, reducing the death rate, however birth rates remain high. Thus Jordan is in the second stage of demographic transition where the birth rates continue to remain high and death rates are low.

■ More than three quarters of both the labour force and employed happen to concentrate in the Governorates of Amman, Zarqa and Irbid, mainly due to concentration of economic activities in these urban areas. It is difficult to establish a casual effect relationship, i.e., whether more job opportunities in these governments are due to migration of people or viceversa. However the pattern of development of Jordan is such that migration is the result rather than the cause of the growth of these urban centres.

■ The sectoral distribution of labour force in Jordan is imbalanced. Almost half of labour force is concentrated in social services and defense sector and there is a rather slow shift of labour to other sectors of the economy.

■ There is an imbalance in occupational distribution of labour. More than half of employed labour in Jordan are engaged in unclassified jobs, which hardly require any skill.

■ Males are predominant in the labour market. Low female participation is due to social factors in Jordan.

■ Most of the labour force as well as employed labour have educational level below General Secondary. But in the recent years the labour having educational level of General Secondary, lower Diploma and Bachelor level is on the increase which could create unemployment among educated.

■ The wage level is unsatisfactory both in private and government sectors, pushing people to emigrate.

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