

SADAT ACADEMY FOR MANAGEMENT SCIENCES NATIONAL INSTITUTE FOR HIGH MANAGEMENT

STRUCTURE AND DIMENSIONS OF THE EGYPTIAN LABOR FORCE: A Demographic and Economic Perspective

By Khaled El-Sayed Hassan

A Dissertation for the Phelosophy Doctor Degree (Ph.D.) in Management Sciences

Cairo, October 2002

Dedication

To My son Omar, and My daughter Nourhan **ACKNOWLEDGMENT**

I wish to express my deep appreciation and sincere gratitude to **Prof. Mohamed**

Kamel Marawan, My Academic supervisor. I would like to acknowledge his most valuable

guidance, constructive suggestions and useful remarks during the preparation of this

thesis. His keen and devotion of time and energy in working with me on the drafts have

been most exceptional.

My profound gratitude and sincere thanks is extending to **Prof. Amin Found El-**

Derghami, the President of Sadat Academy for Management Sciences and to **Prof.**

Mohamed Zaki Eid, Dean of the National Institute for High Management.

My thanks are also due to all Sadat Academy staff for benefits I received from their

teaching and advice. My thanks also go to all the administrative personnel of Sadat

Academy for their continuous help I received during my five years of studying at the

academy.

My deep thanks and great appreciation are also extended to my dear friends **Dr.**

Ayman Gaafar Zohry and Mr. Salah Abdel-Atti Abdel-Tawab, for their continuous

encouragement and their valuable help in searching and collecting the useful references

and literatures, and in discussing the ideas with me.

Khaled El-Sayed Hassan

Cairo, October 2002

i

Index of Contents

No.		<u>Title</u>	Page
1	Chapter One	Introduction	1-11
1.1		Justification	1
1.2		Objectives of the Study	3
1.3		Data Sources	3
1.4		Methodology of the Study	4
1.5 1.5.1		Literature Review Egyptian Literature Review	5 5
1.5.1		International Literature Review	9
1.6		Study Organization	11
2	Chapter Two	Demographic and Economic Trends of Egyptian Manpower and Labor Force, 1976-1996	12-49
2.1		Introduction	12
2.2		Trend in the Age Structure of Egyptian Manpower	14
2.3		Labor Force in Egypt	19
2.3.1		Trend in the Employment Status of Egyptian Labor	
2 2 2		Force	19
2.3.3		Factorial Analysis of the Changes in Labor force Size	27
2.3.4		International Compressions of Unemployment Rates	30
2.3.5		Trend in Educational Level of Egyptian Labor Force	33
2.3.6		Trend in the Industrial Classifications of Egyptian	
		Labor Force	38
2.3.7		Trend in the Occupational Structure of Egyptian Labor Force	45
3	Chapter Three	Employment and Unemployment in Egypt: Analysis of the Recent Situation	50-79
3.1		Introduction	50
3.2		Historical Background of unemployment Problem in	
		Egypt	51
3.3		Socioeconomic Characteristics of Employment and	52
3.3.1		Unemployment in Egypt	52
3.3.1		Variation in Employment and Unemployment by Age Structure	53
3.3.2		Variation in Employment and Unemployment by	
-		Educational Level	62
3.3.3		Variation in Employment and Unemployment by	
		Industrial Classifications	67

No.		<u>Title</u>	Page
3.3.4		Variation in Employment and Unemployment by Occupational Structure	72
3.4		Estimation of the Recent Levels in Employment and Unemployment	76
3.4.1		Recent Level in Employment by Industrial Sectors	76
3.4.2		Recent Kevel in Unemployment	77
4	Chapter Four	Economically Active Life tables and Loss of Active Years Due to Unemployment	80-97
4.1		Introduction	80
4.2		Tables of Economically Active Life	80
4.3		Measures of the Length of Active life	81
4.4		Quantitative Measures of the Burden of Unemployment	87
4.5		Egyptian Labor Productivity	92
4.5.1		Productivity Definitions and Concepts	92
4.5.2		Trends in Egyptian Labor Productivity	92
4.5.3		Significance of the Egyptian Labor Productivity	94
4.5.4		Loss Due to Unemployment in Terms of Money	95
5	Chapter Five	Future of the Egyptian Labor Force: Projection of the Supply and Demand of Labor Force	98-130
5.1		Introduction	98
5.2		Projection of the Supply of Labor Force	99
5.2.1		Assumption of the Components of Egyptian Population growth	99
5.2.2		Assumption of the Labor Force Participation Rates	100
5.2.3		Future Prospects of the Supply of the Egyptian Labor	100
0.2.0		Force	100
5.3		Projection of The demand for labor Force	110
5.3.1		Assumption of the Components of labor Demand	
		Projection	110
5.3.1.1		Gross Domestic Product (GDP) Assumptions	110
5.3.1.2		Productivity Growth rate Assumptions	111
5.3.2		Future Prospects of the Demand for Egyptian Labor	110
522		Force Future Progress of the Domand for Equation Labor	119
5.3.2		Future Prospects of the Demand for Egyptian Labor Force	113
5.4		Future Prospects of Unemployment in Egypt	117
5.5		Future of Egyptian Labor force in Light of Economic	-
		Reform and Global Changes	121
5.5.1		The Egyptian Economic Reform and labor Force	121
5.5.2		Trade liberalization and Labor Force	122

No.		<u>Title</u>	Page
5.5.3		Globalization and Labor Market	124
5.5.4		Globalization and Labor Force	125
5.5.5		Egypt and Globalization	126
5.5.6		Egyptian Labor Force and Migration	127
5.5.3.3		Role of Immigration in Globalization	125
5.5.3.4		Egypt and globalization	126
5.5.6.1		Impact of Gulf War on Egyptian Labor Migrants	128
5.5.6.2		Future of the Egyptian Labor Migrants	129
6	Chapter Six	Summary, Conclusions, and Recommendations	131-148
6.1		Summary	131
6.2		The Main Findings of the Study	134
6.3		Recommendations and Policy Implications	144
	Bibliography Appendixes Arabic Brief		149-156

Index of Tables

<u>No.</u>	<u>Title</u>	Page
2.1	Trend in the size of Egyptian manpower, 1976-1996.	14
2.1.1	Trend in the size of Egyptian manpower by sex, 1976-1996.	17
2.1.2	Trend in the size of Egyptian manpower by place of residence 1976-1996.	18
2.2	Trend in employment status of Egyptian labor force, and measures of the relative size of labor force, and unemployment rates, 1976-1996.	21
2.2.1	Trend in employment status of Egyptian labor force, by sex, and measures of the relative size of labor force, and unemployment rates, 1976-1996.	23
2.2.2	Trend in employment status of Egyptian labor force, by place of residence, and measures of the relative size of labor force, and unemployment rates, 1976-1996.	25
2.3	Components of change in the size of labor force, by sex and place of residence, during the inter-sensual periods, 1976-1986 and 1986-1996.	29
2.4	International collection of unemployment rates by sex and total population. 1996.	32
2.5	Trend in the educational level of Egyptian labor force, 1976-1996.	34
2.5.1	Trend in the educational level of Egyptian labor force by sex, 1976-1996.	35
2.4	Trend in the educational level of Egyptian labor force by place of residence, 1976-1996.	36
2.6	Trend in the industrial classifications of Egyptian labor force, 1976-1996.	40
2.6.1	Trend in the industrial classifications of Egyptian labor force by sex, 1976-1996.	41
2.6.2	Trend in the industrial classifications of Egyptian labor force by place of residence, 1976-1996.	43

<u>No.</u>	<u>Title</u>	Page
2.7	Trend in the occupational structure of Egyptian labor force, 1976-1996.	46
2.7.1	Trend in the occupational structure of Egyptian labor force by sex, 1976-1996.	47
2.7.2	Trend in the occupational structure of Egyptian labor force by place of residence, 1976-1996.	48
3.1	Distribution of Egyptian employment and unemployment at the national level, by sex, and place of residence according to their current age groups, 1996.	55
3.2	Age Specific Activity Rates (ASARs) for population aged 15-59 years at the national level, by sex and place of residence, 1996.	60
3.3	Distribution of Egyptian employment and unemployment at the national level, by sex, and place of residence, according to their educational level, 1996.	63
3.4	Distribution of Egyptian employment and unemployment at the national level, by sex, and place of residence, according to their industrial classifications, 1996.	68
3.5	Distribution of Egyptian employment and unemployment at the national level, by sex, and place of residence, according to their occupational structure, 1996.	73
3.6	Estimation of the size of Egyptian employment by economic sectors for the financial year 2000-2001.	77
3.7	Different estimations of the recent unemployment rate in Egypt, different sources and years.	78
4.1	Abridged table of economically active life for Egyptian male population, 1996.	84
4.2	Abridged table of employment life for Egyptian male population, 1996.	85
4.3	Abridged table of economically active life for Egyptian female population, 1996.	88

<u>No.</u>	<u>Title</u>	Page
4.4	Abridged table of employment life for Egyptian female population, 1996.	89
4.5	Average number of years of unemployed life, and total years of economically active life lost due to unemployment, by sex and both sexes, Egypt, 1996.	90
4.6	Total amount of lose due to unemployment in terms of money, at the national level, 1996.	96
5.1	Projection of population size, Age Specific Activity Rates (ASARs) and the supply of labor force according to the assumptions of first model, years 2001 to 2026, five years intervals.	102
5.2	Projection of population size, Age Specific Activity Rates (ASARs) and the supply of labor force according to the assumptions of second model, years 2001 to 2026, five years intervals.	105
5.3	Projection of the size and the growth rate of the demand for Egyptian labor force by main economic sectors according to the alternative sets of Gross Domestic Product (GDP) and productivity assumptions, year 2006.	114
5.4	Estimation of the future of labor supply surplus (unemployment rate) of Egypt, under the alternative assumptions of Gross Domestic Product (GDP) and productivity, year 2006.	119
5.5	Estimation of Egyptian labor migrants by most important country of destination, 1989-2000.	128

Index of Figures

<u>No.</u>	<u>Title</u>	Page
2.1	Classification of manpower by employment status.	13
2.2	Percentage of the size of Egyptian manpower to all population, at the national level, by sex, and place of residence, 1976-1996.	16
2.3	Trend in Egyptian employment rates at the national level, by sex, and place of residence, 1976-1996.	22
2.4	Trend in Egyptian unemployment rates at the national level, by sex, and place of residence, 1976-1996.	22
2.5	Trend in illiteracy rates among Egyptian labor force, at the national level, by sex, and place of residence, 1976-1996.	37
2.6	Trends in the industrial classifications of Egyptian labor force, at the national level, by sex, and place of residence, 1976-1996.	44
2.7	Trends in the occupational structure of Egyptian labor force, at the national level, by sex, and place of residence, 1976-1996.	55
3.1	Classification of labor force according to the employment status, 1996.	50
3.2	Percentage distribution of Egyptian employment by age groups, 1996.	56
3.3	Percentage distribution of Egyptian unemployment by age groups, 1996.	57
3.4	Age Specific Activity Rates (ASARs), at the national level, by sex, and place of residence, 1996.	61
3.5	Percentage distribution of Egyptian employment by the educational level, 1996.	64
3.6	Percentage distribution of Egyptian unemployment by the educational level, 1996.	65
3.7	Percentage distribution of Egyptian employment by industrial sectors, 1996.	69
3.8	Percentage distribution of Egyptian unemployment by industrial sectors, 1996.	70

No.	<u>Title</u>	Page
3.9	Percentage distribution of Egyptian employment by the occupational structure, 1996.	74
3.10	Percentage distribution of Egyptian unemployment by the occupational structure, 1996.	75
5.1	Projection of the size of Egyptian population and labor force, 1996 to 2026.	107
5.2	Projection of the size of Egyptian male population and labor force, 1996 to 2026.	108
5.3	Projection of the size of Egyptian female population and labor force, 1996 to 2026.	109