

معالجة الفقر من خلال استراتيجية نمو اقتصادي كثيفة العمالة دراسة حالة عن مصر

Poverty Reduction through an Employment Intensive Economic Growth Strategy A Case Study of Egypt

A thesis submitted in partial fulfilment for the degree of Doctor of Philosophy in Economics, Ain Shams University

By: Hala Ali Fares

Under the supervision of:

Prof. Dr. Samir R. Makary Prof. Dr. Ihab Ezz El-din Nadeem

Prof. of Economics, American Prof. of Economics, Faculty of

University in Cairo Commerce, Ain Shams University

Dedicated to:

My dearest parents,

My beloved husband &

My two dearest sons

رمالعة علا عمر بهة

Acknowledgement

The process of doing a PhD is a long, lonely, and frustrating business. Nevertheless, after God Almighty, there are several people to whom I owe a great deal of gratitude and thanks.

I would like to extend my deepest gratitude, love and respect to my dearest professor and god father, Dr. Samir Makary, whose continuous support and guidance through out this research had been inspiring for me, as it had been all through my academic and professional life. I owe him my love and dedication to the economics discipline and the academic profession.

I would also like to thank my dearest Professor Dr. Ihab Nadim, whose support and re-assurance had been indispensible. He did not only guide me and supervised my research, but more importantly he taught me the ethics of the academic profession. His modesty and patience in dealing with his students is a model to be taught to all the coming academicians.

It is an honour and privilege to me to have Professor Dr. Fouad Abu Stait, and Professor Dr. Dina Radi both in my examination board. I benefited a lot from their positive and constructive comments.

Special Thanks to Dr. Alaa Ibrahim, Professor of Statistics and Econometrics for his generous help in the quantitative part of the study, not only did he provide me with the necessary software, but he coached me as well till I learned how to use it.

I would love to extend my gratitude to the Deans of the College of Management and Technology at the Arab Academy for Science and Technology and Maritime Transport, Dr. Mohamed Asaad El-Nidani and Dr. Mohamed Kouta, who have both been so understanding, considerate, and sympathetic. It wouldn't have been possible for me to finish this piece of work on time if it weren't for their support and encouragement.

Special thanks to my big family; my brother, my sister, my brother in law, my nephews as well as my dearest friend and roommate Nermin Minessy for their strong support and encouragement.

Last but not least, I would love to dedicate this work to my dearest parents, my beloved husband, and my two sweet sons Ismail and Ali, who shared with me the difficult times of this study, encouraged me and tolerated my bad temper during the last days.

Abstract

This thesis intends to analyse the ability of Egyptian economic sectors in promoting employment intensive economic growth that can support poverty reduction. Two main quantitative approaches are used to test the sectors' ability in generating labour demand, as well as, promoting economic growth. The first is estimating the elasticity of employment in selected economic sector to figure out which ones have stronger contribution to employment generation. The second approach estimates the direct and indirect inter-sectoral linkages derived from the national Input-Output tables, to reflect the ability of the sector to promote growth in other linked sectors. Sectors that possess relatively high employment elasticity and strong inter-sectoral linkages are considered leading economic sectors, whose growth lead to an employment intensive economic growth.

The creation of demand for labour is not alone enough to guarantee increase in employment. Supply-side impediments sometimes hinder growth in employment, and might result in largely differentiated wage structure. As employment in Egypt is known to be largely structural in type; efforts to reform demand-supply mismatches are essential. Several countries have experienced such problem and pursued different policies to overcome it. This thesis displays the experiences of The Netherlands, Ireland, Malaysia and the Philippines in using active labour market policies among other policies to address the mismatch between demand and supply of labour, and to attend to the market needs and keep up with its dynamic nature.

The quantitative measures used in this thesis show that industry and production services have higher employment elasticity, as well as stronger linkages with the rest of the economy than agriculture, oil and gas extraction and social services. Among the industrial sectors, textile with its different sub-sectors and stages, including compressing and ginning, spinning, weaving, and ready-made garments have relatively high employment elasticity, as well as strong backward and forward linkages with the rest of the economy. Non-metal industries especially ceramic, and chemical products industry especially rubber and fertilizers are also characterised by medium to high elasticity of employment as well as relatively strong sectoral linkages. Food industry, though characterised by the highest

employment elasticity among all industrial and non-industrial sectors, are mainly linked to the agriculture sector- with its crops and livestock sub-sectors- whose growth is constrained by the limited availability of its natural resources. Among the production services sectors; tourism, construction, communication, trade and finance are relatively employment elastic. Tourism, unlike other sectors, is characterised by its diversified links with other sectors namely; agriculture, food, energy sectors including fuel and electricity, printing and publishing, maintenance, machinery, metallic and non-metallic industries, construction, services with emphasis on trade, finance and insurance, transportation, communication, and others. This diversified nature of the linkages between tourism and the rest of the economy highlights its potential to act as an important growth catalyst for the economy.

Labour Market Policies that proved to be more effective in addressing labour market problems, especially structural unemployment, are Active Labour Market Policies (ALMP) that focus primarily on labour training and rehabilitation through tri-partite organizations and based on timely labour market information and analysis (LMIA). Re-evaluation of the effectiveness of the vocational education sector is highly important and proved to be influential in the Malaysian experience.

More studies are required to explore other complementary issues to complete the dimensions of the needed employment intensive economic growth strategy. These include among others studies that target determining skill needs in labour markets and the development of skills policies that meet these needs.

خلاصة

تعتزم هذه الأطروحة تحليل قدرة القطاعات الاقتصادية المصرية في تشجيع النمو الاقتصادي الكثيف العمالة الذي يمكنها من دعم الحد من الفقر. استخدمت هذه الدراسة منهجين كميين لاختبار قدرة القطاعات الاقتصادية على توليد الطلب على اليد العاملة، وكذلك، تعزيز النمو الاقتصادي. الأول هو تقدير مرونة العمالة في بعض القطاعات الاقتصادية لبيان أكثر هم قدرة على توليد فرص للعمل. النهج الثاني يهدف لتقدير التشابكات المباشرة وغير المباشرة بين القطاعات والتي يتم تقدير ها باستخدام جداول المدخلات والمخرجات القومية، لكي تعكس قدرة القطاع على تعزيز النمو في القطاعات الأخرى المرتبطة به. وتعتبر القطاعات التي لديها مرونة العمالة المرتفعة نسبيا تشابكات قوية بين القطاعات الأخرى قطاعات رائدة يؤدي نموها إلى خلق نمو اقتصادي كثيف العمالة.

خلق الطلب على اليد العاملة لا يكفي وحده لضمان زيادة في التشغبل. أحياناً العقبات المتعلقة بجانب العرض تعوق النمو في فرص العمل، وقد يؤدي إلى خلق هيكل للأجور متباين إلى حد كبير. وكما هو معروف البطالة في مصر أغلبها من النوع الهيكلي؛ الجهود الرامية إلى إصلاح التباين بين العرض والطلب ضرورية. عدة بلدان سبقتنا في هذه التجربة واتبعت سياسات مختلفة للتغلب على تلك المشكلة. لذا تعرض هذه الدراسة جانب من تجارب دول هولندا وأيرلندا، وماليزيا والفيليبين في استخدام سياسات سوق العمل الإيجابية بين سياسات أخرى لمعالجة التباين بين العرض والطلب في سوق العمل، لتلبية حاجة السوق ومواكبة طبيعته الديناميكية.

الوسائل الكمية المستخدمة في هذه الدراسة تبين أن قطاعات الصناعة والخدمات الإنتاجية تتميز بمرونة تشغيل أعلى من قطاعات الزراعة واستخراج الغاز والنفط والخدمات الاجتماعية، فضلا عن تميزهما بتشابكات قوية مع باقي النشاطات الاقتصادية. ففي قطاع الصناعة، يتميز قطاع النسيج بمختلف قطاعاته الفرعية ومراحل إنتاجه، بما فيها الكبس والحلج والغزل والنسيج، وصناعة الملابس الجاهزة بمرونة تشغيل مرتفعة نسبيا، فضلا عن تشابكات أمامية وخلفية قوية مع بقية قطاعات الاقتصاد. الصناعات غير المعدنية خاصة السيراميك، وصناعة المنتجات الكيماوية ولا سيما المطاط والأسمدة أيضًا تتميز بمرونة تشغيل عالية جميع القطاعات الصناعية وغير الصناعية القوية نسبيا. أما صناعة الأغذية فتتميز بمرونة تشغيل أعلى من جميع القطاعات الصناعية وغير الصناعية لكن ارتباطها الأساسي مع قطاع الزراعة بفرعيه المحاصيل والثروة الحيوانية والذي يوجد قيود على نموه بسبب ندرة الموارد الطبيعية اللازمة للتوسع فبه. أما بين قطاعات الخدمات الإنتاجية فالسياحة والبناء، والاتصالات، والتجارة والتمويل يمتاز وا بمرونة تشغيل عالية نسبيًا. لكن يختلف عنهم قطاع السياحة بارتباطه بمعظم القطاعات الإقتصادية كالزراعة والأغذية وقطاع المعدنية والبناء والخدمات خاصة التجارة والتمويل والتأمين، والاتصالات والنقل. ويبرز هذا الطابع المتنوع المعتنية والبناء والخدمات خاصة التجارة والتمويل والتأمين، والاتصالات والنقل. ويبرز هذا الطابع المتنوع المتنوع القشابكات القائمة بين السياحة وبقية قطاعات الاقتصاد قدرتها على العمل كقاطرة لعجلة التنمية اللاقتصادية.

وقد أثبتت سياسات سوق العمل الإيجابية فعاليتها في التصدي لمشاكل سوق العمل، ولا سيما البطالة الهيكلية. وتركز هذه السياسات في الأساس على تدريب القوى العاملة وإعادة التأهيل من خلال منظمات ثلاثية تضم الحكومة والقطاع الخاص والنقابات العمالية، وتستند في سياستها إلى تحليل معلومات سوق العمل، وإعادة تقييم فعالية قطاع التعليم المهني والذي أثبت أهميته البالغة في التجربة الماليزية.

ولتكتمل أبعاد استراتيجية النمو الاقتصادي كثيف التشغيل هناك حاجة للقيام بأبحاث تكميلية خاصةً في مجال جمع وتحليل بيانات سوق العمل ودراسة إحتياجاته بشكل مستمر لمسايرة طبيعة السوق الديناميكية، ليتسنى توفير إحتياجاته من خلال عمليات التدريب وإعادة التأهيل المستمرة.

Acronyms

Aggregate (all sectors) Aggr.:

Agriculture Agr:

Active Labour Market Policies ALMP:

CAPMAS: Central Agency for Public Mobilization and Statistics

Communication Comm: Constr: Construction Elec: Electricity

EPL: **Employment Protection Legislation**

Economic Reform and Structural adjustment Programme. ERSAP:

FDI: Foreign Domestic Investment GDP: **Gross Domestic Product**

Household Income, Expenditure and Consumption Survey. HIECS:

HSGREST: Housing and Real Estate HTLR: Hotels and Restaurants

IDSC: Information Decision Support Centre – Egyptian Cabinet.

ILO: International Labour Office

Ind&Min: **Industry and Mining** Input – Output Tables I-O Tables:

 L^{B} : Direct & Indirect Backward Linkage

LB*: LF: Direct Backward Linkage

Direct & Indirect Forward Linkage

 L^{F*} : Direct Forward Linkage

Labour Market Information and Analysis LMIA:

Millennium Development Goals MDG: Passive Labour Market Policies PLMP: Prd&SocSrv: Productive and Social Services

Petroleum, Natural gas extraction, and petroleum products Ptrl:

SocSrv: **Social Services** SZCNL: Suez Canal

TFI: Trade, Finance and Insurance Trnsp&Strg: Transportation & Storage

United Nation Development Programme UNDP:

WPI: Whole Sale Price Index

Glossary:

Poverty definitions based on The World Bank Poverty Assessment Report (2007)

Extreme poverty: Inability to provide even for basic food.

Absolute poverty: Spending less than needed to cover absolutely minimal food and non-food needs (this group is called "poor"),

Near-poverty: equivalent to spending barely enough to meet basic food and slightly more than essential non-food needs.

"All poor": All of the above three groups combined.

General Terms

Nexus: Defined by Encarta as: A closely connected group of people or things, often forming the central part of something. Synonyms: bond, relationship, connection, or tie.

Table of Contents

Acknowledgement	1
Abstract	ii
Acronyms and Glossary	vi
Table of contents	viii
List of Tables	xii
List of Figures	xii
Chapter 1: Introduction	1
1-1 Overview	1
1-2 Research Problem	4
1-3 Topic Statement	6
1-4 Methodology	6
1-4-1 Quantitative Measures	7
1-4-2 Labour Market Policies applied in other countries	s 7
1-5 Structure of the Study	8
Chapter 2: Theoretical Framework & Literature Review	10
2-1 Supply Side Policies	10
2-2 Demand Side Policies	13
2-2-1 Employment Intensity of Growth	13
2-2-1-1 Theoretical Framework	13
2-2-1-2 Literature Review	16
2-2-2 A Review of Hirschman linkages Theory	17
2-2-2-1 Direct Backward and Forward Linkages	s 18
2-2-2-2 Direct and Indirect Backward Linkages	19
2-2-2-3 Direct and Indirect Forward Linkages	20
2-2-2-4 Direct and Indirect Income Generation	21
2-2-3 Employment Beta	21
Chapter 3: Macroeconomic Policies and Labour Market Policies: S	Success Stories
and Lessons to Learn	24
3-1 Introduction	24

3-2 Netherlands	25
3-2-1 Netherlands before and after	26
3-2-2 How far the Netherlands has gone in comparison	n to other
countries?	28
3-3 Ireland	29
3-3-1 Macroeconomic Stability	30
3-3-2 Labour market policy reforms	31
3-3-3 Social dialogue	32
3-4 Malaysia	32
3-4-1 Malaysia sound macro economic policies	33
3-4-2 Malaysia's Labour Market Policies	35
3-5 Philippine	37
3-5-1 Philippine Case Study	37
3-5-2 Philippine's Labour Market Policies	37
3-6 Conclusion	38
Chapter 4: Highlighting the Egyptian Case	39
4-1 Introduction	39
4-2 Egypt's Poverty Map	42
4-2-1 Linkage between poverty and growth and incom	ie
distribution	42
4-2-2 Geographic distribution of poverty	45
4-3 Employment Linkage to Poverty	46
4-3-1 Link between Employment, Unemployment	
and Poverty	46
4-3-2 Link between the Sector of Employment	
and Poverty	47
4-3-3 Link between Poverty and Employment by	
Economic Activity	48
4-3-4 Summarising the employment-poverty linkage	50
4-4 Other causes for poverty increase	50
4-5 Poverty and Employment Profile	52
4-6 Surveying Current Projects and Efforts for	

Employment Generation	53
4-6-1 Employment Generation Efforts	53
4-6-2 Training Efforts	54
4-6-3 Protecting the Labour Force and Securing	
Working Environment	55
4-6-4 Enhancing Technical Education and Building Hu	ıman
Capabilities	56
4-7 Challenges and Objectives	57
4-7-1 Creating Jobs to Absorb the Increasing	
Supply of Labour	57
4-7-2 Protection of Labour Market against the	
latest Global Financial Crisis	58
4-7-3 Developing Small and Medium-Sized Enterprise	s 60
Chapter 5: Elasticity of Employment in Egyptian Economic Secto	rs 61
5-1 Introduction	61
5-2 Data	61
5-3 Results and analysis of point elasticities	62
5-3-1 Employment Elasticity with respect to real GDP	62
5-3-2 Agriculture Sector	63
5-3-3 Industry and Mining	65
5-3-4 Petroleum and Petroleum Products	67
5-3-5 Electricity	68
5-3-6 Construction	69
5-3-7 Transportation and Storage	70
5-3-8 Communication Sector	71
5-3-9 Trade, Finance, and Insurance	73
5-3-10 Hotels and Restaurants	74
5-3-11 Suez Canal	76
5-3-12 Public Services	77
5-4 Results and analysis of arc elasticities	78
5-5 Employment Elasticities in Specific Manufacturing	
Sectors	81

Chapter 6: Inter-Sectoral Linkages in Egypt	87
6-1 Data Structure	87
6-2 Results	88
6-2-1 Agriculture	88
6-2-2 Compressing and Ginning	89
6-2-3 Mining and Quarries	91
6-2-4 Crude Oil and Natural Gas Extraction	91
6-2-5 Food Processing	92
6-2-6 Textile Industry: Spinning, Weaving, and	
Ready-made Clothes	93
6-2-7 Chemical Products and Petro-chemicals	94
6-2-8 Non-Metallic Products	94
6-2-9 Hotels and Restaurants	95
6-2-10 Construction and Maintenance	95
6-2-11 Others	96
6-3 Conclusion	96
Chapter 7: Findings, Analysis and Policy Recommendations	97
7-1 Lessons from other countries	97
7-1-1 Lessons from Ireland and the Netherlands	97
7-1-2 Comparing Egypt to Malaysia and Philippine	99
7-1-3 Lessons from Malaysia	101
7-1-4 Applying Philippine's experience to Egypt	102
7-2 Suggested growth strategy for Egypt based on the	
quantitative models presented	103
7-2-1 Overview of Egypt's National Project	104
7-2-2 A Narrower Look at the provision of Production	l
Clusters	104
7-2-3 Macroeconomic Stabilization and Labour Marke	et
Policies	106
7-2-4 Other Social factors affecting Employment and	
Growth	108
7-3 Future Studies	109

References	110
Appendix 1: Employment Beta	116
Appendix 2: Labour Market Policies	129
Appendix 3-1: ILO Survey	132
Appendix 3-2: Comparison between Egypt, Malaysia and	
Philippine	137
Appendix 3-3: Malaysian Profile	141
Appendix 4: Distribution of unemployment by educational	
Attainment	151
Appendix 5-1: Regression Results of Employment Elasticities	152
Appendix 5-2: Arc Elasticities and Macroeconomic Indicators	172
Appendix 6: Linkages Results based in National Input-Output	
Tables	178
List of Tables	
Table 2-1 Interpreting Employment Elasticities	15
Table 3-1 GDP growth and employment growth 1985-1998 and 1	994-1997
annual average growth rates	28
Table 3-2 Sectoral Shares in Output, Employment and Investment	t: Egypt
2002/03-2006/07	29
Table 4-1 Average Annual Growth Rates of Real per capita expen	ditures and
GDP (1990/91 – 2004/05) (%)	40
Table 4-2 Aggregate Poverty Measures (1990/91-2004/05)	43
Table 4-3 Growth and Redistribution Effects on Changes in Pover	rty
Incidence P0, 1990/92-2004/05 (%)	43
Table 4-44 Percentage Shares of the Poor and Non-Poor by Econo	omic
Activities of Households, all Egypt (1990/91-2004/05) (%)	49
List of Figures	
Figure 1-1 Growth Employment Nexus	3
Figure 3-1 Unemployment Rates in Malaysia 1995-2006	33
Figure 4-1 Incidence of Poverty by Employment Status,	
2000-2004	16