



**Faculty of Commerce  
Economics Department**

# **Evaluating the Income Redistribution Policies**

**(Comparative Case Study: Egypt – Latin America)**

Submitted by:

**Ingy Gamal Mohamed Ragab**

Under the supervision of:

**Professor Dr. Ihab Ezz El Din Nadim**

**2014**

بسم الله الرحمن الرحيم

"قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا  
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ  
الْعَلِيمُ الْحَكِيمُ"

صدق الله العظيم

سورة البقرة الآية 32

# **DEDICATION**

TO MY PARENTS, MY SISTER,  
MY HUSBAND, AND MY SONS

## **ACKNOWLEDGEMENT**

I wish to express my deep appreciation and sincere gratitude to Prof. Dr. Ihab Ezz El-Din Nadim, my academic supervisor, for his most valuable guidance and useful remarks during the preparation of this thesis.

My profound gratitude and sincere thanks is extended to Prof. Dr. Youmn El Hamaky, professor of economics at Ain Shams University , for her constructive suggestions and for all what I have learnt from her throughout my academic years.

I would also like to thank PROF. DR. Amr El-Taki, professor of economics at Sadat Academy, for his devotion of time and energy to read and discuss this thesis, which added a great value to the study.

I am also indebted to all my professors in the economics department and to my colleagues.

Finally, I would like to thank all those who helped me accomplish that task.

Ingy Gamal

## TABLE OF CONTENTS:

|                                                                                       |             |
|---------------------------------------------------------------------------------------|-------------|
| <b>Introduction</b>                                                                   | <b>I</b>    |
| <b>Research Problem</b>                                                               | <b>ii</b>   |
| <b>Literature Review</b>                                                              | <b>iv</b>   |
| <b>Limitations of the Study</b>                                                       | <b>viii</b> |
| <b>Research Objectives</b>                                                            | <b>ix</b>   |
| <b>Research Hypotheses</b>                                                            | <b>ix</b>   |
| <b>Research Plan</b>                                                                  | <b>x</b>    |
| <b>Part I: Evaluating the Income Redistribution Policies In Latin America</b>         | <b>1</b>    |
| <b>Chapter One: The Income Redistribution Policies during the Period 1950-1980</b>    | <b>2</b>    |
| <b>Introduction</b>                                                                   | <b>2</b>    |
| <b>I. Sources of Income Inequality in Latin America</b>                               | <b>5</b>    |
| <b>A. Land Ownership</b>                                                              | <b>5</b>    |
| <b>B. Industrial Growth</b>                                                           | <b>6</b>    |
| <b>C. Education</b>                                                                   | <b>7</b>    |
| <b>D. Labor Costs</b>                                                                 | <b>7</b>    |
| <b>E. Trade Policies</b>                                                              | <b>8</b>    |
| <b>F. Unemployment</b>                                                                | <b>8</b>    |
| <b>II. The Income Redistribution Policies</b>                                         | <b>9</b>    |
| <b>A. Subsidies</b>                                                                   | <b>9</b>    |
| <b>B. Taxes</b>                                                                       | <b>13</b>   |
| <b>C. Government Expenditure on Health and Education</b>                              | <b>15</b>   |
| <b>Chapter One Summary</b>                                                            | <b>19</b>   |
| <b>Chapter Two: The Income Redistribution Policies during the 1980s and the 1990s</b> | <b>20</b>   |
| <b>Introduction</b>                                                                   | <b>20</b>   |
| <b>The Social Drawbacks of the Debt Crisis</b>                                        | <b>21</b>   |
| <b>The Period of the 1990s</b>                                                        | <b>22</b>   |

|                                                                                      |           |
|--------------------------------------------------------------------------------------|-----------|
| <b>The Income Redistribution Policies</b>                                            | <b>24</b> |
| <b>A. Taxes</b>                                                                      | <b>24</b> |
| <b>B. Government Expenditure on Health and Education</b>                             | <b>26</b> |
| <b>Chapter Two Summary</b>                                                           | <b>36</b> |
| <br>                                                                                 |           |
| <b>Chapter Three: The Period of Growth Acceleration (2000-2012)</b>                  | <b>37</b> |
| <b>Introduction</b>                                                                  | <b>37</b> |
| <b>Poverty and Inequality</b>                                                        | <b>39</b> |
| <b>The Income Redistribution Policies</b>                                            | <b>40</b> |
| <b>A. Taxes</b>                                                                      | <b>40</b> |
| <b>B. Government Expenditure on Health and Education</b>                             | <b>42</b> |
| <b>Chapter Three Summary</b>                                                         | <b>49</b> |
| <br>                                                                                 |           |
| <b>Chapter Four: The CCT Programs in Latin America</b>                               | <b>50</b> |
| <b>Introduction</b>                                                                  | <b>50</b> |
| <b>1. Targeting</b>                                                                  | <b>51</b> |
| <b>2. Conditionality</b>                                                             | <b>54</b> |
| <b>3. Benefit Size and Structure</b>                                                 | <b>57</b> |
| <b>4. Financing CCT</b>                                                              | <b>59</b> |
| <b>5. Exit Rules</b>                                                                 | <b>60</b> |
| <b>6. The Impact of CCT Programs</b>                                                 | <b>62</b> |
| <b>Chapter Four Summary</b>                                                          | <b>68</b> |
| <br>                                                                                 |           |
| <b>Part II: Evaluating the Income Redistribution Policies In Egypt</b>               | <b>69</b> |
| <br>                                                                                 |           |
| <b>Chapter Five: Equity and Income Redistribution Policies Before and After 1952</b> | <b>70</b> |
| <b>Introduction</b>                                                                  | <b>70</b> |
| <b>I. The Historical Origin of Income Inequality in Egypt</b>                        | <b>72</b> |
| <b>A. Land Ownership</b>                                                             | <b>72</b> |
| <b>B. Industrial and Commercial Wealth</b>                                           | <b>74</b> |
| <b>C. Tariff Policies</b>                                                            | <b>74</b> |
| <b>D. Unemployment and Inflation</b>                                                 | <b>75</b> |
| <b>II. The Income Redistribution Policies After 1952</b>                             | <b>76</b> |
| <b>I. Land Reform</b>                                                                | <b>76</b> |
| <b>II. Nationalization</b>                                                           | <b>78</b> |
| <b>III. Government Expenditure on Health and Education</b>                           | <b>79</b> |

|                                                                                        |            |
|----------------------------------------------------------------------------------------|------------|
| <b>IV. Labor Policies</b>                                                              | <b>80</b>  |
| <b>V. Cost and Price Controls</b>                                                      | <b>80</b>  |
| <b>VI. Taxes</b>                                                                       | <b>81</b>  |
| <b>The War Economy Period (1967-1973)</b>                                              | <b>82</b>  |
| <b>The Income Redistribution Policies during the Open-Door Policy (1970s-1980s)</b>    | <b>83</b>  |
| <b>A. Subsidies</b>                                                                    | <b>83</b>  |
| <b>B. Taxes</b>                                                                        | <b>85</b>  |
| <b>C. Government Expenditure on Health and Education</b>                               | <b>87</b>  |
| <b>The Adverse Effects of the Open-Door Policy on Income Distribution: A Criticism</b> | <b>90</b>  |
| <b>Chapter Five Summary</b>                                                            | <b>91</b>  |
| <br>                                                                                   |            |
| <b>Chapter Six: The Income Redistribution Policies during the 1980s and the 1990s</b>  | <b>93</b>  |
| <b>Introduction</b>                                                                    | <b>93</b>  |
| <b>Income Distribution during the 1980s</b>                                            | <b>94</b>  |
| <b>The Economic Reform Policy (1991-2001)</b>                                          | <b>95</b>  |
| <b>The Social Drawbacks of the ERSAP</b>                                               | <b>96</b>  |
| <b>The Income Redistribution Policies</b>                                              | <b>97</b>  |
| <b>. Subsidies</b>                                                                     | <b>98</b>  |
| <b>. Taxes</b>                                                                         | <b>107</b> |
| <b>. Government Expenditure on Health and Education</b>                                | <b>110</b> |
| <b>. Transfer Payments</b>                                                             | <b>119</b> |
| <b>. The Agricultural Land Tenure Law</b>                                              | <b>119</b> |
| <b>Chapter Six Summary</b>                                                             | <b>121</b> |
| <br>                                                                                   |            |
| <b>Chapter Seven: The Income Redistribution Policies during the Period 2000-2011</b>   | <b>123</b> |
| <b>Introduction</b>                                                                    | <b>123</b> |
| <b>Poverty and Income Distribution</b>                                                 | <b>125</b> |
| <b>The Income Redistribution Policies</b>                                              | <b>126</b> |
| <b>A. Subsidies</b>                                                                    | <b>126</b> |
| <b>B. Taxes</b>                                                                        | <b>131</b> |
| <b>C. Government Expenditure on Health and Education</b>                               | <b>134</b> |
| <b>Chapter Seven Summary</b>                                                           | <b>142</b> |
| <br>                                                                                   |            |
| <b>Chapter Eight: Applying CCT Programs in Egypt</b>                                   | <b>143</b> |

|                                                         |            |
|---------------------------------------------------------|------------|
| <b>Introduction</b>                                     | <b>143</b> |
| <b>1. Targeting</b>                                     | <b>145</b> |
| <b>2. Conditionality</b>                                | <b>150</b> |
| <b>3. Program Benefits</b>                              | <b>155</b> |
| <b>4. Financing CCT Programs</b>                        | <b>157</b> |
| <b>5. Exit Strategies</b>                               | <b>159</b> |
| <b>Requirements for Successful CCT Implementation</b>   | <b>160</b> |
| <b>The Expected Impact of the CCT Programs in Egypt</b> | <b>163</b> |
| <b>The Ain El Sira Pilot Program</b>                    | <b>164</b> |
| <b>Chapter Eight Summary</b>                            | <b>167</b> |
| <b>Results</b>                                          | <b>168</b> |
| <b>Recommendations</b>                                  | <b>177</b> |
| <b>References</b>                                       | <b>178</b> |
| <b>Appendix A</b>                                       | <b>201</b> |
| <b>Appendix B</b>                                       | <b>215</b> |

## LIST OF TABLES:

|                  |                                                                                                                   |    |
|------------------|-------------------------------------------------------------------------------------------------------------------|----|
| <b>Table 1.1</b> | Tax Revenues as a Share of GDP (%)                                                                                | 14 |
| <b>Table 1.2</b> | Distribution of Educational Expenditures among Quintiles of Population, 1966                                      | 17 |
| <b>Table 2.1</b> | Income Tax and Domestic Tax on Goods and Services in Some Latin American Countries, 1998-2003 (% of tax revenues) | 26 |
| <b>Table 2.2</b> | Illiteracy By Income Quintiles, 1989                                                                              | 30 |
| <b>Table 2.3</b> | Net Primary Enrollment Ratio, 1980, 1985                                                                          | 30 |
| <b>Table 2.4</b> | The Distributive Impact of Government Expenditure on Health, by Quintiles                                         | 32 |
| <b>Table 2.5</b> | Infant and Under-Five Mortality Rates in Brazil and Nicaragua by Income Quintiles, 1990s                          | 33 |
| <b>Table 2.6</b> | Disparities in Health Indicators between Rural and Urban Areas, 1990s                                             | 34 |
| <b>Table 3.1</b> | Income Inequality Before and After Taxation                                                                       | 41 |
| <b>Table 3.2</b> | The % of Household Revenue Devoted to Taxes, 2000s                                                                | 41 |
| <b>Table 3.3</b> | Allocation of Health Spending By Income Quintiles, 2000s                                                          | 43 |
| <b>Table 3.4</b> | Public Education Spending going to the Richest and Poorest Quintiles, 2006                                        | 45 |
| <b>Table 4.1</b> | Targeting Methods used in CCT Programs                                                                            | 52 |
| <b>Table 4.2</b> | Conditionality of CCT Programs in Latin America                                                                   | 55 |
| <b>Table 4.3</b> | Indicators of CCT Spending and Financing Sources, 2009                                                            | 60 |
| <b>Table 4.4</b> | Distribution of Benefits in Quintiles, Selected Programs (%)                                                      | 63 |
| <b>Table 5.1</b> | Gini Coefficients (1974/75-1981/82) Rural and Urban                                                               | 71 |
| <b>Table 5.2</b> | Average Annual Income of Landowners in 1946/47                                                                    | 73 |
| <b>Table 5.3</b> | Changes in the Structure of Landownership in Egypt (1952-1965)                                                    | 77 |
| <b>Table 5.1</b> | Food Subsidies as a % of Total Government Expenditures (1973-1980/81)                                             | 84 |
| <b>Table 5.5</b> | The Size of Private Education vs Government Education in Egypt, 1976/77                                           | 89 |

|                   |                                                                                                               |     |
|-------------------|---------------------------------------------------------------------------------------------------------------|-----|
| <b>Table 6.1</b>  | Distribution of Expenditure by Expenditure Group in Rural and Urban Egypt, 1981/82 to 1990/91                 | 94  |
| <b>Table 6.2</b>  | Food Subsidies as a % of Total Government Expenditures (1981/82-1990/91)                                      | 98  |
| <b>Table 6.3</b>  | Comparison of Actual to Subsidized Prices of Selective Basic Commodities, 1986                                | 99  |
| <b>Table 6.4</b>  | The Impact of Food Subsidies on Household Expenditure Distribution in 1990/91 as measured by Gini Coefficient | 101 |
| <b>Table 6.5</b>  | Rates of Food Subsidy to Consumers per Unit of Commodity, 1996/97                                             | 103 |
| <b>Table 6.6</b>  | Composition of Egyptian Tax Revenues: 1980/81-1986/87 (%)                                                     | 108 |
| <b>Table 6.7</b>  | Distribution of Educational Expenditures by Income Groups. 1980s                                              | 111 |
| <b>Table 6.8</b>  | % of Public Education Expenditure Received by Quintiles, 1997                                                 | 116 |
| <b>Table 6.9</b>  | Attainment of Males and Females Ages 15-19 by Income Group, 1995/96                                           | 117 |
| <b>Table 6.10</b> | Repetition Rates in the MOE Schools, 2000/01                                                                  | 117 |
| <b>Table 7.1</b>  | The Distribution of Electricity Subsidies, 2003/2004                                                          | 131 |
| <b>Table 7.2</b>  | Income Tax Brackets                                                                                           | 132 |
| <b>Table 7.3</b>  | Distribution of the HIO Expenditures, by Quintiles, 2004                                                      | 135 |
| <b>Table 7.4</b>  | Health Indicators by Income Quintile, 2008                                                                    | 137 |
| <b>Table 7.5</b>  | Percentage Distribution of Households by Quintiles according to Educational Status, 2009                      | 141 |

## LIST OF FIGURES:

|                   |                                                                                               |     |
|-------------------|-----------------------------------------------------------------------------------------------|-----|
| <b>Figure 1.1</b> | The Inverted U Kuznets Curve                                                                  | 6   |
| <b>Figure 3.1</b> | Unemployment Rate and GDP Growth in Latin America, 2003-2009                                  | 38  |
| <b>Figure 3.2</b> | The Share of Public Spending Received by Income Groups, 2006                                  | 46  |
| <b>Figure 3.3</b> | The Share of Public Spending on CCT Received by Different Income Groups, 2006                 | 48  |
| <b>Figure 6.1</b> | Food Subsidy Allocations and Distribution of Poverty, 1997                                    | 105 |
| <b>Figure 6.2</b> | Share of Households Holding Ration Cards, by Expenditure Quintile, 1997                       | 106 |
| <b>Figure 6.3</b> | The % of Household Members not Registered in the Ration Cards by Quintiles                    | 107 |
| <b>Figure 6.4</b> | Regional Disparities in Infant and Child Mortality, Egypt 1995                                | 114 |
| <b>Figure 7.1</b> | Cost of Food Subsidies (%of GDP) 1997-2009                                                    | 127 |
| <b>Figure 7.2</b> | Distribution of Subsidies of Four Petroleum Products, % of Subsidy Received by Each Quintiles | 130 |
| <b>Figure 7.3</b> | Direct and Indirect Taxes as a % of Total Tax Revenue 2001/02-2010/11                         | 133 |
| <b>Figure 7.4</b> | Expenditure on Education in Egypt, 2002/03-2010/11                                            | 138 |
| <b>Figure 7.5</b> | Enrollment Rates by Income Quintiles, 2004/05                                                 | 140 |

## LIST OF ACRONYMS AND ABBREVIATIONS:

|          |                                                         |
|----------|---------------------------------------------------------|
| AUC      | American University in Cairo                            |
| BFP      | Bolsa Familia Programme                                 |
| CAPMAS   | Central Agency for Public Mobilization and Statistics   |
| CSOs     | Civil Society Organizations                             |
| CBT      | Community-based Targeting                               |
| CONASUPO | Compañía Nacional de Subsistencias Populares            |
| CCT      | Conditional Cash Transfers                              |
| CPI      | Consumer Price Index                                    |
| DFID     | Dept. for International Development                     |
| ECLAC    | Economic Commission for Latin America and the Caribbean |
| ERSAP    | Economic Reform and Structural Adjustment Programme     |
| EGPC     | The Egyptian General Petroleum Corporation              |
| ECES     | Egyptian Center for Economic Studies                    |
| ERF      | Economic Research Forum                                 |
| FA       | Familias en Acción                                      |
| GDP      | Gross Domestic Product                                  |
| GST      | General Sales Tax                                       |
| HIO      | Health Insurance Organization                           |
| IS       | Import-Substitution Industrialization                   |
| IDB      | Inter-American Development Bank                         |
| IFPRI    | International Food Policy Research Institute            |
| ILO      | International Labor Organization                        |
| IMF      | International Monetary Fund                             |
| IFC      | International Finance Corporation                       |
| IPEA     | Brazilian Institute for Applied Economic Research       |
| Kwh      | kilowatt hour                                           |
| LAC      | Latin America and the Caribbean                         |
| LPG      | Liquified Petroleum Gas                                 |
| MENA     | Middle East and North Africa                            |
| MDGs     | Millennium Development Goals                            |
| MOSS     | Ministry of Social Solidarity                           |
| na       | not available                                           |
| NGOs     | Non-Governmental Organizations                          |
| NAFTA    | North American Free Trade Agreement                     |
| OECD     | Organization for Economic Co-operation and Development  |
| ODI      | Overseas Development Institute                          |
| PAHO     | Pan American Health Organization                        |
| PATH     | Program of Advancement through Health and Education     |
| PETI     | Brazilian Programme for the Eradication of Child Labor  |
| PRAF     | Programa de Asignacion Familiar                         |
| PMT      | Proxy-means Testing                                     |

|           |                                                                                 |
|-----------|---------------------------------------------------------------------------------|
| PROGRESA  | Programa de Educación, Salud y Alimentación                                     |
| RPS       | Red de Protección Social                                                        |
| SADC      | South African Development Community                                             |
| UNDP      | United Nations Development Program                                              |
| UN        | United Nations                                                                  |
| UNU-WIDER | United Nations University-World Institute for<br>Development Economics Research |
| VAT       | value-added tax                                                                 |
| WHO       | World Health Organization                                                       |
| WB        | World Bank                                                                      |

## **INTRODUCTION:**

Income inequality and poverty are separate, though related, objects of study. Related, because extreme inequality, like that of Latin America, makes it likely that a substantial proportion of the population will fall below the "poverty line." Separate, because an increase in inequality, as indicated by a rise in the Gini coefficient, does not necessarily mean a corresponding increase in poverty. People feel poor, not only because their absolute level of consumption is low, but because others in the society are apparently well-off. Thus, we come back to the distribution of income as a central fact of life.

Very poor families need more than a simple income subsidy. They need the sustained support of social services so as to be able to access these services effectively. Developing countries that aim to reduce excessive inequalities in their distribution of income need to know how to best achieve their aim. Actually, governments intervene by:

- Adjusting the Size Distribution through Progressive Redistribution of Asset Ownership: An example of such redistribution policies is land reform, where tenants are transformed into small landholders.
- Increasing the Size Distribution at the Lower Levels through Direct Transfer Payments and the Public Provision of Goods and Services: For example, increasing public health centers and schools in rural and marginalized areas, direct money transfers to the those most in need, and subsidized food programs.

These policies tend to create a social safety net for people who may become more vulnerable by the

development process. However, these policies cannot be applied equally effective in all countries. They must be tailored according to the economic and social conditions to achieve equitable distribution of income.

### **RESEARCH PROBLEM:**

Egypt has achieved high rates of economic growth during the 1990s and 2000s. However, this rising growth has not been accompanied by an improvement in living conditions or an obvious alleviation of poverty, in addition to a persisting gap between the rich and the poor and between the rural and urban areas. In addition, the prevailing income redistribution policies do not effectively achieve their aim. For instance, food subsidies are costly and are not reached by many poor households. The benefits of the subsidies are uniformly distributed across all income groups, much of which goes to wealthier households who are able to buy more of the subsidized goods. This leakage is caused by inadequate and weak targeting mechanisms. Even the eligibility criteria for the ration-card system are not well enforced with almost 63.5% of the households in the richest quintile hold green ration cards.<sup>1</sup>

The energy subsidies also are costly, reaching 6% of GDP in 2009,<sup>2</sup> with most of their benefits accruing to the rich income groups. In addition, they exert a distorting impact on economic decisions by encouraging investment in capital- and energy-intensive products rather than labor-intensive products.

---

<sup>1</sup> Akhter Ahmed et al., The Egyptian Food Subsidy System, Structure, Performance, and Options for Reform, International Food Policy Research Institute, Research Report # 119, 2001, p. 38

<sup>2</sup> World Bank, Middle East and North Africa Region, Regional Economic Update, May 2011, p. 14