**Adverse Selection in Household Investment in Education in
Egypt: Can the World Bank Policy Recommendations Offer a
Solution for Egyptian Households?**

by

Doaa Mohie Mahmoud Saddek

**A thesis submitted to the Faculty of Graduate and Postdoctoral
Affairs in partial fulfillment of the requirements
for the degree of**

Doctor of Philosophy

in

Public Policy

**Carleton University
Ottawa, Ontario**

© 2015

Doaa Mohie Mahmoud Saddek

To the soul of David Wink who highly appreciated education and its power to effect a
positive change in the world

Abstract

The Egyptian labour market gives preference to graduates of higher levels of education to fill remunerative jobs, which has encouraged Egyptian households from all income levels to invest in post-secondary education. However, over time this investment failed to pay off in labour market outcomes especially as the number of graduates exceeded the number of remunerative jobs leading a substantial proportion of graduates to either accept low-paid jobs or remain unemployed until they secure remunerative ones. Paradoxically, in response to these unfavourable outcomes, households have continued to invest heavily in higher levels of education to give their children a competitive advantage to secure one of the few remunerative jobs, a behaviour best described as a version of "adverse selection."

This situation has posed a challenge for Egyptian policy makers who faced the twin problems of increased demand for higher education and more unemployed educated youth. To address this challenge, since the early 1990s, the World Bank has consistently advised the Egyptian government to: a) reduce government intervention in labour markets; b) decrease public subsidies, while encouraging private investment especially in post-secondary education; and c) improve the quality of education to match the needs of private sector employers and increase labour market demand for educated youth.

This thesis examines whether such recommendations could address the labour market challenges faced by educated youth and avoid encouraging household spending, which despite being individually rational, is likely to be socially wasteful and politically problematic. To provide a context for this analysis, the effect of changes in Egypt's policy direction, from a centrally-planned to a market economy, on the education-labour market relationship and on public and private investment in education was studied. Through interviews with a sample of Egyptian households, the determinants of Egyptian household spending on education were also examined to better understand how the quality and/or outcomes of higher education have influenced such spending.

Evidence suggests that for the World Bank's policies to tackle the underlying causes of "adverse selection," they must go beyond attributing education-labour market problems to the quality of education and to distortions caused by government education and labour market policies and focus on the need to promote the creation of good quality jobs in one way or another, possibly including active industrial policies linked to appropriate training schemes. Fortunately a recent shift by the World Bank to focus on creating good jobs may be a positive development.

Acknowledgement

One of the questions I raised in this thesis is whether one's investment in higher education is a worthwhile investment. While most would define worthiness as the increase in the earning potential upon graduation, for me the experience was a lot more than that.

It was a truly life changing experience, which shaped my personality, expanded my perspective and prepared me very well for my upcoming endeavors. Of course it was not all plain sailing. Despite the challenges, what made this journey worth traveling were: First, the pleasure of seeking knowledge and the desire to improve my understanding of the world rather than just to add a degree to my academic credentials. Second, the enormous support and encouragement I received from all the people who believed in the importance of what I am doing and in my ability to overcome any hurdle along the way.

I would really like to thank each and every one who contributed to this experience and made it a rewarding one for me.

First, I would like to thank my fantastic supervisor, Professor Frances Abele, who over the past number of years kept the light at the end of the tunnel turned on to give me hope and keep me working consistently toward my goal. Thanks, Professor Abele for your constructive feedback and support, which had always brought me to the right track whenever the road got rocky.

I am also equally and deeply thankful to Professor Manfred Bienefeld, who has co-supervised my thesis until he retired. Professor Bienefeld's thorough comments and recommendations helped in sharpening my critical eyes and refining my analytical skills. Thanks, Professor Bienefeld for making me a more vigilant researcher and for assuring me that hard work always pays off, even during moments when it was hard for me to believe so.

I am indeed grateful to Professor Ozay Mehmet for stepping in as a third research committee member late in the process and for giving me valuable advice that helped in highlighting the importance of the findings from my interviews.

I was also very fortunate to be supported by a renowned development organization, such as the International Development Research Centre (IDRC), which generously provided financial and logistical support to facilitate data collection for this thesis out of appreciation for efforts done in my research proposal and belief in the importance of my research topic.

I am extremely thankful to my family and friends, without the support of whom I would not have been where I am now. Over the past number of years, the virtual pats on my shoulder and words of encouragement that I received from my parents, Hoda & Mohie Saddek, and my sister, Wessam, despite the geographical distance, have kept me looking forward to the day when I can make them feel proud. I am also indebted to my dearest friend, Sandra Noel, who stayed up late for several nights to edit my thesis and to her husband, Scott, who despite scolding me (jokingly) for taking up of his wife's time, has never failed to draw a smile on my face when I was feeling down. Indeed, the enormous help I received from the young and very smart, Kira Noel, in putting my bibliography together is highly appreciated. It is equally important to acknowledge the significant role played by my friend, Irene Kulcsar, who up until now has treated me with gallons of gelato to keep my energy level up while writing my thesis. And of course, the strength I derived from the warm and supportive hugs I received from my Canadian family, Corry, Richard and Joanne Wink, is not to be underestimated at all.

Last but not least, I want to thank my cute little nieces, Kanzy and Leyan, who made my short breaks from writing an enjoyable time when they called me to show-off their newly learnt nursery rhymes. I hope I continue to be part of their educational journey and perhaps also become an inspiration for them one day.

Table of Contents

Abstract	i
Acknowledgement	ii
List of Tables	vii
List of Figures	viii
List of Appendices	ix
Chapter 1: Research Objective and Background	1
I. Introduction.....	1
A. World Bank Policy Recommendations to Egyptian Government	13
II. Returns to Education: Theoretical Background.....	17
A. Macroeconomic Theories and Investment in Human Capital	18
B. Microeconomic Theories and Investment in Human Capital	20
C. Outcomes of Diploma Disease.....	28
III. The Egyptian Education System	30
A. Education and the Dream of Equality and Upward Mobility	30
B. The Dream Was Not Realized	32
IV. Research Methodology.....	38
A. Heads of Households and Young Egyptians Interviews.....	40
B. Key Informant Interviews	46
C. Handling the Data Gathered from All Interviews.....	49
V. Research Ethics.....	51
VI. Data Collection Challenges	51
VII. Overview of the Thesis Chapters	53
Chapter 2: World Bank Policy Recommendations: Basis and Assumptions.....	55
I. Rates of Return to Education: Methodology and Assumptions.....	58
A. Rates of Return Global Estimates: Methods, Selection and Results	59
B. Rates of Return to Education Global Estimates: Criticism.....	68
II. World Bank Policy Recommendations: The Relation Between Investment in Education and Labour Market Outcomes.....	88

A. Redirecting Government Subsidies and Spending toward Primary Education and Away from Higher Education Levels	89
B. Encouraging Private Investment in Education.....	93
C. Improving Quality of Education	100
III. Egypt's Education-Labour Market Relationship (Diagnosis and Solutions)....	103
A. Government Intervention and Education-Labour Market Relationship	104
B. Quality of Education in Egypt: Household Spending and Labour Market Outcomes	108
C. Suggested Policy Solutions to Egypt Education-Labour Market Problem.....	114
Chapter 3: The Political Economy of Education in Egypt.....	118
I. Egypt's Political Economy of Education	120
A. Phase I: Before the British Occupation (Mohamed Ali's Period (1805-1848)).	122
B. Phase II: The British Occupation	126
C. Phase III: National Independence	130
D. Phase IV: Sadat's Liberal Policies (1970-1980)	135
E. Phase V: Structural Adjustment (1980s until the End of Mubarak's Time).....	139
Chapter 4: Determinants of Household Spending on Education in Egypt and the Policy Recommendations of the World Bank.....	151
I. Overview of Egypt's Education System and Profile of Households Interviewed	154
A. Egypt's Education System	154
B. Profile of Households Interviewed	157
II. Household Perceptions of Education-Labour Market Realities in Egypt.....	169
A. The Unfavourable Labour Market Conditions Faced by Educated Youth: Household Perspectives	170
B. The Motivation behind Household Investment in Higher levels of Education ..	189
III. World Bank Policy Recommendations and the Solutions to the Education-Labour Market Problems.....	208
A. Quality of Education and Reducing Household Spending on Education	208
B. Quality of Education and Youth Labour Market Opportunities	210
IV. The Market for Good Jobs and the Rationality of Household Investment Behaviour	215
A. Rationality of Private Spending on Education at the Individual Level	217

B. Rationality of Private Investment in Education at the Social Level	218
Chapter 5: Conclusion.....	221
I. The World Bank is Moving Good Jobs to Centre Stage.....	228
II. Could the Reformulated Development Agenda Help Address Egypt's Job Creation Challenge?	231
III. Topics for Future Research	236
Bibliography	238

List of Tables

Table 2-1: Returns to Social and Private Investment in Education by Level of Education (Based on the Full Method of Estimation).....	67
Table 2-2: World Bank's Locus of Key Education Challenges in Egypt by Sub-sector	116
Table 4-1: Education and Employment Profile of Youth Interviewed	161
Table 4-2: Education of Heads of Households	164
Table 4-3: Sources of Income and Standard of Living of Households.....	168
Table 4-4: Unfavourable Labour Market Conditions (Opinions of Parents).....	174
Table 4-5: Unfavourable Labour Market Conditions (Opinions of Youth).....	183
Table 4-6: The Importance of Investing in Higher Levels of Education (Opinions of Parents)	195
Table 4-7: The Importance of Investing in Higher Levels of Education (Opinions of Youth)	200
Table 4-8: Investment in Higher Education and the Improvement of Social Opportunities (Opinions of Parents)	204
Table 4-9: Investment in Higher Education and the Improvement of Social Opportunities (Opinions of Youth).....	206

List of Figures

Figure 1-1: Street Graffiti	9
Figure 1-2: Diploma Disease (Causes and Effects)	28
Figure 1-3: Trend of Share of Education Expenditure in Total Household Expenditure (%) by Income Quintile (2000 and 2004)	34
Figure 2-1: Share of Education Components out of Household Spending on Education Over time (1995, 1999, 2000, 2003)	109
Figure 3-1: Investment in Education over Five Phases of Egypt's History	120
Figure 3-2: Summary of the Political Economy of Education in Egypt (Before and After Independence and Modern Times)	148

List of Appendices

Appendix 1-1: Sector of Employment of the First Job for Secondary and Post-Secondary Graduates (1980-2011)	263
Appendix 1-2: The Structure of Egypt's Education System.....	264
Appendix 1-3: Approval for Access to Household Addresses	265
Appendix 1-4: Heads of Households Interview Guide	266
Appendix 1-5: Youth (18-28) Interview Guide	269
Appendix 1-6: Household* Roster.....	273
Appendix 1-7: Key Informant Interview Guide.....	274
Appendix 1-8: Carleton University Research Ethics Clearance	276
Appendix 1-9: Approval for Data Collection from the Central Agency for Public Mobilization and Statistics (CAPMAS).....	277
Appendix 1-10: Letter of information and Consent Form read to and signed by the young interviewee	278
Appendix 1-11: Letter of information and Consent Form read to and signed by the by one of the parents	280
Appendix 1-12: Letter of information and Consent Form read to the key informant interviewees	282

Chapter 1: Research Objective and Background

I. Introduction

The combination of decreased child mortality and high fertility rates experienced in the 1980s has produced a large youth¹ cohort in the Middle East and North Africa (MENA) in general, and in Egypt, in particular. This demographic fact has presented challenges for policy makers seeking to provide adequate education services and job opportunities for the growing number of young people seeking to join a labour market.

The Arab Spring, which began in December 2010 in Tunisia and quickly spread throughout the region, has brought the resulting youth problems to the political forefront. Chronically high youth unemployment rates² in the region have led to the pervasive underutilization and marginalization of youth—particularly among the more educated. Their resulting frustration and anger has, in turn, fostered and sustained their revolts against many long entrenched autocratic regimes in the region (Campante & Chor, 2012). According to the International Labour Organization (ILO):

There are deep-seated structural issues in these regions that result in the world's highest youth unemployment rates as well as severe underdevelopment in the productive potential of the economies. The collective frustration of a generation of youth that was granted the opportunity to gain an education but not given the same opportunity to gain

¹ For the purposes of this thesis, "youth" is taken to refer to those males and females in the age bracket of 15 to 29 years old, as defined by the World Bank and the ILO.

² ILO report, *Global Employment Trends for Youth: 2011 update*, showed that "Over the entire twenty year span [1991-2011] for which data exist, approximately 1 in 4 youth in the labour market have been unemployed in the regions of the Middle East and North Africa, and this is despite progress made on the education front for both girls and boys."

decent employment was certainly a contributing factor behind mobilizing youth in support of the political protest movements in Bahrain, Egypt, Libyan Arab Jamahiriya, Syrian Arab Republic and Tunisia. Consequently, promoting opportunities for decent employment for youth remains firmly fixed among the priority of the interim governments. (ILO, 2011, p.5)

Unfortunately, this marginalization of youth is not just a temporary regional problem faced by the current cohort of MENA's labour market entrants. Indeed, the ILO (2013) report, *Global Employment Trends for Youth: A Generation at Risk*, has highlighted the fact that worsening youth unemployment is becoming a persistent, structural problem worldwide, although it is particularly pronounced in countries, like the MENA countries, that are experiencing a major youth population bulge.³

The challenge that youth unemployment poses for policy makers does not lie only in the persistence of the phenomenon itself, but also in its negative economic, social and political spillover effects, in that the long periods of unemployment and the onerous process of searching for a rewarding job after finishing school often lead to youth discouragement, withdrawal from the labour market and increased out-migration,⁴ which suggests a regional loss of human capital, or "brain drain." Moreover, the delay in obtaining a remunerative job can also lead to other negative human and social consequences. These can range from a rising marriage age (Assaad et al., 2009b) to more

³ "The highest regional youth unemployment rate in 2012 is registered in the Middle East, where 28.3% were out of work. On current projections, this is expected to rise to 30% in 2018." ILO (2013)

⁴ Assaad (2007), Assaad & Barsoum (2007), Amer (2007a&b), Wahba & El-Hamidi (2005), Wahba (2013) and Assaad & Kraft (2013) showed that this is particularly true among educated youth in Egypt.

frequent engagement in socially and culturally unacceptable behaviours such as drug addiction and violence as well as ideological radicalization.

Youth in Egypt, as elsewhere in the MENA region, face several labour market challenges. Studies analyzing the characteristics of Egypt's labour market before the 2011 revolution showed that unemployment in Egypt is predominantly a youth phenomenon, with almost 83% of the total unemployed Egyptians belonging to the age bracket of 15-29 in 2006 (Amer, 2007b).⁵ Moreover, Egypt's Labour Market Surveys⁶ (1988, 1998 and 2006) showed youth unemployment rates of (10.5%, 17.3% and 12.5%, respectively) (Amer, 2007b) that significantly and consistently exceeded the average unemployment rate (5.3%, 7.9% and 6.2% respectively).⁷ After the 2011 uprising, the latest Egypt Labour Market Survey 2012 has also confirmed that the youth unemployment rate continued to increase reaching 14.4% in 2012⁸ (Assaad⁹ & Krafft, 2014). Moreover, youth unemployment in Egypt has been more particularly concentrated among the more educated youth, dominantly those who completed technical/vocational education (with an unemployment rate of 42% for young females and 18% for young

⁵ This study applied the extended labour force and standard unemployment rate definitions. The standard unemployment rate definition includes persons who were not employed for at least one week before the interview, yet were available to work and have been searching for a job during the past three months (the reference period in the Labour Surveys). The extended labour force definition considers those engaged in primary non-market activities to be employed (Assaad, 2007b).

⁶ These are the Egypt Labour Force Sample Survey 1988, the Egypt Labour Survey 1998 and the Egypt Labour Market Panel Survey (2006) (which was Egypt's last labour survey before the 2011 Revolution).

⁷ It is worth noting that according to Assaad (2009), the decrease in the unemployment rate between 1998 and 2006 is expected to be more due to improvement in calculating unpaid family workers in the 2006 survey compared to the 1998 one, rather than due to an actual increase in employment opportunities.

⁸ It is worth noting that the growth in Egypt working age population (15-64) is driven by the growth in the youth population (15-29), which has led to severe demographic pressures on the labour market. Lately, the growth in the working age population slowed from 3% per annum in the period of 1988-2006 to 1.2% per annum between 2006 and 2012. This is believed to be due to the contraction of the youth population in the age bracket of (15-24) by 2.3% per annum over the 2006-2012 periods. Despite this contraction in the 15-24 year old youth population, the pressure in the labour market remains as the young adult population in the age bracket of 25-29 maintained a high growth rate of 4.2% per annum over the same period (Assaad and Krafft, 2013b, p.4). Moreover, Assaad and Krafft (2013b) also spotted an increase in the growth rate of the child population (0-14) from 1% per annum in the 1998-2006 periods to 3.8% per annum in the 2006-2012 periods, a result that anticipates a continued future increase in the demographic pressures on the labour market as this child population transition into the phase of youth and is ready to join the labour market.

⁹ Ragui Assaad is a professor of Planning and Public Affairs at the University of Minnesota. He is a renowned labour market expert in the Middle East and North Africa and the project director of Egypt Labour Market Panel Surveys (2006, 2012). Professor Assaad's various publications were quoted in this thesis as they provided important sources of information about Egypt labour market and its link to education.

males in 2006) and those who completed post-secondary education (with an unemployment rate of 41% for young females and 26% for young males in 2006) (Amer, 2007a, p.12).

However, the unemployment rate, as a labour market indicator, does not fully explain the nature of the problems confronting young labour market entrants in Egypt. In order to highlight the inadequacy of the unemployment rate as a measure of labour market health, Assaad and Krafft (2014) highlighted that the indicator failed to show the impact of the latest economic and political problems—which include the global financial crisis in 2008 and the 2011 uprising in Egypt—on Egypt's economy and, consequently, on the labour market. Indeed, it only showed a slight increase between 2006 and 2012 (from 6.2% to 6.9%),¹⁰ a number that appears to fail to accurately reflect the problems afflicting the current Egyptian labour market. Moreover, the higher unemployment rates among more educated youth could be taken to imply that the less educated are better off because they have a lower unemployment rate (2-4% for both young males and females in 2006)¹¹ while it is important to remember that these low unemployment rates conceal the very poor quality and precarious nature of the jobs usually taken by the less educated individuals¹² (Assaad & Krafft, 2014).

¹⁰ According to Assaad and Krafft (2014), the unemployment rate is largely driven by demographic forces and since there has been a declining demographic pressures of new entrants lately, this is believed to have counteracted the cyclical forces of deteriorating economic conditions, causing only a slight change in unemployment rate. This makes rate an insensitive measure of labour market health in Egypt.

¹¹ Amer (2007a)

¹² Assaad and Karfft (2014) showed that in 2012, 14% of the workers with no degrees and 14% of those with basic education were employed in irregular employment—which is characterized by intermittent casual type of jobs that are usually associated with labour market vulnerability and poverty—as opposed to only 3% of those who completed post-secondary education. Irregular jobs are considered as the jobs that have the poorest quality when compared to other forms of informal employment (which vary in quality).

Hence, in order to gain a better understanding of the labour market realities in Egypt and the employment prospects that young Egyptians are likely to face once they finish their education and are ready to join the labour market, there is a need for other measures that could complement the unemployment rate in describing the situation. Some such measures include the composition of the sectors of employment, the types of jobs offered in these sectors, and the distribution of these employment opportunities among individuals from both poor and rich households and across different levels of education. The results of examining the Egyptian labour market with these measures are discussed in detail below.

Studying the sectors of employment in Egypt showed that over time, the quality of jobs offered in the labour market has deteriorated, as a result of the decrease in the number of highly paid secure government jobs, the relatively slow increase in formal private employment and the substantial growth of informal¹³ regular and irregular¹⁴ low-paid jobs. From the 1960s until the 1980s public sector and government were considered the main employers of secondary and post-secondary graduates¹⁵ in Egypt as a result of the government Employment Guarantee Scheme. However, following the abandonment¹⁶ of this policy in the early 1990s, government and public sector employment substantially

¹³ “The distinction between formal and informal employment is based on whether an individual has either a contract or social insurance coverage. Formal jobs are defined as jobs that have either a contract or social insurance coverage or both, while informal jobs are defined as those with neither a contract nor social insurance.” (Assaad & Krafft, 2013a) As calculated by Assaad and Krafft (2013a), informal employment include those who reported working in the informal private regular wage work, irregular wage employment, unpaid non-agriculture family work, unpaid agriculture family work and self- employed.

¹⁴ Irregular work is casual (intermittent) or seasonal type of work, which is usually of precarious nature. For example, this involves mobile workers, construction workers moving from job site to job site, or individuals working intermittently on someone else’s farm or field. (Assaad & Krafft, 2014)

¹⁵ 60% of all secondary and post-secondary graduates were employment in government and public sector jobs in the 1980s as opposed to only 20% in the 2000s. (Assaad & Krafft, 2013a)

¹⁶ The guaranteed employment policy was curtailed first at the end of the 1970s before it was cancelled at the beginning of the 1990s.

contracted. In 1998 government and public sector employment accounted for 39% out of all employment and this proportion fell to 30%¹⁷ in 2006 (Assaad & Krafft, 2013a).

The decrease in government and public sector employment was not compensated for by a commensurate increase in formal private sector employment, which showed only a meagre increase over time from 8% in 1998 to 9% in 2006 to 11% in 2012 (Assaad & Krafft, 2013a). At the same time informal employment, which has started growing rapidly since the second half of the 1970s (at a 20% growth rate between 1976 and 1985 followed by a growth rate of 66% between 1985 and 1999)¹⁸ represented almost 60% of total employment by 2012 (Assaad and Krafft, 2013a).

The question then becomes: to whom do the secure formal jobs available go? An examination of the distribution of the types of employment for different wealth groups (using a wealth index) showed that jobs in the public and formal private sectors are disproportionately filled by people from richer families. By contrast, poor quality jobs (more specifically irregular jobs) are usually filled by individuals from poor households while regular informal wage employment is concentrated in the middle wealth groups (Assaad & Krafft, 2013a).¹⁹ This unequal distribution of the good jobs, among employed individuals from different wealth groups, becomes more problematic when one takes into consideration the fact that these jobs offer disproportionately higher wages compared to the informal jobs taken by the majority of the employed individuals. According to Frost

¹⁷ Government and public sector employment maintained a 30% of total employment in 2012 (Assaad & Krafft, 2013a).

¹⁸ ILO (2001)

¹⁹ This result was the same for employed male and female workers, both in urban and rural areas.

(2008, p.35), the wage differential between formal and informal employment is enormous, on the order of 15-25%.

The level of education attained also determines who gains access to the secure formal jobs in Egypt. Those completing higher levels of education are more likely to secure a government or formal private sector job as compared to those with lower levels of education (Amer, 2007a; Assaad & Krafft, 2013a; Frost, 2008). According to Amer (2007a, p.28), in 1998, 30% of informal workers were illiterate, while 5% had a university degree. On the other hand, in the same year, 6% of formal workers were illiterate, while 29% were university graduates. Moreover, studying Egypt Labour Market Surveys of 1998 and 2006, Assaad et al. (2009b) calculated a job quality index, which showed that in 1998 and 2006 the quality of the job increases with the level of education (meaning that the higher the educational level, the higher the job quality index); however, over time, the quality of jobs at all education levels has significantly dropped between 1998 and 2006.²⁰ The fact that earnings are disproportionately higher in formal employment, of which the more educated have a higher share, could possibly explain why there is an increasing return to investment in education in Egypt, meaning that the additional earnings gained from investing in additional levels of schooling is higher for higher levels of education (secondary and post-secondary). As Assaad et al. (2009c) showed, in 2006 the return on post-secondary education was 66% higher than

²⁰ Assaad et al. (2009b) calculated a composite measure of job quality for wage workers, which included indicators for income security, employment security, voice representation security through membership in a trade union or professional syndicate and work security.

that on basic education and the return on vocational secondary education was 22% higher than that for basic education.²¹

Consequently, these three labour market signals—1) poor quality jobs are associated with poverty and low pay, 2) more educated individuals have better chances of securing formal jobs, 3) and investment in higher levels of education have higher labour market returns than lower levels of education—have led to increased demand for secondary and post-secondary education, which could be associated with an increased gross enrolment rates²² in vocational secondary education from 40% in 1998/1999 to 46% in 2000/2001 to 50% in 2003/2004 (World Bank, 2007) and in university education from 22.9% in 2001/2002 to 28% in 2005/2006 (Amer, 2007a).

However, over time the increased number of secondary and post-secondary graduates, combined with the relatively dwindling availability of formal jobs—mainly government and public sector jobs—have led to a mismatch between the demand and the supply of educated labour. This has consequently led to the following three unfavourable youth labour market outcomes.

First, the more educated labour market entrants have been increasingly obtaining their first jobs in the informal sector. As Assaad and Krafft (2013a) showed, while in the early 1980s more than 60% of young secondary and post-secondary graduates used to obtain their first jobs in the public sector, this fell to only 20% in the 2000s. By contrast, the

²¹ This result is based on Assaad et al. (2009) who studied urban male wage workers in the age of (20-54). The rates of returns to investment in education will be discussed in more detail in chapter 2.

²² Gross enrollment rate is measured as total enrolment at a specific level of education as a percentage of the school population.

share of young secondary and post-secondary graduates obtaining informal private sector jobs rose from less than 20% in the early 1980s to more than 40% in 2011 (for more details see Appendix 1-1). Over time, the frustration among educated youth and their parents regarding these outcomes is compounded by the increasing reality that even when they do their best, investing time and money to earn post-secondary diplomas and degrees, they are subsequently faced with the fact that the types of jobs available to most university graduates are informal sector jobs that could be done well by people with little or no education (e.g., street vendors, drivers, phone operators and the like). It is not surprising then that street graffiti like the one in Figure 1-1 have become a common sight in Cairo and various other large urban centres in Egypt since the beginning of the 2011 Revolution.

Figure 1-1: Street Graffiti

The graffiti reads, "Our country wants us to become street vendors after finishing a university degree with 99% overall grade. After this, how could you ask me to love you, Egypt?"

Source: Revolution Graffiti - Street Art of the New Egypt, Facebook Group. From the organized sit of expatriate Egyptian university students (from rural areas and cities outside Cairo), February, 2013, Kasr El Aini Street, Cairo.

Second, with the increasing difficulty of securing a rare formal job, educated youth are highly likely to remain unemployed while searching for a good job (Assaad, 2013). This would explain why they have higher rates of unemployment as compared to the less educated individuals, as seen above.

Third, the frustration over the poor quality of the jobs available in the labour market and the difficulty of securing formal jobs has resulted in discouragement and even withdrawal from the labour market, especially among more educated females, who were the main beneficiaries of the Egyptian government's Employment Guarantee Scheme. This is evident from the decrease in the labour force participation rate²³ from 72% in 1998 to 55% in 2012 among urban female university graduates and from 50% in 1998 to 30% in 2012 among urban females with vocational secondary education degree (Assaad & Krafft, 2013b), which highlights a loss in human capital.

Paradoxically, in response to these unfavourable labour market outcomes—namely that a substantial proportion of graduates are either accepting low-paid jobs or remaining unemployed until they secure remunerative ones—Egyptian households have continued to invest heavily in higher levels of education, hoping to give their children a competitive advantage to secure one of the few formal remunerative jobs available, which go with higher socio-economic status, as seen above.

²³ Labour force participation rate is calculated as the percentage of the unemployed and employed individuals out of the working age population (15-64 years old).

As such, the few remunerative formal jobs available—for which education serves as a screening device—that yield disproportionate rewards to the lucky handful of graduates who manage to secure one of them motivate household investment in higher levels of education. It is in this respect that the Egyptian household investment in higher levels of education could be considered essentially a lottery.

However, like any gambling game, some will be winning big but the vast majority will be losing out. Under these circumstances, the increased household investment in higher levels of education, in which the main motivation is to secure the few remunerative formal jobs, leads to undesirable outcomes for most when an increasing number of highly educated people end up doing work for which their education could be considered largely a waste. This is especially true if that education was narrowly career focused, or when the young people remain unemployed in the vain hope of finding a good job for so long that they lose both their motivation and any skills which they may have acquired in the course of their education.

Consequently, the investment by Egyptian households in higher levels of education for their children could become counterproductive and socially irrational as the unfavourable labour market outcomes provide incentives for even more private investment, thereby further worsening the situation. And this could be so even though this household investment behaviour could be rational at the private level, which it would be, if

households were fully aware of the probabilities of success and failure and accordingly decided that it was worth taking the associated risk.

The highly competitive labour market ensuing from these circumstances, more specifically the market for remunerative secure jobs, would therefore reinforce the pressure on Egyptian households to do all they can to give their children the best possible chance of succeeding against the odds to secure remunerative employment. And as will be seen in more detail below, empirical analyses²⁴ do show that household spending on education in Egypt has been significant and increasing over time.

The insistence of Egyptian households on continuing to invest heavily in higher levels of education, despite disappointing labour market outcomes, can ultimately be best understood as a version of the "adverse selection" paradox in that worsening labour market conditions for educated youth will paradoxically tend to strengthen the incentive to invest in higher levels of education²⁵ as the struggle to gain access to the few available high-paying jobs intensifies, especially so if inequality is rising, so that the losers face ever more grim outcomes.

This raises a key question. What policies have been used in Egypt to respond to the underlying causes of this adverse selection behaviour, namely: a) the worsening labour market conditions for educated youth; and b) the belief of households that increased

²⁴ These include International development reports such as the *Egypt Human Development Report* (1998, 2000, 2010) and World Bank reports (2002) as well as World Bank sector specific policy notes (2005, 2007), which are based on Egypt Household Income Expenditure Consumption surveys (HIECS).

²⁵ This resembles the case of health insurance (the classical case for explaining adverse selection) in which the poorer a person's health, the more likely he or she will opt to invest in health insurance.

investment in higher levels of education will provide their children with a reasonable prospect for securing a remunerative job?

A. World Bank Policy Recommendations to Egyptian Government

In their attempts to address education-labour market problems, policy makers in Egypt—as in many other developing countries—have been aligning their efforts with the policy solutions recommended by the International Financial Institutions (IFIs), mainly the World Bank,²⁶ especially since Egypt agreed to a Structural Adjustment Program (SAP) in the 1990s.²⁷ As will be seen in more detail in chapter 2, the World Bank's—mainly supply-side focused—policy recommendations have been based on the view that the main causes of these problems can be traced back to: a) unwise government intervention in Egypt's labour markets; and b) the poor quality of education, which has led to inefficient household spending on education that has been unable to provide students with the skills needed in the labour market and thereby stimulate labour demand for educated youth.

From this perspective, the World Bank attributes the disproportionate labour market rewards that go to the graduates of higher levels education to the certification culture that the Egyptian government created in the 1960s when it promised guaranteed employment in the government and public sector to all secondary (mainly technical/vocational

²⁶ The World Bank was the main donor to education reforms in Egypt in the 1990s (Sayed, 2006).

²⁷ With the increase of the international debt, Egypt, like many developing countries, joined the World Bank and International Monetary Fund's structural adjustment program that aimed at increasing economic growth through lowering government role in the economy and encouraging free market reforms such as lowering trade barriers.

graduates) and post-secondary education graduates. According to the World Bank (2002a, 2005), even after this scheme was abandoned in the early 1990s, it left behind it a labour market oriented towards rewarding credentials rather than skills and productivity. The result is increased demand for higher levels of education, which has exerted an inexorable and ultimately unsustainable pressure on government's budgets given the government's continued commitment to a policy of guaranteeing citizens free access to all levels of education, including post-secondary.

As a result, the World Bank places the blame for the high unemployment rates among educated youth on the fact that because Egypt's education system was effectively insulated from market feedback by the government policies, it failed to prepare graduates for the needs of a more competitive and flexible liberal labour market (World Bank, 2002a). Moreover, based on the assumption that "supply would create its own demand," the World Bank suggests that if the quality of education were to be improved, the resulting "properly" educated youths would be able to find employment in jobs that would be created to make productive and profitable use of their skills.

The World Bank also suggests that it is the failure of the public system of education to provide students with good quality education that is leading households to spend an increasing percentage of their budget on their children's education in an effort to help them pass exams that are of paramount importance under this certification oriented system (World Bank, 2007). In this context, increased private spending on education is seen as inefficient since it is not helpful in improving the quality of the formal system of

education. Moreover, household spending on education that is directed toward passing examination could ultimately lead to inequality in access to primary education, which the World Bank deems as the most important level of education for which access should be free to everyone.²⁸

From the above explanation of the roots of Egypt's education-labour market problem, the World Bank policy recommendations to the Egyptian government can be summarized as promoting the following three solutions: a) removing labour market distortions, caused by government labour market policies and regulations (World Bank, 2002a, p.4); b) decreasing government subsidies on post-secondary education and focusing the government's limited resources on increasing access to and improving quality of primary education, which is assumed to be the most socially profitable; c) encouraging more private sector investment in the provision of post-secondary education in order to improve quality of education at this level and ensure that the skills taught there match the global market needs (World Bank, 2002a, 2007). The detail of these policy recommendations will be studied in chapter 2.

The objective of this thesis is therefore to examine whether or not the World Bank's supply side oriented explanation of Egypt's education-labour market challenges, and the related policy recommendations, can realistically be expected to bring relief to Egyptian

²⁸ Household spending on education at lower levels of education (primary and secondary) is mainly directed to the provision of private tutoring, which is believed to help children pass the national exams at these levels before they ultimately join post-secondary education. As per the World Bank rationale, this private spending, which becomes essential under the certification system, could discourage access to primary education, especially among the households that cannot afford these private tutoring costs that became an integral part of the education system.

households who are investing heavily in higher levels of education in the face of increasingly challenging labour market conditions, hoping to win the lottery of life.

In order to address this question, the thesis will study the development of the education-labour market relationship in Egypt, as well as the motivation behind household investment in higher levels of education, particularly in relation to the World Bank's interpretation of the problem. In doing so, the thesis will proceed as follows:

- First, the historical evolution of the relation between education and the labour market will be studied through a political economy lens, which will examine how changes in political direction and process shaped—and reshaped—the relationship between education and the labour market in Egypt over time, often by redefining the objectives of, and the rights to, different types of education in society.
- Second, within this context, the thesis will analyse the motivation behind the decisions of Egyptian households²⁹ to invest in higher levels of education, especially in the face of unfavourable labour market outcomes for educated youth, by examining household perceptions and opinions as captured in a qualitative survey conducted for this thesis in an effort to increase our understanding of the ways in which the quality and/or the outcome of higher education have influenced private investment decisions.

²⁹ The point of view of households typically has been ignored when the relationship between education and labour market outcomes is studied.

Before going into the detail of answering this research question in the coming chapters, the remainder of this first chapter provides a background against which the main arguments of the thesis can be developed. The first section, below, provides an overview of theories dealing with the relationship between investment in education and labour market results.

The second section provides some background information about Egypt's education sector, including its goals, the changing relationships to labour market outcomes and the apparent motivations behind the decisions of households to invest in education. The third section then explains the research methodology adopted in this thesis.

Finally, the chapter ends with a brief outline of what will be covered in the thesis chapters to follow.

II. Returns to Education: Theoretical Background

For any society, education is considered important for many reasons: creating responsible citizens; expanding young people's understanding of the world; emotional and cultural development; and providing youth with the means of obtaining gainful employment. However, in a difficult competitive environment, and given the importance of earning a living to human well-being, it is the link with the labour market that lends education its special significance and generally becomes the dominant justification for public, as well as private investment, in this sector.

As will be seen below, some theories argue that the importance of investment in education lies in the ability of education to increase the skills and productivity of workers, with the expectation that this will then be reflected in higher earnings and higher rates of growth. On the other hand, other theories are skeptical of the alleged skill and productivity enhancing aspects of education. These theories, instead, argue that education is simply a separate competition, the main purpose of which is to determine which individuals will gain access to the limited numbers of "good jobs" available in a society where unemployment or under-employment is prevalent.

This section discusses the underlying assumptions and the resulting limitations of the main macroeconomic and microeconomic theories attempting to assess the benefits that education generates for individuals and societies. The main focus in this thesis will be on the microeconomic theories, which are widely used to estimate the returns to education accruing to individuals. These theories are of primary significance for understanding the debates concerned with the link between individual decisions to invest in education and the actual and/or expected labour market outcomes.

A. Macroeconomic Theories and Investment in Human Capital

Macroeconomic theories study the effect of investing in human capital on a country's economic growth and they generally come in two forms: the traditional neoclassical Solow-Swan³⁰ growth model and the more recent theories of endogenous growth.³¹

³⁰ The Solow-Swan model is named after Robert Solow (1956) and Trevor Swan (1956) who independently developed the model.

³¹ Endogenous growth theory distinguished itself from the Solow-Swan model by arguing that economic growth is determined by factors that are internal to the economic system and not the result of outside forces (Romer, 1994).

The neoclassical Solow-Swan growth model (Solow, 1956; Swan, 1956) assumes that the relationship between human capital, as measured by education, and the growth of a nation's Gross Domestic Product (GDP) can be expressed as a linear production function in which economic growth is understood to be primarily determined by varying quantities of homogeneous labour and physical capital inputs. Under this model, the effect of education (as a proxy for the changing quality of labour) on economic growth is used implicitly to explain the otherwise unexplained "residual" that remains after accounting for the growth resulting from changes in the two main factors of production—labour and physical capital (Haddad et al., 1990).

Because the neoclassical theory tends to equate growth with potential welfare gains, the theory focuses almost exclusively on the impact of education on the growth in national income while largely ignoring other possible indirect effects (externalities) of education on society, such as improved health conditions and decreased crime rates, which could also provide justification for public investment in education.

Moreover, because the impact of education on growth is merely assumed to explain the residual of the production function, the Solow-Swan model can only be used to suggest a possible association between economic growth and investment in education (Haddad et al., 1990). As such, it cannot provide a basis for determining the optimal level of education investment, nor can it explain the processes by which human capital

accumulation might affect economic growth, or establish a causal relationship between investment in education and GDP growth (Gradstein et al., 2004).

Unlike the Solow-Swan model, Romer's (1986) and Lucas' (1988) more recent theories of endogenous growth have brought education and technological change to the forefront as major forces for increased productivity, and hence growth. These theories introduced human capital as an explicit input into the production function. In effect this expands the concept of labour to incorporate the vitally important qualitative dimension and is, therefore, theoretically preferable to the Solow-Swan model's "homogeneous units of labour. As Sianesi and Van Reenen (2000) suggested, these theories also distinguished themselves from the Solow-Swan model by explicitly proposing a role for education externalities as factors in accelerating and enriching economic growth.

Ultimately while both the theories of endogenous and exogenous growth have interpreted the commonly observed positive correlation between growth and education as evidence of the productive contributions made by education to growth, there is no consensus as to which theory better explains the link between education and growth, in part because the empirical evidence generated by both models has remained inconclusive (Pissarides, 2000).

B. Microeconomic Theories and Investment in Human Capital

As noted earlier, while some microeconomic theories expect the impact of investment in education to be primarily reflected in increasing productivity (and hence in increasing

earnings), others, see education mainly as a screening mechanism whose main function is to determine who will gain access to the limited number of good jobs available. These theories are discussed in more details in this section.

a. Education and Productivity: The Theory of Human Capital and The Rate of Return to Education

At the micro level, attempts to measure returns to education have been closely associated with the theory of human capital. Having demonstrated that labour market returns were closely linked to investment in education, theorists like Schultz (1961) and Becker (1964, 1993) argued that education should be seen as a key determinant of individual earnings and that this relationship reflected the increased productivity resulting from the positive impact of education on human capital.

Assuming that education was an investment good, this approach gave rise to the widespread use of a specific methodology for estimating private and social rates of return to education³² in both developed and developing countries.

i. Private Rate of Return

Private rates of returns refer to the returns accruing to individuals as a result of the investment in their own education. These returns are generally measured by the

³² More on the rate of return method, its assumptions and results will be discussed in chapter 2.

additional income (wage differential) earned through adding one additional year of schooling, or an additional level of education.

Ultimately, this approach assumes that household, or individual, decisions to invest in education are—or should be—based on a comparison of these private returns to education with those that would have been generated by other types of investment (e.g., capital investment).

ii. Social Rate of Return

Social rates of return to education are generally used to provide a rationale for public spending on education. As in the case of private returns, such decisions should be based on cost-benefit principles comparing the net present value (public and private) of the social costs and benefits associated with investment in education against those of other forms of public investment.

However, while these concepts may sound simple in theory, they are difficult to estimate in practice. Indeed, despite its widespread use, the rate of return method of estimation is widely criticized for defining the costs and benefits of both private and social investment in education too narrowly. Ultimately, the methodology's implicit assumption that costs and benefits can be reliably quantified, or that households have good information regarding the resulting rates of return, is rarely justified, especially in many developing countries.

Despite these limitations, the results generated by this method of estimating the costs and benefits of investment in education have been widely-used as a basis for policy decisions around the world. In particular, the World Bank's policy recommendations about investment in education have depended heavily on results derived from this method of estimation even though there may be a reason to believe that the problems embedded in this methodology may be associated with pervasive and systematic distortions in the education policies that are derived from it, as will be discussed further in Chapter 2.

b. Education as A Screening Mechanism

i. The Theory of Market Signaling

Unlike the theory of human capital, Spence (1973) and others³³ have maintained that the importance of education does not actually lie in its ability to raise productivity, but rather in its function as a signaling, or screening, tool used by employers who are uncertain of the productive capability of individual job applicants and therefore use prior academic achievement in certain fields or institutions as proxies to guide them in selecting candidates. In response to this "market signaling,"³⁴ prospective labour market entrants can be expected to invest in those types of education that promise to increase their chances of being selected for more desirable jobs. Although the idea of market signaling can be used to study the effect of possible informational gaps in the labour market on both employers and on those investing in education (future employees), Spence's model has been more widely used to study employer behaviour.

³³ Arrow (1973) also created what was referred to as the 'filtering hypothesis', in which he considered education to be a means to filter the 'desirable' from 'less desirable' employees (Carnoy, 1985).

³⁴ As Spence (1973) named it.

ii. The Diploma Disease

Like market signalling theory, Ronald Dore's (1976) "diploma disease" also delinked the relationship between education and productivity. To Dore, education is mainly pursued as a means to an end, which is generally the attainment of job security through a "modern sector job."³⁵ Studying the education systems of several countries in the 1960s, Dore argued that the almost universal fervor for increased investment in education in the developing world was primarily driven by a desire of nation states to build modern economic sectors that could gradually replace traditional institutions and practices. To Dore (1976), "The secondary schools and universities [in that situation] ran the immigration service for the modern sector bridge-head" especially since it was clear that those who would not go beyond primary education would be trapped in the activities of the traditional society, primarily agriculture, which were (and remain) widely economically and culturally associated with poverty and "backwardness."

Against this backdrop, the glamour of the modern sector led to sharply-increased demand for education and hence to rapidly rising school enrolment rates, or in Dore's words, an "educational explosion." In a prescient passage, Dore (1976) then went on to describe the future that has since come to pass in Egypt, as in so many other societies, and that is the focus of this thesis:

³⁵ According to Dore (1976, 1997), a modern sector job is mainly a clerical job with a secure career niche in a large public or private sector organization.

What parent, if he could afford it and felt his son had a chance, would not want to send his child to primary school to get him into the visa queue? What politician could resist the demands of parents for more secondary schools, for a bigger queuing area? Even if the number of visas eventually to be issued is fixed and already vastly oversubscribed for, no one likes his child to be told already at the end of primary school that he has been ruled out of consideration, that he can't even stay in the queue. (Dore, 1976)

As Dore saw it, the outcome of this educational explosion would inevitably lead to an excess supply of secondary and university graduates, eventually far exceeding the numbers that could possibly be accommodated in productive modern sector jobs. As labour markets became more competitive, the level of certification required to attain a modern sector job would also tend to increase inexorably. This, in turn, would further exacerbate the mismatch between the supply of, and the demand for, highly educated labour. While Dore termed the resulting qualification escalation a "diploma disease," this thesis will focus on the possibility that market forces are unlikely to provide a way out of this impasse since faced with such circumstances private investment in education is likely to fall prey to an "adverse selection" bias as deteriorating labour market conditions lead individuals to increase their investment in education, thereby further exacerbating the underlying imbalances. In Dore's prophetic words:

The Paradox of the situation is that the worse the educated unemployment situation gets and the more useless educational certificates become, the

stronger grows the pressure for an expansion of educational facilities. If you have set your sights-or your parents have set your sights for you-on a modern sector 'job', and if you find that your junior secondary certificate does not get you one, there is nothing to be done except to press on and try to get a senior secondary certificate, and if that does not work to press on to the university. The chances are that this will in fact prove to be sensible decision. The mechanism of qualification escalation ensures that once one is in the modern-sector-qualification range, the higher the educational qualification one gets, the better one's chances of getting some job. (Dore, 1976)

Implicit in the concept of the "diploma disease" is the assumption that employers use educational certificates primarily as screening devices because they believe that educational attainment is a reasonable guide for the general ability (intelligence and powers of application) of the job applicant and his or her likely 'trainability' over a whole range of skills. This stands in sharp contrast to the neoclassical view, which treats education as an indicator of cognitive skills that have been imparted to the graduate and that have enhanced the value of the human capital that is being brought to market.³⁶

As Dore (1980) foresaw, the screening function of education would continue to become more pronounced so long as the number of graduates, or senior certificate holders, exceeded the number of modern sector jobs. Those who failed to secure a modern sector job would eventually have to accept their fate and accept less desirable work as bus

³⁶ Dore (1980) argued that employers also are victims of the myth that the more the education the person has the better they are, assuming that they are getting more for their money when they employ an educated person, even for jobs that require little education, further contributing towards qualification escalation.

drivers or cashiers, not what they had hoped for, but better than remaining unemployed.

Figure 1-2 describes Dore's "diploma disease" model.

Figure 1-2: Diploma Disease (Causes and Effects)

Source: Dore (1976).

C. Outcomes of Diploma Disease

Dore (1976, 1980) showed that when the stakes in the diploma competition are high, there will be less learning-for-its-own-sake as the education sector gradually promotes rote-memorization and exam-centred ritualism, which eventually cramps and distorts the entire educational process:³⁷

I suggested that, unless recruitment patterns were altered so that the schools were relieved of the difficult balancing job of trying to combine the function

³⁷ This was clearly observed in the countries studied by Dore (1976), and indeed remains true for several other developed and developing countries up to the present day.

of educating children with the function of sorting and labelling them, improving the quality of education would be an impossible task. I specified this as a necessary condition. I was at least careful not to claim that it would be sufficient. (Dore, 1980)

With the spread of the "diploma disease," both public and private education spending become subject to adverse selection as spending, and the motivation for spending, increase in response to deteriorating outcomes. As Dore argued nearly 40 years ago, parents may continue to increase their investments in further education, especially when increasing overall social and economic inequality may continue to increase the pressure on people to play the certification game in an increasingly desperate effort to improve their social and economic status, or to prevent their child from falling into the abyss of the harsh and often non-remunerative world of informal employment.

As this process continues, governments are faced with an endless escalation of education costs that become harder to justify or sustain as it becomes clear that the outcome of this private investment is a growing army of highly educated unemployed youth whose frustration and de-motivation could have detrimental social and political impacts.

The above review of various authors' approaches shows how the relationship between investment in education and economic growth at the macro level and labour market outcomes at the micro level are generally conceptualized in the literature. As will be seen in chapter 2, these theories—particularly the microeconomic theories—have provided the

lens, through which the viability of the World Bank policy prescriptions, guiding investment in education in developing countries (Egypt included), has been assessed by the supporters and critics of these policies. But, before examining the relevance of these various approaches to the case of Egypt, we must first understand the historical evolution of Egypt's education system. The following historical background provides a context for understanding the process through which the education system has defined and attained, or failed to attain, its main goals and how that experience has, in turn, shaped and influenced the education investment behaviour of Egyptian households.

III. The Egyptian Education System

A. Education and the Dream of Equality and Upward Mobility

Egypt's education system is trapped within four mutually reinforcing trends: rapid population growth; severe constraints on public finances; slow formal sector employment growth; and rising social and labour market inequality. Together these trends have gradually undermined the high hopes once invested in education starting in the early 1950s (after gaining independence in 1952), especially the hopes of those who dreamed of promoting equity and upward mobility and of building Egypt's modern sector.

In the 1950s, Egypt introduced the Free Education Policy, which guaranteed citizens a "right" to free "education at all levels" in state educational institutions. This policy clearly sought to give the poor equal access to the education system and, did succeed in

substantially increasing both male and female enrollment rates at all levels of education³⁸ (see Appendix 1-2 for more detail on the structure of Egypt's education system).

According to Johnson (2011), following the free education policy, the number of students grew by 8% annually between 1952 and 1970. Birdsall and O'Connell (1999) also showed that with the free education policy there has been a steady increase in the gross enrollment rates for both boys and girls at every level of schooling, between 1960 and 1990.

The importance of education to gain access to modern sector jobs—and consequently to upward social mobility—became very pronounced in Egypt in no small part because of the 1963 Employment Guarantee Scheme, under which the government promised public sector employment to all secondary (general and vocational) and post-secondary graduates. As Dore (1976) would argue, the Employment Guarantee Scheme encouraged the development of an extreme form of credentialism in that it did not merely weaken the importance of skill or productivity in the hiring process, it almost eliminated it by transforming the certificate itself into a guaranteed entitlement to a secure remunerative job.

Together with the Free Education Policy, this "bureaucratization of employment"³⁹ marked the beginning of Egypt's version of Dore's "education explosion." Families rushed to take advantage of all levels and types of education that they hoped would lead

³⁸ The Egyptian education system consists of four levels: 1) primary (six years); 2) preparatory (three years); 3) secondary (general and vocational); and 4) post-secondary (higher education institutes and universities).

³⁹ Dore (1976) used the term "bureaucratization of employment" to describe modern sector jobs for which certification was very frequently required. These were found initially in the public sector but Dore later discovered in the countries he studied that this phenomenon was also taking place in the private sector.

to secure government jobs for their children. The popularity of these policies was never in doubt as both the Free Education Policy and the Employment Guarantee Scheme were aligned with what Egyptian households wanted to hear, especially those whose children would have had no hope of landing secure remunerative government jobs before independence, as will be further discussed in chapter 3.

B. The Dream Was Not Realized

Unfortunately, the objective of achieving upward mobility and greater equality through such education and employment policies remains an unrealized dream.

a. Slow Formal Employment Growth and The Dream of Upward Mobility

In fact the Employment Guarantee Scheme gradually led to an overstaffed public sector straining to absorb the ever increasing number of graduates until it became obvious that the dream of upward mobility could not be realized by simply guaranteeing a secure public sector job to all secondary school and university graduates. Consequently, the government began curtailing the scheme in the 1970s, only to officially abandon it in the early 1990s, thereby ushering in a new crisis as privatization and the downsizing of the public sector effectively reversed the earlier processes and suddenly confronted Egypt's graduates with dramatically reduced opportunities. This is especially true since job growth in the private modern sector did not come close to bridging the yawning gap that suddenly appeared between the supply of, and the demand for, graduates from Egypt's higher education system.

Consequently, the scarcity of public sector jobs and the slow growth in the formal private sector relative to the growing number of graduates resulted in prolonged queues for government jobs, which were common among educated youth who waited an average of 8 years with the hope that they might secure a job in the government (Birdsall & O'Connell, 1999). In addition, an increasing proportion of educated labour force entrants had no alternative but to accept unstable and relatively non-remunerative informal jobs,⁴⁰ which clearly do not meet the expectations upon which households had based their decisions to invest in higher education, as will be seen in detail in chapters 3 and 4.

Faced with the slow growth of secure remunerative jobs, Egyptian parents—from all income brackets—are now being held to ransom by their desire to do the best for their children. Consequently, they continue to invest in putting their children through university hoping to give them the best possible chance in an increasingly competitive labour market. In this respect, the abandonment of the Employment Guarantee Scheme and the introduction of market-driven labour markets have done little to curb the demand for post-secondary education, as reflected in increasing gross enrolment rates and increasing levels of private household expenditures on education.

Moreover, rising levels of private expenditure on education have been associated with changed patterns of education investment as households seek to maximize their children's chances of success in the certification game. The most direct result has been an explosive

⁴⁰ Informal employment is not only found in the private informal unregulated sector but also in the private formal regulated sector (Frost, 2008). Accordingly, not all informal employment is negative. Rather, they tend to be polarized in quality. That being said, the vast majority of informal jobs are usually relatively marginal.

growth in the demand for private tutoring as parents hire school teachers to provide their children with private lessons based on the school curriculum outside of school time, in efforts to ensure that their children will obtain the highest possible test scores. Indeed, together with tuition fees, spending on private tutoring now accounts for almost 60% of total education spending by households (World Bank, 2007). More generally, Egyptian households from all income brackets now spend an average of 6 to 15% of total household expenditures on education,⁴¹ with the wealthiest households spending the highest proportion, as Figure 1-3 below shows.

Figure 1-3: Trend of Share of Education Expenditure in Total Household Expenditure (%) by Income Quintile (2000 and 2004)

Source: World Bank (2007, p.42) using Egypt Household Income and Expenditure Surveys (2000, 2004)

⁴¹ Household spending on education is classified into direct spending (which involves tuition fees, uniforms, transportation, books, supplies and private tutoring) and indirect spending (which refers to the opportunity cost resulting from putting the children into further education and having to sacrifice the income they could have earned instead) (Tilak, 2002). The estimated household spending above includes direct spending only.

Other household survey data (Egypt Human Development Report (EHDR), 1998/1999)⁴² showed that "since the 1980s households' share in education expenditures out of GDP has been increasing" and this finding was further confirmed in several World Bank reports (2002a, 2005, 2007), which suggested that household spending on education, as a percentage of GDP, has risen by as much as 23% between 1995 and 2002/2003,⁴³ bringing it to a level that exceeds those in other developing countries and also in OECD countries.⁴⁴ Indeed, the World Bank's 2007 report estimated that by that time household spending on education was equivalent to between 60 and 65% of public spending on education in Egypt.

On balance, it seems clear that in Egypt unfavorable labour market conditions, together with rising inequality, have led to the further spread of Dore's "diploma disease," and that this process has actually intensified following the cancellation of the Employment Guarantee Scheme. Only now the process is driven by market forces as "adverse selection" encourages households to continually increase their private spending on education in the face of deteriorating employment prospects for graduates. Indeed, the worse the labour market situation becomes, the greater will be the incentive for households to invest in higher education hoping to improve their children's chances in a fiercely competitive labour market. This phenomenon is further discussed in chapter 4.

⁴² This is based on the social spending household sample survey that was conducted specially for the *Egypt Human Development Report 1997/1998*.

⁴³ This represents an increase in household spending in education from 3% to 3.7%, as a percentage of GDP.

⁴⁴ As highlighted by EHDR (1998/1999) and World Bank (2002a, 2005).

b. Education Quality and the Dream of Equality

The dream of ensuring equitable access to education was also further undermined when rapidly rising enrolments rates came face to face with increasingly severe budget constraints. Together, these have led to an almost inevitable decline in the quality of public education, which caters to around 90% of Egypt's total student population.

At the primary school level, this process was graphically described by Birdsall and O'Connell (1999) when they reported that, "demographic pressures and increasingly strained resources resulted in the physical disrepair of many primary schools, overcrowded classrooms, and poor teacher morale and motivation in the face of low salaries." Because the demand for education was so strong, the option of easing this problem by curbing enrolment growth was not realistically available, which left the government to focus its limited budget on building new schools that could accommodate the growing number of students while reducing class sizes. However, this emphasis on bricks and mortar came at the expense of investment in the enhancement of learning processes by such means as improving syllabi to promote cognitive skills and scientific thinking and/or by enhancing teachers' skills and performance. The result is an education system which uses outdated teaching methods and encourages the cramming of information for the sole purpose of passing exams.

Ultimately, it is this exam-focused education system, together with an increased stake in certification, which has fueled the demand for private tutoring, although that trend has

been further encouraged by the fact that poorly paid and demotivated teachers have come to see it as a way of increasing their meagre incomes.

Meanwhile, the increasing importance of private funding for education is steadily undermining the goal of equal access to education, since it has made access to higher levels of education increasingly dependent on the parents' financial capability to pay for such private tutoring services. And in so far as education credentials govern access to the few good jobs that are available, this also means that children of wealthy parents are far more likely to secure those jobs. The private tutoring phenomenon will be discussed in more detail in chapters 2 and 4.

It is worth noting here that complaints by households about the need for private tutoring, which puts increasing pressure on their budgets, became so insistent that the Ministry of Education officially banned private tutoring in 1998. The ban, however, proved unenforceable and ultimately did little to curb the proliferation of the practice.⁴⁵

However, the discontent of households with the practice of private tutoring has remained strong and, in 2011, Egyptian secondary school students organized a demonstration in front of the Ministry of Education to express their dissatisfaction with the government's evident inability to solve this persistent problem. The young demonstrators chanted angrily to the minister, "Tell the truth! Is education still free? Or is that just a lie?"⁴⁶

⁴⁵ "Bahaaeddin (2001, September 22) "Egyptian Minister of Education battling in vain against banned private tuition." *Albawaba News*. http://www.albawaba.com/news/report-egyptian-minister-education-battling-vain-against-banned-private-tuition?quicktabs_accordion=0

⁴⁶ Gameel (2011, September) <http://www.almasryalyoum.com/news/details/114288>.

In conclusion, the dream that Egypt's education system could foster equity by ensuring universal access has fallen short at many levels. Quality became increasingly uneven and has generally declined. Free access was undermined by the increasing importance of private household spending on tutoring. And the hope of producing graduates to fill productive, remunerative and secure positions in a prosperous economy seems to have been widely dashed, though for reasons that go well beyond the education system itself.

Against this background, the coming chapters will examine in detail the motivation behind the continuing willingness of Egyptian households to invest in higher education for their children despite the worsening labour market conditions. It will also analyze the viability of the World Bank policies—implemented by the Egyptian government—to deal with the growing labour market challenges faced by the educated youth and the increasing financial burden of education being borne by Egyptian households.

The coming section explains the research methodology that was used to reach the research objective.

IV. Research Methodology

This thesis applies a mixed method research technique, which involved the collection of three types of data: 1) in-depth interviews with a sample of Egyptian heads of households and young members of the same households; 2) in-depth interviews with education specialists and former government officials; 3) and secondary data analysis of international reports from the World Bank, United Nations Development Programme

(UNDP) and ILO as well as empirical studies addressing Egypt's education sector and youth labour market.

To understand how Egypt's households perceive the relationship between their private investment in education and labour market outcomes, it was deemed important to discuss this issue in-depth with both the heads of households (whether mother or father),⁴⁷ who make the decision to spend on education, and with younger members of the same households who are, or will be, most directly affected by those decisions. In order to reach this goal, a small sample of 33 households with at least one young person in the 18 to 28 age bracket was interviewed from the households visited during the 2006 Egypt Labour Market Panel Survey (ELMPS06).⁴⁸

Heads of households were asked to explain if, and why, they had invested in the education of their children and whether, in retrospect (where appropriate), they thought that this investment had led to the desired outcomes. Meanwhile their sons and/or daughters were asked whether or not they were satisfied with the quality of the education they had received (or were receiving) and, where appropriate, whether they felt that this education had facilitated (or would facilitate) their entry into the labour market.

The perspectives expressed by the respondents were then assessed against the background of the available empirical evidence pertaining to the relationship between education and labour market entry contained in Egypt's various Labour Market Surveys.

⁴⁷ In only one interview in rural Gharbya, the child's uncle was interviewed since he was the one who raised her after her parents' death.

⁴⁸ The Egypt Labour Market Panel Survey (ELMPS) is a nationally-representative household panel survey. The first round of this panel study took place in 1998 covering a nationally representative sample of 4,816 households (Barssoum, 2007).

The views expressed by households were then used to examine the plausibility of the assumptions underlying the World Bank policies that continue to be widely used to deal with Egypt's education-labour market problems.

Furthermore, two former Egyptian government officials and three education experts were interviewed in order to provide a background for this critical assessment of Egyptian education policies in relation to the general discourse about investment in different levels and types of education and the possible impact on household spending on education. The key informant interviews also provided a context, which helped later in drawing the framework of analysis for the data collected from the households.

The rationale behind sample selection and sample size for the members of the households and the key informants interviewed is explained below.

A. Heads of Households and Young Egyptians Interviews

a. Sample Selection Criteria

A small sample of Egyptian households was purposively selected from among those households interviewed during the ELMPS06.

The selection criteria for the households interviewed was that they must include at least one young person between 18 and 28 years of age.⁴⁹ This age bracket was chosen in the

⁴⁹ This selected age bracket uses an expanded "Youth" concept, as defined by the World Bank and the ILO, which includes males and females from ages 15 to 29.

hope of including the perspective of young Egyptians who were in the last years of general secondary education (planning to go to university), those who failed to continue their education or join the academic track of education,⁵⁰ those who were enrolled in post-secondary education, and those who had completed their education. It is also highly likely that people in this age bracket would have some work experience, whether full-time or part-time jobs. Incorporating the diverse perspectives of these different groups of young people was important to enrich the discussion on how the young interviewees would evaluate the link between their education and their labour market outcomes.

Because of the wide economic and social disparities between different governorates in Egypt, and because those differences would probably affect the ability of households to invest in education, clusters of households in three governorates with different characteristics⁵¹ were selected in an effort to gain some understanding of how those differences might affect education investment decisions. The three selected governorates included: a) Gharbya,⁵² a Lower Egypt governorate with a high economic ranking according to Egypt Human Development Report (2003) Human Development Index (HDI); b) Menia,⁵³ an Upper Egypt governorate with a low economic ranking; and c) Greater Cairo,⁵⁴ which is more diverse than the other governorates in terms of the forms of education available (private, international and public) and which has long been the

⁵⁰ These include students enrolled in vocational education whose grades in primary education were insufficient to enable them to join the academic education track. It was important to understand the point of view of this group regarding the worthiness of continuing to university education, and the effect they thought it could have had on improving their living conditions, to compare with the views of those who succeeded in continuing on to university education.

⁵¹ Governorates are the political jurisdictions in Egypt, roughly the equivalent of a Canadian province.

⁵² Gharbya has a high Human Development Index (HDI) among Lower Egypt governorates because it contains the city of Mahala, the main producer of Egypt's textile industry that contributes to a large share of Egypt's GDP. One of Egypt's biggest universities, Tanta University, is also located in Gharbya.

⁵³ Menia is one of Egypt's poorest governorates, according to HDI. One of Egypt's biggest universities, Menia University, is located in Menia.

⁵⁴ Great Cairo includes the governorates of Cairo and Giza.

target of young Egyptians from other governorates seeking access to a wider range of more modern sector job opportunities.

Because the economic status of households is likely to affect their decision to invest in education, in each of the three governorates a sample of rich and poor families was selected. The indicator used to identify the standard of living of the families selected was the wealth index, as defined in Assaad et al., 2009b.⁵⁵ Since most of those who scored low on the wealth index in the survey data for Gahrbya and Menia were from rural areas, the majority of the poor households interviewed in these two governorates were rural households,⁵⁶ while the majority of the families interviewed, with a relatively higher score on the wealth index, were from urban areas.⁵⁷ Similarly, within Greater Cairo some families were selected from relatively poor districts, and some from relatively well off, upper class districts. More details on the profile of the households interviewed will be discussed in chapter 4. It is worth noting that access to the information and addresses of households was provided by the Population Council, which partnered with Egypt's Central Agency for Public Mobilization and Statistics (CAPMAS) in 2006 to collect this survey data (see Appendix 1-3 for data sharing approval from the Population Council). It is also worth highlighting that the field visits and data collection for the household interviews were fully funded by the International Development Research Centre (IDRC).

⁵⁵ According to Assaad et al. (2009b) who used the Filmer and Pritchett (2001) methodology, wealth quintiles are measured using a household wealth index where a proxy for household wealth has been constructed for each of the ELPMS06 households based on household assets and housing characteristics. These include: the number of rooms; the materials of the roof, walls, and floors; connections to piped water, telephone, electrical and sewerage systems; and ownership of 23 selected durable consumer goods. These data are all available in the ELPMS2006 from which the sample of households interviewed was selected. Accordingly, the wealth index was used to help select families with different standards of living for interviews.

⁵⁶ Out of ten poor households interviewed in both governorates eight were rural and two were urban households.

⁵⁷ Out of fourteen households interviewed, with middle level standard of living, in Gharbya and Menia, four were rural and ten were urban households.

b. Sample Size

A total of 33 households were interviewed. In each household, two interviews were conducted—one with the head of the household (mother or father) and the other with one of their children in the targeted age bracket—for a total of 66 interviews.

Six cases were interviewed in the urban areas, and six in rural areas, of both Gharbya and Menia. Five cases were interviewed in poor districts and four in upper class districts in Greater Cairo.

Even though 33 households were interviewed, the sample of households selected from the ELMPS06 dataset was much bigger, bearing in mind that households might refuse⁵⁸ to be interviewed and that some of the addresses identified might not be easily reachable. As a result, 20 households—all matching the sample selection criteria above—were originally selected from each governorate.

The total number of interviews to be conducted was not determined a priori but rather determined iteratively using the concept of saturation, as defined by Glaser & Strauss (1967): "The researcher will know when a given search is ended or the appropriate number of groups [has been] surveyed when no additional data can be found that develops properties of the conceptual categories [studied]."⁵⁹ In this thesis, saturation point was reached when 33 interviews were completed.

⁵⁸ Because the interviews took place in the fall of 2010 during parliamentary elections, a number of households refused to be interviewed, thinking that the interview was in some way politically-motivated.

⁵⁹ An online summary of the book was retrieved from http://faculty.babson.edu/krollag/org_site/craft_articles/glaser_strauss.html

c. Data Collection

The interviews were conducted using two semi-structured interview guides, which were pre-designed: one for interviewing heads of households; and the other for interviewing the younger members of the households (see Appendix 1-4 and Appendix 1-5).

A family roster (see Appendix 1-6) was also designed both in order to assess the standard of living of each household visited and in order to monitor any significant changes to the household's socio-economic circumstances since 2006 when the ELMPS06 was conducted. Significant changes in the socio-economic status of respondents included members leaving the households to work abroad, and changes in marital or employment status as compared to 2006. In the few cases (three), when the young person selected for interview was not available, one of his or her siblings, still in the same age bracket, was taken as a replacement.

Beginning with the step of filling in these family rosters together with the heads of households turned out to be very helpful in that it helped to break the ice with the family before commencing the actual interview.

The interview guide for heads of households invited them to articulate their perceptions about five main areas, or problems:

- 1) The relationship between education and the job search process;

- 2) The difference in qualities between public and private education (if they were aware of a difference);
- 3) The benefits, if any, of private tutoring;
- 4) If they think that spending on their children's education is/was a worthwhile long term investment; and
- 5) Their overall evaluation of their children's education and any suggestions for improvements to the system.

The interview guide for the younger member of the household focused primarily on how the respondents perceived the relationship between their education and their ability to find a desirable job. It therefore involved questions about how easy/difficult the job search process was (or had been), what they deemed a desirable job and whether they felt that their education had helped them in the job search process. Section A of the interview guide focused specifically on the sector of employment (formal or informal) of the first job taken after the interviewee finished his/her education.

I personally conducted all of the household interviews with the aid of a research assistant who has a long experience in conducting interviews for various national surveys in Egypt. The assistant received one week of training on the interview guides for heads of households and youth. We pre-tested the two interview guides based on four "trial cases." These were families that had been identified by friends as being able to help us to test the effectiveness and clarity of the questions before beginning the interviews of actual sample households.

The household interviews were tape recorded (with the approval of the interviewees).⁶⁰ All recorded tapes were then transcribed. The transcription of each interview took place immediately after the interview was completed.⁶¹ This approach helped to refine the wording of the questions (especially after the first three interviews) before proceeding with the following interviews. It also made it easier to identify the main points raised in the interview responses and allowed more probing on these main points during the following interviews. Ultimately, this was also helpful in allowing us to identify when the stage of data saturation had been reached and when more interviews were, therefore, no longer needed.

In evaluating the above data collection procedures, it is important to note that the research objective did not include seeking to identify trends over time, or producing statistically generalizable findings, because the sample of households to be interviewed was not large enough for this type of analysis.

However, even this small sample was sufficiently large to allow a better understanding of the ways in which households perceive the education and labour market realities that underlie their decisions to invest in the education of their children.

B. Key Informant Interviews

⁶⁰ Few interviewees refused recording thus notes were taken instead during the interviews.

⁶¹ This means transcription was happening in parallel with the interviewing process rather than beginning only after all interviews were completed.

i. Sample Selection Criteria

A snowball sample collection (or chain sample) technique was used to identify the education experts and previous government officials to be interviewed. The process began by interviewing a well-known education expert who had worked as a consultant for the World Bank and who was identified by a professional contact. At the end of that interview, this person was asked to name another possible interviewee who was particularly knowledgeable about the issues discussed in the interview. This process continued with each subsequent interview until the desired sample size was reached.⁶²

ii. Sample Size

A total of five key informant interviewees were ultimately interviewed. Since Egypt's education policies have long been heavily influenced by various international development organizations (primarily the World Bank but also other foreign aid donor organizations) three of the key informant interviewees were people who had links with such organizations. These included a current senior operation officer at the World Bank office in Egypt, a previous World Bank consultant (also chosen because he is a known expert in the economics of education in Egypt) and a senior program officer at the Ford Foundation, which has been an active organization in funding post-secondary education in Egypt.

⁶² Sufficient background knowledge on the policies and problems of the education system was gained from five interviewees.

In addition, in order to include the perspective of the government and have a better understanding of its direction and decision to investment in different levels and types of education, the two remaining key informant interviewees⁶³ were former government officials at the Ministry of Education.

Although a very small sample size, it was deemed sufficient for the objective of providing background knowledge and better understanding of education policies and the implications of the government decision to invest in different levels and types of education.

iii. Data Collection

A semi-structured interview guide was designed for interviewing education specialists and former government officials. While the same questions were raised to all the interviewees, I slightly modified the questions posed during the interview to match the background of each of the interviewees. The general interview guide involved six sections, which addressed issues such as (see Appendix 1-7 for more detail):

- 1) Whether the current problem of the educated unemployed is rooted in the education sector or in the labour market;
- 2) What could be the motivation of Egyptian households in spending on education despite the poor labour market outcomes;

⁶³ One of these former government officials was working as the Head of the National Center for Educational Research and Development (affiliated to the Ministry of Higher Education) during the time of the interview. The other was working as Secretary General of the Arab Council for Childhood and Development. Both used to be in the position of First Under Secretary of the Ministry of Education.

- 3) What is the impact of the former Employment Guarantee Scheme on the current investment behaviour of households;
- 4) How the government decisions to invest in one level/ type of education are justified and what are the inequality implications of these decisions;
- 5) Whether private sector operation in the education sector are likely to promote improvements in the quality of education; and
- 6) How public investment in education is impacting access to, and the quality of, education, in light of budget constraints.

I personally conducted all the key informant interviews. These interviews were not recorded since, in Egyptian culture it is very sensitive to ask government employees, or experts in any field, to be recorded. Caution was needed here since there was a real risk that if approval to record was sought, and given, this would have come at the expense of the quality and candour of the responses.

C. Handling the Data Gathered from All Interviews

All interviews (households and key informants) were conducted in Arabic.

Interviews of households were then transcribed by hand in Arabic, the official language in Egypt. While subsequently analyzing the data I summarized the main points made in the transcribed interviews in a separate MS-Word document in English, with the regions from which the households were selected (which also reflect their standard of living) being the main variable for data comparison. Using an MS-Word facilitated word search

during the analysis phase and ultimately enabled better comparisons between the responses of different households.⁶⁴

The data was analyzed based on the themes in the interview guides. The ideas generated by the respondents for each theme were identified. Moreover, the number of times each idea was raised by heads of households or young interviewees was noted⁶⁵ and those frequencies were summarized in the tables highlighted in chapter 4. It is worth noting that while some of the ideas generated were highlighted for their popularity, some others were flagged more for their relevance to the discussion raised and that none of the frequencies presented are suggesting these were generalizable ideas.

The ideas generated by respondents were then related and compared to the research objective, the debates in the literature and the available empirical evidence. The results of the analysis of these household interviews are more fully discussed in chapter 4.

As for the key informant interviews, I was taking notes during each interview since they were not recorded. These notes were then summarized in a Word document for each interview. The opinions and views raised by the key informants are evident throughout the discussion, usually taking the form of quotations to clarify and/or support arguments being analyzed in different chapters of the thesis.

⁶⁴ It is worth noting that the original Arabic transcripts continued to be consulted in order to select quotations that support the ideas raised, as will be viewed in chapter 4.

⁶⁵ A tally count of the ideas raised by households of different economic standards was generated in a separate excel sheet.

V. Research Ethics

The research proposal, draft interview guides and participant consent forms were reviewed and approved by Carleton University's Research Ethics Board in May 2010 (see Appendix 1-8 for Carleton University Ethics Clearance). The research was also approved by Egypt's CAPMAS, the organization responsible for giving access and approval to individual researchers to conduct interviews with Egyptian households. (See Appendix 1-9 for CAPMAS' data collection approval)⁶⁶

After being provided with an explanation of the purposes of the research, interviewees were given the opportunity to choose not to participate. Moreover, they were encouraged to ask for clarification or explanation at any point during the interview.

Interviewees were assured that the information they provided would be used anonymously throughout the research. Moreover, they have been told that no one will have access to their data except the researcher for the purpose of the analysis. See Appendix 1-10, Appendix 1-11, and Appendix 1-12 for the information letters and consent forms used for the young interviewees, heads of households and key informant interviewees.

VI. Data Collection Challenges

⁶⁶ The approval is in Arabic.

Three main challenges were faced during the data collection phase. Some of which necessitated some changes to the data collection plan.

First, households from the upper socio-economic class in Cairo were very reluctant to be interviewed. In fact, all of the families identified in this class through the ELMPS06 dataset refused to be interviewed. As a result, the four families that were ultimately interviewed in this class had to be identified through friends and acquaintances, who were able to persuade them to participate in the research. This is unlikely to have skewed the data collected in any significant way since there was no previous connection between myself and any of these four families.

Second, in order to conduct interviews with Egyptian households, researchers are required to obtain approval from CAPMAS for the technical aspects of the research, including the purpose of the study, interview guides to be used and the sample size and frame. For security reasons, researchers are also asked to obtain the permission of the Ministry of Interior before data collection begins. As the interviews were planned to take place during Egypt's 2010 parliamentary elections, obtaining security permission from the Ministry of the Interior, although ultimately successful, was both difficult and imposed some delays on the scheduling of the interviews.

Third, seeking to identify policy makers, who were working in the Ministry of Education and Ministry of Higher Education during the time of the interviews—in order to provide the contextual government perspective regarding education policies and its link to labour planning—turned out to be impossible since policy makers currently working in the

Egyptian government were so sensitive about being interviewed by an unknown interviewer that they were unwilling to share information related to their work. To overcome this challenge, interviews were instead conducted with a close proxy, Egyptian government officials who had served prior to 2010.

VII. Overview of the Thesis Chapters

The following chapter 2 begins by examining, in more detail, the general assumptions, methodology, findings and criticisms surrounding the “rate of return to education” estimates on which the World Bank's education policy recommendations have been broadly based, before proceeding to analyze and assess those policy recommendations and the role that they have played in shaping the Egyptian government's efforts to deal with the problematic nature of Egypt's education-labour market relationships.

Chapter 3 examines the political economy of education in Egypt in order to show how political changes have affected the relationship between labour markets and education, with special emphasis on the shifting balance between public and private investment in education. This discussion will also include a critical assessment of the World Bank's view that it is the distortion of market incentives and signals resulting from unwise and excessive government intervention in education and in labour markets that is mainly responsible for undermining education quality, impairing the labour market's allocative functions, and hence its efficiency and ultimately in creating a persistent, and highly undesirable, certification culture.

Chapter 4 studies in more detail how and why investment by Egyptian households in education can be usefully understood as an example of adverse selection. In so doing, the chapter compares and contrasts the motivation behind increased household spending on education in Egypt against the World Bank's argument that this spending is a response to the poor quality of public education and that an improvement in that quality would ultimately help to solve the mismatch between the supply and demand of educated youth. The chapter ends with a discussion of the private and social rationality of continued household spending on higher education in face of the increasingly unfavourable labour market conditions faced by educated youth.

Chapter 5 uses the evidence and data presented in the thesis to reach some conclusions about the relative plausibility of the World Bank's proposed solutions to the problems associated with Egypt's education-labour market relationships.

Chapter 2: World Bank Policy Recommendations: Basis and Assumptions

As highlighted in the previous chapter, since the 1990s, the World Bank has been a major donor of funds—and source of advice—for programs that aim to develop Egypt's education sector. Indeed, since that time the World Bank's policy recommendations can be said to have had a significant influence on Egyptian government policies dealing with the direction of public spending on different levels of education in Egypt.

To lay the groundwork for the examination of the plausibility of the claim that the World Bank's policies could offer a solution to Egypt's education-labour market problems in the coming chapters, this chapter explains the main World Bank policies that have been used to guide developing countries in general, and specifically Egypt, on public spending on education. In this regard, the chapter will explore, in more detail, the economic rationale and assumptions behind these policies, their methodological foundation, and the main discourse around the policies.

As suggested earlier the World Bank's policies addressing investment in education are broadly based on the theory of human capital which assumes that, in a competitive market, investment in education will boost economic growth through its effect on labour productivity. Since different levels and types of education have different effects on productivity—and consequently on growth—governments are advised to focus public spending on education on the types and levels of education that are known to be most effective in boosting productivity, while leaving private sector investors to fund other levels/types of education.

As will be seen in more detail in this chapter, based on results defined by this approach, World Bank economists have reached strong conclusions regarding both private and social rates of return on investment in education derived from empirical studies conducted in a large number of developed and developing countries, namely that: a) investment in primary education provides greater social rewards than that in higher levels of education; b) private returns to investment in all levels of education are higher than social returns; and c) the social return from investing in general/academic secondary education is higher than that for vocational secondary education. Although World Bank economists have clearly acknowledged the serious methodological limitations of the studies from which these conclusions are derived, those conclusions have nevertheless become the "conventional wisdom" in part because the World Bank has repeatedly used them as the empirical basis for a generalized set of policy recommendations on education spending in developing and many developed countries around the world.

As this chapter will show, it is difficult to justify the derivation of such confident and consistent policy prescriptions from results of studies based on a methodology that takes little account of specific country circumstances and that defines both the drivers of investment in education and the impact of that investment extremely narrowly.

Moreover, the problems clearly go beyond those associated with the limitations - and/or distortions - associated with this particular methodology since many studies using that same methodology, but done by other reputable researchers and institutions (see below), have only rarely corroborated the consistent results so widely touted by the World Bank.

Indeed, there may be reasons to consider the possibility that the World Bank's willingness to use these studies as the basis for its general policy prescriptions might be related to its evident predilection for policies seeking to empower private market actors, which are assumed to promote efficiency and welfare.

In any event, based on the “consistent conclusions” that the World Bank economists have generated from their rate of return estimates, the World Bank has promoted a set of general policy recommendations on education, which include: a) focusing public education spending mainly on primary education because it has higher rates of returns; b) encouraging private investment in the provision of education, especially in levels and types of education (such as vocational and post-secondary education) that are said to generate lower social rates of returns; c) and improving the quality of education so that graduates can meet the demands of a more liberal, competitive economy.

Following this introduction, this chapter will examine the above arguments, and their implications for the World Bank's policy recommendations for Egypt, in three sections. First, it examines the methodology, general results, and theoretical assumptions underlying the World Bank economists' claim that global rates of return to education have been remarkably consistent across space and time. Second, it identifies and discusses the main World Bank policies regarding investment in education and its relationship to labour market returns in developing countries and the main arguments around the viability of these policies. The last section then focuses specifically on the case of Egypt in order to show how the World Bank views education-labour market

problems in that country and what policies it has advised the Egyptian government to adopt based on its understanding of this problem.

I. Rates of Return to Education: Methodology and Assumptions

The World Bank's policy prescriptions on how governments should manage public spending on education draw heavily on the work of two of its economists, George Psacharopoulos and Harry A. Patrinos, who have been primarily responsible for collecting and generating estimates of rates of return to education in many developed and developing countries over time and who have used these estimates to allege the existence of certain very consistent results in all parts of the world. Indeed, over time, the constant repetition of those “consistent conclusions” has eventually led to a widely-shared consensus regarding the profitability of investing in different levels and types of education around the world. As Paul Bennell (1996a, p.183) reported:

The main findings of these reviews are constantly cited in the economics of education literature and in government and aid donor documents concerned with education priorities and policies in developing countries. As a senior economist at the World Bank, GP [George Psacharopoulos] has been especially influential in shaping the Bank's own education and vocational training policies...In particular, three of the Bank's most important education policy recommendations follow logically from GP's patterns. First ... education at whatever level is a relatively attractive investment not only for individuals but also governments. Second, with certain caveats, in most developing countries, primary education should receive the highest

investment priority, followed by secondary education (World Bank, 1986, p. 9). Third, government subsidization of higher, and to a lesser extent, secondary education is excessive given the large differentials that exist between private and social [rates of return to education]. To remedy this misallocation of resources, students should be made to contribute significantly more to the costs of their own education.

Before examining these policy prescriptions in greater detail in the second section of this chapter, it is important to clarify the arguments and the evidence that have been used to justify them. This section will, therefore, begin by examining the methodological and theoretical underpinnings of the evidence used by World Bank economists as the basis for their repeated claim that estimated global rates of return to education show clear and consistent patterns over time and around the world.

A. Rates of Return Global Estimates: Methods, Selection and Results

Psacharopoulos and Patrinos compiled estimates of both private and social rates of return for more than 98 developed and developing countries⁶⁷ and their results have been regularly updated whenever new country studies have become available. In an important 1994 paper, Psacharopoulos (1994) provided a detailed and clear account of: a) the methods applied in the independent country studies that were used to estimate those rates of return on education; b) and the criteria that were used to determine, which independent

⁶⁷ Psacharopoulos and Patrinos used 98 countries in the 2004 global update. The number was lower in earlier updates of Psacharopoulos (1973, 1985, 1994, 1995).

study results should be included in the ongoing attempt to identify, or corroborate, global patterns in the rates of return on investment in education.

a. Estimation Methods Adopted in Country Studies

According to Psacharopoulos:

Estimates of the profitability of investment in education can be arrived at using two basic methods which, in theory at least, should give very similar results: (a) the "full" or "elaborate" method⁶⁸, and (b) the "earnings function" [Mincer's equation] method, which has two variants ... The method adopted by various authors is often dictated by the nature of the available data.

(Psacharopoulos, 1994, p.1325)

Ideally, one would employ the elaborate method, which uses detailed age-earnings profiles of individuals with different levels of education together with an appropriate social discount rate,⁶⁹ to calculate the net present value of the associated streams of benefits from education and the full costs of successfully completing each level of education. However, as Psacharopoulos (1994, p.1325) noted, it is rarely feasible to employ this approach in practice, and even when it is applied, various shortcuts are generally used to make it more manageable. Thus, the limited number of country studies that applied the elaborate method and that were included in his team's calculations of global rates of return on investment in education, generally simply assumed that "the

⁶⁸ In his 1995 update, Psacharopoulos also discussed a short-cut method of the elaborate method that is easier to apply; however, he considered this method inferior to the full method as it oversimplifies and abstracts the age-earnings profile included in the estimation.

⁶⁹ This is the interest rate used to calculate the present value of the stream of future benefits and costs.

annual stream of benefits is typically measured by the earnings advantage of graduates of the educational level to which the rate of return is calculated, and the earnings of a control group of graduates of a lower educational level. The stream of costs consists of the foregone earnings of the individual while in school (measured by the mean earnings of graduates of the educational level that serves as control group) in a private rate of return calculation, [and] augmented by the true resource costs of schooling in a social rate of return calculation." (Psacharopoulos, 1994, p.1325)

In other words, even in these methodologically superior studies, the complex question of how to measure individual and/or social returns to, and costs of, investment in education were generally handled by using crude-and narrow-proxies for both the cost and the benefit streams.

Meanwhile the great majority of the country studies that enter into the calculation of those aggregate global estimates of the rates of return to education were based on the far less defensible "earnings function" method, which generally uses a version of the so-called "Mincer's function," to estimate returns to education investment based simply on the statistical relationship between number of years of schooling (or sometimes levels of education),⁷⁰ years of work experience and earnings. Traditionally, this relationship is estimated as follows:

⁷⁰ The number of years of education has been replaced by the levels of education (e.g., primary, secondary and post-secondary) at an updated version of the Mincerian function because it is the level of education rather than the number of years spent in education that gets rewarded in some labor markets.

$$\text{Ln } W = \beta_0 + \beta_1 \text{EDU} + \beta_2 \text{EXP} + \beta_3 \text{EXP}^2 + u$$

Where $\text{Ln } W$ is the logarithm of wages (W),⁷¹ EDU is the number of years of schooling, EXP is work experience in years, β_1 is the coefficient measuring the marginal effect of education on wages, β_2 and β_3 are measuring the marginal effect of years of experience and squared years of experience, respectively and u is a random term that captures any effects on earnings that are not covered by education and experience.

As Psacharopoulos (1994; 1995) has explained, while the elaborate (or "full") method is the most appropriate—and desirable—method of estimating returns to investment in education, this approach is "very thirsty in terms of data" that is not usually available, especially in most developing countries. As a result, "researchers have resorted to less data-demanding methods ... [and] have found it increasingly convenient to estimate the returns to education based on the Mincerian earnings function method" (Psacharopoulos 1994, p.1326) and this is despite the acknowledged fact that this approach is not even actually measuring a rate of return on investment. Indeed, Psacharopoulos goes on to deplore the fact that researchers often mistakenly refer to the coefficient β_1 in Mincer's function as the rate of return to investment in schooling, whereas this coefficient actually only estimates the marginal effect of education on wages (marginal wage effect).

⁷¹ The equation is shown in the logarithm of wages ($\text{Ln } W$) in order to measure the marginal effect of education (EDU) on earnings. Marginal return refers to the extra unit of earning resulting from an added year of education, while other variables affecting income are held constant.

As is obvious from the above, both of these approaches to estimating the returns on education investment are firmly based on human capital theory's assumption that the private and social benefits of education are based on its effect on labour productivity and that earning differentials can be used as a proxy to estimate those benefits. For social returns to education, Psacharopoulos and Patrinos (2004, p.117) justified the use of observed wages as a proxy for estimating social benefits of investment in education⁷² on the grounds that it is too difficult to estimate the broader impact of investment in education on society through the so-called "externalities."⁷³

Moreover, on the cost side, the methods⁷⁴ adopted by the studies included in the global estimates of the rates of return to investment in education, simply defined the cost of education as the opportunity cost—meaning the incomes foregone when students remain in school. While direct public spending on education was added to the opportunity cost (mainly while estimating social rates of returns), direct private costs of education were assumed to be non-existent or minimal, on the grounds that education in most countries is highly subsidized (Sianesi & Van Reenen, 2000). Given the growing importance of such private spending on education, its exclusion from such calculations is clearly an increasingly unacceptable procedure, as this thesis suggests.

⁷² According to Psacharopoulos (1995), in calculating social return, private sector wages were included while the civil service pay scale was considered irrelevant to social return (but included to private return). Psacharopoulos defended this assumption based on one of his findings that showed that returns to the society are higher in the private sector than in the public sector.

⁷³ These are external benefits that go to the society as a whole as a result of investing in education such as reduced crime rates and improved health standards.

⁷⁴ "When using the basic Mincer's earnings function method, foregone earnings are automatically imputed to the rate of return calculation for the full length of one's schooling cycle." (Psacharopoulos, 1994)

From the above, it is obvious that the methodological foundation of the empirical studies used to draw conclusions about global rates of return to investment in education is too weak and problematic to form the basis for strong and relatively unambiguous advice on education policies. While it may be true that any other methodology could also yield only relatively uncertain results because of the complexity of estimating the true costs and benefits of investment in education, this does little to increase confidence in the World Bank economists' claim that their rates of return to investment in education results have been highly consistent over space and time nor does it lend enough support to the highly consistent policy recommendations that the World Bank has been promoting actively in developing countries (Egypt included) based on these results.

b. Selection of Country Studies

When policy relevant results are to be summarized on the basis of averages derived from aggregate country groupings, it is critically important to know the criteria by which countries were selected for inclusion in one group or another. In this instance, the explanation given by Psacharopoulos (1994, 1995), and Psacharopoulos and Patrinos (2002, 2004) raises additional questions regarding the robustness of these particular results. Thus, in discussing , the criteria used to select or exclude country studies from the pool being used to calculate average global rates of return on investment in education, Psacharopoulos revealed a significant degree of arbitrariness in that process:

The selection of the results...is based on whether the authors of an original work have reported the returns to education based on any one of the standard methodologies described above. This has eliminated works that (a) even

having "returns to education" in their title..., the reported results do not allow a ready estimation of the returns to education; (b) works that have included too many variables in the fitted earnings function, other than human capital variables, and have biased the returns to education reporting earnings functions only within occupations...and thus artificially biasing downward the returns to education-a point made by Becker nearly 20 years ago and still ignored by many authors (see Becker, 1964); and (c) works that have wrongly reported the returns to primary education by tacitly assigning foregone earnings to those 6-8 years old.⁷⁵ (Psacharopoulos, 1994, p.1325)

Moreover, in his successive updates of returns to education compilations, Psacharopoulos (1973, 1981, 1985, 1994) also noted that the studies that were selected for inclusion in these compilations differed enormously in terms of data quality, coverage and methodology. Psacharopoulos and Patrinos (2002, 2004) even went further in agreeing with critics who claimed that the lack of comparability in the results from the various selected studies posed a real challenge for the aggregate results.

The real reason one should be skeptical about indiscriminate rate of return compilations, and in spite of the efforts of the compilers, is that in the original works the estimates are rarely fully comparable. There are two main sources of non-comparability: data sample coverage and methodology.

(Psacharopoulos & Patrinos, 2004, p.114)

⁷⁵ In all global updates Psacharopoulos confirmed that a three year opportunity cost is the appropriate number at the primary level of education.

c. Rate of Return to Education: General Results

Despite the fact that the World Bank economists, most actively involved in the estimation process, have liberally acknowledged the serious limitations of the global rate of return estimates they have compiled, they have continued to derive a number of clear and strong conclusions based on these allegedly highly consistent estimates. Indeed, these results were so widely repeated by the IFIs that, in the words of one of the main critics of the global estimates of the rates of return to investment in education, Paul Bennell (1996a, 1996b), these conclusions have eventually become “the received wisdom” in many policy circles.

The three main results that have become the received wisdom in many quarters and, which are important to this thesis as they have been used to justify the World Bank's advice on education policy in Egypt and around the world, can be best summarized as follows:

First, among the three main levels of education (primary, secondary and post-secondary), investment in primary education is found to generate higher private and social returns as compared to investment in other levels of education in all regions of the world (see Table 2-1). According to Psacharopoulos (1994, p.1326), "Primary school children, mostly aged 6-12 years, do not forego earnings during the entire length of their studies." This means that the cost of investing in this level of education is low and thus the social rate of return to investing in primary education tends to be high.

The second finding is that private returns are generally higher than social returns at all levels of education, which implies that the profitability from investing in education is higher at the individual level than at the social level. This gap between individual and social returns to education is attributed to widespread public subsidies, which make investment at the social level more costly. The difference between social and private returns was also related to methodological issues since the indirect (or non-economic) benefits of education for society are not taken into consideration in these estimates of the social rates of return on education investment, as seen above (Psacharopoulos & Patrinos, 2004; Becker, 1964; Sianesi & Van Reenen, 2000); Haddad et al., 1990).

Table 2-1: Returns to Social and Private Investment in Education by Level of Education (Based on the Full Method of Estimation)⁷⁶

Region	Social			Private		
	Primary	Secondary	Higher	Primary	Secondary	Higher
Asia*	16.2	11.1	11.0	20.0	15.8	18.2
Europe/ Middle East/ North Africa*	15.6	9.7	9.9	13.8	13.6	18.8
Latin America/ Caribbean	17.4	12.9	12.3	26.6	17.0	19.5
OECD	8.5	9.4	8.5	13.4	11.3	11.6
Sub-Saharan Africa	25.4	18.4	11.3	37.6	24.6	27.8
World	18.9	13.1	10.8	26.6	17.0	19.0

*Non OECD Countries

Source: Psacharopoulos & Patrinos (2004).

Third, private returns on academic/general secondary education were higher than those for vocational education and these differences were even higher in the case of social returns. The World Bank economists tended to attribute this mainly to the relatively higher per unit cost of vocational/ technical education (Psacharopoulos, 1987).

⁷⁶ The data available for each country belonged to different years (the latest available year in each country). Psacharopoulos frequently updated the results whenever new data appears for each country. The latest data used for the countries in the table above were from 1999 and this is not for every country.

B. Rates of Return to Education Global Estimates: Criticism

The fact that the global rate of return estimates were used widely as a basis for the World Bank's education policy recommendations in developing countries, since at least the mid-1980s, has naturally subjected the reliability and robustness of the method, approach and assumptions adopted by the World Bank economists to close scrutiny.

The main critics of the global estimates of the rates of return to investment in education have deepened and amplified those previously acknowledged weaknesses to conclude that these aggregate results are not robust and cannot legitimately be generalized in support of the World Bank's standard education policy recommendations for two main reasons: 1) the methodological biases and flaws in the approach undertaken by the World Bank economists, which affect the relevance of the results; and 2) the narrow theoretical definition adopted of the contribution of education to the society (its effect on earnings) which does not take adequate account of the fact that investment in education also has other economic and non-economic implications. These criticisms were reinforced by the fact that several rate of return studies, conducted outside the Bank, have rarely supported the widely generalized global estimates of rates of return to investment in education, as will be seen below.

This section first examines the main criticisms against the methodology underlying the global rate of return results, which include: a) misleading data aggregation technique for incomparable poor quality data; and b) biases in the selection of country studies, which

overlooks important adjustment variables. Second, this section discusses the criticism against the theoretical assumptions of the rate of return method adopted by the World Bank economists when it comes to the costs and benefits considered and the assumed role of education in society, which all rendered impossible the generalization of the rate of returns results.

a. Methodological Biases and Generalization of Results

i. Issues in Data Quality and Aggregation

Although the World Bank economists have themselves highlighted serious problems with the comparability of the data from the different country studies included in their calculations, critics, such as Bennell (1996a, 1996b), have argued that this problem, combined with the generally poor quality and incompleteness of the data in these studies, should not have led to the strong and confident assertions about the consistency of the global rates of return estimates. This is especially true since, as Bennell (1996a) has also noted, the original authors of many of those country studies were too cautious to draw any firm conclusions for their own countries because they were acutely aware of the serious deficiencies in the quality of the data available.

In addition, numerous critics (Tilak, 2007b; Bennell (1996a, 1996b); Curtin & Nelson, 1999) have noted that the global rates of return estimates—calculated as simple averages—are potentially highly misleading since they obscure the large variations in the estimated rates of return across countries. Thus, as Bennell (1996b, p.238) has reported, "among the thirty-four (developing) country studies that have complete sets of social

rates of return to education by level of education, in only half of them is the social rates of return to primary education significantly higher than either secondary or higher education."⁷⁷

In his reply to the above criticism about the reliability of the data used and the aggregation method adopted to derive conclusions about the profitability of investment in education, Psacharopoulos (1996, p.201) has replied: "So what? ... It so happened that the compilations yielded averages by level of education that favor primary schooling as the number one investment priority. Should we discard this finding because some of the original studies are based on limited country samples or do not pass contemporary econometric scrutiny? This is for each reader to decide."

ii. Biases in Selection of Countries' Studies and Discarding Adjustment Variables

In their global estimates, the World Bank economists selected country studies, which included no variables other than the human capital variables (wages and years/levels of education). Psacharopoulos and Patrinos (2002, p.3) argued that fitting in many variables in hopes of better explaining the relationship between education and the labour market has the methodological limitation of "steal[ing] part of the effect of education on earnings." The exclusion of studies accounting for factors other than the human capital ones has raised concerns among many critics that the World Bank economists' decision might reflect a bias towards studies in which the results would tend to support "preferred"

⁷⁷ Bennell conducted this thorough analysis on some of the countries (mainly sub-Saharan African countries) included in Psacharopoulos' 1994 review.

conclusions, especially since other studies (Bennell, 1996a; Curtin & Nelson, 1999; Haveman et al., 1984; Wilson, 1980) that took different approaches—such as including adjustment variables (like the following) in addition to the human capital ones—led to different conclusions than what the World Bank economists reached.

First, various studies (Haveman et al., 1984; Haveman et al., 1991; Wilson, 2001; Curtin & Nelson, 1999; Rusalkina & Hicks, 2002) showed that the socioeconomic background and parents' level of education have a significant effect on the rate of return to investment in education and that excluding these variables, according to (Wilson, 2001), tends to bias the rate of return results. Taking these variables into account showed that the children of more educated and richer parents are the ones who continue in higher education and secure better paid jobs.

Moreover, Bennell (1996a, 1996b) adjusted the rate of return estimates for some of the countries included in the global estimates to account for the effect of natural ability and other variables⁷⁸ on observed wages and found a significant change in the rate of return estimates for these countries. He reported:

Psacharopoulos presents (wherever possible) unadjusted country [rate of return to education] ROREs in his global reviews. But ... the differences between adjusted and unadjusted ROREs can be very large indeed. For example, in five out of the six countries where data are available (i.e. Ethiopia, India, Kenya, Pakistan and Thailand), the inclusion of key

⁷⁸ These other variables included school drop outs, examination failure rates and occupation types.

adjustment factors reduces social ROREs to primary education by at least one-third. (Bennell, 1996b, p.236)

The effect of natural ability on the estimated rates of return was also obvious when estimating rates of return to vocational education in comparison to general secondary education. The global reviews did not adjust the data for the ability and size of student population in both types of education, even though it is known in developing countries that only a few students join the general secondary track and these are usually the most able, while the rest join vocational education as the second best option available to them. Bennell (1996b) highlighted the fact that failure to account for this difference between these two groups of students biases the results in favour of general secondary education.

In response to these concerns, Psacharopoulos (1994, 1995) argued that there is no conclusive evidence about the significance of the effect of socioeconomic background and natural ability variables on rate of return results and thus accordingly they ignored studies that include these variables. According to Psacharopoulos (1994, p.1330), "the complexity of the econometric and theoretical issues ... is such that it is difficult to reach any firm conclusion about the size or even the direction of the bias." But if the evidence is inconclusive—as Psacharopoulos argued—about the impact of these factors on the estimated rates of return to investment education, it is still not clear on what basis the World Bank economists chose to ignore the studies that highlighted the significance of these factors and decided to include only those studies, which totally disregarded them.

Other important adjustment variables that are not taken into consideration in the rate of return studies from most developing countries and that do potentially bias earning estimates are: the incidence of youth unemployment among those who leave school at different education levels and the prevalence of subsistence and unpaid work in several countries (since these country studies report earnings only from waged workers in the formal sector). Moreover, critics such as Curtin (1996) and Bennell (1996a, 1996b) have shown that ignoring these adjustment variables biases the estimated social rate of returns to education in favour of primary education. As Curtin emphasized:

A complete application of benefit-cost analysis to education should quantify both the output of the schooling system at each level, and the projected employment expectations for each group. Reported educational [Internal Rates of Returns] IRRs are usually based only on the average earnings of the employed output from each [educational] group, instead of the average earnings of the total output from each level of schooling. The high probability of unemployment of primary school leavers in most developing countries results in the lower ex post benefit-cost ratios for primary than for post-primary leavers revealed. (Curtin, 1996, p.69)

After carefully examining the rates of return to education calculated for the Sub-Saharan African studies included in the World Bank economists' global estimates, Bennell (1996a, 1996b) showed that almost all of these country studies only used earnings data from waged, formal sector employment to derive net income benefits by level of education. But, since primary school graduates are concentrated in informal and subsistence

employment in these countries, ignoring income earned from these other sectors of the economy seriously overestimates the rate of return to primary education. He further confirmed his argument by highlighting that adjusting the data from three countries to take into consideration wages in the informal sector reduced the rates of return to primary education in these countries sharply. Ironically, Bennell showed that Psacharopoulos (1982, p.12) himself highlighted this problem when estimating the rates of return in Burkina Faso, reporting:

Clearly one cannot make recommendations for the expansion of the education system on evidence pertaining to a mere 1.5% select group of the labour force (i.e. those in private sector wage employment). The vast majority of primary school graduates will end up being engaged in other activities. The non-wage sector is exactly the place where most of the output of education projects is destined. Yet evidence of the role of education in this sector is lacking up to this point. (Bennell, 1996a, p.189)

However, according to Bennell (1996, p.189), the importance of this point was never flagged in any of the subsequent global reviews on rates of return to education. Indeed, these "very partial rate of return estimates (based on earnings data for the fortunate minority of the labor force who have jobs)" continued to be used widely to support the World Bank's policy recommendations regarding prioritizing public investment in primary education.

b. Theoretical Biases and Generalisation of Results

Just like the methodological biases identified above, the narrow theoretical definitions and restrictive assumptions about the impact of investment in education on the society—mainly those specified under the theory of human capital—which were used to generate the global estimates of the rates of return to education, also make the generalization of these estimates unjustifiable, as will be seen below.

i. Rate of Returns Assumptions about Costs and Benefits

1. Opportunity Costs and Direct Costs Assumptions

The country studies included in the global rate of return estimates generally either assumed that there was no opportunity cost to primary education or allowed for no more than 3 years of foregone income at this level of education, as Psacharopoulos (1994) has highlighted. However, in many low-income countries, where subsistence household production typically predominates, households need the labour of their children at early ages and might choose not to enroll them in primary education for precisely this reason. In such cases, some opportunity costs should clearly be assigned to primary education in order to avoid overestimating the resulting private and social rates of return at this level of education. Indeed, Bennell (1996a, 1996b) adjusted the data from some countries by assigning a higher opportunity cost to primary education and as he reported, “Even marginal changes in income forgone among primary school graduates ... cause [Rates of Return to Education] RORE estimates to primary education to change dramatically.”

On the other hand, the opportunity cost of higher education may often be over-estimated in the rate of return studies since these studies generally assume that the opportunity cost of higher education is equal to the average income earned by secondary education graduates at the time when they choose to participate in university education. However, in developing countries, where open unemployment among secondary school graduates is often significant, Bennell (1996a, 1996b) has shown that since the alternative to attending university would often be unemployment, these estimates of the opportunity cost of higher education would often be seriously overestimated.

Moreover, as has been noted, generally all rate of return studies assume that direct out-of-pocket household spending on education is zero. This ignores the reality that in many (if not most) developing countries, and indeed in many developed ones, a significant part of the cost of financing children's education often falls on the shoulders of the households, even though governments do generally provide substantial subsidies to education. The private contributions to the costs of education generally entail household spending on supplementary tutoring, private schooling, school supplies and transportation, which would certainly influence household decisions to invest in education, especially in developing countries. Ignoring these costs, which can be significant in many countries, inevitably leads to overestimated private rates of return. If taken into consideration, the resulting rates of return might not support the general conclusion that private returns on investment in education exceed social returns.

2. Private and Social Benefits Assumptions

The rate of return method assumes that in a perfectly competitive private sector-led economy, observed wages should be a good proxy for labour productivity and hence for the social returns from education. However, since, in almost all developing countries, markets are particularly far from being competitive and the formal private sector is generally smaller than the formal public sector, using earnings alone as a proxy for the benefits of education could be especially misleading, leading to a systematic underestimation of both the private and the social rates of return to education, more specifically to investment in post-secondary education.

At the private level, returns to education go beyond the desire for increased levels of income. Other motives include, to varying degrees, the desire for a more secure, more permanent and socially respected job, more agreeable or challenging work and a more pleasant and safer work environment, and as many studies (Bennell, 1996b; Curtin, 1996; Curtin & Nelson, 1999) have shown these benefits usually accrue to those with higher levels of education. Thus, ignoring these private benefits results in an underestimation of the returns to post-secondary education relative to those for primary education.

The same problem applies to estimating the social returns to education, which do not take into account education externalities. Indeed, this could explain why the global rates of return estimates of the social returns to education are lower than the estimates of private returns. In fact Curtin and Nelson (1999, p.1600), using evidence from various sources, including the World Bank's data, concluded that it is public investment in post-secondary, and not primary, education that gives the

largest pay-off per dollar spent if one includes the impact on both the health status of the population and the growth rates of the Gross National Products (GNP). They further supported their argument by reporting that:

International confirmation of the poor return in terms of national income growth from just producing primary leavers can be found in Barro's seminal work (Barro, 1997). His exhaustive investigation of comparative growth rates in over 100 countries from 1960 to 1990 found that the most significant determinants included male secondary and higher schooling, life expectancy and the fertility ratio. The proportion of the labour force with only primary schooling proved to have a negative but insignificant impact. (Curtin and Nelson, 1999, p.1608)

In reply to this problem, Psacharopoulos and Patrinos (2002, 2004) stated that there have been several attempts to assess externalities from investment in education, but once again they justified excluding these attempts from their global estimates because they did not lead to conclusive results:

There is a concern in the literature with what might be called "social" rates of return that include true social benefits, or externalities. Efforts to make such estimates are numerous, but the estimates vary widely. The earnings of educated individuals do not reflect the external benefits that affect society as a whole but are not captured by the individual ... They are often hard to identify and even harder to measure. In the case of education, some have succeeded in identifying positive externalities but few have been able to

quantify them. If one could include externalities, then social rates of return may well be higher than private rates of return to education. A recent review finds that empirical evidence is scarce and inconclusive, providing some support for human capital externalities, but not very strong ... Evidence is not unambiguous... The evidence comes from a few studies. (Psacharopoulos & Patrinos, 2002, p.6)

Ironically, Psacharopoulos' and Patrinos' response seems to lend support to the concern that their selection of country studies to be included in their global estimates might be biased by a desire to confirm certain preferred and preconceived results since, as they mentioned above there have been “numerous efforts” to estimate social rates of return to education, using a wider definition of social benefits, yet they chose to emphasize the conclusions of “a few studies” that happen to lend support to the human capital assumptions about externalities.

ii. Assumptions about the Role of Education (Productivity versus Screening)

But the problem is not only limited to the ways in which the rates of return method defines and estimates the costs and benefits of education, it also extends to the key underlying assumptions linking education to earnings and productivity. As will be seen below, this assumption is limited—sometimes inaccurately—in its definition of the driver behind investment in education at the private and social levels, which differ from one country to another.

On the question of whether investment in education is guided by its contribution to marginal productivity, and consequently economic growth, as "expected" by the human capital approach, Psacharopoulos based his acceptance of this proposition on the very weak assertion that a few specific country studies had "upheld the results" expected by theory, namely that additional years of schooling had increased productivity⁷⁹ (Psacharopoulos, 1994, p.1328).

However, the link between schooling and increased labour productivity is "not universally agreed upon," as Carnoy (1986, p.162) reported. When education is playing a screening role in the society, where those with higher levels of education are assumed to be the most capable and are therefore selected for the more remunerative jobs, the human capital theory's assumption that education is an investment that leads to increases in productivity and earnings, which reflect the economic returns to such investment, is fundamentally challenged. Indeed, in this case, education merely plays the role of an allocator in that well-paid jobs are assigned to the more educated without education necessarily having increased their marginal productivity or their aggregate output (Carnoy, 1985, p.163).

Critics⁸⁰ showed that in countries where the number of higher education graduates exceeds the number of formal sector wage jobs, the demand for higher education will increase because it is seen as a way of improving an individual's chances of securing one of these few formal jobs. In this scenario, the underlying assumption of the theory of

⁷⁹ Psacharopolous (1994, p.1330) and Psacharopolous (1995, p.9) reported a few studies in order to show that there is more empirical evidence to support the human capital hypothesis than the screening hypothesis.

⁸⁰ Bennell (1996a) highlighted this screening role of education in Sub-Saharan Africa. Curtin (1996) also did so for Papua New Guinea.

human capital, that increasing one's skills and productivity is a key driver for investment in education at the private level, is not justified. Rather, it is the desire to have a competitive advantage in the market for remunerative jobs that guides private investment in education.⁸¹ On the other hand, at the social level, as the mismatch between the supply and demand of educated labour increases, those who fail to secure remunerative jobs will ultimately decide to accept lower paid ones, for which they will compete with the less educated. This situation has two consequences at the social level, both of which challenge the assumptions of the theory of human capital.

First, the expected relationship between more years of schooling and increased earning and productivity tends to be weakened when educated youth work in jobs that require lower levels of education than what they have already achieved, a situation known in the literature as "over education."

Second, opposite to what the rate of return and human capital theory suggests, the less educated will be the most vulnerable in this race since there is a high probability they will be replaced by the more educated in "the jobs that were until recently the preserve of primary school graduates and illiterates" (Bennell, 1996a, p.190). Curtin (1996) studied the returns to education and employment in Papua New Guinea and showed that the percentage increase in wage employment that went to primary school leavers from 1980 to 1990 was far less than that for post primary school leavers. He concluded that "This [outcome] refutes the implicit assumption of much conventional human capital theory

⁸¹ Bennell (1996a) and Carnoy (1986) also argued that education itself might not be enough in this case without also using the power of social networks through families and acquaintances.

that all types of labour are perfect substitutes for each other, and that therefore primary school-leavers will enjoy priority hiring in the labour market, merely because their wages are lower than those of better qualified but only equally productive labour" (Curtin, 1996, p.68).

In his response to these concerns, Psacharaopoulos did not see a problem in "over education," so long as it was paid for by the individuals who wish to undertake such investment: As Psacharapolous argued,

From what point of view can there really be "over education"? ... if people are willing to invest in their education, in spite of low private returns, they must be deriving some value other than monetary. In addition, if they finance their own education, this is a zero-sum game from the point of view of social policy. These people are not overeducated ... They are rightly educated according to themselves. One cannot deny people's chance to undertake more education for probable social advancement, or even sheer consumption, if people pay for their own education. (Psacharapolous, 1994, p.1334)

However, for him, and for the supporters of his hypothesis, over education could lead to a problem at the social level "if public resources were used to finance a level or type of education that has a social rate of return below the opportunity cost of capital, or if the extra social resources invested in someone's "surplus schooling" does not have a productivity counterpart." (Psacharapolous, 1994, p.1334)

In fact, Psacharapolous' view regarding over education derives its justification from the neoclassical human capital theory, which considers over education to be a temporary problem that would be solved in the long run once firms/employers adjust their technologies⁸² and job structures—assuming zero adjustment and information costs— to absorb the excess supply of skilled and educated workers. As such, over education is not counterproductive. On the contrary, the abundant supply of highly educated individuals will drive their wages down and ensure that employers have access to more skilled workers at a lower wage. On the other hand, individuals are also expected to ultimately adjust their levels of investment in education when they realize that the private return on this investment is lower than expected, thus ultimately restoring market equilibrium for the supply and demand of skilled labour (Tsang and Levin, 1985). Under this formulation of the problem, it is assumed that well informed individuals willingly and rationally choose to invest in higher levels of education than those currently demanded in the labour market and that they are eventually prepared for the possibility of accepting jobs that require lower levels of education than what they have invested in.

However, the situation is seen differently through the lens of the screening hypothesis, which, opposite to the human capital theory, argues that the problem of over education is persistent, rather than temporary, since, in reality imperfect information about the skills and productivity of employees and the high costs of technology adjustment will make it too difficult for the employers to adjust job structures to match the skill level of the labour force. Thus, rather than adjusting job structures, employers use education as a

⁸² “According to neoclassical economists, firms make production and input decisions based on given technology and relative prices. The technology is characterized by flexible production techniques so that firms can always adapt their production processes to minimize production costs as relative supplies and prices change.” (Tsang and Levin , 1985, p.93)

screening tool, hoping this will help them to select and hire the most capable workers which, in turn, encourages individuals to invest in ever higher levels of education in order to positively distinguish themselves from others in the labour market. As the supply of educated workers increases, employers are then tempted to further raise the minimum educational requirements for given jobs—even though these might not necessarily require such credentials—in order to attract the most capable workers. This ultimately further fuels more investment by individuals in higher levels of education. In this situation, although relative wages would decrease as the relative supply of educated workers increases, individuals may still continue to invest in education, knowing that the wages they would be offered as less educated job-seekers would be much lower still (Tsang and Levin, 1985). As such, it could be argued that over education can be a problem stimulated by labour market inefficiencies since people will be forced by labour market realities to over invest in education, despite the low private returns, in order to improve the likelihood of securing relatively more remunerative jobs, which is consequently assumed to give them a better socioeconomic status compared to the less educated.

On the issue of increased vulnerability and unemployment among primary school graduates when they are replaced by more educated people competing for the same jobs, just like the issue of over education, Psacharopoulos (1980, p.92)⁸³ did not consider this to be a problem because from the perspective of the human capital theory, what matters is that the jobs are filled with the most productive people available. As he reported, "workers with more education qualifications bump from the labour queue those less

⁸³ As reported in Bennell (1996a).

qualified and get the job [but] there is nothing wrong with this if the more qualified perform better on the job."

Of course, there is no guarantee that increased education qualifications (particularly if they are unrelated to the job) necessarily make for more qualified and more productive workers for all types of jobs. As a matter of fact, Tsang and Levin (1985) highlighted a number of studies,⁸⁴ which showed that workers with higher levels of education than those required for their jobs tend to be more dissatisfied with their jobs and exhibit adverse workplace behavior, such as absenteeism, turnover, and sabotage. They, therefore, concluded that rather than helping employers to select the most productive workers, this situation could actually result in reduced work effort, increased production costs and lower productivity.

In addition, in the situation where primary school leavers are more prone to losing their jobs to the more educated, a policy recommendation to invest more in what is assumed to be a "more productive" primary education would appear counterintuitive and possibly also counterproductive. The repercussions of this scenario will be discussed in more detail in this thesis as it perfectly matches the case of Egypt's education-labour market relationship.

On balance, taking into consideration the problems—in both the methodological and theoretical assumptions—highlighted by the critics of the global rate of return estimates, the reliability of their results as a basis for wide policy prescriptions is highly

⁸⁴ Sheppard and Herrick (1972); House (1974); Quinn and Shepard (1974); Quinn and Mandilovitch (1975)

questionable. As Tilak (2007a) explains, "there is no justification for considering the rate of return as the sole criterion in investment decision making, while it could have been supplemented by other considerations." From the above evidence, one cannot conclude that private returns to education are generally higher than social returns, that primary education is more socially rewarding than post-secondary education or that general secondary education is more worthwhile than vocational education. Without taking into consideration the different countries' contexts, generalizing policy prescriptions based on these aggregate results is not only going to be unhelpful but also might cause additional problems for some countries. Given the difficulties of defining the different roles that education could play in each society and the various political and social considerations involved in the decision to invest in education, it might be logical to conclude that this investment decision and its related policies are better left to each countries' government since they are more aware of the inherent complexity of their situations and the priorities of their societies.

It is worth noting that in its 1995 Education Sector Review, the World Bank itself warned against the inaccuracies of the rate of return estimates taken from the global reviews:

Caution ... is necessary when looking at rates of return. They can be misleading when, for instance, labor markets are heavily regulated and earnings do not reflect marginal productivity. (World Bank Education Sector Review, 1995, p. 22)

Estimates of rates of return are also slow to reflect new developments in the labor market, such as growing imbalances between employers' demand and

the output of the education system ... Methodological considerations and practical problems ... mean that it is prudent to exercise caution and use good judgment when applying cost-benefit analysis The cost-benefit framework of economic analysis provides a key diagnostic tool that points policymakers in certain directions, rather than a precision indicator for setting priorities. (World Bank Education Sector Review, 1995, p. 96)

Paradoxically, despite these warnings, the World Bank's education policy recommendations continued to be anchored in these results, which led critics to believe that these results were accepted as the conventional wisdom, and indeed as policy foundation, primarily because they fit with the Bank's preferred free market agenda. As Bennell describes:

Reliance on market-based indicators such as [rates of return to education] ROREs in achieving allocative efficiency is of course entirely consistent with the neoliberal development paradigm that has so strongly influenced World Bank lending policies. More substantively, the strong emphasis given to both the provision of primary education (in order to improve productivity and the overall quality of life among the poor concentrated in the subsistence agriculture and informal sectors) and increased cost recovery [at higher education levels] is directly supportive (in theory, at least) of World Bank-inspired and/or designed structural adjustment and poverty alleviation programs. (Bennell, 1996a, p.184)

The coming section explores the World Bank policy recommendations in detail and how these policies envision the priorities of educational reform and the solutions to education-labour market problems in developing countries. It also addresses the main discourses about these policies.

It is followed by an analysis showing how these policy recommendations were used to offer a solution to the diagnosed causes of Egypt's education-labour market problems.

II. World Bank Policy Recommendations: The Relation Between Investment in Education and Labour Market Outcomes

Based on an examination of various World Bank Education related reports⁸⁵ as well as critiques (Bennell, 1996b; Curtin, 1996; Curtin & Nelson, 1999; Tilak, 2007a) of the World Bank's proposed policy solutions, the World Bank's general recommendations for education sector reforms in developing countries could be summarized along three main policy directions: 1) redirecting government subsidies and spending on education more towards primary education and away from higher levels of education; 2) encouraging private investment in education; and 3) improving the quality of education to better match labour market needs. Even though public spending on education in developing countries is the focus of attention of these policy recommendations, outcomes from implementing these policies undoubtedly also affect private household investment in education. Each of these policy recommendations is discussed in detail below.

⁸⁵ World Bank (1995, 2000, 2002, 2006, 2007), Haddad et al. (1990); World Bank Education Sector Review (1995)

A. Redirecting Government Subsidies and Spending toward Primary Education and Away from Higher Education Levels

Channeling government spending away from higher education towards primary education has been among the main World Bank education policy recommendations to developing countries. The justification for this policy is that primary education is less costly to provide at the social level and that the largest improvements in productivity occur during the early years of schooling, as suggested by the global rate of return results. According to the World Bank Education Sector Review (1995, p.65), "Spending more public funds per higher education student than per primary student is inefficient in most countries because the social returns are generally lower to higher education than to primary education at least in countries with less than universal primary and secondary enrollments." The 2007 World Development Report (WDR) also asserted that, "Because learning is cumulative, investments in learning during childhood and adolescence have larger returns than later investments because they increase the productivity of those later investments" (WDR, 2007, p.71).

Moreover, the World Bank argues that public subsidies to higher education fuel inequality because the benefits accrue disproportionately to wealthier groups. It is also suggested that the discrepancies noted between private and social rates of return are the result of these subsidies:

Public spending on primary education generally favors the poor, but public spending on education as a whole often favours the affluent because of the

heavy subsidization of the upper-secondary and higher education levels, which usually have relatively few students from poor families. (World Bank Education Sector Review, 1995, p.4)

Along this line of thinking, it is considered important for governments with limited budgets to direct their spending to increase access to primary education for everyone rather than subsidizing other levels of education that mainly cater to the more affluent.

This long standing policy advice, however, was criticized by policy makers in developing countries as it ignores the political consequences that would follow from cutting subsidies for post-secondary education. Government subsidies to support access to higher levels of education are essential where university education is equated with social prestige and considered a gateway to higher social mobility, as will be seen from the case of Egypt in the coming chapter. Moreover, when general inequality is high in the country and the gap between the rich and poor is expanding, it will be hard for a government to lower or eliminate subsidies to post-secondary education because the outcomes could easily lead to political and social unrest. Tilak (2007a) showed how decision makers in developing countries have been challenging this rate-of-return based policy recommendation:

As Psacharopoulos and others at the World Bank went on estimating rates of return to education in various countries and became strong advocates of their relevance and for rather exclusive reliance on them in policy formulation, and as the policy implications drawn within a narrow technical framework of

economic efficiency were highlighted, policy makers and researchers from developing countries joined the critics and strong attacks are made on the very relevance of the method of rate of return to education. Rate of return is viewed ... as a capitalist conspiracy to see that developing countries do not develop strong higher education systems, would remain under-developed educationally as well as economically, and would forever remain dependent on the advanced countries.

In reply to the concerns raised by policy makers about the policy directions related to public investment in higher education in developing countries, the World Bank convened a task force⁸⁶ entitled Higher Education in Developing Countries: Peril and Promise in 2000, to which experts from 13 countries and donor representatives were invited. The task force aimed to "clarify the arguments for higher education development, especially from the standpoint of public policymakers and the international community. It has also diagnosed specific problems that are common across the developing world and suggested potential solutions" (World Bank, 2000, p.9).

The task force opened its report by highlighting that there is a dire need to develop higher education in developing countries in order to increase national competitiveness:

This poses a serious challenge to the developing world. Since the 1980s, many national governments and international donors have assigned higher

⁸⁶ The task force was convened in collaboration with the United Nations Educational, Scientific and Cultural Organization (UNESCO).

education a relatively low priority. Narrow—and, in our view, misleading—economic analysis has contributed to the view that public investment in universities and colleges brings meager returns compared to investment in primary and secondary schools, and that higher education magnifies income inequality. (World Bank, 2000, p.10)

However, despite this apparent reversal, the solutions proposed by this task force did not differ much from the mainstream World Bank recommendations, inspired by the earlier rate of return results. The recommendations of the task force centered on encouraging governments to establish their own policies, which would in turn encourage private contributions to higher education, and improve its quality:

The Task Force is united in the belief that urgent action to expand the quantity and improve the quality of higher education in developing countries should be a top development priority ... The Task Force recognizes that there are many difficulties in achieving these aims, including the plethora of competing demands for public money... Each developing country makes it a national priority to debate and determine what it can realistically expect its higher education system to deliver. The debate must be informed by historical and comparative knowledge about the contribution of higher education to social, economic, and political development—but also should take clear account of the challenges the future will bring This kind of holistic analysis of higher education systems has rarely been attempted. It does not mean reverting to centrally planned systems—

far from it. Instead, it offers the ability to balance strategic direction with the diversity now found in higher education systems across the developing world. This diversification—a reaction to increased demand—has brought new providers (especially from the private sector) into the system and encouraged new types of institutions to emerge. It promises increased competition and, ultimately, improved quality. (World Bank, 2000, p.10-11)

B. Encouraging Private Investment in Education

As highlighted above, advising governments to decrease their spending on education beyond primary level has always been accompanied with a recommendation to promote private investment in financing these levels. This could be accomplished through two main policies: 1) increasing post-secondary fees and establishing a cost recovery system at the university level; and 2) encouraging the supply of private education services at vocational and post-secondary levels (World Bank Education Sector Review, 1995).

a. User Fees and Cost Recovery

The World Bank considers imposing higher user fees and creating cost recovery systems in public post-secondary education important in order to enable a more equitable allocation of government spending on education. According to this view, these systems are expected to increase the total resources available to the education system; thus, decreasing the financial pressure on government budget and enabling government

resources to be more focused on increasing access to primary education, which should be a government priority. As the World Bank highlighted:

In general, fees are justified at public institutions for higher education. Also acceptable is the elimination of subsidies for such non-instructional costs as student housing and meals except where income taxation systems are very progressive or include a graduate tax; either measure can permit recovery of the costs of higher education from lifetime earnings. (World Bank Education Sector Review, 1995, p. 107)

Individuals, their families, and communities should finance more of post-compulsory education, particularly tertiary education. (WDR, 2007, p.80)

However, in order to reduce the degree to which this change would discriminate against poor students whose families would no longer be able to finance their secondary or post-secondary education, the World Bank urges governments to provide scholarships and student loans to help poor students who have the potential to continue into higher education yet have limited financial capability. According to the World Bank Education Sector Review (1995):

No qualified student should be unable to enrol because of inability to pay. To determine who is qualified at the post-compulsory level, a fair and valid means for assessing potential students' qualifications for entry is needed. (World Bank Education Sector Review, 1995, p. 113)

Fees at higher education institutions must be combined with student loan and scholarship programs [which is not as problematic as student loans]⁸⁷ to ensure that all who wish to borrow for their education are able to do so and to guarantee necessary financial support to academically qualified poor students. (World Bank Education Sector Review, 1995, p.116)

The problem with this policy recommendation lies in the fact that if inequality in access to post-secondary education exists while government subsidies are being offered to help students from lower-income families have access to this level of education, there is no guarantee that by establishing cost recovery systems, which clearly make access to post-secondary education dependent on the financial capability of the student and his family, would not add—or at best maintain—inequality in access to this level of education. As a matter of fact, the unequal representation of poor students at the university level could be claimed as "inevitable" in many developing countries.⁸⁸ This is mainly the case because the route of post-secondary education is long, increasing the relative opportunity cost of schooling for the poor. Even in the World Bank discussion paper by Haddad et al. (1990), they quoted the work of Jimenez in Colombia (1986), which showed that even with a student loan program, lower-income students are less likely to attend university unless motivated with financial subsidies, as an example used by the critics of the World Bank policy to show the inadequacy of cost recovery and student loan policies to enable equality of access to university education (Haddad et al., 1990). In such circumstances,

⁸⁷ In the same report the World Bank flagged several problems related to student' loans that have been noted in developed and developing countries. These include, according to the World Bank: heavily subsidized interest rates; high administrative costs; and very few graduates repaying their loans. The World Bank attributed these problems to the fact that the loan schemes have been administered by government ministries and agencies rather than by financial institutions, such as banks (p. 108).

⁸⁸ The low level of representation of poor students at the university level is also a point of argument in many developed countries.

generalising cost recovery systems and eliminating government subsidies at the university level could further erode, and possibly eliminate, the slim chance remaining for poor students to attend university.

Moreover, even if one accepts that student loans and scholarships have offered partial solutions to the problem of inequity in some places,⁸⁹ in countries, where youth unemployment is known to be high and where a high proportion of secondary and higher graduates are eventually forced to accept low paying informal sector jobs, borrowing for education is almost unfeasible since future earnings are usually taken as collateral for these types of loans. Under these circumstances, neither the borrowers (students) nor the providers (lenders) would like to take the risk. Even more, as two of the key informant interviewees⁹⁰ reported, in countries where there are high levels of government corruption and nepotism, as is the case in Egypt, there is no guarantee that government scholarships will necessarily go to those who most need and deserve them (Key Informant, 2010).

b. Private Supply of Education

Enabling private sector provision of education services is another preferred World Bank solution to filling the gap created by reduced public educational spending and to increasing efficiency in the education sector, especially at the vocational and university

⁸⁹ This is doubtful, given that student loans have also been flagged as problematic in various developed countries. See Lochner, Stinebrickner and Suleymanoglu (2013) for an analysis of the issue of student loan default in Canada.

⁹⁰ This was reported by a senior program officer working at Ford Foundation and one of the former government officials at the Minister of Education.

education levels (those claimed to be less socially rewarding as the rates of returns results suggested).

In general, the World Bank believes that vocational education should not be financed by governments because it argues that it would be more efficient and effective to provide such education through firm-based training schemes, rather than through the formal education system. In the World Bank discussion paper by Haddad et al. (1990), the authors quoted various studies—mostly carried out for the World Bank—which provided economic justification for this policy recommendation:

Training carried out in industrial institutes and vocational secondary schools appears to be less cost-effective than more informal, firm-based training; short-courses appear to have a bigger payoff than longer courses of training; and the payoff to quasi-institutional vocational training may be higher for those who have completed primary school than for those who have completed secondary ... (Moreover), Vocational education is much more expensive than academic, and, if unconnected to an employer or group of employers, does not appear to give graduates any advantage in finding work or earning higher wages. An extensive review of World Bank investment in vocational education and training (Middleton and Demsky, 1988) also suggest that investment in vocational education in those skills relevant to rapidly growing industries and, more generally, in industrially dynamic

economies, have a higher payoff than to academic education. (Haddadd et al., 1990, p.48-49)

Thus, in order to reach cost efficiency and satisfy labour market needs, policy makers are advised to encourage investment in vocational education by private employers.

The critics of this policy advice usually focus on the fact that in many developing countries (Egypt included), vocational education is considered the education of the poor, since it is a shorter educational route to a post-primary degree, compared to the more costly university one. Likewise, the decision of governments from developing countries to continue providing/or not this type of education is usually thought to be based on political rather than economic foundations since the burden falls on the shoulder of governments to meet the educational demands of the masses, something that is hard for the private sector to tackle. As the two former government officials interviewed for this thesis mentioned, a smaller percentage of the education budget of the government of Egypt already goes to vocational education as compared to general secondary education, even though vocational education is attended by a larger number of students and should therefore receive more government spending than the general secondary type of education. From their point of view, the government cannot further decrease its spending on vocational education, let alone leave it totally to the private sector, since such decision would have political implications in that the government would be accused of catering to the needs of the minority at the expense of the majority. Both of the former government

officials were inclined to suggest a private-public partnership in the provision of vocational education as a possible solution to this problem (Key Informant, 2010)

On the other hand, El-Hamidi (2005) highlighted that because of the high capital investment needed for vocational education most private sector entities have neither the capacity nor the willingness to invest in this form of education. Without government funding and provision, vocational education is unlikely to continue and thus cannot be left entirely to market forces.

At the higher education level, the World Bank encouraged developing country governments to encourage private provision of this level, as it highlighted:

The Bank lending for higher education will support countries' efforts to adopt policy reforms that will allow the subsector to operate more efficiently and at lower public cost. Countries prepared to adopt a higher education policy framework that stresses a differentiated institutional structure and a diversified resource base, with greater emphasis on private providers and private funding, will continue to receive priority. (World Bank Education Sector Review, 1995, p.136)

As with increasing user fees and the elimination of subsidies for university education, this recommendation could further increase inequality of access to post-secondary education. Consequently, this could also lead to inequality in labour market outcomes,

especially in societies where private higher education is regarded (rightly or wrongly) as being of better quality and is accordingly more highly valued in the labour market.

C. Improving Quality of Education

The assumption that education is rewarded in the labour market in so far as it enhances students' productivity, as is true of human capital theory, implicitly establishes a link between quality of education and labour market outcomes. Under this assumption, if the labour market does not seem to be rewarding investment in education—as reflected in low labour demand—this is explained as being an outcome of the poor quality of education, which does not prepare individuals to meet labour market needs. Therefore, the importance of education quality in solving youth labour market problems was flagged by the World Bank (WDR, 2007, p.12) as it reported that "If quality is low or if what is learned is not relevant in the job market, unemployment rates can be high even for some of the most highly educated." The WDR (2006, p.139) also showed that "the quality of education matters for opportunities ... much of the learning in schools does not prepare children to be productive adults, let alone for the rigors of competition they will face in the global labor market."

As a result, those developing countries where higher unemployment rates are associated with higher levels of education have generally been advised to improve the quality of education at all levels in order to equip young people with the skills needed in the labour markets. These recommendations basically assume that the resulting supply of skilled employees will ultimately create its own demand. As the WDR (2007, p.74) put it, "A

high-quality education system must improve the relevance of school curricula by teaching students the practical knowledge, thinking, and behavioral skills demanded by the labor market; using teaching methods that lead to high learning achievement; and blending the academic and vocational curricula. It must, in addition, strengthen the connection between school and the local economy to facilitate the school-to-work transition and boost economic development."

However, there are reasons to be skeptical about the assumption that if jobs do not arise, this is because education is of poor quality. If education is playing a screening role that is largely unrelated to productivity—and that serves, in part, to legitimize a fundamentally unhealthy and unsustainable labour market situation as the "diploma disease" would suggest—improving the quality of education might not lead to increased demand for educated youth. In such a case, this policy might simply encourage more spending on education in response to deteriorating labour market conditions, without this necessarily leading to increased job opportunities. It is worth noting here that with the 2013 WDR, the World Bank has changed its view regarding the relation between improving quality of education on increasing labour demand since that report argues that without the creation of "good jobs for development"⁹¹ any improvement in education quality is not likely to lead to a solution to lowering youth unemployment in developing countries. This recently revised view will be discussed in more detail in chapter 5.⁹²

⁹¹ Good jobs for development are defined in the WDR (2013) as those jobs that have a positive spillover effect on the society. (WDR, 2013, p.17)

⁹² It is important to note that improving education quality remains an important developmental policy on its own.

On balance, the above discussion about the World Bank policy recommendations prior to 2013 can be summarized in the following three points:

- The World Bank human capital-based policy solutions, generalized to virtually all of its client countries as part of a broader market empowering paradigm, is founded on the assumption that investment in education is both motivated and justified by its impact on productivity and skills, and therefore on economic growth and welfare.
 - It, therefore, follows that in order to foster the contribution of education to productivity in the labour market, and consequently economic growth, it is important that governments focus their resources on providing free universal access at the primary education level (the more productive level) while fostering private investment in other levels of education.
 - Finally, based on the assumption that good quality education improves productivity and minimizes the mismatch in skills between education and labour market needs, it becomes important to improve the quality of education through developing school curricula that equip students with practical knowledge and skills needed in the labor market, raising teachers' skills and applying more effective teaching methods, which would enhance the learning process.
- Ultimately, the improved quality of education is expected to lead to higher labour demand and lower youth unemployment.

Following this analysis, the question now becomes what are the implications of such policy advice on the relationship between investment in education and labour market outcomes in Egypt?

III. Egypt's Education-Labour Market Relationship (Diagnosis and Solutions)

As highlighted in chapter 1, Egypt's education-labour market relationship can be described by two main characteristics: a) a labour market that rewards investment in higher education relatively higher than lower levels of education (contrary to the "received wisdom" on which World Bank advice is based); and b) relatively high unemployment rates for higher education graduates, followed by their disproportionate absorption into low-paid insecure jobs.

Based on their knowledge—or belief—that the labour market rewards higher levels of education with remunerative and more secure jobs, Egyptian households decided to spend a percentage of their income to help their children reach the university level, hoping they would be able to secure one of these preferred jobs. Unfortunately, the labour market outcomes from these household investments did not match their expectations as the number of educated youth by far exceeded the number of good jobs available. This situation resulted in disappointed and financially burdened households and a growing pool of educated unemployed youth, the very situation, which Dore (1976) had warned against many years ago.

This section examines the World Bank's diagnosis of the roots of this education-labour market situation in Egypt (why there is increased demand for higher levels of education and high unemployment among the more educated) and the Bank's related policy advice, which has been shaping the Egyptian government's education policy since the 1990s. Seeing the situation through its human capital lens, the World Bank's explains that Egypt's education-labour market problem can be attributed to: a) government intervention in the labour market, which distorted education rewards and incentives to invest in education; and b) poor quality education, which drove inefficient spending by households on education and failed to provide the supply of skills required to meet the needs of labour demand.

A. Government Intervention and Education-Labour Market Relationship

As highlighted in chapter one, rate of return studies in Egypt (Assaad et al., 2009c; El-Hamidi, 2005) have shown that there is increasing private rates of return to investment in education, which means that, at the individual level, the marginal reward for completing higher levels of education (Secondary and post-secondary) is higher than the marginal reward for completing lower levels of education in the labour market.⁹³ Assaad et al. (2009c), using Egypt's Labour Market Panel Surveys (ELMPS), have calculated rates of return on investment in different levels of education for male urban wage earners⁹⁴ (20-54 years old) and their results suggest that in every case-1988, 1998 and 2006-the rates of

⁹³ No reliable estimates were found for Egypt for social rates of return to education.

⁹⁴ This study was comparing rates of return to education in Iran, Egypt and Turkey. To increase comparability between the three countries, the authors focused on urban male wage and salary earners in full time employment only. Males also have high rates of labour force participation (89.1% in 2006), which leads to more accurate results (Assaad et al., 2009).

return on investments in post-secondary and vocational education were higher than those in basic education. Indeed, in 2006, they showed that the return for post-secondary education was 66% higher than that for basic education, while the return on vocational secondary education⁹⁵ was 22% higher than that for basic education. El-Hamidi (2005) also disaggregated the rates of return to education analysis for male and female wage workers in 1998 and showed that higher levels of education have higher rates of return compared to lower levels of education, regardless of the gender.⁹⁶

From the World Bank's human capital perspective, the inconsistency of Egypt's rates of return results with the rates of return enshrined in the Bank generated conventional wisdom is naturally taken to mean that in Egypt education is not being rewarded in accordance with increased worker productivity but rather in accordance with an unhealthy process of certification that has been generally attributed to excessive government labour market intervention in the Middle East and North African (MENA) Countries, specifically through policies, such as guaranteed employment and wage determination policies, which have distorted labour market rewards and increased the demand on higher education.

The lure of public sector employment has influenced the returns to education by directly influencing educational choices. Until recently, public sector employment was almost a guarantee in the [MENA]⁹⁷ region for persons with higher or intermediate education. As a result, labourers in the region have

⁹⁵ Both the post-secondary education and the vocational secondary education offer higher than primary level degrees that are appreciated in the labour market. However, the post-secondary degree is still much more appreciated in the labour market than vocational secondary education.

⁹⁶ El-Hamidi (2005) showed that while the returns to vocational education is 29% higher than secondary education for male wage workers it is 2% lower than secondary education for female wage worker. El-Hamidi (2005, p.15)

⁹⁷ In this report, Egypt's case was given as an example reflecting the problem of government guaranteed employment.

often sought educational credentials for the sole purpose of securing public sector employment. By rewarding educational credentials in public employment with higher wages, governments in the region have encouraged investment in types of human capital that are not necessarily designed to prepare students to meet the requirements of a modern market economy, but to meet the needs of growing bureaucracies. As a result, individuals in the region have often sought higher degrees to better their chances for public sector jobs, but with little attention to content or quality. (World Bank, 2008, p.227)

Although, in principle, the roots of credentialism in Egypt could be attributed to the government's guaranteed employment policies, the continuation of the problem long after that policy was abandoned, could also be considered a result of labour market failures, especially if one adds the high unemployment rates among the more educated to the rate of return results above. As will be seen in detail in chapter 3, despite the fact that since the 1970s Egypt has started taking serious steps towards establishing a more liberal economy, the labour market has continued to reward end degrees, making the need for certification even more intense now than it was in the past when the economy was more centrally-planned. In large part, this was so because although on the path to a more liberal economy the role of the government as an employer of graduates did diminish, the void was never filled by a commensurate number of formal private sector⁹⁸ jobs that could have absorbed the massive number of higher education graduates entering the labour markets.

⁹⁸ Assaad et al. (2009) rates of return estimates showed that the private sector in Egypt is also rewarding certificates.

Even if it is believed that the most recent Egyptian labour market survey data has not yet fully reflected the (hoped for) positive effects of a more liberal labour market on rates of return to education,⁹⁹ comparing the case of Egypt to an even more liberal Middle Eastern country, like Turkey, Assaad et al. (2009c) have shown that even there labour markets still reward certificates to excess.

Of course in this respect, the World Bank's response would be that it is the absence of an enabling investment environment that stifled the necessary, and predicted, expansion of private sector employment, which then merely reinforces the advice for governments to focus on encouraging private-sector led growth if they want to see more tangible positive results for youth employment.

While subsidies, credit, and fiscal and exchange-rate policies may have worked together to lower the employment-creating capacity of growth in the past, the fundamental impediment to employment creation in the [MENA] region has been the shortage of growth itself, a reflection of the lack of a dynamic and competitive private sector. If the region is to achieve higher employment growth and higher wages, it needs to substantially increase output growth (and productivity), especially by the private sector ... For the region to increase economic growth, however, it needs to change the engines of growth themselves. At present, the formal private sector remains underdeveloped in MENA, still emerging from a culture of decades of state-

⁹⁹ El-Hamidi and Said (2008) and Assaad et al. (2009) believed that the positive effect of the more liberal labour laws adopted, for example, will take time until it shows up in labour survey data and that the data currently in hand (ELMPS 2006), have not yet captured these changes.

led growth and industrialization ... Private sector activity is concentrated in a small number of large firms that have benefited from protective policies, along with a number of microenterprises that account for much of employment but have little access to formal finance, markets, or government support programs. (World Bank, 2008, p.228)

The argument about the effect of the change in the government direction over time on the evolution of education-labour market relation in Egypt will be discussed in more detail in chapter 3.

B. Quality of Education in Egypt: Household Spending and Labour Market Outcomes

From the World Bank's perspective, the poor quality of education in Egypt also explains the education-labour market situation described above. Viewed through this lens, household spending on education in Egypt is a response to the poor quality of education in the formal public system, which has raised household interest in spending on a service like private tutoring, while also increasing the mismatch between the demand for, and the supply of educated youth. The World Bank's view of each of these issues is discussed in detail below.

1. Private Tutoring and Investment in Better Quality Education

The World Bank has shown that the bulk of household spending on education goes to school fees, which have increased significantly over time, and to private tutoring, which is believed to prepare students to pass exams (World Bank, 2007).

In general the World Bank (2005, 2007) has shown that spending on both tuition fees and private tutoring has been increasing over time as a percentage of total household spending on education and that this appears to have been "crowding out" other types of education expenditure, as seen in Figure 2-1.

Figure 2-1: Share of Education Components out of Household Spending on Education Over time (1995, 1999, 2000, 2003)

Sources: 1999 data from World Bank (2005) and 1995, 2000, 2004 data from World Bank (2007), based on calculations from the Egypt Household Income Expenditure and Consumption Surveys (HIECS).

Moreover, in its 2002, 2005 and 2007¹⁰⁰ policy notes and education sector reviews in Egypt, the World Bank identified increased household spending on education—more specifically on private tutoring—as a significant problem. The World Bank's opinion on this issue rests on three main points:

First, for the World Bank, the demand for private tutoring is assumed to be primarily a response to the poor quality of Egypt's public education system, in which the low-paid teachers and exam- focused learning have created an inordinate demand for this type of service. As the World Bank (2007) highlighted, "Tutoring ... is more accurately diagnosed as being driven by (i) high stakes tests that require rote memorization; and (ii) very low teacher pay." (World Bank, 2007, p.40) The World Bank (2005) also suggested that "Partly to address deteriorating quality issues in public education, private tutoring has become a pervasive problem in the Egyptian education system." (World Bank, 2005, p.17)

Second, the significant outlays by households on private tutoring, especially at the secondary and pre-secondary levels of education, are considered problematic because they further exacerbate inequality in access to good quality education. According to the World Bank:

¹⁰⁰ Report No. 24905-EGT in 2002, Policy Note 2, in 2005 and Report No. 42863-EG, in 2007.

Perhaps no other single set of factors skews ... the inequality of educational opportunities more than private tutoring, school fees and other private investments households in Egypt currently must make to give their children the best chance to succeed. And of course, the tutoring is the symptom of the disease ... Differences in household expenditure on education naturally vary by income level and region. (World Bank, 2007, p.40)

Third, the phenomenon of private tutoring reflects the willingness of households to spend on their children's education. This spending, however, according to the World Bank, goes towards a parallel system of education while it could—and should—have been more efficiently used¹⁰¹ to improve the quality of the formal education system itself. Indeed, as highlighted earlier in this chapter, making use of the willingness of households to spend on education is seen as a preferred policy option for the World Bank, especially at the post-secondary level. As per the World Bank (2007) policy note:

Private expenditures, per se, are not necessarily a problem in education systems. Such resources can augment public expenditures and lead to greater outcomes for all students. However, when such expenditures aim to compensate for weaknesses in the public education system, the results are often inequitably distributed. (World Bank, 2007, p.43)

¹⁰¹ This was mentioned in World Bank (2007, p.43), *The road not travelled: Education reform in the Middle East and North Africa*. (World Bank, 2008, p.105) and in the Egypt Human Development report (1998/1999, p.85).

This diagnosis of the private tutoring problem could be challenged. First, because it assumes that the households have full information to assess the quality of education they are purchasing, while in reality quality of education is a concept that is hard to define and assess.¹⁰²

Second, in a culture, like Egypt's, which is characterized by credentialism, households are expected to be keener to purchase a certificate associated with getting a good job than to invest in a better quality of education. As Dore (1976) would argue, in such circumstances, household spending on education could actually lead to further deterioration of the learning process since credentialism gradually shifts the focus to teaching students how to pass national exams. It is in this setting that investing in private tutoring became an important part of Egypt's education system.

In this situation, one could argue that in a competitive labour market the need for a certificate that improves labour market outcomes could be more of a driver for the demand for private tutoring than the poor quality of education. As such, the hope of using private household investment in education to improve the quality of the public system of education might have no foundation. The motivation for household demand on private tutoring will be studied in more detail from the perspective of the households in chapter 4.

2. Education Quality and Labour Demand

¹⁰² This also holds true regarding the ability of employers to assess the quality of education of the graduates they are hiring.

On the other hand, in explaining the link between quality of education and labour market outcomes, the World Bank sees that the high unemployment rates among the educated Egyptian youth are "symptomatic of a mismatch between the labor market needs and the education system output. Developed in an era when education prepared students largely for the public service, the system does not prepare graduates with the skills required for the evolving economy" (World Bank, 2002a, p.5). In its 2007 Egypt Education Sector Policy Note, the Bank further confirmed that "Skill mismatch and education quality partly explain the (general) modest economic returns to education in Egypt, (compared to other countries)" (World Bank, 2007, p.26).

The problem with this explanation of the situation is that it appears to assume that the solution of education-labour market problems lies in improving the quality of education, while in reality this might not be the case. Indeed if the quality of education was improved but this was not followed by a commensurate increase in the labour market's capacity to absorb graduates from the education system in good jobs, this suggested solution would seem doomed to failure.

It is worth noting that improving the quality of education is an asset in and of itself, especially if this improvement focuses on creating better citizens¹⁰³ rather than just focusing on improved economic (labour market) outcomes. However, this benefit of education quality is not accounted for in the World Bank's evaluation of the returns on

¹⁰³ In the 1890s, J. Dewey defined the task of education in the society as to help children "develop the character, the habits and virtues that would enable them to achieve self-realization by utilizing their peculiar talents to contribute to the well-being of their community" (Westbrook, 1993).

education investment, nor is it a major incentive for households to spend on education if their aim is primarily to purchase a certificate for their children.

The debate on the drivers of household spending on their children's education in general, and private tutoring in specific, and how this is related to desired labour market outcomes will be discussed in more detail in chapter 4.

C. Suggested Policy Solutions to Egypt Education-Labour Market Problem

Based on its diagnosis of Egypt's problem and its strong belief in the received wisdom about the social profitability of education, the World Bank's recommendations to the Egyptian government as seen in Table 2-2 (World Bank, 2002a), have focused on:

- a) increasing equity in access to all levels of education by reducing private costs for primary and—to a lesser extent—for secondary education, while increasing cost recovery and private sector investment at the post-secondary level;
- b) improving the quality of teaching at the primary level and ensuring graduates from secondary and post-secondary education are equipped with the skills needed in the labour market;
- c) decentralising the management of schools, as well as rationalizing government spending on the three levels of education; and
- d) developing compensatory funds to match local contributions from parents to pre-university schools on a sliding scale with contributions from poorer communities receiving a higher level of matching grants (World Bank, 2005).

Table 2-2: World Bank's Locus of Key Education Challenges in Egypt by Sub-sector

Sub-sector	Access and Equity	Quality	Management	Efficiency
Primary	Reduce private costs of public education	Raise quality of instruction	Decentralize management; Increase parental involvement	Reduce personnel budget
Secondary	Reduce private costs of public education	Produce workers who can learn	Decentralize management	Reduce personnel budget
Post-secondary	Increase cost recovery	Improve match with private labour market demand	Increase institutional autonomy	Rationalize finance and resource allocation
System-wide			Create database for informed decision-making, including outcomes	

Source: Slightly adapted from World Bank 2002a *Arab Republic of Egypt education sector review: Progress and priorities for the future*. p.50.

Note: It is important to highlight that the above combination of policy recommendations remained the same in the World Bank (2005) policy note and (2007), Egypt Education Sector Report.

As will be discussed in chapter 3, the Egyptian government has gradually adopted these policy recommendations since the 1990s by allowing the establishment of private universities starting in 1992, creating a cost recovery system in public universities, adopting pedagogical reforms (World Bank, 2008, p.184) and focusing the Ministry of Education's National Strategic Plan (2007-2012) on improving the quality of education and linking it more closely to labour market needs. However, for political reasons, the government's promise to make education free for all at all levels was kept intact—at least in the government's speeches—even when the policies adopted were going in a different direction and financial pressure on households from education was increasing.

On balance, testing the viability of the World Bank's explanations for the case of Egypt and its suggested solutions depends ultimately on how one views the role played by education in society, the link between spending on education (private and/or public) and education quality, on the one hand, and between education quality and the labour market outcomes (the rate of return and employment rates), on the other hand. These materials will be the focus of the coming chapters.

Chapter 3 will examine the political economy of education in Egypt in order to study the effect of the change in the government's direction and social power structure over time on education and its role in, and contribution to, Egyptian society. In other words, it seeks to answer whether or not the change toward a more liberal economy has improved the education-labour market relationship in Egypt.

Chapter 3: The Political Economy of Education in Egypt

As seen in the previous chapter, in explaining the problems experienced in Egypt's education system and its link to the labour market, the World Bank has attributed these to two main causes. First, it attributed them to government interventions, which distorted labour market returns to education and consequently resulted in a labour market that rewards credentials rather than productivity. Second, it attributed them to the deterioration of the quality of education that encouraged inefficient household spending and caused a mismatch between the skills needed in the labour market and those offered in the schooling system. Accordingly, the World Bank's policy recommendations focused on: a) minimizing the role of the government in the labour market; b) improving the quality of basic education; and c) mobilizing private spending and investment in post-secondary education.

This chapter, and chapter 4, test the ability of these World Bank explanations of the education-labour market relation in Egypt and the related policy recommendations to offer a solution to Egyptian households, whose increased spending on education is derived from their demand for certification, which is motivated by: a) the deterioration of the education-labour market relationship; and b) the belief that investment in higher levels of education improves ones' chances in the competitive labour market.

This chapter studies the political economy of education to show how the change in government direction—from centrally planned to market economy—has affected the relationship between education and the labour market, and how that, in turn, has influenced public, as well as private household, investment in education, ultimately leading to a situation in which adverse selection¹⁰⁴ is dominating private spending decisions.

As will be seen below, an understanding of the political economy of education in Egypt, over five important phases of its history, suggests that the World Bank's education policy recommendations might not bring relief to Egyptian households who are investing heavily in education in the face of challenging labour market conditions. As will be shown in this chapter, the application of free market reforms in Egypt—highly recommended by IFIs in general and World Bank in particular—has tended to further encourage, rather than reduce or eliminate, the certification culture which was originally triggered by the government's Employment Guarantee Scheme since:

- The free market reforms failed to provide the number and types of jobs that could compensate for the decreased number of secure government jobs; and
- The widened socioeconomic disparity, ensuing from these market reforms, has increased the importance of household spending on higher levels of education in the hope of social advancement.

These arguments will be discussed in detail below, while studying the evolution of the education-labour market relationship in Egypt over time and how this affected the decision to invest in education both at the social and private levels.

¹⁰⁴ Increased motivation to invest in higher levels of education in face of challenging labour market conditions, faced by educated youth

Figure 3-1: Investment in Education over Five Phases of Egypt's History

I. Egypt's Political Economy of Education

As seen in the previous chapter the relation between education and labour market is commonly studied primarily from an economic perspective, in that investment in education is mainly evaluated by estimating its contribution to earnings and to economic growth. However, in reality the decision to invest in education is not only an economic one, which means that other social and political factors need to be considered when evaluating private and public investment decisions in this sphere. Hence, there is a need to study the political economy of education, which evaluates the decisions to invest in education within a "context of conflicting power relations and the playing out of these conflicts in the state" (Carnoy, 1985). According to Carnoy:

The political economy of education ... treats education as a factor shaped by the power relations between different economic, political and social groups.

How much education an individual gets, what education is obtained and the role of education in economic growth and income distribution are part and parcel of these power relations... No study of the educational system can be separated from some explicit or implicit analysis of the purpose and functioning of the government sector. (Carnoy, 1985, p.157)

For politicians, the key competing developmental objectives involved in the decision to invest in education are:

- a. How efficient the system is in achieving economic objectives, such as providing the skills necessary for the labour market, and non-economic objectives, such as producing better citizens who are aware of their rights and responsibilities; and
- b. How effective the system is in ensuring acceptable, and politically defensible, degrees of equality of opportunities.

In any society, education reform policies must always seek to maintain a reasonable balance between these educational objectives.

This chapter will show how the prioritization of these objectives has changed under the different political systems experienced during five important phases of Egypt's history (see Figure 3-1) and how those changes have affected the relationship between education and labour markets and ultimately, the levels and patterns of household demand for education services.

A. Phase I: Before the British Occupation (Mohamed Ali's Period (1805-1848))

Mohamed Ali¹⁰⁵ (1805-1848), known as the founder of modern Egypt, came to power with the support of the religious notables (the *ulama*), the rich merchants and the leaders of the urban guilds, who saw in Ali a capable leader who could put an end to the civil conflicts that had hit the country from 1801 to 1805¹⁰⁶ and they, therefore, convinced the Ottomans to appoint him as the governor of Egypt.

Ali had the ambition of separating Egypt from the Ottoman Empire and establishing an empire of his own, with Egypt at its centre. Towards this goal, he directed economic development toward financing and establishing a strong army that eventually enabled him to conquer Hijaz,¹⁰⁷ Greece, Sudan, and Syria (Sayed, 2006).

Ali considered the establishment of strong and centralized State bureaucracy to be important in achieving his political and economic objectives. According to Abdelrahman (2004, p.88) “During Mohamed Ali's rule the State assumed sole responsibility for managing the whole economy ... The State became the only industrialist, the only teacher, the only farmer and the only producer.”

In establishing the modern Egyptian State, Ali did not rely on the emerging Egyptian bourgeoisie or on the *ulama* who had originally brought him to power. He also dissolved

¹⁰⁵ Mohamed Ali was an Albanian soldier who originally came to Egypt to support the Ottomans against the French Occupation in 1801.

¹⁰⁶ According to Lawson (1992), the imposition of increasingly burdensome taxes, which affected the strong commercial dealings between urban and rural market systems at the end of 1700s, led to periodic outbreaks of political violence in the period from 1801 - 1805 and a popular uprising led by the guild leaders in 1805 against the governor of Egypt.

¹⁰⁷ Now part of Saudi Arabia

artisanal organizations and community guilds¹⁰⁸ and forbade the industrial production that they had carried out outside of the public sector (Abdelrahman, 2004, p.87). Instead, he relied on foreign bourgeoisie¹⁰⁹ of European, Levantines and Turco-Circassian origins who occupied all high-ranking positions in State bureaucracy and army. According to Abdelrahman (2004, p.89), it is believed that Ali's reliance on foreign bourgeoisie in his development plans, instead of the local elite, made him later lose the needed support of the local elite in his war against the collective intervention of the European powers, which ultimately led to his defeat.

During Ali's rule, the government consolidated its monopoly over the country's agricultural and industrial resources.¹¹⁰ He protected Egypt's textile industry—which depended on the country's main cash crop (cotton) at the time—against cheap imported British products with the aim of establishing an international trade monopoly in the industry. During Ali's time, the industrial sector was employing about 4% of the population or between 180,000 and 200,000 people above the age of 15 (Metz, 1990).

Ali also implemented major educational reforms, the aim of which was to train a cadre of civil servants to run the state monopolies, and of competent army officers, to execute his planned expansionary military missions, something that could not have been accomplished through the traditional religious schools that provided most of the education available until that time (Sayed, 2006).

¹⁰⁸ These groups enjoyed a relatively high degree of organization, which enabled them to confront the central administration before Ali. Thus, their continuation posed a possible threat to Ali's regime, hence why he eliminated their power (Lawson, 1992).

¹⁰⁹ According to Abdelrahman (2004), foreign bourgeoisie was dominating trade by the end of Ali's rule, despite his attempt to restrict their power.

¹¹⁰ The Egyptian government used to determine what crops to cultivate. It was also the main buyer of agriculture proceeds from farmers and the main seller to distributors. In industry, production was taking place in state owned factories (Metz, 1990).

As a result, the equivalent of the current secular post-secondary education was first introduced to Egyptians when Ali established the specialized schools, which he believed were necessary in achieving his economic and military expansion goals. The government prioritized investment in higher levels of education, rather than primary education, which was given attention at a later stage.

Education, as with other sectors in the economy, was controlled by the State. The government fully funded all levels of education (including primary and post-secondary levels). It covered the cost of tuition fees, books and other expenses and financed educational missions to France and England so that the students could learn about modern sciences and seek what was then-defined as a good quality education.

Initially, the government used the traditional religious primary schools to recruit students for the modern specialized school.¹¹¹ This gave the chance for promising students from the lower social classes to join the children of the landowning elite who sent their children to these schools in order to guarantee them a place in the government bureaucracy.

However, even though children from all social classes¹¹² were recruited to the specialized schools, equal access to education for all was not one of Ali's objectives since he believed

¹¹¹ Later on Ali created a primary schooling system, which could better train students (both men and women) to join the specialized schools for military science, engineering and medicine (Russell, 2001).

¹¹² This is mainly because Mohamed Ali wanted to empower other social classes in order to face and weaken the power of his main opponents, "the old Mamluk elite" (Russell, 2001).

that too much education at all social levels would lead to political unrest as educated citizens are less controllable. That could be seen in a letter from Ali to his son and heir:

What Europe is suffering from is the result of generalizing education among all levels of society ... they have no chance of avoiding what happened. So if this is an example in front of us our duty is simply to teach them how to read and write to a certain limit in order to encourage satisfactory work and not to spread education beyond that point. (Sayed, 2006, p.25)

Mohamed Ali's economic and military expansion posed a threat to the Ottoman Empire and to British interest in the region, especially after he invaded Syria in 1831 (Metz, 1990), and so these two powers soon entered into an alliance to force Ali out of Syria and to oblige him to sign the 1841 Treaty, which stripped him of all of the territories that he had managed to conquer, removed government protection from Egypt's textile industry and gave cheap British textiles privileged access to the Egyptian market.¹¹³

With the dwindling of Mohamed Ali's power, the previous economic and military demands behind the establishment of the specialized schools diminished. As a result, government spending on education decreased substantially and was insufficient to sustain the specialized modern schools, which ultimately shut down. None of Ali's successors were able to finance such expensive education until Ismail (who came to power in 1863) benefited from the proceeds of a cotton boom, which enabled him to re-open the specialized schools and even further develop primary education (Russell, 2001).

¹¹³ This is except for Sudan. Mohamed Ali was also granted the hereditary governorship of Egypt for life, as compensation.

However, with the increase in Egypt's foreign debt¹¹⁴ and the end of the cotton boom, Egypt was almost bankrupt in 1876. Consequently, Ismail's educational development was disrupted.

Despite the limitations of the development of the education system at that time, it nonetheless introduced secular education and modern science to Egyptians for the first time after a long history of traditional religious education under Mohamed Ali's predecessors. It also created a small class of educated Egyptians who were able to join government and military jobs, which were limited to the Egyptian upper class before.

B. Phase II: The British Occupation

a. The Situation at the Beginning of the Occupation (1882- 1922)

At the beginning of the British Occupation, in the early 1880s,¹¹⁵ the main priority of the first British Consul General was to service the large public debt—which had accumulated due to the extravagant spending of Mohamed Ali's successors—and to direct the country's economy, land and infrastructure to the production and export of raw cotton, which was of particular interest to the British.

Under these circumstances, the British had no interest in developing education or in increasing government expenditure on this sector. Indeed, "the British maintained that if

¹¹⁴ According to Russell (2001), the increase in foreign debt was due to Ismail's lavish spending.

¹¹⁵ It is worth noting that the British involvement in Egypt's economy goes before the beginning of the occupation in 1882 especially that the economy during all Mohamed Ali's successors was mainly focusing on cotton production that was exported to the British factories.

Egyptians were truly concerned about education, then individuals and communities would work together to sponsor more schools for the masses."¹¹⁶

The British believed that education was important as long as its objective was to provide basic literacy. Like Mohamed Ali, they believed that too much education for the populace would promote more resistance against them. Therefore, they maintained the traditional elementary schools that were attended by the masses already operating under religious institutions (mosques and churches). These schools offered arithmetic, reading and writing in addition to their main focus of religious studies.

Next to this low-tiered education, the British differentiated the public system of education by creating separate high-tiered primary education by raising tuition fees on a small number of primary public schools, which made them affordable only to Egypt's upper classes. These schools were intended to prepare students to obtain post-secondary education that would enable them to fill the lower ranks of the civil services. The British made these government jobs accessible only to upper class Egyptians—mainly the land owning elite—whose interests in the production of raw cotton¹¹⁷ coincided with those of the British. Next to this two tiered public system of education, private foreign and missionary schools existed to provide foreign language education to the children of the elite.

¹¹⁶ Funding for elementary schools came from the personal funding of upper class families and the Royal family, who sought popular support by this action (Russell, 2001, p52).

¹¹⁷ 0.1% of the total number of landowners held nearly 20% of the total farmland, while 94% held 35% of the area, which reflects an extreme concentration of wealth in the hands of the upper class, as reported by Abdelazim (2002, p.20).

The inequality in access to the same form of education, and the related inequality in labour market outcomes, served the interests of both the British, who, as Russell (2001) described, "felt more comfortable with the elite at the helm," and the Egyptian land owning upper class, who were keen on the separation of social classes in schools, at work and, indeed, in social life. For both groups, limiting the education of the lower classes was important to ensuring a continuous supply of manual labour, much needed in the business of cotton production.¹¹⁸

The pervasive and continuous discrimination against the Egyptian masses in different aspects of the economy, together with the compulsory recruitment of peasants and manual workers in cotton production and the increased unemployment and inflation that resulted from the exploitation of Egypt's resources during World War I all led to the 1919 revolution (Metz, 1990). Outraged Egyptian masses¹¹⁹ from all cities and villages took to the streets railing against the British Occupation and demanding independence. Even though the revolution did not lead to full independence, it resulted in a new phase in the British Occupation in which Egyptian Nationalists were allowed, for the first time in 1922, to participate in the political and economic life of their country.¹²⁰

b. Pre-Independence Phase (1922-1952)

Under this new phase, political power was shared among the British, who controlled the army, police and filled the high government positions, the Monarch, who was responsible

¹¹⁸ A small percentage of the funding from the upper class also went to technical and agricultural education (Russell, 2001).

¹¹⁹ The Egyptian masses included students, government officials, professionals, women, and transport workers who went out to show support for the Egyptian Nationalist demands for independence (Metz, 1990).

¹²⁰ In 1922 the British announced the partial independence of Egypt.

for approving the constitution and appointing the Prime Minister and the members of the *El Wafd* party, representatives of the Egyptian Nationalists, who had most of the parliamentary seats. These three powers, however, were not equal since British interests still prevailed whenever there was conflict between them (Metz, 1990).

Enabling the participation of the Nationalists in the economic and political life of the country—despite the restrictions placed on their authority and decision-making power—was considered a step forward under this phase of the British Occupation and the education sector benefited relatively from this step. First, the head of the *El Wafd* party managed to increase the government budget directed towards education. Moreover, in 1944 basic education was made compulsory and free for all (Heggi, 1996). In addition, the traditional elementary schools and the high-tiered primary schools were merged into one primary education system, which was made both compulsory and free for all social classes. The objective of this educational reform was to reduce the inequities resulting from the historically two-tiered education system, hoping this would possibly translate into more equitable access to government jobs for the children of the masses.

These reforms were also accompanied by the banning of the English language from primary education, for nationalistic reasons.¹²¹ However, the upper classes did not welcome this decision and responded by moving their children out of the newly-merged public primary school and in to the few private foreign language schools available,

¹²¹ The Nationalists made Arabic the only language studied in the merged schools, a decision that was resisted staunchly by the British who maintained the English language as the language of teaching and the one much needed for bureaucratic jobs, which were filled by English citizens and upper class Egyptians (Heggi 1996).

seeking better quality education.¹²² The number of private schools, which offered English language, increased thereafter to cater to the needs of the upper classes.

Secondary education was not free under this phase until 1950 when Taha Hussein,¹²³ the Egyptian intellectual who believed in education as a right for all citizens, became the Minister of Education. Before this point, anyone (including those from poor social classes) who could manage to pass the primary school exam with high grades was allowed, in principle, to access secondary education. The reality, however, was that only those who could afford it were able to actually obtain a secondary education. In this period, secondary education was not yet compulsory, although more accessible.

One might conclude that, regardless of the partial educational gains made in this period, the power of the upper class, supported by the British, maintained the divide between the social classes in access to education and the related labour market outcomes. That situation continued until Egypt's full independence was gained after the *1952 coup d'état*, led by the Free Officers¹²⁴ against the Monarch and the British Occupation.

C. Phase III: National Independence

¹²² The quality of education was then assessed as being indicated by the teaching of foreign language, which was for long related to top level jobs in Egypt.

¹²³ Taha Hussein was an Egyptian thinker who had his views about the development of the education sector. In 1938, he wrote an influential book "The Future of Education in Egypt," which highlighted his support for nationalism. Hussein advocated and indeed worked on implementing many of the ideas he raised in his book when he became a Minister of Education in 1950. Two of his main ideas involved advocating free education for all at all levels of education and encouraging State supervision on all types and levels of education. (Galal, 1993)

¹²⁴ The failure of the Arabs, led by the Egyptian army, in the 1948 against Israel, together with the continued infringements of the British in Egypt's political and economic lives led to increased resentment to the British Occupation. This time it was among the army officers who created the Council of Free Officers, which succeeded in seizing power in the 1952 coup d'état, making use of the weakened power of the main Nationalist party (*El Wafd*) and the Monarch (Metz, 1990).

a. Early Years After Independence (1952-1960)

After gaining full independence, the Free Officers formed the Revolutionary Command Council (RCC), which dictated policy to a civilian Cabinet. A struggle over the leadership of the RCC and the presidency of Egypt among the Free Officers ended in 1954 when Lieutenant Colonel Gamal Abdul Nasser¹²⁵ took over as President (Metz, 1990). It was important for the RCC to consolidate power first by reducing the power of the land-owning class, and second by gaining the support of the masses.

To meet these goals, the first reform in 1952 was the *Land Reform Law (No. 178)* under which much of the land owned by the elite was sequestered and redistributed in smaller pieces to small farmers and tenants.¹²⁶ The actions taken under the *Land Reform Law*, along with the extensive confiscation of the assets of the elites and the royal family conducted by the RCC, not only weakened the upper class but also provided financial resources to the government to implement its development plans.

Education played an important role in this phase by enabling the leaders to gain public support by showing the masses that they cared about empowering Egyptian citizens and enabling equity, which Egyptians had desired for so long before their independence. As a result, one of the first laws issued after the *coup d'état* was *Law 210 for 1952*, which stipulated that basic education was to be compulsory and free at all public schools. Consequently, school enrolment in primary schools increased. Promises were also made

¹²⁵ Lieutenant Colonel Gamal Abdul Nasser was a member of the Council of Free Officers and the main driver of the 1952 *coup d'état*.

¹²⁶ The original land owners were paid half the value of their land in terms of government bonds. The farmers were asked to buy the re-distributed lands in the value paid to the original owners (Metz, 1990).

by the Ministry of Education that other levels of education would also be made free and compulsory (Heggi, 1996).

As for linking education to economic activities, after gaining independence, Egypt, like most developing countries, placed a great deal of hope on creating a cadre of educated Egyptian citizens that could replace the foreigners in the country and help in the development of the different sectors of the economy. However, the government's effort to link education to the labour market and economic development did not advance beyond nationalistic speeches, at this phase. The absence of a well-defined government strategy to show how educational reform would enable Egyptians to contribute to the country's economic development raised skepticism about the seriousness of the government in keeping these promises (Heggi, 1996).

The situation remained this way until 1961 when President Nasser announced the so-called "Socialist Decrees" under which the government controlled and managed all economic resources and was the main instrument of development. These decrees demonstrated a clearer government direction and plan for investment in education.

b. The "Socialist Decrees" and Nasser's Egypt (1961-1970)

Having already focused his efforts on successfully crushing his opposition,¹²⁷ maintaining political stability was the next important step for Nasser. Toward that goal, the "Socialist Decrees" focused on two main measures: 1) expanding state control over

¹²⁷ The Communists and Islamists were the two main opposition groups to Nasser (Metz, 1990).

all economic sectors through a wide nationalization of the private sector; and 2) stressing equity and social mobility as important goals of the state's development plan in order to gain public support.

Under the 1960s public sector-led economy, growth rates averaged 7.2%, and per capita income increased by 19.1% (Abdelazim, 2002). This phase also witnessed a wide expansion of welfare programs and an increase in government subsidies to the poor.

Because equity was an important demand of the Egyptian masses after independence, equal access to education was highly emphasized under the Socialist Decrees, which defined education as "a right of citizenship." (Heggi 1996) As a result, government expenditure on primary education increased to foster school enrolment. The promises made by the Free Officers to make education available to everyone at all levels were fulfilled under the Socialist Decrees (Heggi 1996). Secondary and university education became publicly offered for free. In the first ten years following the 1952 *coup d'état*, government spending on higher education increased by 400%.¹²⁸ Moreover, since industrialization¹²⁹ was a key government objective under the Socialist Decrees, the government gave much attention to the development of technical and vocational education, hoping to create enough supply of skilled workers for the state-owned factories.

¹²⁸ According to a report (n.d.) by Investia Venture Capital (a financial service company), *Public and Private Universities in Egypt*.

¹²⁹ According to Metz (1990) industrialization was intensified under Nasser's regime in the hope of making the economy less dependent on cotton export.

Under that state controlled economy, the economic objectives of education were closely tied to working for the government and the public sector, especially after the Employment Guarantee Scheme was announced. During the 1960s, the Employment Guarantee Scheme managed to absorb the bulk of labour force entrants as suggested by the low unemployment rate of only 2.2% (ILO, 2001). This was probably because the number of secondary and post-secondary graduates at the time was still commensurate with government and public sector demand and the ultimate income differentials within the economy were reasonably modest at the time. The Employment Guarantee Scheme, to a certain degree, was also ensuring equity in the labour market outcomes of education by giving all those who invested in education an equal chance of securing public sector jobs.

On the education demand side, this phase marked the beginning of what Dore (1976) named "the education explosion." The dream of the modern society and the chance given to the children of poor and middle class families to join secular education—and indeed to then secure a prestigious government job—made secondary and university education the target of every family in Egypt at that time. Besides the deeply rooted beliefs—driven by memory from the past—that lower paid manual jobs were perfectly correlated with lower levels of education and being trapped into a lower social class, this could explain the increased demand on university education that started at that phase.

It is worth noting that at this time the role of university education as an important solution to poverty and a tool to social mobility was highly emphasized (even exaggerated) in

Egyptian culture. It was not uncommon during Nasser's time that even the movies produced—in which the message delivered was reviewed and controlled by the state—consistently pictured a university graduate coming from a poor family who managed through his education to raise his entire family to higher social class, and indeed succeed to marry someone from the aristocratic class.

On balance, Nasser's centrally planned economy succeeded in enabling economic growth and controlling unemployment until 1965, after which the economy was heavily impacted by the 1965 and 1967 wars against Israel. The country remained in political and economic instability until the economic situation changed under the new government direction of President Sadat.¹³⁰

D. Phase IV: Sadat's Liberal Policies (1970-1980)

After the 1973 war against Israel, it was important for President Sadat to seek political support from the United States,¹³¹ which he believed could help him in his peace negotiations with Israel. As a result, in 1974, Sadat showed the Western World his inclination toward the establishment of a more liberal economy by announcing Egypt's open door policy, known as "*Infîtah*." Hoping to create a private-sector-driven economy to attract foreign direct investment from Arab and Western countries, Sadat cancelled

¹³⁰ Anwar Sadat was a member of the Free Officers and was President Nasser's Vice President. Sadat took over as an acting President after Nasser's death and was elected as President in 1970.

¹³¹ One of the measures taken toward that objective was ending the Soviet-Egyptian Treaty of Friendship and Cooperation in 1976 (Metz, 1990). It is worth noting that the Soviets were the main political and military supporters to Egypt during Nasser's time and at the beginning of Sadat's time.

private property sequestration laws,¹³² provided tax holidays for private investors and encouraged the privatization of public sector companies (Metz, 1990).

Investment in education was also affected by the new direction of the state. In anticipation of the increase in private investment in the newly emerging industrial sector, following *Infitah*, there was more government consideration for the development of higher education and a range of vocational training opportunities (such as agricultural and industrial)—as opposed to pre-secondary education—in order to provide the skills that would be needed by the prospective private investors. Moreover, private sector investment in education—as with all other sectors—was encouraged for the first time under *Infitah*.¹³³

Even though under *Infitah* the Egyptian economy reached unprecedented average annual growth rates of (8%), during 1974-1985 (ILO, 2001), the job content of this growth was weak. The reason could be attributed to the fact that the inflated growth rate following the open-door policy was not the outcome of increased investment in the industrial or agricultural sectors.¹³⁴ Instead, it was an outcome of an increase in oil revenue, duties from the Suez Canal, tourism, and remittances from Egyptians abroad, referred to as "rentier" sectors since they depend on natural resources and decisions made abroad.¹³⁵ Even though demand on Egyptian labour from abroad—mainly Gulf countries—

¹³² According to Moustafa (2007. P91), Trough law 69/1975 Sadat reversed sequestration orders, which were established by law 150/1964 under which the regime has sequestered private property in order to demonstrate the regime's new respect for private property and thus encourage private investment.

¹³³ The government, however, remained the main provider of education at all levels.

¹³⁴ These are two economic sectors that are capable of absorbing large volumes of labour.

¹³⁵ Abdelazim (2002)

increased during the 1970s oil boom, this was not sufficient to address the increased unemployment rate, which climbed to the 5-7% range (Hassan & Sassanpour, 2008).

At the same time, unemployment, particularly among the more educated, increased when the over-crowded government offices and public sector began to curtail the Guaranteed Employment Scheme.¹³⁶ Therefore, contrary to what was hoped for, *Infitah* marked the beginning of what Dore (1976) called, "educational disillusion" as it failed to create enough demand to absorb the large supply of skilled labour.

Under these circumstances, acquiring an educational degree no longer appeared to be a guaranteed pathway to the desired stable prestigious job, which was still widely defined as a government job during this phase. Signs of this disappointment were witnessed first, in the multiple year long waits¹³⁷ youth experienced waiting for a government job to open up and, second, in the increase of the number of educated youth working in informal employment. When compared to the stable prestigious government jobs, which have been the targets of investment in higher levels of education, informal employment is characterized by low pay, an absence of social insurance and benefits (e.g., vacation days, pensions, medical insurance) and a lack of regularity (Frost, 2008). In addition, most of the informal employment could have been achieved without the need to invest in higher levels of education.

¹³⁶ It is worth noting that despite curtailed employment, at this phase, the government and the public sector remained the main employer of Egyptians, particularly the middle class (Abdelazim, 2002).

¹³⁷ This is a wait-period of approximately 8 years, according to Birdsall and O'Connell (1999).

Informal employment¹³⁸ has played an important role in the economy since the mid-seventies, as it started absorbing large and increasing number of workers. By 1976, employment in the informal sector was estimated to be 2.4 million workers, contrasted against only 170,000 in the formal private sector. This number increased until it reached 2.9 million in 1985. By contrast, fewer than one million people were employed in the informal sector during the Nasser years of the 1960s (ILO, 2001).

The role of education in enabling social equity was also challenged for the first time by the rapidly rising income inequalities and corruption that were caused by *Infitah*. The open-door policy "increased the area of interaction between badly paid bureaucrats and rent seekers. The bureaucrats, therefore, acquired rent in their transactions" (Abdelazim, 2002) through bribes. The result was the creation of a new class, which built a fortune out of rent seeking businesses.¹³⁹ Following the widened gap between the rich and poor in Egypt, Egyptians rioted throughout the country in 1977¹⁴⁰ for the first time since the British Occupation, this time against the disillusionment of *Infitah* and the corruption and disparities it created.

It became obvious in Sadat's time that education was an unreliable path to remunerative employment or to advancing social and economic equity. However, in his speeches, President Sadat retained the slogans he inherited from his predecessor Naser's socialist regime about the importance of education as a means for upward mobility and equality

¹³⁸ According to Hassan & Sasanpour (2008), "Informal sector employment (in Egypt) is dominated by wholesale and retail trade, low technology manufacturing, construction, and transport."

¹³⁹ Instead of encouraging foreign direct investment through the elimination of foreign exchange restriction, the open-door policy encouraged corrupt practices when the low-paid government officials engaged in bribery and favoritism in granting import licenses. Krueger (1974) referred to these government officials' practices as a form of rent-seeking behaviour.

¹⁴⁰ These riots were motivated by Sadat's elimination of basic food subsidies, following a condition of a World Bank loan that he applied for in 1976 to stabilize the economy. After the riots, Sadat restored the subsidy and raised public sector wages (Metz, 1990).

and regarding the responsibility of the government to ensure these goals are reached.

This politically-influenced message has become an entrenched belief in Egyptian society even in the face of contradictory actions and outcomes.

On balance, despite the efforts of Sadat's regime to liberalize the economy, it was important for the legitimacy of the political system and its continuation in power to maintain government subsidies on basic goods and services, to keep public-sector companies producing consumer products (Abdelazim, 2002) and to continue to promise government jobs to all graduates, despite the growing difficulty in making this promise a reality. These forms of government intervention (which were maintained after Sadat throughout the 1980s for the same reasons) drove the International Financial Institutions (IFIs) to consider the Egyptian economy to be more of a state-controlled rather than a free market economy. Consequently, as will be seen below, further liberalisation of the economy was the main recommendation of the IFIs to solve the economic problems experienced in the 1980s.

E. Phase V: Structural Adjustment (1980s until the End of Mubarak's Time)

When the favourable external conditions that caused the high growth rates in the 1970s subsided, Egypt experienced an economic slow-down starting in 1986 and continuing throughout the 1990s. According to El-Mahdi (2003), the sharp decline in foreign investment inflows, following the drop in oil prices and other related sources of foreign exchange, as well as the recession in the world economy, led to a dramatic decrease in

Egypt's growth.¹⁴¹ Moreover, according to Abdelazim (2002) the fiscal budget deficit reached 23% of GDP in 1986 and the current account deficit exceeded 10% of the GDP. Together with increased foreign debt,¹⁴² it became obvious that external help was needed to solve the country's problems. Consequently in 1991, Egypt, like many other developing countries, joined the Structural Adjustment Program (SAP). Throughout the 1990s, the World Bank and International Monetary Fund (IMF) promoted SAP as a program that would help developing countries adopt free market reforms. Such reforms were believed to generate sufficient growth rates to help create employment opportunities for the growing population and correct the failure and inefficiencies caused by state intervention in the economy.

In order to enable the adoption of a free market reforms under the SAP, it was necessary that the Egyptian government undertake several economic measures, which included: tightening fiscal policy through the reduction of consumer subsidies; granting a greater role to the private sector in the economy; and enabling foreign direct investment by ending government control over investment and eliminating most tariffs on imports (El-Mahdi, 2003).

Mubarak's regime—continuing on the liberal trend that had begun under Sadat—adopted the SAP recommended measures. Even after the completion of SAP, Egypt's macroeconomic policies continued to be market-oriented, in line with the general rules of the IFIs and the global economy. In that respect, the government of Egypt implemented a

¹⁴¹ Growth in real GDP slowed down to 2.7% per year in 1986-88 (Abdelazim, 2002).

¹⁴² Due to increased borrowing under Sadat and Mubarak, at the beginning of the 1990s total external debt was about US\$49 billion. The total external debt-to-GDP ratio was 150% (El-Mahdi, 2003).

massive privatization plan from 1991 to 1997 by cutting off subsidies to the state-owned enterprises and removing public enterprises¹⁴³ from direct ministerial control (El-Mahdi, 2003). More flexibility was also given to private employers in hiring, compensating and terminating employment with the 2003 introduction of *Labour Law (No. 12)*, which was intending to encourage private (domestic and foreign) investment and enable job creation (Wahba, 2009).

As highlighted in chapter 2, within the context of these market reforms, the importance of education to the economy and the viability of government investment in the sector were assessed through a human capital lens and the sector's contribution to economic growth. Under the SAP, "the IMF's priorities listed education and training as the fourth ingredient of development, after stimulation of the market economy and good governance" (Sayed, 2006). As a result, education was one of the sectors in which the Egyptian government was advised to cut spending on, in order to tackle its budget deficit. With development agencies strongly focusing on basic education as a powerful instrument to reduce poverty and inequality throughout the 1990s and 2000s,¹⁴⁴ the Egyptian government was advised to direct its resources more towards improving access to good quality basic education and less towards higher education.

The government of Egypt took several steps that demonstrated its adoption of the IFI's policy recommendations for educational reform, as highlighted in the 2001 report

¹⁴³ In 1991, 314 public sector companies were grouped under 27 holding companies (reduced by 2013 to 16), responsible for all the affiliates in a particular sector (El-Madhi, 2003).

¹⁴⁴ After the Educational, Scientific and Cultural Organization's World Conference on "Education for All"(EFA) in March 1990, major international organizations, donors and governments unanimously pledged to achieve universal primary education and reduce illiteracy before the year 2000 (Dixon, 2010).

"Education Development National Report of The Arab Republic of Egypt from (1990-2000)" and "The National Five Year Strategic Plan (2007-2012)" entitled "Towards an Educational Paradigm Shift."¹⁴⁵ First, government spending on pre-secondary and secondary (general and vocational) schooling as a proportion of total public education spending increased from 58.8% in 1990 to 64.9% in 2000. Moreover, government spending on higher education as a proportion of total education spending decreased¹⁴⁶ from 35.7% in 1990 to 24% in 2000 (World Bank, 2002a, p.26). The licensing of private universities¹⁴⁷ was enabled by 1992's *Act No. 101*. After the *Republican Decree (No. 355)* in 1996, concerning the establishment of private universities, the number of private universities in Egypt grew until it exceeded the number of public universities.¹⁴⁸ Moreover, cost recovery and centres of excellence programs were established and offered for higher tuition fees in public universities. According to the World Bank (2002a, 2007) cost-recovery programs and higher user fees at the university level are considered correctional mechanisms to address the inequality in access to university education caused by government subsidies.¹⁴⁹ According to the World Bank's view, the government could use the revenue generated from these programs to establish funds that solicit contributions from households in order to provide funding opportunities to poor students, which would enable them to join university (World Bank, 2005).

¹⁴⁵ The National Five Year Strategic Plan (2007-2012) focused mainly on the improvement of the quality of education at the primary level and decentralization of the education system (two core principles of the World Bank education policy recommendations). <http://planipolis.iiep.unesco.org/upload/Egypt/Egypt%20National%20Strategic%20Plan%20for%20Education%20in%20Egypt%20Towards%20a%20Paradigm%20Shift.pdf>

¹⁴⁶ Fahim and Sami (2010) also showed that between 1995 and 2005 public expenditure on higher education in Egypt was declining relative to total public expenditure on education and relative to total public expenditure.

¹⁴⁷ Before 1996, private sector operation in post-secondary education was limited to the services of the American University in Cairo, an international university, and the Arab Academy for Science and Technology and Maritime Transport, which was operated by the Arab League.

¹⁴⁸ According to the Ministry of Higher Education website, there are currently 23 private universities in Egypt, compared to 20 public universities. It is worth noting that the majority of university students attend public universities due to the barrier imposed by high tuition fees imposed at Egypt's private universities.

¹⁴⁹ World Bank (2002a, p.32) highlighted that, "Taken together, it is estimated that the poorest population quintile, with more than 25 percent of all school-age children, receives about 15 percent of total public spending, compared to the richest population quintile, with about 12 percent of all school-age children and 24 percent of total public spending."

Generally, SAP and the free market reforms undertaken during this phase did not lead to the economic growth that was hoped for.¹⁵⁰ They also failed to increase foreign direct investment, which continued to drop.¹⁵¹

Moreover, the socioeconomic inequality that started during *Infitah* increased after the SAP. ILO (2001) showed that the Gini coefficients, as measures of inequality, indicate an increase in inequality on per capita expenditure in urban areas between 1995/1996 to 1999/2000 and an unchanged distribution in rural areas.¹⁵² Moustafa (2006) also showed that the percentage of income/consumption held by the poorest 20% of Egyptians dropped from 9.8% of total income/consumption in 1995 to 7.7% in 2000. He also observed that the distribution of expenditure in 1999/2000 was skewed in favour of the upper income classes, where the richest 20% of the Egyptian population spent nearly 50% of the country's total consumption expenditure.¹⁵³

The highest cost of the free market reforms, as mentioned by the ILO (2001), was the slow response of the private sector investment in compensating for the decreased public investment in the economy. Consequently, employment growth, in this phase, proved to be very weak, and the incidence of youth unemployment began to manifest itself forcefully in the early 2000s.¹⁵⁴

¹⁵⁰ The average GDP growth was 4.0% in the 1990s (ILO, 2001).

¹⁵¹ According to El-Mahdi (2003), foreign direct investment dropped from USD\$783 million in 1995 to USD\$428 million in 2002 and continued to drop after that.

¹⁵² Gini index for urban areas increased from 33.8% in 1995/1996 to 37.2% in 1999/2000 (ILO, 2001, p.15).

¹⁵³ According to a recent study by the World Bank (2014), Egypt's inequality, as measured by the Gini coefficient, is low by international standards. It is similar to a developed European OECD country and less than the United States (in which the Gini coefficient exceeds 40%). However, the paradox is that social justice and demands for equality were behind the 2011 revolution against Mubarak's regime (as highlighted in the local and international media and indeed as appeared in the slogans raised during the 2011 demonstrations, the most important of which was "Bread, freedom and social justice"). This paradox drove the World Bank (2014) to suggest that there could be a discrepancy between people's perceptions and the actual figures examining inequality in Egypt. The World Bank attributed the cause of the people's perception of inequality to the sharp increase in the gap between GDP growth and household income growth during the period that preceded the revolution, as the National Household Expenditure and Income Survey data highlighted. For more details, consult <http://www.worldbank.org/content/dam/Worldbank/egypt-inequality-book.pdf>.

¹⁵⁴ Youth unemployment increased from 11% in 1988 to 18% in 1998 (Wahba & El-Hamidi, 2005).

Furthermore, giving the lead to the private sector—as suggested by the free market reforms—left specific groups in the economy, whose access to this sector is limited, such as women, with high unemployment rates. As Assaad et al. (2000) has shown, female unemployment rates increased from 14.7% in 1990 to 24.2% in 1995. They reported that women were more adversely affected than men¹⁵⁵ by the transition to private-sector-led economy. This was the case because female workers had been the main beneficiaries of the Employment Guarantee Scheme that was suspended and because private sector employers have failed to provide a work environment that accommodates female workers, which ultimately led them to remain unemployed or withdraw from the labour market, as witnessed by the low female labour force participation rates.¹⁵⁶

In addition, the informal private sector has grown steadily in this phase, with the result that the total number of workers in this sector almost doubled over a decade. According to the ILO (2001), the total number of workers in the informal (non-agricultural) sector grew to 4.8 million in 1999¹⁵⁷ from 2.9 million in 1985, an average annual growth of 8.7%, compared to average annual growth rates of formal employment of 3.2% and of the labour force of 2.9%. On its own, the growth of the informal sector as an employer for labour market entrants could be a good economic indicator that helps to decrease youth unemployment; however, when compared with the high hopes that Egyptian households have historically placed on education and its power to secure a modern sector clerical job, this result could easily be considered a disappointment. Thus, the labour market

¹⁵⁵ The same study showed that male unemployment for the same period increased from 5.7% to 7.5%. Wahba (2009) and Assaad (2007) also reported the same finding.

¹⁵⁶ Seen from private employers' perspective, Assaad et al. (2002) highlighted that private employers might find it more costly to hire women compared to men because the labour laws impose a number of female-specific mandates on private employers, such as generous paid and unpaid maternity leaves, child care provisions, and restrictions on working hours.

¹⁵⁷ The informal private sector accounts for 86% of total number of private non-agricultural workers.

outcomes of education at this phase were basically a further intensification of the trends of the earlier phase.

Sensing the political and social unrest that could possibly result from the growing youth unemployment and the disappointment of educated youth,¹⁵⁸ Mubarak, like his predecessors, decided to maintain the socialist rhetoric of the 1950s and 1960s mainly through speeches and ambitious government promises that put job creation at the top of the government agenda.¹⁵⁹ In 2001, the Egyptian government announced its Economic and Social Development Plan," which indicated that its cornerstone was the deepening of "social dimension" of the economic reform through the creation of 700,000 productive job opportunities for youth in the 2001/2002 fiscal year. Even though the number of jobs promised was unrealistic,¹⁶⁰ it was politically important for the government to make such announcements—which utilized the well-established paternalistic role of the state—in order to tone down the effect of the free market reforms on the disappointed masses.

The historical importance of post-secondary education to Egyptians, and its link to social prestige and economic equity, posed another political threat to the Mubarak regime's endorsement of free market reforms, since these reforms did not encourage free or equal access to this level of education. As a result, "free access to all levels of education for all

¹⁵⁸ Which Dore (1976) referred to as the main problematic outcome of the "diploma disease".

¹⁵⁹ According to Assaad (2013) Arab regimes used education and its link to public sector employment as a tool of "political appeasement" in the context of the "authoritarian bargain" social contract that they have struck with their citizens in the post-independence period. This is a situation, which he argued led to dualism in the labour market.

¹⁶⁰ According to Wahba and El-Hamidi (2005), "At the time, the labour force has been increasing by 733,000 graduates entering the labour market each year for the first time. Thus, to absorb the new entrants ... the economy would need to create 833,000 new jobs every year, which required an increase in GDP by 6-7% annually." ILO (2001) also highlighted that "the economy was not capable of implementing the targeted plans of investment and employment and the pool of unemployed was increasing."

Egyptians"¹⁶¹ continued to be a government promise, without excluding university education even when government expenditure on university education—following the recommendations of the market reforms—actually decreased and cost recovery programs and higher user fees were established (as highlighted above).

With the continued promise of a free university education for all and the aggravation of the certification culture that resulted from the failure of the free market reforms to create enough secure and remunerative jobs for labour market entrants, the need and demand for university education has paradoxically become even more essential for young Egyptians who want to distinguish themselves in an increasingly competitive labour market. The result was increased household spending on education-and especially on private tutoring¹⁶²- since that is believed to pave the way to a university degree. On its own, this has made access to university dependent on the financial capability of households to pay for such private tutoring, inherently creating unequal access to Egypt's post-secondary education system. This inequity is intensified when one knows that the alternative to a university education is to join the formal vocational education track,¹⁶³ which is not valued either in the society or the labour market. Gradually the vocational education

¹⁶¹ Article 20 in the constitution under Mubarak stipulated that, "Education in all the state institutions is free at all its different levels." (Sayed, 2006).

¹⁶² According to Dixon (2010), the free market reforms required that the government cut spending on civil servants' wages. Among the most affected were public school teachers, who fostered a system of private tutoring to supplement their low pay.

¹⁶³ It is worth noting that during this phase, the government, with the support of several foreign funding agencies, took many initiatives to improve the Egyptian technical vocational and educational training system (TVET). In 2002, the Egyptian government adopted a policy statement on TVET and established The Supreme Council on Human Resources Development, which had the responsibility "to set up a national policy related to planning and developing manpower and training and set up comprehensive and global national programme for the development and optimum use thereof." As a result, many programs were developed, such as a) The National Skills Standard and Certification Project, b) the National Training Fund, c) The World Bank Higher Education Enhancement project, d) the Mubarak Kohl Initiative, e) Skill Development Program of the World Bank, and f) TVET project (European Commission) (Amer, 2007a). However, the Egyptian TVET continued to face various problems that rendered it unable to supply skilled workers to the labour market, some of which, according to Amer (2007a), include: a) the fragmentation of the institutions providing training since a very large number of institutions are in charge of vocational training in Egypt (more than 20 institutions, 14 ministries as well as agencies and public enterprises), b) insufficient budget allocations to vocational training, and c) the more theoretical than practical methods of pedagogy applied in technical and vocational education.

track¹⁶⁴ has become the education of those for whom the path to university was beyond their financial reach.

Moreover, it could be argued that the differentiated university services and programs that have resulted from the higher education reforms have contributed not only to inequality of access to higher education but also to inequality in the resulting labour market outcomes. Promoting fee-based programs at public universities and the private universities established under the free market reforms, as "changes toward service excellence and improved quality of higher education,"¹⁶⁵ made the graduates of such programs—mostly children of the upper middle class and rich families—more in demand in the labour market (Dixon, 2010). This would not have been a problem if the number of good quality jobs in the labour market was commensurate with the number of graduates of the higher education system in general. However, when there are few of these jobs available, this service differentiation¹⁶⁶ indirectly plays a labour market screening role, in which only the children of those who could afford these services, viewed as premium, would be selected for the few "good jobs" available. In that respect, such reform transformed university education, once the dream of all Egyptian households for upward mobility and socioeconomic equity, into a tool that widens social disparities. As Birdsall and O'Connell (1999, p.7) put it, "education's potential as a great leveler [in

¹⁶⁴ According to the latest data from the Ministry of Education, vocational education is attended by 70% of graduates from the upper primary level compared to 30% who attended general secondary (Egypt Ministry of Education, 2007). Assaad et al. (2009) showed that Egypt boasts a large share of vocational upper secondary graduates who are ready to join the labour market (33.8% in 2006, up from 19.9% in 1988)

¹⁶⁵ "Education Development: National Report of The Arab Republic of Egypt from (1990-2000)" (2001)

¹⁶⁶ There is no study that proves that these differentiated and private university services actually provide better quality education; however, this is a widely-held belief in Egyptian society, mainly because these differentiated services offer foreign language courses, which are appreciated in the labour market.

Egypt] has been minimal. Education may still be reinforcing rather than undermining the transmission of poverty and low education attainment across generations."

**Figure 3-2: Summary of the Political Economy of Education in Egypt
(Before and After Independence and Modern Times)**

In summary, the examination of the political economy of education in Egypt shows that the decision to invest in the objectives of education—mainly providing the skills needed in the labour market and allowing equal access to education for everyone—has been highly politicized over time (see Figure 3-2). It could be argued that the failure of the market reforms to create enough secure remunerative jobs that reward investment in higher levels of education has put the policy makers in Egypt in a dilemma, which ultimately led to the intensification of the certification culture. On the one hand, policy makers were committed to applying World Bank free market reform policies, which aimed to reduce the budget deficit; on the other hand, they needed to fulfil their social contract with the masses in order to avoid political instability.¹⁶⁷

The government's attempt to achieve a reasonable balance between the various objectives of education, levels of enrolments, private versus public funding, and the employment needs of the educated youth has become increasingly difficult after the economy became embedded in the highly volatile and competitive international markets. Surprisingly, the Egyptian government managed—through its unrealistic public promises that aimed to cover rather than solve market failure—to make these conflicting priorities coexist peacefully for a long time without being challenged (El-Khawaga, 2012) or offering an actual solution to youth education or labour market problems. The result was raising the expectations of Egyptian households with respect to education and its ability to give them access to better labour market opportunities (as will be further highlighted from the interviews of households in chapter 4). This consequently further fueled the certification culture in Egypt, which led to adverse selection in private investment in education.

¹⁶⁷ An issue that Dore (1976) has warned against in his discussion of "diploma disease", as flagged in chapter 1.

The fact that the good jobs failed to materialise was not the only market failure that increased demand for credentials in Egypt. It could also be argued that the overall socioeconomic inequity that resulted from shifting the economy from a centrally planned to a more liberal economy might have also aggravated Egypt's "diploma disease." The widened social gap between rich and poor and the cultural history of linking higher levels of education to upward social mobility made investment in education continue to appear to be a necessity for Egyptian households.

On balance, Egypt's political economy of education provides evidence against the World Bank's claim that the distortion caused by government intervention in both the labour market and education sector was the main cause fueling the certification culture and the resulting inefficient levels and patterns of household spending on education (World Bank, 2005). In fact, the same evidence that the World Bank uses to justify its claims can also be used to show that the market reforms, even though they might not have caused credentialism, have neither eradicated it, nor offered any real solution to the problem.

Chapter 4: Determinants of Household Spending on Education in Egypt and the Policy Recommendations of the World Bank

This chapter examines the views of the parents and young members of the Egyptian households interviewed on the relationship between investment in education and labour market outcomes. It analyzes the underlying motivation that has driven households across different income levels and geographic regions to invest in ensuring their children can access the highest possible level of education. The chapter also examines how the households interviewed assess the current labour market realities as compared to the outcomes they had hoped for when they had initially decided to invest in their children's education.

This general assessment by households of the education-labour market situation in Egypt¹⁶⁸ provides an opportunity to evaluate the validity of the World Bank's explanation of Egypt's education and labour market challenges and the likelihood that the policy recommendations proposed by the World Bank to the government of Egypt will help to reduce current "inefficient" levels and patterns of household spending on education (World Bank, 2007, p.28) and the resulting problems of unemployed and disaffected educated youth.

As seen in chapter 2, the World Bank (2007) attributes the problem of Egyptian household spending on private tutoring to the poor quality of education, which forces parents (across all income levels) to invest out-of-pocket in a parallel system of

¹⁶⁸ Despite not being generalizable to all Egyptian households, mainly because of the small sample size studied, it is worth noting that most of the ideas raised by the households interviewed were supported by the empirical studies that analyzed the different rounds of Egypt's Labor Market Surveys. Where applicable, these studies will be referenced.

education. Moreover, the World Bank (2002) also argues that the poor quality of the education delivered in the public system does not adequately prepare graduates for the needs of the labour market. Accordingly, the World Bank consistently advised the Egyptian government to improve the quality of secondary and pre-secondary education both in order to reduce the need for household spending on private tutoring and to better equip youth with the skills required in the labour market. This is in addition to capitalizing on the willingness of Egyptian households to pay for their children's education by encouraging parents to contribute towards improving the quality of post-secondary education by establishing cost recovery systems that also ultimately would decrease the financial burden of the education system on government.

To supplement the more macro-level evidence showing the increasing willingness of Egyptian households to invest in education, and especially in higher levels of education, 66 interviews were conducted with individual household members (parents and children in the age of 18-28) to gain a better understanding of the motivations driving that investment, and of the ways in which households perceive their experiences with the education system and with the labour market outcomes associated with their investment in education. While the number of individuals interviewed is too small to support statistically significant generalization, the structured and systematic nature of these interviews does provide qualitative data that provides further insight into how Egyptian families perceive the education-labour market challenges facing labour market entrants in Egypt.

On balance, the findings from these interviews lend support to the proposition that the relative scarcity of secure remunerative jobs in face of the abundant supply of educated youth together with the earning disparity between the good formal jobs and the informal ones has continued to fuel the certification culture by strengthening the motivation for households to invest in such certificates in order to increase the chances of their children being selected for one of those good jobs. Under these circumstances, the fact that households understand that in a deteriorating labour market the chances that their investment in education will lead to the desired results will be declining may paradoxically encourage them to invest even more heavily in education as they gamble on giving their children an opportunity to compete for those relatively scarce good jobs. In other words, household responses suggest that they view education as a means to an end and that their spending on a service like private tutoring is not motivated by a desire to purchase a better quality service, but by a desire to improve their children's chance of winning the employment lottery. Moreover, in so far as this is so, the World Bank's recommendations cannot be expected to alleviate the certification problem, to redirect private investment in education to improving the quality of the formal post-secondary education or to make a significant contribution to solving the mismatch problem between the supply and demand for educated youth.

The first part of this chapter provides an overview of the current structure of Egypt's education system and of the characteristics of the households that were interviewed in order to establish a context within which to understand the responses of the household members interviewed. The second part then discusses in more detail the perceptions of

those household members regarding both the particular labour market outcomes of their investment in education, and of the general importance of such investments in improving people's chances of success in the labour market. The third section then goes on to examine the plausibility of the World Bank's policy recommendations and asks whether these are likely to offer effective solutions to Egypt's education-labour market dilemma in light of these interview results. The final section of the chapter examines the rationality of the decisions of Egyptian household to invest in their children's higher education despite the increasingly unfavourable labour market outcomes for highly-educated youth. In other words, it asks whether this seemingly perverse household investment behaviour can actually be justified under current circumstances.

I. Overview of Egypt's Education System and Profile of Households Interviewed

A. Egypt's Education System

Egypt's education system consists of four levels of education: 1) primary (six years); 2) preparatory (three years); 3) secondary (general and vocational); and 4) post-secondary (high institutes and universities). (See Appendix 1-2 for an overview of the structure of Egypt's education system)

The primary and preparatory¹⁶⁹ levels represent compulsory basic education. After the successful completion of these levels, students undertake secondary education, which consists of an academic track (general secondary) which generally leads to university and a technical and vocational track, which consists of 4 separate streams, including: a three year technical secondary education and 2 year vocational training that provide end degrees;¹⁷⁰ a five year technical secondary¹⁷¹ education and a three year vocational training program that could possibly lead to university.¹⁷² Those who finish their basic education with sufficiently high grades in the final national exam are admitted to the general secondary level, while those with lower grades are allocated to the technical and vocational track,¹⁷³ which is why this type of education is generally considered “a dead-end repository of school failure,” as Galal (2009) has described it. However, as will be seen from the household discussions below, vocational and technical education seems to be serving an important function in that it gives those with less academic ability and/or with more limited financial capability an opportunity to get a post-primary “end degree.” It is worth noting that in 2005/2006 academic year, 61% of students attending secondary education in Egypt were in the technical and vocational track (Amer, 2007a).¹⁷⁴

¹⁶⁹ “Preparatory education is either general or vocational depending on the results at the end of primary school. Those who succeed in the national exam at the end of primary can enter into general preparatory schools while those who fail are sent to the vocational preparatory track... However, the proportion of vocational preparatory students among total preparatory students is very small as it represents 4.3% in 2005/2006... The main purpose in creating these schools was to teach practical skills that will serve for the labour market. Nevertheless, these schools fail to provide their alumni with marketable skills due to insufficient funding for supplies or teaching material.” (Amer, 2007a, p.7)

¹⁷⁰ End degree means that after finishing this level of education the person becomes certified and ready to join the labour market. Moreover, he/she is not given the option of continuing into university education.

¹⁷¹ “Graduates from these schools acquire the grade of technicians. The purpose of technical schools is to prepare students to the labour market.” (Amer, 2007a)

¹⁷² According to World Bank (2002a) the vast majority of vocational and technical education track graduates enter directly into the labour market. Only the top 5% are given the opportunity to join university. Amer (2007a) also showed that around 8% of these graduates would join technical institutes.

¹⁷³ Technical/vocational secondary education consists of three speciality areas: industry, agriculture and commerce, from which students choose which area they would like to enroll in.

¹⁷⁴ As calculated from Amer (2007a) table1 the percentage of students joining vocational and technical education out of total number of students attending secondary education accounted for 65% in 2001/2002 and for 63% in 2003/2004.

Students in Egypt mostly attend the public education system, where education is offered free of charge at all levels; however, a small percentage of students attend private schools.¹⁷⁵ Private schools in Egypt range from schools owned by individuals (for business purposes) to schools run by religious organizations (churches and mosques) to international schools and all of these are supervised by the Ministry of Education. While the first two categories teach the same curriculum as that offered in public schools, albeit sometimes supplemented by additional language courses, the international schools teach a different curriculum. Although all of these schools are classified as private schools, the quality of education that they offer differs widely and according to one of the former government officials who was interviewed, "The Egyptian government only conducts financial and administrative audits of private schools and universities but it does not monitor the quality of teaching in these institutions." (Key Informant, 2010)

In Egypt, students at all levels of education may take supplementary lessons in addition to those taught in the formal schooling system and these are classified in two types: the first is private tutoring, which is provided mostly by the school's own teachers¹⁷⁶ outside of school hours and is usually either provided at students' homes or in education centres operated by some charitable NGOs. Private tutoring is paid for by parents and is considered part of the underground economy in that the income that is generated is generally unreported and goes directly to the teacher. The second type of supplementary learning takes the form of group tutoring, which is offered for a small fee by many public schools at the end of the school day to students who might need additional help with the

¹⁷⁵ According to the World Bank (2008), in 2003, private enrolment as a share of total enrolment was 8% in primary, 5.5% in secondary, and 16.5% in post-secondary education. Amer (2007a, p.58) showed that percentage of students attending private schools at all levels of pre-university education went from 6% in 2001/2002 to 7% in 2005/2006.

¹⁷⁶ These are mostly the teachers who are teaching the students during the school day.

curriculum. Although group tutoring is also delivered by the school teachers, the income generated goes to the school, which pays the teacher a percentage.

Regardless of the type of education (private or public), many students depend on private tutoring as an important part of the education process. According to a 2010 study conducted by The Egyptian Cabinet, Public Opinion Poll Centre and Information and Decision Support Centre (IDSC) to examine households' opinion of private tutoring, among the 1022 households surveyed from all of Egypt's governorates, 65% of those attending public schools received private tutoring. The figure was similarly high, 58%, for those attending private schools.

Students at all education levels may participate in private or group tutoring, or a mix of both, depending on family budgets. Private tutoring at the general secondary level is known to be the most expensive and the one that exerts intense pressure on family budget (World Bank, 2007).

B. Profile of Households Interviewed

One parent and one young person (in the 18-28 age bracket) from each of thirty-three households selected and interviewed from three governorates having certain specified characteristics (as highlighted in chapter 1): twelve in Menia, twelve in Gharbya and nine in Greater Cairo. Because of the importance of the standard of living in determining patterns of investment in education, households in each of the three governorates were

selected from sub-sets of poor and rich households.¹⁷⁷ This section provides detail about the profiles of the households that were selected and interviewed, including the education and employment status of the young person interviewed, the highest education level reached by the household heads, their main sources of income and the household standard of living,¹⁷⁸ as observed by the condition of their accommodations.

a. Profile of the Young People Interviewed

i. Education Profile

As highlighted in Table 4-1, a total of 17 young people were interviewed from rural and lower class districts and 16 from urban and upper class districts. The sample of the young people interviewed included those who had completed university or vocational education, some who were currently completing their education and some who had dropped out at the primary or preparatory level. This mix of educational backgrounds was useful for understanding the interviewees' point of view regarding what levels of education were being sought in the labour market and the opportunities that are likely to be available based on the level, and type, of education attained.

1. Rural and Lower Class Districts

¹⁷⁷ As highlighted in chapter 1, the majority of the poor households interviewed in Gharbya and Menia were from rural areas (eight out of ten poor households). Poor households interviewed in Greater Cairo were selected from poor districts.

¹⁷⁸ As explained in chapter one, the standard of living of the households was determined by their score in the wealth index calculated from Egypt Labour Market Panel Survey (2006). More information about the households' standard of living (such as sources of income and the condition of accommodation) was collected during the interviews to provide additional context for the households' responses.

The education profile of the youth interviewed in rural and lower class districts ranged from those who had dropped out at the primary level to those who had completed university education. Out of the 17 cases interviewed in rural Menia and Gharbya and the lower class districts of Greater Cairo, six had completed university education (one of whom was pursuing a master's degree), five had finished vocational education, three had completed general secondary and were currently enrolled in university, and three had dropped out of school during basic education (two at the preparatory level and one at the primary level). In each case, the reason that was given for dropping out of school early was to find a job to support the family.

Of the six persons who completed post-secondary education in rural and lower class districts, three had attended private post-secondary technical institutes.

2. Urban and Upper Class Districts

The young people interviewed in urban and upper class districts included eight who had completed university (one of whom was finishing a master's degree), four who had finished general secondary education and were enrolled in university during the time of the interview, two who had completed vocational education and two who had dropped out at the preparatory level.

Five out of the eight interviewees who had attended university in urban and upper class districts (two from Cairo's upper class districts and three in urban Gharbya) had attended private universities or post-secondary technical institutes.

The wide variety of experiences provides some basis for a discussion of the differences in quality between private and public higher education, as perceived by those who attended these institutions and the parents who financed them. It also opened the door to a discussion on the different labour market prospects thought to be available to graduates of various types of education and educational institutions.

Table 4-1: Education and Employment Profile of Youth Interviewed

	Rural and lower class districts								Urban and upper class districts							
*Highest Degree Attained by Youth	Rural Menia	%	Rural Gharbya	%	Cairo lower class district	%	Total rural/ lower class districts	%	Urban Menia	%	Urban Gharbya	%	Cairo upper class district	%	Total urban/ and upper class districts	%
University education	1	17%	3	50%	2	40%	6	35%	2	33%	3	50%	3	75%	8	50%
General secondary	1	17%	1	17%	1	20%	3	18%	3	50%	0	0%	1	25%	4	25%
Vocational education	3	50%	1	17%	1	20%	5	29%	0	0%	2	33%	0	0%	2	13%
Preparatory education	1	17%	0	0%	1	20%	2	12%	1	17%	1	17%	0	0%	2	13%
Primary education	0	0%	1	17%	0	0%	1	6%	0	0%	0	0%	0	0%	0	0%
Total	6		6		5		17		6		6		4		16	
Employment Status																
Employed and/or working while studying	4	67%	3	50%	5	100%	12	71%	1	17%	3	50%	2	50%	6	38%
Unemployed	1	17%	2	33%	0	0%	3	18%	2	33%	3	50%	1	25%	6	38%
Studying only	1	17%	1	17%	0	0%	2	12%	3	50%	0	0%	1	25%	4	25%
Sample Size	6		6		5		17		6		6		4		16	

*Note: The highest degree attained means the last level of education completed. This means that if the interviewees reported that they were currently enrolled in university, the highest degree attained would be general secondary.

ii. Youth Employment Status

Table 4-1 also shows that the sample of young interviewees included both people who were employed and unemployed although it is worth noting that all of those listed as unemployed at the time of the interview had been previously employed. Once again this diversity of experience helped to enrich discussion of the ease or difficulty of finding a job and provided an idea of the types of jobs that the young people would accept both while studying and after completing their education.

1. Rural and Lower Class Districts

The majority of people interviewed in rural and lower class districts were employed either after finishing education or during their studies (12 out of 17). Three of the interviewees were unemployed. Of these, one was looking for a job and the other two were girls who had previously been employed but had left the labour market after marriage. The remaining two interviewees were currently pursuing studies at university without a job in hand; however, both reported that they had worked while studying during previous years of schooling.

2. Urban and Upper Class Districts

By contrast, only a minority of people interviewed in urban and upper class districts were employed (six out of 16) and six were unemployed. Four were still enrolled in university and of these none expected to be looking for a job before completing their education.

b. Profile of Heads of Households

i. Education Profile

Table 4-2 below shows that out of the 17 heads of households interviewed in rural Menia, rural Gharbya and Greater Cairo's lower class districts, eight were illiterate, five had finished primary education, two did not complete any educational degree but did know how to read and write, one dropped out at the preparatory level and one completed general secondary education. Overall, the levels of education achieved by those parents interviewed in the rural and lower class districts were much lower than the education levels achieved by their children, who mostly either finished university or vocational secondary education.

As for the urban parents, six out of the 16 heads of households interviewed in urban Menia, Urban Gharbya and Cairo upper class districts were university graduates (with one having completed a doctoral degree). Additionally, five of the heads of households held a vocational secondary degree; four had completed primary education while one mother in urban Gharbya had not completed any educational degree. Urban parents also generally achieved lower levels of education compared to their children, except for the upper class parents whose education matched that of their children.

Table 4-2: Education of Heads of Households

Highest Degree Attained by Parents	Rural and lower class districts								Urban and upper class districts							
	Rural Menia	%	Rural Gharbya	%	Cairo lower class district	%	Total rural/ lower class districts	%	Urban Menia	%	Urban Gharbya	%	Cairo upper class district	%	Total urban and high class districts	%
University education	0	0%	0	0%	0	0%	0	0%	2	33%	1	17%	3	75%	6	38%
General secondary	0	0%	0	0%	1	20%	1	6%	0	0%		0%	0	0%	0	0%
Vocational education	0	0%	0	0%	0	0%	0	0%	1	17%	3	50%	1	25%	5	31%
Preparatory education	0	0%	0	0%	1	20%	1	6%	0	0%		0%	0	0%	0	0%
Primary education	2	33%	2	33%	1	20%	5	29%	3	50%	1	17%	0	0%	4	25%
Literate	0	0%	2	33%	0	0%	2	12%	0	0%	1	17%	0	0%	1	6%
Illiterate	4	67%	2	33%	2	40%	8	47%	0	0%	0	0%	0	0%	0	0%
Sample Size	6		6		5		17		6		6		4		16	

c. Source of Income and Household Standard of Living

Table 4-3 shows that all of the households interviewed, whether in rural and Cairo lower class districts or urban and upper class districts, reported a variety of different sources of income. The standard of living for households was assessed by the condition of their accommodations, which involved the size of their house relative to the number of family members living there, the type of furniture and appliances owned as well as access to sewage and water systems.

The condition of the accommodation was assessed based on a mix of observation and subsequent verification with the heads of the households. Sources of income and standard of living were used as indicators of the capability of the households interviewed to invest in their children's education.

i. Rural and Low income Districts

The majority of the families interviewed in rural and lower class districts reported that pension income from a retired or deceased parent is one source of the household income. Roughly half of the families interviewed also reported that they depend on income from employed children, either living with them or working abroad. More than one third of the families reported they depend on employment income from one or both of the parents.

All but one of the families interviewed in the rural regions and Cairo lower class districts owned their houses (the exception was one family renting an apartment in Cairo) and in most cases home ownership was a result of inheritance. Moreover, a majority of the families interviewed in these areas (12 out of 17) had a low standard of living in that their houses were poorly-furnished and very small in relation to the number of people living there. All of the rural houses (8 out of the 12) had unfinished walls and no access to sewage services, but they did have access to clean water.

The remaining 5 out of the 17 rural and Cairo lower class districts families have relatively higher standard of living in that their houses were large, moderately furnished with finished walls; however, all but one of these households did not have access to sewage.

ii. Urban and Upper Class Districts

The majority of the families interviewed in urban and Cairo upper class districts reported employment income from one or both of the parents with pension income from retired or deceased parents being the second most frequently reported source of income.

The majority of families interviewed (11 out of 16) had apartments/houses that were reasonable in size compared to the number of persons living there and were moderately furnished with finished walls. Although two of the families in urban Gharbya lived in small poorly furnished houses all of the urban families in the sample had access to both

sewerage and clean water. Finally, three of the households interviewed in Cairo's upper class districts lived in large houses with luxurious furnishings.

Table 4-3: Sources of Income and Standard of Living of Households

Sources of Income	Rural and lower class districts								Urban and upper class districts							
	Rural Menia	%	Rural Gharbya	%	Cairo lower class district	%	Total rural and lower class districts	%	Urban Menia	%	Urban Gharbya	%	Cairo upper class district	%	Total urban and upper class districts	%
Income from owned business	3	50%	0	0%	1	20%	4	24%	2	33%	1	17%	0	0%	3	19%
Income from working parents	3	50%	1	17%	3	60%	7	41%	2	33%	4	67%	4	100%	10	63%
Pension from a retired/deceased parent	3	50%	6	100%	4	80%	13	76%	4	67%	4	67%	0	0%	8	50%
Income from working children	2	33%	5	83%	2	40%	9	53%	0	0%	2	33%	0	0%	2	13%
Income from savings	1	17%	0	0%	0	0%	1	6%	3	50%	0	0%	0	0%	3	19%
Rent from property	2	33%	2	33%	0	0%	4	24%	0	0%	1	17%	0	0%	1	6%
Standard of living																
Low	4	67%	4	67%	4	80%	12	71%	0	0%	2	33%	0	0%	2	13%
Middle	2	33%	2	33%	1	20%	5	29%	6	100%	4	67%	1	25%	11	69%
High	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3	75%	3	19%
Sample Size	6		6		5		17		6		6		4		16	

II. Household Perceptions of Education-Labour Market Realities in Egypt

The main purpose of the household interviews was to learn how households—from a variety of income levels and regions—perceive the challenges facing young Egyptians seeking to enter the labour market and how those perceptions have influenced their decisions to invest in education. As will be shown below, the interview responses were compatible with the hypothesis that Egypt's World Bank inspired education policy reforms are not likely to offer solutions to the growing mismatch between the supply of, and the demand for, the more educated graduates because those policy reforms are based on a faulty understanding of the perceptions and the motivations that are leading Egypt's households to systematically increase their investment in higher levels of education even as labour market outcomes continue to deteriorate.

This conclusion becomes apparent once one understands the full implications of the interview responses. First, it was clear that people were deeply, and generally disappointed in the unfavourable labour market opportunities available to educated labour market entrants. Indeed, the great majority complained bitterly about the scarcity of secure and remunerative jobs, especially since their investment in education had been primarily motivated by a desire to find such employment. Indeed, both parents and children expressed particularly widespread dissatisfaction with the low quality of most of the private sector jobs that had become available to them, partly because they were relatively insecure, and partly because they often require only relatively minimal levels of schooling.

However, despite their acknowledgment of these very unfavourable labour market conditions and prospects, most respondents clearly believed that investment in higher levels of education was especially important to enabling young persons to be competitive in the tight labour market of good jobs. This appeared to be driven by the belief that the labour market, and indeed the society at large, tends to value higher levels of education when filling job vacancies even when there may not be good evidence to show that the more educated employees are more productive which is, of course, the defining hallmark of the certification culture.

It is worth noting that these interviews were conducted at the end of 2010—shortly before the fall of Mubarak's regime—and that in some real sense the deep frustration and dissatisfaction with Egypt's stark and deteriorating education-labour market realities that found expression in these responses could be said to foreshadow the dramatic events of 2011.

***A. The Unfavourable Labour Market Conditions Faced by Educated Youth:
Household Perspectives***

a. Good Jobs Are Scarce

Respondents generally linked investment in education to the goal of landing secure government jobs, even though, as noted before, the government had long dismantled the Employment Guarantee Scheme and was no longer hiring new graduates. But it seems that hopes of securing government jobs subsided only very slowly, especially since, as highlighted in chapter 3, even as governments implemented austerity measures and took

steps to downsize the public sector, they often implicitly paid lip service to the old social contract and continued to promise to create enough good jobs to absorb the country's graduates. Indeed, according to two of the key informants¹⁷⁹ who were interviewed, these unrealistic promises helped to enshrine the desire for secure government jobs in Egyptian culture and it may be some time yet before households give up on this dream (Key Informants, 2010). In their responses, households emphasized their preference for government jobs in different ways:

"We educate our children to become bureaucrats. Government jobs guarantee a better future."

(A father from Rural Gharbya)

"A job in the government is what I wish for my children, especially after all the effort they have put into succeeding in their education."

(A mother in urban Menia)

"One should not underestimate the security of the government job. It might not pay as well as a private sector job but you know that no one can fire you based on their whims."

(A young woman in a lower class district in Cairo)

Empirical studies analyzing various rounds of Egypt's Labor Market Surveys—(Amer (2007), Assaad et al. (2009c), EHDR (2010), Barsoum (2013))—have all supported the

¹⁷⁹ This was reported by the former World Bank consultant (also a known education expert) and one of the former government officials.

finding that government and public sector jobs continue to be the preferred jobs for Egyptian youth which can serve as a reminder of Dore's prescient prediction (1976) that the hope of securing a clerical job by investing in post-secondary education would be one of the major drivers of the "diploma disease."

This is also a reminder that investment decisions could sometimes be driven more by perceptions than by facts, in part because the facts—meaning the expected outcomes—cannot be known at the time the investments are made. Those perceptions have remained largely unchanged even though more than half of the youth and roughly half of the parents, who were interviewed, whether in rural and lower class districts or urban and upper class districts,¹⁸⁰ reported great difficulty in securing a government job (see Tables 4-4 and 4-5 for response rates); and even though their unsuccessful search for a secure government job left them with a feeling of great disappointment that their investment in education had not paid off.

In addition it is worth noting that respondents from relatively poorer households often attributed the difficulty in obtaining a government job partly to their weak social connections which they believe to be needed to secure such jobs.

"We are poor. We do not know anyone who could recommend me for a government job that matches my field of study"

(A young woman who is a university graduate in rural Menia)

¹⁸⁰ 7 out of 17 parents in rural and lower class districts and 8 out of 16 parents in urban and upper class districts reported that it was very difficult to land a government job. More than half of the youth interviewed in both types of regions also confirmed this result.

"I wish I were rich enough to pay someone to find a government job for my son"
(A mother in rural Gharbya)

Of course, as noted earlier, the tendency to persist in treating a government job as the definitive "good job" is also associated with the fact that the formal private sector has so far failed to emerge as a viable alternative source of good jobs, thus leaving graduates no choice but to cling to the model of the state as the main employer of graduates and to continue to target the shrinking number of the government jobs. As two of the education experts¹⁸¹ interviewed emphasized, Egyptian households appreciate government employment mainly because they are longing for the security and stability that are absent in the current private sector (Key Informants, 2010). The two former government officials interviewed further confirmed that it is the "immaturity" of the private sector that forces households to look for, the now rare, government jobs. This was also highlighted in the disappointment expressed by the households in the private sector jobs that were now available to their children as employment opportunities.

¹⁸¹ This was reported by the senior program officer at Ford Foundation and the senior operation officer at the World Bank.

Table 4-4: Unfavourable Labour Market Conditions (Opinions of Parents)*

	Rural and lower class districts (rural Menia, rural Gharbya and lower income districts in Cairo)	Urban and upper class districts (urban Menia, urban Gharbya and high income districts in Cairo)
Issues Raised		
a. Good Jobs are Scarce		
Government jobs, the most desired jobs for their security, are hard to find	41%	50%
b. Dissatisfaction with the Private Sector Jobs Available		
i. Private sector jobs might pay more than government jobs; however, they are not as secure because the job can be lost at any time. They also entail longer working hours than are adequately reflected by the pay.	53%	56%
ii. The jobs available could have been secured without a university degree	24%	19%
iii. Poor returns to investment in both levels and types of education		
- Salaries earned do not cover what parents spent on private tutoring and tuition fees (in the case of private schools) over their children's years of schooling and they barely cover children's personal expenses.	41%	69%
- Whether graduating from private or public schools, young people face the same problems while searching for a good remunerative job	41%	50%
c. Long Time Taken to Secure a Job		
It takes university graduates more time to find a job than people who are less educated. This is because university graduates wait for a good job that matches their education while less educated people accept the jobs available.	24%	38%
d. Favouritism in the Labour Market		
Social connection is more effective than education in the labour market, particularly for finding good jobs. This discriminates against the poor whose social networks are not as well-situated as those of the wealthy to helping locate and secure good jobs.	65%	63%
Sample Size	17	16

* Percentages are for the people who raised the ideas listed in the table

b. Dissatisfaction with Available Private Sector Jobs

While youth unemployment is an important economic indicator, and one that readily makes newspaper headlines in Egypt—as elsewhere—and while it is one of the main points addressed in many political speeches, the employability of the youth—as defined by having a job or not—does not seem to be the main motivating factor behind Egyptian household investment in higher levels of education. Indeed, although almost all respondents expressed varying degrees of dissatisfaction with labour market outcomes, and frequently talked about "the absence of job opportunities," analysis shows that their real concern is not the absence of opportunities but rather the absence of "good"—or desirable—opportunities.

In fact, the evidence shows that nearly all of the young interviewees—as highlighted in the employment profile in Table 4-1— managed to find a job soon after finishing their education but because these were usually informal jobs,¹⁸² both parents and their children did not consider these to be real employment opportunities because: i) such private sector jobs are not secure; ii) most such jobs could have been secured without a high level of education; and iii) such jobs are generally not well remunerated and therefore yield a poor return on the investment in education.

i. Private Sector Jobs Are Not Secure

¹⁸² This is confirmed by empirical results which showed that informal private employment represents roughly half of the first jobs obtained by young Egyptians (56% for males and 42% for females) (Amer, 2007).

In comparison to the preferred government jobs, more than half the parents and more than one third of the children interviewed in all regions deplored the absence of security in private sector jobs, and they were especially critical of the fact that employers can generally lay off or fire employees without notice.¹⁸³ Moreover, parents also tended to be concerned about the absence of social security benefits in most private sector jobs, as they clearly see this as an important feature of government employment.

In general, the majority of the young interviewees in rural and lower class districts and roughly one third¹⁸⁴ of those from urban and upper class districts, emphasized the extent of this informality by reporting that they had not signed employment contracts for any of the jobs that they had taken after completing their education. They attributed this to the reluctance of private sector employers to commit to their employees, particularly young employees.

Table 4-5 below shows that some of the youth interviewed in the rural and lower class districts¹⁸⁵ faced significant health hazards working in private sector factories and workshops and reported that their employers did not care to provide health insurance or improve working conditions. Even though this issue was raised only by few young respondents in relatively poor areas, an empirical study¹⁸⁶ using data from the ELMPS06

¹⁸³ Six out of 17 children interviewed in rural and lower class districts and six out of the 16 children interviewed in urban and upper class districts criticized the insecure nature of private sector employment. The same results was also reported by nine out of the 17 parents interviewed in the rural and lower class districts and nine out of the 16 interviewed in urban and upper class districts.

¹⁸⁴ This idea may have been less frequently reported in urban and upper class districts because the majority (62%) of the youth interviewed in these regions were either unemployed or continuing their studies and, as such, did not have work experience to draw upon in this area.

¹⁸⁵ These were four young males: three from rural Menia and one from rural Gharbya. Two had completed vocational education and one had dropped out of primary education while the other dropped out at the preparatory level.

¹⁸⁶ This is mainly the work of (Assaad et al., 2009, p.18), which studied job quality in Egypt's labour market.

has shown that, in 2006, 59% of the jobs of waged and non-waged workers studied had low-quality/unsafe workplaces and 68% did not involve medical insurance coverage.

Despite the unfavourable comments made by both parents and children with respect to private sector employment, almost all the households interviewed acknowledged that jobs in the formal private sector tend to be more remunerative than equivalent government jobs. However, they generally felt that this relatively higher pay was not adequate compensation for the long working hours, a characteristic of many private sector jobs. The critical opinion of households regarding the available private sector jobs entailed statements along the following lines:

"My daughter works as a receptionist in a clinic. Sometimes she comes back home at midnight. The private sector working hours are not always good for girls."

(A mother from a lower class district in Cairo)

"I work in construction site carrying cement to higher floors. The job involves lots of hazards and there are no security regulations in the work floor."

(A young man from rural Menia who completed vocational education)

"Private sector employers won't sign a contract unless they know they want to keep you. Honestly, I didn't want to continue in my previous job so I was glad my employer did not want to sign a contract."

(A young man from an upper class district in Cairo)

"Private sector jobs can sometimes be abusive and include long working hours. But my son's income is important to the family so he has to continue with his current employer."

(A mother from rural Gharbya)

It is worth highlighting that one of the education experts interviewed reported that "In Egypt, young people and their families want to get the best out of two worlds. They would like to secure a government job as it guarantees a fixed stream of income no matter how small it is. However, because they know that a government job alone will never provide them with the salary/wage level that they aspire for they enthusiastically seek private sector employment after they manage to secure a government job in order to supplement the low pay offered there." (Key Informant, 2010)

ii. Jobs Available Could Have Been Secured Without High Levels of Education

As can be seen in Table 4-5, more than half of the young persons interviewed in rural and lower class districts and the majority of those in urban and upper class districts reported that the types of jobs available to university graduates in their communities—such as sales positions in shops, answering phones, driving cars, teaching children in nurseries—are non-prestigious and could have been secured without an investment in university education. The university graduates interviewed, whether in rural and lower class districts or urban and upper class areas, believed that their university education provided them with the theoretical background and knowledge to enable them to work in their respective fields of studies. However, they were disappointed when upon graduation they

found no jobs that could either help them apply what they had learned or even complement their knowledge with practical experience in their fields. This frustration was reflected in such statements as:

"Have you ever seen any one in Egypt working in the field he/she spent years studying? We accept what is available and the jobs available do not actually require any university education."

(Sarcastically reported by a young woman who was a university student from a lower class district in Cairo, working as a secretary while studying)

"I did not graduate from the faculty of dentistry to work as a carpenter's assistant, like most university graduates in my community do. There must be a solution to this problem."

(A young man who was a university graduate from urban Menia)

"I feel sorry for my son. All of the jobs available to him after finishing his university degree are the same types of jobs he used to do when he was still a student. It feels like all of his efforts over the past four years were not worthwhile."

(A mother from Rural Gharbya)

"I think I was well-trained in university to become a social worker and I was looking forward to learning more at work. But there are almost no jobs available in this field so I ended up working in my brother's shop until I got married."

(A young woman who was a university graduate from urban Gharbya)

These views match findings from the 2010 *Egypt Human Development Report*, which showed a significant decline in the probability of labour market entrants securing good quality jobs in either the public or the private sector. This was found to be especially true for educated youth, who have become highly dependent on informal employment, which now absorbs most such graduates. This mismatch in the education-labour market could best be explained through a failure of the labour market, rather than of education.

iii. Jobs Available and Poor Return on Investment in Education

Table 4-4 and Table 4-5 show that, a little more than one third of the parents and youth interviewed in rural and lower class districts and the majority of the parents and children interviewed in urban and upper class districts¹⁸⁷ reported that the jobs available after finishing education are not remunerative enough to pay back what the parents had spent on education, or even to cover the young people's personal expenses. This frustration is clearly expressed:

"My son used to work in a nearby city. A big part of his salary was going to transportation and the rest barely covered his personal expenses. I asked him to quit that job because it was not worthwhile. He is looking for a better job now."

(A mother from urban Menia)

¹⁸⁷ This idea was stressed particularly by parents and youth in urban and upper class districts, likely because private tutoring in these areas tends to be more expensive (compared to the cost in rural areas) and feel that such expenditure is too costly to be rewarded by the available jobs in the labour market.

"There is no way that any job my daughter would get could cover what I spent on her education. I paid a fortune for her international school and private tutoring. I am not expecting her to pay me back but I want her to at least be able to finance her own needs."

(A mother in an upper class district in Cairo)

"I know my parents paid a lot for my education and it will take a long time before I can cover what they paid, given the salaries available. However, I think I would be able to cover what they spent on my education and even more only if I could manage to get a job abroad."

(A young man from rural Gharbya)

Fully half of the parents and children interviewed in urban and upper class districts and some of those in rural and lower class districts¹⁸⁸ felt that there was no difference in the return to investment between the private and public systems of education. They reported that graduates of both systems of education face the same daunting labour market challenges:

"It does not matter whether you graduate from private or public education, I was in a private school in primary education and then I finished a post-secondary degree in a private high institute but as I told you I have been searching for a job for three years after graduation, with no luck."

¹⁸⁸ The response rate in rural and lower class areas to the questions about private schooling was lower than those in urban and upper class districts because none of the interviewees in these regions actually has been to any of the private schools. They attempted to answer the questions based on establishing a comparison between their own situation and that of neighbors and relatives who participated in private education.

(A young woman from urban Menia)

"I graduated from a private nursing institute and find it hard to be employed by big hospitals since, for licensing reasons, they prefer graduates of public nursing institutes. So I know that in my field of study, private education graduates are certainly not preferred in the job market."

(A young woman from rural Gharbya)

"The labour market does not necessarily prefer graduates from private education to those from public education. That said, it is usually true that those who finish private schooling are the ones whose parents are rich and well-connected socially and can help their children find a good job easily."

(A mother from a lower class district in Cairo)

"I know people who graduated from public universities and managed to find very good jobs after graduation. It is not necessarily true that only the graduates of private education find better jobs. It all depends on one's networking skills, not on the type of education."

(A mother from an upper class district in Cairo)

Table 4-5: Unfavourable Labour Market Conditions (Opinions of Youth)*

Issues Raised	Rural and lower class districts (rural Menia, rural Gharbya and low income districts in Cairo)	Urban and upper class districts (urban Menia, urban Gharbya and high income districts in Cairo)
a. Good Jobs are Scarce		
Good jobs are too rare to find, especially secure government jobs, jobs that match one's field of study and jobs abroad	59%	75%
b. Dissatisfaction with Private Sector Jobs Available		
i. Jobs available to post-secondary education graduates in the community could have been achieved without investing in higher levels of education (e.g., salespeople in shops, assistants in workshops and teaching in nurseries).	53%	69%
ii. Poor returns on investment in levels and types of education		
- Salaries earned do not cover what parents spent on private tutoring and tuition fees (in the case of private schools) over the years of schooling	41%	63%
- Whether graduating from private or public schools young people face the same problems while searching for a good remunerative job	12%	50%
iii. Informality of the jobs available		
- Private employment is not secure and employees can be fired without advance notice	35%	38%
- No contracts	76%	38%
- Health hazards might be experienced without medical Insurance	24%	6%
c. Long Time Taken to Secure a Job		
It takes university graduates more time to find a job than less educated people. This is because university graduates wait for a good job that matches their education while those who are less educated accept the jobs available.	59%	19%
d. Favouritism in the Labour Market		
Social connection is more effective than education in the labour market, especially for helping to find good jobs. This discriminates against the poor whose social networks are not as powerful as those of the rich in helping to locate and secure good jobs.	88%	50%
Sample Size	17	16

* Percentages are for the people who raised the ideas listed in the table

c. Time Taken to Land a Good Job

As Tables 4-4 and 4-5 showed, many of the parents and young persons interviewed highlighted that it takes university graduates longer to find a job compared to those who are less educated. This effect is more pronounced in the rural and low income areas where more than half of the youth interviewed felt that university graduates with wealthy parents would often be willing to remain unemployed until they found a good job; however, they also understood that less educated people would tend to accept any job that became available since, in most of the cases, their families needed the income and thus they could not afford to remain unemployed for a long time.

"I have seen how long it takes university graduates to find a job and I felt that I do not dare to complain about the problems I am facing in the labour market as a vocational education graduate."

(A young man from rural Menia)

"Waiting for a well-paid job that rewards one's education takes a long time. When you are poor, you have to accept any opportunity available to finance your own needs."

(A young man from a lower class district in Cairo)

Empirical studies¹⁸⁹ have corroborated these findings by showing that university graduates often stay unemployed for a longer time than those with lower levels of education because they value their degrees and are therefore more reluctant to take an informal job, instead of

¹⁸⁹ ILO (2007) Egypt school-to-work transition survey and *Egypt Human Development Report* (EHDR) (2010).

waiting for a remunerative secure job. Meanwhile, those with less education have lower expectations for the jobs that they are willing to take and they therefore end up being employed more quickly after leaving school (EHDR, 2010). One of the former government officials interviewed explained that this situation was the result of a culturally rooted belief that the graduate of any university specialization must get a job in his or her field of study or risk devaluing his or her degree by taking an unrelated, lower level job. This, as he claimed, does not match the reality of the current labour market situation, which requires more flexibility from the educated youth "if they want to earn their living" (Key Informant, 2010).

Another education expert¹⁹⁰ surmised that more educated people might take more time to become employed because they usually expect higher reservation wages¹⁹¹ as compared to less educated people, but such wages are unlikely to be offered to young people just after graduation (Key Informant, 2010). Therefore, the persistence of educated youth in finding a secure remunerative job that they think adequately rewards their investment in education might unfortunately be what keeps them unemployed. This is true, although accepting informal jobs was inevitable when educated young people finally realized they can't stay unemployed for a long time.

It is worth highlighting that the disappointment of the university graduates interviewed—whether from rural or urban areas—and the sense of hopelessness they feel regarding their chance of finding a good job in Egypt was clearly reflected in their widespread

¹⁹⁰ This was reported by the former World Bank consultant.

¹⁹¹ Reservation wages is an economic concept meaning the lowest wage rate at which a person is willing to accept a specific job.

desire to find employment abroad, mainly in the Gulf countries, where they could expect to earn a higher income than could be acquired in Egypt. However, as EHDR (2010) showed, very few young people succeed in attaining this goal because of the expenses involved in preparing for immigration, which most of them cannot afford.

d. Favouritism in Egypt's Labour Market

In addition to the long-time taken to land a desirable good job and the difficulty of the search for these rare jobs, Tables 4-4 and 4-5 also showed that the majority of the households members interviewed in all regions criticized the growing importance of social connection in the labour market as a means to help young people in their search for good jobs.

Poor households considered this situation to be unfair since the few remunerative jobs available are more likely to be allocated to the children of the rich, whose families have more powerful social connections who can inform them about the availability of good jobs and help them access these opportunities. In such circumstances, the highly competitive market for good jobs has led to labour market favoritism, in which the few good jobs are given to those who have privileged access to information about where these jobs exist.

Consequently, poor parents feel that investing in their children's education until they reach the university level is becoming much more of a dire need in face of this labour market bias. For them, education seems to be the main, feasible solution to address the

challenges and inequities of the labour market. It then comes as no surprise that poor parents in Egypt call educational certificates the weapon (*El-Selah*) with which they seek to equip their children in their battle against harsh and unfair labour market conditions.

These views were reflected in such statements as:

"As we say in Egypt, he who has a back is not beaten on the belly. If my parents were rich enough to know powerful people, I would not have faced all that I am facing now to find a job. Unfortunately, nowadays education alone is not a guarantee you will get the job you deserve."

(A young man from urban Menia)

"After my son finished his university degree, I went to see the parliamentary representative for our jurisdiction in order to help him find a job in the government. I do not have relatives or friends who can help my son and I was hoping the parliamentary representative could help, but I was disappointed. He did not even meet me. It seems no one wants to help poor people."

(A father from rural Menia)

"If my daughter had not gotten a job right after her graduation, I would have certainly started calling relatives and friends to help. I know it is very unfair but seeking help from one's social network is indispensable nowadays, even more important than education itself."

(A mother from an upper class district in Cairo)

"I can't say that social connections alone could have helped me find a good job. Who would recommend you in the first place if you don't have university degree? I think both university degrees and powerful connections are needed to get a good job."

(A young woman from rural Gharbya)

These opinions are broadly confirmed by the ILO (2007) Employers' Survey, which showed that employers' offers of good quality jobs to young graduates are usually based on social connections, which leave a large number of educated youth at a disadvantage. This is what Dore (1980) referred to as screening by favouritism.

As a matter of fact, as reported by one of the education experts interviewed "both poor and rich Egyptian households resort to their social networks to help in the search for a good job. However, the ability and effectiveness of the social network to secure these jobs seems to be directly related to the socioeconomic class in which this network exists, with an obvious advantage accruing to those from the upper social class." (Key Informant, 2010)

An alarming finding emerged from the interviews with households that might be closely-linked to the increased asymmetry of information in the market for good jobs. Several interviewees,¹⁹² from rural areas and lower class districts in Greater Cairo, mentioned that they either heard from their friends or they themselves had been asked to pay several thousand Egyptian pounds to current employees in big private companies and

¹⁹² Even though there is no evidence that this is a general phenomenon across the country, five people out of the total 33 households highlighted this phenomenon. The fact that it was mentioned across several different areas (mainly poor areas) suggests an alarming new trend.

government departments in order to guarantee a job for their children at these places. If this has become a common practice, it would extend the "diploma disease" in Egypt from paying to purchase a certificate to paying to purchase a job.

B. The Motivation behind Household Investment in Higher levels of Education

In the above discussions, the household members interviewed raised concerns about the unfavourable labour market conditions faced by their children. These concerns included complaints about the scarcity of the remunerative secure jobs, the low returns, and disappointing quality, of private sector employment and the unfairness of the labour market in preferentially allocating the scarce good jobs to those who have powerful social connections, usually the wealthy.

This section discusses the rationale behind household decisions to continue investing in higher levels of education despite their dissatisfaction with the labour market outcomes for educated youth, as highlighted above.

The households interviewed believed that even though the labour market situation is not currently as hoped for, and even though it might take time to obtain a remunerative secure jobs, more educated people are still given a priority over those less educated in being recruited into good quality jobs.¹⁹³ Likewise, their investment in university education seems important towards giving their children the opportunity to play in what

¹⁹³ Eight out of the youth and five out of the parents interviewed in rural and lower class districts and 11 out of the children and four out of the parents interviewed from urban and upper class districts flagged that university education still gives better quality opportunities in the labour market compared to vocational education or lower levels of education.

is essentially the lottery for the few good jobs available knowing that without such investment there would be no chance of winning. This logic is clearly expressed:

"It might take time to land a good job but when the time comes this job comes only to those who have a university degree."

(A young man in urban Gharbya)

"If the university degree does not enable me to find a good job in Egypt, it can certainly give me a good chance to find a remunerative job abroad."

(A male from urban Menia)

Actually, labour market signals show that households are right to believe that good quality jobs ultimately go to those with higher levels of education. An empirical study, on two rounds of Egypt's Labour Market Survey data,¹⁹⁴ showed that in Egypt the average job quality rises steadily with the level of education, especially among wage and salary earners as opposed to non-wage workers.¹⁹⁵ This means that the more educated a person is, the more likely he or she would secure a good quality job.

In their race to winning the scarce good jobs, the households interviewed revealed that it is the anticipated positive outcomes usually associated with a higher education certificate that set the motives for household investment in education more than the learning

¹⁹⁴ Studying data from Egypt Labour Market Survey of 1998 and Egypt Labour Market Panel Survey of 2006, Assaad et al. (2009) attempted to calculate an index for job quality in Egypt based on various dimensions, including earnings, formality of employment (measured by social insurance, health insurance, and trade union membership), type of workplace (field, street, office), job stability, hours of work (too many or too few) and commuting time to work.

¹⁹⁵ Non-wage workers include self-employed and unpaid family workers.

motives or an interest in improving the quality of education. This is demonstrated by their willingness to spend on education, despite their dissatisfaction with the quality of both the private and public education systems. The household interviews also showed that the anticipated positive outcomes of a post-secondary certificate go beyond getting a good job; they also include improving social opportunities and enabling upward mobility, which further support the decision to invest in university education.

a. Acknowledging Poor Quality of Education and Spending for Certification

Spending on their children's education did not mean that the households interviewed were happy about the quality of the service they received for their investment. On the contrary, regardless of income level, the parents and children interviewed reported myriad problems with both the public and private education systems that they wish could be resolved.

Tables 4-6 and 4-7 show that almost half of the parents and children interviewed in rural and lower class districts and the majority of the parents and more than one third of the children interviewed in urban and upper class districts criticized the public system of education for crowded classrooms, which do not allow teachers to give much attention to all students. This is in addition to the large volume of material studied per term, the complicated syllabi (especially at the general secondary degree level), and the absence of any formal monitoring of teacher performance in schools.

"How come we expect teachers to perform well in their jobs when they are asked to teach a class of 45 to 50 students a very complicated and long syllabus that is supposed to be covered in 30 minutes every day?"

(A young woman from Urban Menia)

"General secondary schools do not record student attendance. This means no one attends school at this level, especially because everyone takes private tutoring."

(A mother in urban Gharbya)

"Teachers come to class too demotivated to teach. I do not blame them. They know they will be repeating everything to the same crowd in the evening in their private tutoring sessions."

(A young man from lower class districts in Cairo)

One of the education experts interviewed also commented on the crowded classes and how they affect the teaching process in public schools as he said, "it is enough to say that a school principal once told me that in public schools teachers spend most of their time trying to manage and discipline the large number of students in each class after that there is barely any time left to teach them anything." (Key Informant, 2010)

Even though private schools are commonly believed to offer better quality education, some of the parents and children interviewed in rural and urban areas believed that

private schools were also subject to several problems that sometimes render the extra money spent on them not worthwhile (see Tables 4-6 and 4-7), such as:

"As long as students in public and private schools are both required to take private tutoring to pass their exams, to the parents there is no difference in quality."

(A mother in an upper class district in Cairo)

"Private and public schools teach the same curriculum. Private schools, however, have the privilege of teaching foreign language courses perhaps that is why people like to join them."

(A young woman from urban Gharbya)

The key informants interviewed further supported the view of the household members interviewed about the poor quality of education offered at private schools and universities in Egypt. As one of the education experts put it, "While private education in many other countries is operating successfully, private schools and universities in Egypt are managed like cement factories. The private providers mainly care about their profit and they are not keen to add any value to the educational process. The government therefore needs to identify operational standards and rules to regulate private sector accountability in the education sector." (Key Informant, 2010)

The complaints about the poor quality of both systems of education, however, did not prevent households from spending a significant proportion of their income to ensure that

their children achieve the highest possible level of education, a behaviour that forced one of the former government officials interviewed to say that Egyptian households themselves are playing an active role in the deterioration of the quality of the education system, without realizing it. (Key Informant, 2010)

Table 4-6: The Importance of Investing in Higher Levels of Education (Opinions of Parents)*

	Rural and lower class districts (rural Menia, rural Gharbya and low income districts in Cairo)	Urban and upper class districts (urban Menia, urban Gharbya and high income districts in Cairo)
Issues Raised (Education as a Means to an End)		
a. Poor Quality of Education Acknowledged Yet Certification is the Goal		
i. Complaints About Quality of Education		
- Public System of Education has problems (crowded classrooms, teachers do not give much attention to all students to answer their questions, large volume of material studied per term, complicated syllabi (especially at the general secondary level), and the absence of control on teacher performance in schools)	47%	88%
- Private System of Education has problems (no improvement in the quality of teaching relative to the public system yet more expensive and it still involves private tutoring, like the public system)	41%	43%
- Private Tutoring is imposed by school teachers	35%	56%
- Private Tutoring is a financial burden on households	59%	69%
ii. Certification is the Target of Household Investment in Education		
Private tutoring is essential to pass exams	30%	44%
Parents are willing to spend on hard working child's education even if this spending would crowd out other essential household expenditures (such as food)	24%	25%
Spending to help low-performing child access higher levels of education (through joining private institutes and paying teachers to help them with exams, and providing them with private tutoring in as many subjects as can be financed)	18%	25%
University education might present better opportunities in the labour market compared to vocational education; however, vocational education is the highest possible degree poor parents could afford and it is still better than leaving school at basic levels.	29%	25%
Spending to put low performing children into private higher education institutes to compensate them for not being able to join public universities with their grades. This is because higher level education matters in the labour market.	18%	25%
Sample Size	17	16

* Percentages are for the people who raised the ideas listed in the table

Perhaps the best proof of the interest of households in certification (as opposed to the quality of education) is their spending on private tutoring. Although most of the parents interviewed, regardless of their income level, revealed dissatisfaction with the financial burden that private tutoring imposes on their family budgets, many of the parents and children interviewed in rural and lower class areas and urban and upper class districts—as seen in Tables 4-6 and 4-7—believed private tutoring was important for helping students pass exams successfully. They even tried to rationalize their reliance on private tutoring by highlighting some of its benefits, including: 1) giving a chance for students to have direct and closer supervision from their teachers, especially if the child is not a hard worker; 2) providing students with an opportunity to learn in a smaller group than the normal class size; and 3) creating the opportunity for students to be trained by school teachers on possible exam questions.¹⁹⁶ These views were expressed in different ways:

"I took private tutoring to do well in the subjects I am studying. It really made studying easier for me."

(A young woman from urban Gharbya)

"I knew my son was not a hard worker and I wanted to do anything to make him pass secondary education. In a way, private tutoring helped him pass his exams."

(A mother from an upper class district in Cairo)

¹⁹⁶ This finding was also highlighted in the Public Opinion Poll Centre and the Egyptian Cabinet, Information and Decision Support Centre (IDSC) 2010 study on the opinions of heads of households on the problem of private tutoring.

"I took private tutoring mainly in English language because I was not doing well in this subject and I was afraid it might affect my overall score at the last year of secondary education."

(A young male from rural Gharbya)

These justifications show that household members view private tutoring as a score maximizing service. Households did not claim they pursued private tutoring so that the teachers help their children think creatively or develop their cognitive skills. In fact, they rather proudly reported that during the tutoring sessions teachers train the students on expected exam questions and provide them with model answers to memorize:

"It bothers me and my friends very much when, after taking private tutoring and spending a lot of money on it, the teacher puts questions on the exam that are different from what he trained us on during the private lessons."

(A young man from a lower class district in Cairo)

However, despite the complaints of parents and youth that private tutoring is indirectly forced on them by teachers,¹⁹⁷ and despite their recommendations that the government should take action to eliminate private tutoring and its financial burden, they are complicit in this exchange. When the Ministry of Education banned private tutoring in 1998, private tutoring has remained unabated (World Bank, 2002a); the parents continued to support this phenomenon, in which they apparently have a stake.

¹⁹⁷ This was reported by six out of the parents and 12 out of children interviewed in the 17 rural and lower class district households and nine out of the parents and three of the children interviewed in the 16 urban and upper class district households.

The desire to ensure their children pass from a lower to a higher level of education does not seem to be limited to household spending on private tutoring. The interviews provide other evidence that households are willing to invest time and money to ensure that their children, obtain the highest possible certificate to help improve economic and social opportunities of their children. Some of the ideas raised by the parents and youth include:¹⁹⁸

First, a few parents, particularly from rural areas and lower class districts, mentioned that sometimes when parents know that their child is not doing well in school, they pay some money to the teachers close to examination time hoping that the teachers will at least give the child a passing grade while marking their exams. What is interesting is that these parents did not see any problem with such a payment. Rather, they justified it as their way to help their children succeed:

"We are poor but we tried as much as we could to help our children get a certificate that would improve their lives in the future. The teachers, in a way, 'sympathize' with the poor parents' desire to help their children succeed".

(A mother from rural Menia)

Moreover, some of the children who finished university education mentioned that when their grades in general secondary exams were insufficient to allow them to study the field

¹⁹⁸ Each of these views separately was not mentioned by all interviewees; however, they are noted here because they do reflect the different ways in which each household was keen to equip the children with a certificate, given their different circumstances.

that they were interested in at university, they instead studied the field which their grades allowed, since, according to them, it is more important in Egyptian society to be a university graduate than to be a graduate of a particular field.¹⁹⁹ See Table 4-7.

¹⁹⁹ General secondary grades determine not only whether or not the student will be able to attend university but also which school the student will be able to attend at university. For example, schools like medicine, engineering and economics require students to score higher grades in secondary education than other fields.

Table 4-7: The Importance of Investing in Higher Levels of Education (Opinions of Youth)*

	Rural and lower class districts (rural Menia, rural Gharbya and low income districts in Cairo)	Urban and upper class districts (urban Menia, urban Gharbya and high income districts in Cairo)
Issues Raised (Education as a Means to an End)		
a. Poor Quality of Education Acknowledged Yet Certification is the Goal		
i. Complaints About Quality of Education		
- Public System of Education has problems (crowded classrooms, teachers do not give much attention to all students to answer their questions, large volume of material studied per term, complicated syllabi (especially at the general secondary level), and the absence of control on teacher performance in schools)	47%	38%
- Private System of Education has problems (no improvement in the quality of teaching relative to the public system yet more expensive and it still involves private tutoring, like the public system)	18%	25%
- Private Tutoring is imposed by school teachers who do not explain material as they should in class	68%	19%
ii. Certification is The Target of Household Investment in Education		
Private tutoring is essential to pass exams	35%	38%
Higher degrees can help in finding a remunerative job abroad, since there are not enough good jobs in Egypt	47%	13%
University education gives better opportunities in the labour market as compared to vocational education	47%	69%
Stopping at vocational education is better than lower levels of education (the higher the level the better are the chances in the labour market)	18%	0%
Even when the field of education in university studied is not of interest, what matters is to have a university certificate, regardless of the field.	12%	6%
Sometimes taking a vocational degree and shifting from science to the social science fields in general secondary are taken as easy and less expensive routes to ensure the high grades to access university.	12%	13%
Rich people put their children in private schools because they are known for equipping students with good language skills (something that is appreciated in the labour market).	41%	19%
Sample Size	17	16

* Percentages are for the people who raised the ideas listed in the table

Even though young people who attended vocational education highlighted the inability of this type of education to lead them to a good job, they still considered it the most affordable highest possible level of education that poor households could afford and, thus, deemed it better than leaving school after basic education. Possibly, poor households also prefer vocational education because, as highlighted under the education profile, it can sometimes lead to university if the student manages to obtain high grades.²⁰⁰ In this way, vocational education could be considered a less expensive route to university than general secondary education.

It could be also argued that household demand for private schools, institutes and universities is another form of demand for certification rather than for high quality education. Two of the parents interviewed in upper class districts in Greater Cairo, and one mother interviewed in urban Menia, mentioned that putting one's child into private schools is, in most cases, related to social prestige. This is related to a general perception that associates good quality with a service that is paid for, even in the absence of proof that these schools actually offer better quality education, or in the face of evidence that they do not.

A little more than one third of the children interviewed in rural areas and few of those in urban areas mentioned that demand on private schools might also be derived from their popularity for equipping students with better foreign language skills, which are appreciated in the labour market. In such case, those parents who can afford these

²⁰⁰ This idea of vocational school as an inexpensive route to university was highlighted by four of the interviewees (two from rural and two from urban areas).

schools send their children there with the hope that the affiliation with these schools will give their children a competitive advantage in the labour market.

Finally, some parents reported that private institutes and universities are sometimes used to fulfill the higher education dreams of students whose grades in the general secondary exams were too low to enable them to join public universities.²⁰¹ In these circumstances, it could be argued that the private provision of post-secondary education might be contributing further to the certification culture. So long as there are no reliable quality control checks on these institutions in Egypt,²⁰² there is no reason to believe that private institutions will not be created to meet any parental demands for certificates or degrees for their children.

Generally, the above discussion shows that household investment in Egypt's education seems to fit Dore's (1976) idea of the "diploma disease" almost perfectly in that private investment in education, at all income levels, is not driven by a desire to provide one's child with a better quality education, but rather with a desire to purchase a certificate that can be used to gain some advantage in the fierce competition for good jobs.

b. Improvement of Social Opportunities

Household interviews also showed that an important reason why parents invest in their children's education—with a focus towards university education—is their desire to see

²⁰¹ This was highlighted by three of the parents from rural and lower class districts and four of the parents from urban and upper class districts, a finding that was also confirmed in a recent study by Barsoum (2013).

²⁰² This perspective was reported by the education experts interviewed.

their children live better lives than their own²⁰³ (see Table 4-8 for a summary of the ideas raised by parents). With the increased overall economic inequity and growing social gap, the need for education as a tool for upward social mobility further encourages, as Dore (1976) highlighted, "diploma disease" and the demand for certification:

"I put my son into education because I wanted him to find a job opportunity outside of agriculture and farming. These jobs are the destiny of those who are not educated, like me. I did not want my son to suffer what I suffered."

(A father from rural Menia)

The fear of intergenerational transmission of poverty was also expressed by less educated poor fathers and mothers who showed pride in managing to ensure their children could attend university, which, for them compensates for their inability to leave them any wealth to inherit:

"Even if it would have required me to cut down on my food expenses to make my children reach university, I would not have hesitated. After all, this is what I could do for them."

(An illiterate mother from rural Gharbya)

On the other hand, poor parents whose children stopped at vocational education or left school at the basic education level, highlighted that they were not happy that their children had not gone on to university. Sometimes the child's dropping out of school was

²⁰³ More than one third of the parents from rural and lower class districts reported they hoped education would help their children to lead a better life than themselves.

attributed to a lack of interest in education and in some other cases it was blamed on the family's inability to finance the expensive university track.

Table 4-8: Investment in Higher Education and the Improvement of Social Opportunities (Opinions of Parents)*

Issues Raised (Education as a Means to an End)	Rural and lower class districts (<i>rural Menia, rural Gharbya and low income districts in Cairo</i>)	Urban and upper class districts (<i>urban Menia, urban Gharbya and high income districts in Cairo</i>)
b. Improvement of Social Opportunities		
University education gives young men and women better marriage opportunities compared to those who only completed vocational education. The latter are not perceived well in society.	47%	50%
Society appreciates the attitudes and behaviours for which university graduates are known.	18%	13%
Higher levels of education improve the social status of children above that of their poor parents.	41%	0%
University education is essential to maintain the social status of children to match that of their wealthy parents.	0%	19%
Sample Size	17	16

* Percentages are for the people who raised the ideas listed in the table

Having a university degree is also viewed as a valuable asset for marriage opportunities for both boys and girls (see Tables 4-8 and 4-9). A more educated person is likely to attract an educated spouse and thus together they would be able to create a family that belongs to a higher social class. The dream of modernity is the main goal in this case:

"My son finished a vocational degree and when he proposed to a relative who was a university graduate, her family rejected his offer. Since then, he decided to do further studies that could enable him to attend university."

(A mother from a lower class district in Cairo reported sadly)

*"Joining university is good for girls because it enables them to meet prospective suitors
and improve their chances of a good marriage."*

(Bluntly stated by a young woman in rural Gharbya)

Moreover, more than half of the young men and women interviewed saw that the importance of education to girls lies in preparing them to be sources of knowledge for their future children. This, according to them, is a benefit of girls' education regardless of the challenges they face in the labour market (see Table 4-9):

"I think girls might be benefiting more than boys from university education. Even if they fail to find a job after graduation, they will be able to use their knowledge to raise their children well. An educated mother is certainly better than an uneducated one."

(A young woman from urban Menia)

Cultural and social considerations also seem to affect parents' valuation of their children's education and their views on how it could improve their lives. Rich parents,²⁰⁴ for example, thought that it is impossible in their social class to leave their children with an education below the university level, even when they are convinced that the current education system is of poor quality. For them, it was a matter of maintaining social

²⁰⁴ Three of the parents interviewed from urban and upper class districts reported that a university education will help their children to maintain the standard of living their parents established for them. It is worth noting that rich families sometimes invest in putting their children in higher levels of education in the hope that they will become more able to manage and grow the wealth that their parents had built over time.

status. As Dore (1976) observed, "Once a status order gets itself established, men in the top ranks try to pass them on to their children; status becomes hereditary."

Some parents²⁰⁵ also reported that the educational institution is valued, regardless of its economic outcomes, because of the attitudes and behaviours that their children acquired by attending school surrounded by educated peers. For them, it is a way of protecting their children from the unacceptable behaviours that are perceived to be quite common among uneducated children, such as early smoking and drug addiction.

Table 4-9: Investment in Higher Education and the Improvement of Social Opportunities (Opinions of Youth)*

Issues Raised (Education as a Means to an End)	Rural and lower class districts (rural Menia, rural Gharbya and low income districts in Cairo)	Urban and upper class districts (urban Menia, urban Gharbya and high income districts in Cairo)
b. Improvement of Social Opportunities		
University education gives young women better marriage opportunities, even when they fail to secure good jobs.	59%	44%
Being a university graduate is appreciated in the society as a mark of social prestige.	18%	25%
Young women benefit from university education more than young men because even if they might fail to get good jobs, as university graduates they will be better at raising children and educating them than less educated women.	53%	56%
Sample Size	17	16

* Percentages are for the people who raised the ideas listed in the table

On balance, all of the parents and children interviewed raised important ideas regarding the relationship between investment in education and employment opportunities. Many highlighted their dissatisfaction with the job opportunities available. This dissatisfaction drove them to make decisions about how to prepare their children to be winners in the

²⁰⁵ Three of the parents interviewed from rural and lower class districts and two of those from urban and upper class districts highlighted the importance of the attitudes and behaviours acquired by sending their children to school.

fierce labour market competition by using their financial resources to invest in educational certificates and their social connections to facilitate access to the labour market.

The parents and children interviewed were fully aware that their investment in education is not a magic solution to reach the desired labour market outcomes—as defined by secure remunerative jobs—nevertheless, they realized that they must make this investment, even when it exerts a pressure on their budget, because without it there would be no chance for their children to secure a good job.

Thus, the interviews with parents and their children tend to support a diagnosis of adverse selection. Household decisions to invest in private education are a response to the shrinking number of good labour market opportunities available for educated youth. The scarcity of good jobs has increased the incentives to invest in higher level certificates in an attempt to offset this labour market challenge.

Consequently, the households, whether rich or poor, highlighted their frustrations that their financial burden—caused by spending on private tutoring—is increasing and, at the same time, the opportunities available to their children in the labour market are not improving. The question that remains is, could the World Bank education policy recommendations to the Egyptian government possibly help lessen the financial burden on households and improve labour market opportunities for educate youth?

In light of the evidence raised by the interviews with Egyptian households, the next section aims to examine the validity of the World Bank's explanation of Egypt's education-labour market problem, mainly centered on the poor quality of Egypt's education system,²⁰⁶ and then test the ability of the World Bank's policy recommendations to offer solutions to the problems raised by Egyptian households.

III. World Bank Policy Recommendations and the Solutions to the Education-Labour Market Problems

A. Quality of Education and Reducing Household Spending on Education

The findings from the interviews with Egyptian households, together with the empirical studies²⁰⁷ supporting these findings, suggests that household investment in education in Egypt is primarily driven by the desire for results—namely economic (labour market) and social results—and not aimed at quality improvement, as the World Bank's view suggests.

Thus, there is a high possibility that any attempt to improve quality of education without addressing the deteriorating economic opportunities for graduates might not succeed in ending the certification culture or the accompanying inefficient private spending on education.

²⁰⁶ Focusing on quality of education is a logical consequence from the assumption that the main role of education in the society is to improve skills and therefore increases productivity.

²⁰⁷ Public Opinion Poll Centre and Information and Decision Support Centre (IDSC) (2010); Barsoum (2013); Amer (2007); Assaad et al. (2009); EHDR (2010); ILO (2007)

Indeed, since the mid-1990s the government of Egypt has taken several steps—mostly funded by foreign bilateral and multilateral donors—to improve syllabi and train school teachers in modern teaching methods. However, these efforts have never succeeded in reducing the supply or demand for a shadow education system, like private tutoring, which indirectly derives its importance from the expected labour market outcomes.

On the supply side, teachers did not readily support changes to the current education system that were expected to affect their private tutoring business. In fact, even when the government attempted to solve the problem of private tutoring in 2000 by raising teacher salaries and creating a special public service cadre for them—which aimed to improve guidelines for promotions and increase benefits and basic salary at each level—many teachers continued to provide private tutoring, seeking more sources of income (Key Informant, 2010).²⁰⁸ According to the senior operations officer interviewed at the World Bank office in Egypt, the increase to teacher salaries was not comparable to the income they collect through private tutoring and teaching continues to be categorized as one of the lowest-paid jobs in Egypt²⁰⁹ (Key Informant, 2010).

As for the demand side of private tutoring, the households interviewed did not seem to envision a direct link between their goal of passing exams and improved quality of public classroom education, yet they do establish this link with their spending on private tutoring. Thus, it is highly possible that a change in the quality of teaching might not stop them from spending on private tutoring, from which they see tangible results.

²⁰⁸ This was reported by the two previous government officials at the Ministry of Education.

²⁰⁹ According to the interviewee, there are 1 million and 700 thousands teachers and administrative employees in the Ministry of Education and if under the new cadre each of them earns EGP 1000/ month (CAD\$142) this means that the Ministry will need to spend EGP1.7 billion (CAD\$243 million) on salaries only.

Likewise, solutions that aim to take advantage of the willingness of households to spend on education in order to improve the quality of the formal education system, as the World Bank (2005) has suggested, also might not succeed for the same reason. If the goal of investment is to increase a child's individual competitiveness in the labour market, as the results from the interviews suggest, it can be expected that individual parents will be less likely to want to spend their money on improving education for everyone (which does not offer a specific competitive edge for their own children over other children). Even more, as one of the former government officials interviewed stated, "Egyptian households no longer trust the government's ability to solve their problems; hence, they would be very reluctant to invest their money in any project that might promise to improve educational quality if it was suggested by the government" (Key Informant, 2010). In this situation, this former government official, as well as one of the education experts interviewed,²¹⁰ both believed that fostering civil society work in the sector of education could possibly solve this problem of mistrust between the households and the government and might help make better use of the money that the households inefficiently spend on private tutoring (Key Informant, 2010).

B. Quality of Education and Youth Labour Market Opportunities

In its explanation of Egypt's education-labour market problem, the World Bank reported:

²¹⁰ This was reported by the senior program officer interviewed at Ford Foundation. She also added that working directly with the civil society, research institutes and universities has been the strategy of Ford Foundation, unlike several foreign donors of funds such as the World Bank and the United States Agency for International Development (USAID), because it is more effective in ensuring that the outcome of the development of the education sector would meet people's needs than providing funding to the ministry.

High unemployment rates do not necessarily reflect a low demand for educated workers. Rather, they demonstrate that schools and universities often produce the wrong kinds of skills. Even in light of high unemployment rates and obvious signs of an over-educated labour force, employers complain that they cannot find workers with the right skills. (World Bank, 2002a, p.39)

The evidence available suggests that the problems experienced by young Egyptians in their search for a good job cannot be mainly attributed to the mismatch between the skills needed by employers and those that are provided by the education sector for several reasons.

First, there is no confirmation that people receiving better quality education are facing better labour market opportunities. As flagged in the household interviews above, those who attended the public system or the private system of education both complained about the same labour market challenges.²¹¹

Second, in its explanation of the skills mismatch between labour supply and demand, the World Bank's view seems to be exclusively based on the employers' point of view.²¹² However, there is little evidence to suggest that the employers are in a good position to evaluate the quality of education of graduates. Employers might claim that they do not trust the education system to equip young graduates with the skills they seek yet they still

²¹¹ This comparison is valid if we assume, as the World Bank would claim, that private schooling provides better quality education. At least, this is how these schools are promoted and perceived in society and the labour market.

²¹² The World Bank Enterprise survey showed that 20-25% of the enterprises surveyed in Egypt (from small to large enterprises) reported that a lack of skilled labour is a major problem facing their business (World Bank, 2008). Small enterprises are defined in the survey as those employing 1-19 workers, medium enterprises are those employing 20-99 workers and large enterprises are those employing more than 100 workers.

use the credentials of this faulty education as a screening tool,²¹³ not as a productivity enhancement tool, when they select jobseekers—particularly for professional/clerical positions, which are highly desired by educated youth and their families (ILO employers' survey, 2007).²¹⁴ Indeed, in studying education-occupation mismatch in Egypt, El-Hamidi (2008)²¹⁵ showed that findings from Egypt Labor Market Surveys (1998, 2006) support the job competition model, which stipulates that in a labour market with an imperfect information system, employers use education as an indicator of the cost of investing in job training.

In that respect, the quality of education does not seem to be influential in causing the problem of the educated unemployed in Egypt. This is further confirmed by the fact that the link between projections of future manpower needs and education planning has almost universally proven to be very difficult (UNESCO, 1968; Sen, 1966), especially in today's world where the relation between occupations and levels and/or types of education is far from being rigid and indeed does vary over time in almost all countries.

Moreover, the marginal productivity, which is supposed to guide policy makers in determining the types, levels and quality of education to invest in, is even more difficult to define when informal and unpaid employment account for a growing percentage of the labour market, as is the case in Egypt.

²¹³ Evidence of certification being used as a screening tool by private sector employers was proved by Assaad et al. (2009c).

²¹⁴ This survey is connected to the ILO School to Work Transition survey and covered enterprises in Egypt's formal and informal sectors.

²¹⁵ http://www.erf.org.eg/CMS/uploads/pdf/1224079504_15thAC_LBR_Fatma_El-Hamidi.pdf

Accordingly, the World Bank's explanation of the reasons that could have triggered inefficient household spending on education and that have increased unemployment among educated youth, together with the Bank's policy recommendations, are unlikely to offer the solutions that households are seeking, namely decreasing their financial burden and creating good jobs for their educated children. Indeed, there is a possibility that the recommended policies might encourage further private spending on education without actually solving the increasing mismatch between the demand and supply for educated youth.

The data in hand and the picture drawn by household interviews about the realities of the education-labour market situation in Egypt, and their responses to the labour market challenges suggest, like the analysis of the political economy of education, that the problem in Egypt's education-labour market relationship lies instead primarily in the paucity of good formal private sector jobs, which has failed to absorb the large pool of young graduates.

Indeed the complaints raised by the households about the unfavourable labour market conditions can be related, to a great extent, to: a) the failure of the free market reforms and macroeconomic policies adopted by the Mubarak regime; and b) to the incompetence of the regime in its efforts to correct these failures, as revealed in the following three points.

First, there is the households' perception of the scarcity of secure jobs, which they continue to associate with government employment while, criticizing the quality of private sector employment opportunities. This reflects the evident inability of the free market reforms and privatization to compensate for the declining role of the government as an employer of graduates. These reforms, as highlighted in the previous chapter, have instead led to increased informal employment which, in most cases, lacks continuity, benefits and security and does not reward household investment in education or meet aspirations for upward social or economic mobility.

Second, the inequality and favoritism experienced in the allocation of the few jobs that are considered good by households, also reflects the overall socioeconomic inequality and social disparities that have followed in the wake of the free market reforms in Egypt. Indeed, the circumstances under which the highly paid good quality jobs largely go to the children of the rich—who can most easily afford to provide their children with the necessary “prestigious” degrees and certificates—would contribute to maintaining current socioeconomic gaps and reducing opportunities for upward mobility.

Last but not least, as highlighted above, the decision of the regime to conceal, rather than actually to seek to correct, the failures of the free market reforms through continued unrealistic promises about future job creation has fostered adverse selection in household spending on education. As such, these promises tenuously sustained the lofty ambitions of households of the possibility of securing government employment and therefore

encouraged their spending on education toward that goal even when good government jobs are in reality becoming scarcer.

As a matter of fact, household frustration about the dwindling number of good jobs, their perception of the unfairness and inequalities in the economic and social opportunities accruing to young Egyptians, and their disappointment in the government's inability to solve education-labour market problems have not only encouraged perverse household spending on education, but were also among the drivers that set the stage for the uprising against Mubarak's regime in January 2011, a rebellion that was led by frustrated youth.

IV. The Market for Good Jobs and the Rationality of Household Investment Behaviour

In light of the above background, if household investment in education is motivated by labour market outcomes, and these outcomes do not seem to materialize, the question arises if the decision by Egyptian household to continue to invest in higher levels of education is rational, or justified?

The conclusions that have been derived from the available secondary data, supplemented by the household interview results that were generated for this thesis, call into question the basic rationale—and hence the rationality—of private investment in education. The evidence does not provide strong support for the belief that such investment is likely to achieve its objectives for everyone who chooses to invest and as such the investment decision could be considered irrational.

However, one can see the choices of households as being made in a world, in which the costs of failure to the households appear potentially disastrous, while the gains from success, although statistically improbable, appear almost unlimited. If one also adds that old beliefs in the efficacy of education die hard—especially when these beliefs have been fueled by continued unrealistic political promises—this investment becomes justified and indeed appears quite rational.

The available empirical data has shown that at the individual level, those who invested in higher education levels have a higher return to their investment and are more likely to secure the few good quality jobs than those who did not invest to this level. However, at the social level, empirical evidence showed that the majority of the unemployed are among those who invested in higher levels of education and that educated youth are increasingly accepting informal poor quality low-paid jobs.

The difference between the benefits that accrue to the investors at the individual and social levels apparently created self-interest in investing in higher education despite the knowledge that it becomes more difficult to land a good job when everyone else is targeting the same investment with the same goal.

This section examines the rationality of private investment in education both at the individual and at the social level, and the policy implication that this behaviour by households suggests.

A. Rationality of Private Spending on Education at the Individual Level

As could be inferred from the interviews, the consumer-driven expenditure of Egyptian households on education resembles playing the lottery. Even though the gamblers know their chance of winning might be slim, they are not discouraged from buying a ticket because the cost of the ticket appears much smaller than the expected possible gains. The gamblers also know that unless they buy a ticket, there is no chance that they will win.

Although Egyptian households acknowledged that their children's chances of landing a good job might be small, because good jobs are rare, in a world of bounded rationality²¹⁶ they have no choice but to use their simple evaluation of the net long term benefits of education, where the net benefit is what one might expect with more education as compared to what one might have received without it.

According to this rationale, the costs of investing in education seem smaller when compared to the costs that would be incurred if the households did not invest in ensuring their children could access higher levels of education. As the household interviews highlighted, the out-of-pocket expenses spent on education—even though they are perceived as burdensome—are rationalized because they are considered the ticket price to giving their children a chance to compete for the few remunerative secure jobs that are available. The households know that if these costs were not paid, there would be no possibility of securing one of these rare good jobs while the probability of remaining in a

²¹⁶ Under bounded rationality, decision making is considered a fully rational process of finding an optimal choice given the information available.

petty informal job²¹⁷ would grow significantly larger. In this way, the child's anticipated future income²¹⁸ from the good job, combined with the social mobility anticipated as a result of this prospective income, seem to be more influential in influencing household decisions to invest in further education than the current expenses incurred. This is essentially viewed as short term pain for a long term gain.

From the perspective of the theory of rational choice, the investment decision of households is linked to various scenarios and the decision that will be selected is the one that leads to the best possible scenario, given the information available. Since relative advantages seem to be accruing to the individuals who invest in more education (better access to the good jobs and better relative pay), private investment in education, which appears as perverse investment, could actually be reflecting rational behaviour at the individual level.

B. Rationality of Private Investment in Education at the Social Level

With increased competition for the rare good jobs, the desire of each household to give their children a better chance to secure one of these jobs will only continue to increase significantly. As such, the incentive to engage in adverse selection will tend to grow more intense, leading to "collectively irrational behaviour."²¹⁹

²¹⁷ For example, according to Bennell (1996), the predominance of subsistence household production in developing economies strongly encourages parents to invest in the schooling of their children hoping for a better future.

²¹⁸ This is true even though the opportunity cost of schooling might affect the decision of families, especially poor families who need the paid labour of their children as soon as possible.

²¹⁹ Many economists, however, would redefine this "collective irrationality" as "rational" by arguing that the investors (the households) had simply developed a greater willingness to take risks (to gamble). As highlighted in chapter 2, Psacharopoulos (1994, p.1334) argued that, "if people are willing to invest in their education, in spite of low private returns, they must be deriving some value other than monetary." This view could be challenged, though, because this willingness to take risk is not chosen by the households so

In a way, the failure of the free market reforms to create enough secure remunerative jobs for everyone created a version of the Tragedy of the Commons²²⁰ where the market for good jobs has become essentially an excludable common pool resource.²²¹ As is well known, in such case the invisible hand cannot be expected to ensure that individual self-interested behaviour will contribute to the common good.

Because in the classical Tragedy of the Commons the limited common resource can usually not be expanded,²²² the policy recommendations to address this social dilemma logically focus on lowering the demand on the limited resource by either privatizing access to the common resource or penalizing over-use through the enforcement of laws (Ostrom, 1990).

However, to address the problem of adverse selection in private investment in education and its relationship with the limited market of good jobs, penalizing households for investing in ensuring their children can access higher education seems infeasible, and highly improbable under any political system. Moreover, privatising university education and/or reducing government subsidies on higher education—which as seen before, is part of the World Bank's education reform policies—to lessen the pressure on the limited market for good jobs might end up reserving those rare good jobs for those who can

much as it is imposed on them by the changing circumstances that are, as highlighted before, in large part, driven and encouraged by their own behaviour.

²²⁰ A concept raised by Garrett Hardin (1968), which describes the outcomes of having many individuals use a scarce natural resource in common. The concept since then has been applied to many other fields to explain collective behaviour.

²²¹ A common pool resource is a resource that serves a group of people. The common pool resource becomes excludable when the group size is larger than the capacity of the resource to serve everyone. As such, people can be excluded from using the resources if, for example, they do not pay to use it. The classical example usually used to explain the common pool resource is the use of fisheries and forests.

²²² Since the concept is usually applied on natural depletable resource. Even though the labour market for good jobs in Egypt is limited, it can be expanded, unlike in the example of natural resources.

afford to complete higher education. This policy option, according to Dore (1976, p.182), would further consolidate the belief that more education leads to the prestigious jobs, fueling increased competition for these top jobs and increasing demand for credentialism. This has actually been the case in Egypt.

As a result, the phenomenon of adverse selection²²³ could only diminish either when households lose any reasonable hope of their children's success in the labour market lottery and stop investing in higher education, or when Egypt's macroeconomic policies enable the creation and expansion of good jobs that can effectively utilize the country's highly educated human resources. Otherwise, adverse selection will continue and the difference between the benefits accruing to some from investment in education at the individual level and the losses suffered by the great majority who lose the lottery will further foster wasteful investment in education and misallocation of resources.

In light of the evidence presented in Chapters 3 and 4, Chapter 5 will examine ways of addressing the adverse selection paradox in Egypt in light of the World Bank's (World Development Report, 2013) new direction which focuses development strategies on the creation of good jobs.

²²³ Adverse selection in this context refers to the increased incentive to invest in higher levels of education, despite the unfavorable labour market conditions that the more educated people face.

Chapter 5: Conclusion

The issue of increasing household spending on education in Egypt—more particularly on private tutoring—has been a hot button topic for Egyptians and has received extensive attention in the media since the 1990s (Sayed, 2006). Both the pressure that it exerts on household budgets and the possible inequality of access to education that might result out of the growing importance of this spending have been sources of extensive frustration and complaints that have posed a challenge to policy makers over the past three decades. These complaints became even more amplified when those increased levels of household spending came to be coupled with high rates of unemployment among the more educated labour market entrants, who found it more and more difficult to land remunerative jobs that could justify the investment in their education. It is this situation that set the direction for this thesis, which has attempted to answer two key questions. First, what influences households to invest heavily in seeing their children pursue post-secondary education despite their knowledge of the unfavourable labour market outcomes for educated youth? And second, are the government's World Bank supported policies appropriate for bringing relief to the Egyptian households caught in this dilemma and for dealing with the resulting imbalances in the labour market?

Because the World Bank's supply-side oriented policy recommendations have shaped Egyptian education policies since the 1990s, this thesis focused more specifically on these policies in an effort to assess their appropriateness for dealing with education-labour market problems in Egypt, which have resulted in an adverse selection bias that

leads households to invest in higher levels of education in response to deteriorating labour market outcomes.

To address this issue, this thesis first examined how the changing balance of political forces in Egypt has shaped its educational system and, hence, the relationship between education and labour markets and the balance between public and private investment in education. The outcome of this analysis was then used to examine the World Bank's claim that current education-labour market problems are rooted in the fact that earlier extensive government intervention in the labour market continues to distort the relationship between investment in education and labour market outcomes and that this problem could only be addressed if market forces were freed of those distortions.

In this context, the thesis then examined the determinants of Egyptian household spending on education—based on evidence from the qualitative data generated by the household interviews conducted for this thesis as supplemented by secondary sources—in order to test the plausibility of the World Bank's claim that mobilizing such spending toward improving the quality of education in the formal public system could possibly solve the mismatch between demand and supply of educated labour.

In chapter 2, the thesis examined the key World Bank policies that have provided guidance for public investment in education in developed and developing countries for many decades now. The chapter showed that the empirical support for these policy prescriptions comes from a large set of selected “rate of return” studies all based on

human capital theory core assumption that the contribution of education to society can be defined and measured—or approximated—by its effect on marginal productivity and consequently on incomes and on economic growth.

Based on aggregate averages calculated from these studies, the World Bank economists has derived global conclusions about the social profitability of investment in different levels and types of education, particularly with regard to three findings: a) the social profitability from investing in primary levels of education is higher than that in post-secondary education; b) private rates of return at all levels of education exceed social rates of return; and c) social returns to investment in general secondary education is higher than that in vocational secondary education. In time, the World Bank's endorsement of these results elevated those results into a "conventional wisdom" from which the Bank derived its education policy prescriptions suggesting that: a) governments should use the limited resources available for education, more efficiently by reducing spending (subsidies) on levels of education with low social rates of return (i.e. vocational and post-secondary) while increasing that on primary education, which has a high rate of social return; b) private investment in education should be encouraged for vocational and post-secondary education, which have low social rates of return; and c) education quality should be improved and be more closely linked to the needs of a private sector-led labour market in order to impart more of the skills needed to enhance productivity and thereby create more demand for educated youth. Despite acknowledging the grave methodological and statistical limitations of the rate of return to education estimates, on which these policy prescriptions were based, the World Bank

continued to promote these policies in developed and developing countries around the world.

Chapter 2 also showed that the main distinguishing features of Egypt's education-labour market situation (namely, higher rates of return for higher levels of education and higher unemployment rates among more educated youth) when viewed through the World Bank's human capital lens, are attributed to: a) government subsidies to post-secondary education, which significantly lower the private cost and thereby resulted in private returns that exceed social returns at this level of education; b) labour market distortions first introduced by the earlier Employment Guarantee Scheme, which created a deeply entrenched certification culture that remains long after the scheme was abandoned and that continues to lead households, educators and labour market actors to reward certificates as much or more than productivity and skills; and c) a consequent mismatch between the skills imparted by a certificate and examination centered education system and those actually needed by private sector employers, which lowers the demand for more educated youth and thus contributes to their high unemployment rates. Of course, this diagnosis of Egypt's problems leads directly to the conclusion that the solution would lie in minimizing government intervention and reducing (or eliminating) the distortions that feed the certification culture and prevent market feedback from restoring balance in the supply and demand for educated labour; this is in addition to improving the quality, and relevance, of the education system by inducing it to provide the skills actually demanded by private sector employers. Among other things, it is assumed that such reforms will reduce the inefficient household spending on private tutoring, which is seen

primarily as response to the current examination focused certification culture and as such, has become both a reflection of, and a contributor to, the poor quality of the current public education system.

However, despite the apparent logical plausibility of the World Bank's view, the evidence presented and discussed in this thesis suggests that the World Bank's explanation of the causes of Egypt's education-labour market problems (which are mainly attributed to supply-side problems), and the resulting policy prescriptions may not be well-suited to address the deep problems confronting the education-labour market relationship in Egypt or to improve, or even arrest the deterioration of the stark labour market conditions faced by the more educated labour market entrants in that country, for the following reasons.

First, as shown in chapter 3 the certification culture in Egypt was strongly reinforced by a much earlier government's Employment Guarantee Scheme, which promised to provide all educated Egyptians with secure government jobs; however, it turns out that even after more than forty years of free market reforms, and more than twenty years after this scheme was officially abandoned in the 1990s the certification phenomenon has by no means disappeared and that could be attributed to two main reasons: a) the failure of market reforms to create enough secure remunerative jobs to replace those previously offered by the government; and b) the increase in socio-economic inequality that has followed from those free market reforms. Taken together, these two factors have been instrumental in driving households to invest in the highest possible educational certificates (or degrees) for their children, in the hope of improving their chances in the

increasingly desperate competition for the few good jobs available at a time when those who fail in that competition face an increasingly bleak and insecure future among the growing ranks of the informally employed.

In Chapter 3 we are also reminded that because economic issues always have political dimensions one must ultimately assess the associated policy processes through a political economy lens. As the evidence in the chapter showed, the political tension caused by the outcomes of the market failures—mainly the high and persistent unemployment rates among educated youth, who extend their job search in an attempt to prevent, or postpone, their permanent absorption into informal employment and the increased financial pressure on household budgets associated with increased spending on private tutoring—led Egypt's autocratic Mubarak regime to try to absorb the anger and frustration of Egyptian youth, and their households, by making unrealistic promises about the government's commitment to equitable access to all levels of education and to job creation for Egyptian youth. However, no serious or credible explanation was given of how the government might fulfill these promises. These empty promises have consequently deepened the crisis by further raising household expectations and indirectly reinforcing the behaviours that had fueled Egypt's "diploma disease."²²⁴

These broad conclusions are lent further support in Chapter 4, in that the interviews with individual households showed that household decisions to invest in higher levels of education are primarily driven by a desire for better economic and social outcomes for

²²⁴ The "diploma disease" refers to the process in which the scarcity of good jobs - relative to the volume of graduates - will lead to an "irrational" escalation of the minimum educational levels demanded for any given job, as well as increasing demand on education as a means to an end not for learning purpose.

their children. Moreover, this desire to invest in the education of their children is not significantly diminished by the fact that they generally acknowledged the major challenges facing educated individuals trying to find good quality jobs, or by the fact that they understand that education alone will often not be enough to help them to reach this goal, without the added advantage of access to influential social networks. Indeed, the respondents were clearly keen to continue to invest to help their children reach higher levels of education in the hope of improving their chances of securing a good job, and if not in Egypt, then there is still a hope, as the households highlighted, that the university degree could possibly help them to find such a job abroad. As such, the household spending towards post-secondary education was generally viewed essentially as the price of a ticket that would allow the children the opportunity to enter the lottery for the few good jobs. These results suggest that policies aiming to solve Egypt's persistent education-labour market mismatches by improving the quality of education are unlikely to succeed unless these improvements are coupled with policies that can fulfill the promise of creating reasonably good-and relatively secure-jobs for the higher education graduates who have been, and who will be, entering Egypt's labour markets in future.

On the whole, the evidence suggests that in order for the World Bank's policies to effect a positive change in Egypt's education-labour market relationship, policies will need to go well beyond attributing education-labour market problems to the quality of education and to the distortions caused by past government labour market policies. Instead, it should be taken into consideration that Egypt's problem lies much more on the labour demand side, as reflected in the slow growth in the number of good jobs over many years.

Fortunately, the World Bank itself has recently come to recognize the importance of demand-side policy solutions to addressing the chronic education-labour market problems facing many (if not most) developing countries. Indeed, following the 2010 interviews with Egyptian households, the World Bank released its 2013 World Development Report (WDR) in which it argued that in future development policies must be more actively focused on the creation of what it named "good jobs for development." The following section examines this argument and explores its implications for Egypt's efforts to address its education-labour market challenges.

I. The World Bank is Moving Good Jobs to Centre Stage

According to WDR (2013, p.87), the conventional wisdom was to focus development strategies on growth and assume that developmental transformation, in terms of better living standards and greater social cohesion, would follow. However, experiences from many different countries showed that such transformation does not necessarily follow from economic growth. Accordingly, the new development strategies advocated in the WDR (2013), has emphasized that it is only through the creation of good jobs that development transformation can become a reality and this is mainly because "Jobs are more than just the earnings and benefits they provide. They are also the output they generate, and part of who we are and how we interact with others in society. Through these outcomes, jobs can boost living standards, raise productivity, and foster social cohesion." (WDR 2013, p.8)

According to this view, while "good jobs" are defined as those jobs that provide greater satisfaction to the individuals who hold them, "good jobs for development" are those that have the highest positive spillover effects for society and these cannot be defined in the abstract because these types of jobs that contribute most to development will depend on an individual country's circumstances. In other words, the job creation challenge is fundamentally different for agrarian economies, for conflict affected economies or for those with high rates of youth unemployment. After emphasizing the adoption of a cross sectoral multidisciplinary approach, the report concluded—though in very broad terms—that the jobs with the greatest development pay-offs are likely to be the ones that make cities function better, connect the economy to global markets, protect the environment, foster trust and civic engagement, or reduce poverty (WDR, 2013, p.17).

With this new approach to development, education is no longer blamed for skills mismatches and high rates of unemployment, especially in countries like Egypt, which is currently experiencing a youth bulge.²²⁵ Indeed, this new World Bank perspective effectively validates most of the arguments presented in this thesis when it states that: "High unemployment and skills mismatches are often attributed to shortcomings in education and training systems. But in reality they can also result from market distortions, which send the wrong signals to the education system or lead to a lack of dynamism in private firms. In such situations, massive investments in training systems, as seen in many parts of the world, might show disappointing results as hoped-for job outcomes do not materialize." (WDR, 2013, p.37) This shift clearly reframes the

²²⁵ This is unlike previous reports that maintained whether directly or indirectly—as shown in this thesis—that improving the quality of education to equip graduates with the skills needed in an open market economy would help improve the skill mismatch and ultimately improve labour market conditions for youth.

problem as more of a labour demand problem than a labour supply problem, which is the core argument of this thesis. The solution thus lies, as the report highlighted, in fostering competition, especially in more skill-intensive sectors (WDR, 2013, p.18).

Following its definition of "good jobs for development," the WDR (2013) sketched out, in broad strokes, how the governments of developing nations might embark on such a new development path. In so doing, it begins with a reminder that it is not the function of governments to create jobs since it is rather the private sector that should be able to fill this role (WDR, 2013, p.21). The role of governments, according to the WDR (2013, p.22), is to "ensure that the conditions are in place for strong private-sector-led growth, to understand why there are not enough good jobs for development, and to remove or mitigate the constraints that prevent the creation of more of those jobs." Consequently, the report suggests that in order for a government to fulfill this role, it should adopt a three-layered policy approach, which includes: a) ensuring the establishment of fundamentals, such as macroeconomic stability, an enabling business environment, human capital accumulation, and the rule of law; b) making sure that labour policies are enhancing the development payoffs from jobs, rather than undermining job creation; and c) understanding where good jobs for development lie, according to the specific country context, and prioritizing policies to foster the creation of such jobs.

The question now is whether this new attention to the creation of good jobs as an engine for development, and the related policy framework, may offer the solution needed in Egypt's context.

II. Could the Reformulated Development Agenda Help Address Egypt's Job Creation Challenge?

As argued in this thesis, Egypt has a problem in that the economy has failed to create enough good jobs to absorb its educated labour market entrants especially following the curtailing of government and public sector jobs after its free market reforms. Moreover, the explosive growth of private sector informal employment,²²⁶ which has become the dominant labour market option for educated young labour market entrants, has encouraged young Egyptians and their families to invest in higher levels of education in an attempt to improve their children's chances of avoiding the destiny of being trapped in such a low quality job. The result has been a growing pool of disappointed and disaffected educated youth who either remain unemployed for long periods in the hope of eventually obtaining a remunerative and secure job, or withdraw from the labour market in discouragement or eventually accept poor quality informal jobs available, which in most cases do not reward their investment in education.

This formulation of Egypt's problem suggests that the solution could possibly lie in: a) the creation of good formal private sector jobs, in one way or another, possibly including active industrial policies, which could be linked to appropriate technical and vocational training schemes designed and planned through partnerships between the government and private sector; and b) the enforcement of employment regulations, which would

²²⁶ As represented by low-paid insecure jobs.

encourage the provision of "decent work"²²⁷ in the private sector, minimize the loss of human capital that can result from the discouragement and withdrawal of youth from the labour market and encourage employers to focus more intensively on operational efficiencies to offset the associated costs.

Of course, the adoption of active industrial policy, as one of the possible solutions for accelerating the growth of good jobs, is controversial since it suggests that the government's involvement would need to go beyond simply laying the groundwork for private sector operations and waiting at the periphery to correct market failures when they occur. Indeed such a policy would almost certainly require "a government strategy of directional thrust, to alter the sectoral and technological structure of production towards those which probably offer greater prospects for accelerating growth in an ecologically sustainable way, with higher-wage jobs" (Wade, 2013).

As such, it is not obvious whether or not this policy solution would be well received under the new development direction of the World Bank which, as flagged in the WDR (2013) above, has preserved the mainstream view that the role of governments lies in maintaining macroeconomic stability, establishing a business-enabling environment and removing labour market barriers. It is worth noting, however, that the suggestion of industrial policy as a solution to foster growth and job creation now is becoming more welcomed by supporters of free-market policies rather than being considered a source of

²²⁷ According to the WDR (2013, p.158), "First formulated at the International Labour Conference in 1999 and later endorsed by many countries and regions, ILO's Decent Work Agenda includes a threshold below which no job should fall. The threshold has four components: productive employment (not simply any job), basic social protection according to national conditions, opportunity for voice and organization, and rights at work. As an incremental agenda, Decent Work indicators can change, depending on the economic, social, and institutional progress of countries."

major distortion to the operation of markets, particularly in the wake of the 2008 global financial crisis.²²⁸

Besides industrial policy, a proactive government solution and better regulation of employment is needed in Egypt to improve the quality of private sector jobs. This would help minimize the loss of the country's human capital resulting from youth frustration over the absence of employment protection and the precarious nature of most of the informal employment available to them. In that respect, the World Bank's new three-layered policy approach justifies the adoption of labour market policies—such as employment protection legislation and minimum wages, collective representation, active labour market programs and social insurance—as means for the government to address market failures:

Labor regulations can be designed to address labor market failures that result in inefficient or inequitable outcomes. Difficulties in enforcing long-term contracts between employers and employees may lead to excessive churning and underinvestment in training. Inefficiencies in the organization of insurance schemes may leave workers unprotected in the case of dismissal, which could force them to curtail their job search before finding the right match. Uneven market power can enable firms to set wages that are lower

²²⁸ In the ILO & UNCTAD (2014) edited book, Yifu Lin and Treichel showed that "[Industrial policy] was [considered] a strategy that defied the concept of comparative advantage and advised countries to give priority to capital-intensive heavy industries, even though capital was scarce in those economies." (ILO & UNCTAD, 2014, p.66) In addition, industrial policy involves more government intervention than neoclassical economists would approve. The result was that such policy has never been favoured as a solution to job creation and growth. After the 2008 global financial crisis, the volatility of the market powers and the severe outcomes of the market failures led the new structural economist to aim to integrate the insights of structuralism and neoclassic economic analysis concerning the growth process. In this respect, Yifu Lin and Treichel highlighted that "Economic development is ... a dynamic process marked by externalities and coordination requirements. While the market is the necessary basic mechanism for effective resource allocation at each stage of development, governments must play a proactive, facilitating role for an economy to move from one stage to another and to overcome the type of information, coordination, and externality issues that are inherent to the development of new activities and sectors" (ILO, & UNCTAD 2014, p.71).

than would be agreed upon under more competitive conditions.

Discriminatory practices can have the same effect. Uneven power or incomplete information may lead to an unsafe workplace. These market imperfections and institutional failures can affect job creation and lead to gaps between what workers gain from employment and the social value of their jobs. (WDR, 2013, p.260)

Government intervention [is] justified when individual incentives are misaligned with social goals—when, for example, employment is not rewarding for women, when young people are "queuing" to be civil servants, when cities are too congested to productively absorb more rural migrants, or when logistics costs are too high for domestic firms to engage in international trade. In these cases, government policy should aim to remove the constraints that prevent individuals, farms, and firms from making the best choices for society. (WDR, 2013, p.292)

However, the WDR (2013) emphasized that labour policies could essentially be a double-edged sword as excessive use of these policies could impede market forces and discourage, rather than encourage, job creation:

In sum, labor policies and institutions can improve labor market information, manage risk, and provide voice. But these advantages can come at the expense of labor market dynamism, reduced incentives for job creation and job search, and a gap in benefits between the covered and uncovered. The challenge is to set labor policies on a plateau—a range where regulations and

institutions can at least partially address labor market imperfections without reducing efficiency. (WDR, 2013, p.27)

It is certainly important that, as the WDR (2013) advised, labour market regulation be adopted with caution in order to strike a balance between the benefits to private employers, employees and society at large. However, achieving this balance will pose a significant challenge for the Egyptian government. On the one hand, the country, as highlighted in this thesis, is in need for better labour market regulation to ensure decent work and better quality jobs for youth in general, and educated youth in particular. On the other hand, given the current political instability and the Egyptian government's severe budget deficit,²²⁹ there is a risk that the government might choose to adopt employment regulations that are even less strict, and very likely less effective, in the hope of providing flexibility and cheap labour, that would stimulate much-needed private investment in Egypt. This was the strategy adopted by the Mubarak regime²³⁰ since the 1990s and welcomed by international financial institutions at that time. Whether or not the balance will again shift towards the benefit of the employers over employees this time and whether such choice would be blessed by the World Bank in light of its new job-centered development agenda, is still an open question.

In conclusion, this thesis has argued that the creation of good jobs accompanied with public-private investment in technical and vocational training as well as the better

²²⁹ This is evident in the massive government borrowing since 2013 from Gulf countries (such as Saudi Arabia, and the United Arab Emirates) which were important to stabilize the economy amid the political turmoil that followed the 2011 Revolution.

²³⁰ This was evident from the endorsement of labour law (No.12) of 2003, which aimed to regulate the relationship between private sector employers and employees and was siding more with the business interests, especially on the issues related to the termination of employments.

enforcement of labour regulations that improve working conditions in the private sector and make the private sector a more reliable source of employment could be the key to easing the labour market challenges faced by educated youth, while also gradually lowering the perverse incentive for household to keep spending on higher levels of education as labour market conditions deteriorate.

However, such solutions will not be attainable if job creation is chiefly left to be achieved by more flexible markets, with the government's role limited to the correction of market failure and laying the groundwork for the private sector. Rather, it is very likely that good job creation will require a more pragmatic and proactive government willing to give strategic support and direction at both the macro and micro level. That said, it must be understood that these brief indicative remarks cannot begin to do justice to the question of how countries might accelerate the creation of good jobs. It is certainly not an easy task, especially so for a country like Egypt, which is currently facing many major social, political and economic challenges. However, as WDR (2013) has noted, it is an issue that will have to be explicitly addressed if countries like Egypt are to solve their chronic youth labour market problems.

III. Topics for Future Research

The question of how Egypt would be able to generate more good jobs, in light of the World Bank's new definition of the roots of developmental transition, and the current political and economic instability, is a question that would benefit from future research.

More research is also needed in order to assess the possible benefits and costs of enforcing labour market regulations that would improve the quality of private sector employment. In other words, what would be the impact of such regulations on labour market participation and unemployment rates, especially for youth and women (the most vulnerable groups to poor quality jobs)? Moreover, to what extent the enforcement of labour regulations would be considered discouraging to the prospects of private investment in Egypt?

A third possible future research topic would be a study of the extent to which attaining a higher education certificate in Egypt has come to be seen as a stepping stone, not to a good job in Egypt, but to good jobs and a new life in a country other than Egypt. It would be interesting to explore what the consequences may be of this motivation for investment in higher education on the country's policies that aim to create good jobs locally.

Finally, more research is needed about the most effective modes of delivering technical and vocational training in Egypt. In other words, are there lessons learnt from the experience of similar developing countries that Egypt can benefit from?

Bibliography

- Abdelazim, S. S. (2002, November). Structural Adjustment and the Dismantling of Egypt's Etatist System (Doctoral dissertation), Virginia Polytechnic Institute and State University, Blacksburg, VA. Retrieved from <https://vtechworks.lib.vt.edu/handle/10919/5534/browse?value=Abdelazim%2C+Saleh+S.&type=author>
- Abdelrahman, M. (2004). *Civil Society Exposed: The Politics of NGOs in Egypt*. London, UK: Tauris Academic Studies.
- Abdel Samee, M. (2010, September 30). Personal interview.
- Acemoglu, D., & Autor, D. (2009). *Lectures in labor economics*. Unpublished manuscript, Department of Economics, Massachusetts Institute of Technology, Cambridge, MA. Retrieved from <http://economics.mit.edu/files/4689>
- Adams, A. V. (2007, February). *The role of youth skills in the transition to work: A global review* (Working Paper No. 5). World Bank HDNCY Human Development Network Children and Youth Department Working Paper Series. Retrieved from <http://siteresources.worldbank.org/INTCY/Resources/395766-1187899515414/RoleofYouthSkills.pdf>
- Ahlburg, D. A., & Amer, M. (2004, June 8-10). *Labour market mobility among Egyptian youth*. Paper presented at the Research Workshop on Gender, Work and Family in the Middle East and North Africa, Mahdia, Tunisia. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1194089287_Labor-MonaAmer.pdf
- Alston, P., & Bhuta, N. (2005). *Human rights and public goods: Education as a fundamental right in India* (Working Paper No. 5). Economic, Social and Cultural Rights Series Human Rights and Global Justice Working Paper Series. Retrieved from <http://www.chrgj.org/publications/docs/wp/Alston&Bhuta%20Human%20Rights%20and%20Public%20Goods%20-%20%20Education%20as%20a%20Fundamental%20Right%20in%20India.pdf>
- Amer, M. (2007a, January). *Transition from education to work: Egypt country report*. European Training Foundation (ETF) Working Document. Retrieved from http://zanran_storage.s3.amazonaws.com/www.meda-etc.net/ContentPages/1145740834.pdf
- Amer, M. (2007b, September). *The Egyptian youth labor market school-to-work transition 1998-2006* (Working Paper No. 0702). Economic Research Forum Working Paper Series. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1194099458_Amer.pdf

- Amer, M., & Simonnet, V. (2008, November 23-25). *Labor market transitions in Egypt: The impact of the first employment status*. Paper presented at the 15th Annual Economic Research Forum Conference on Equity and Economic Development, Cairo, Egypt. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1224079321_15thAC_LBR_Amer_Simonnet.pdf
- Angel-Urdinola, D. F., & Tanabe, K. (2012, January). *Micro-determinants of informal employment in the Middle East and North Africa region* (Discussion Paper No. 1201). SP Discussion Paper Series. Retrieved from http://www-wds.worldbank.org/external/default/WDSCContentServer/WDSP/IB/2012/02/01/000333038_20120201032926/Rendered/PDF/665940NWP00PUB0Box365795B0SPDP01201.pdf
- El-Araby, A. (2009, June 8). Access and equity in higher education: A comparative assessment of financing policies in six Arab countries. In A. Galal & T. Kanaan (Eds.), *Financing Higher Education in Arab Countries*. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1245583025_FinancingHigherEducationSixArabCountries.pdf
- Aslam, M., & Kingdon, G. G. (2008). Gender and household education expenditure in Pakistan. *Applied Economics*, 40(20), 2573-2591.
- Assaad, R. (1997). The effects of public sector hiring and compensation policies on the Egyptian labor market. *World Bank Economic Review*, 11(1), 85-118.
- Assaad, R. (2006). Institutions, household decisions, and economic growth in Egypt. *Contributions to Economic Analysis*, 278, 385-411.
- Assaad, R. (2007a, September). *Labor supply, employment and unemployment in the Egyptian economy, 1988-2006* (Working Paper No. 0701). Economic Research Forum Working Paper Series. Retrieved from <http://www.mafhoum.com/press10/308E14.pdf>
- Assaad, R. (2007b). *Unemployment and youth insertion in the labour market in Egypt*. (Working Paper No. 118). The Egyptian Centre for Economic Studies.
- Assaad, R. (2009). *The Egyptian labor market revisited*. Cairo, Egypt: The American University in Cairo Press.
- Assaad, R. (2013, August). *Making Sense of Arab Labor Markets: The Enduring Legacy of Dualism* (Discussion Paper No. 7573). Institute for the Study of Labor (IZA) Discussion Paper Series.. Retrieved from <http://anon-ftp.iza.org/dp7573.pdf>
- Assaad, R., Badawy, E., & Krafft, C. (2014). *Differences in pedagogy, accountability, and perceptions of quality by type of higher education in Egypt and Jordan*

- (Working Paper No. 828). Economic Research Forum Working Paper Series. Retrieved from <http://www.erf.org.eg/CMS/uploads/pdf/828.pdf>
- Assaad, R., Salehi-Isfahani, D., & Hendy, R. (2014) *Inequality of opportunity in educational attainment in Middle East and North Africa: evidence from household surveys* (Working Paper No. 834). Economic Research Forum Working Paper Series. Retrieved from http://www.eldis.org/go/home&id=69874&type=Document#.VJ3YO_Bzw
- Assaad, R., & Krafft, C. (June 2014). *Why the unemployment rate is a misleading indicator of labour market health in Egypt* (No.14). Economic Research Forum Policy Perspective.
- Assaad, R., & Krafft, C. (2013a). *The structure and evolution of employment in Egypt: 1998-2012* (No. 805). Economic Research Forum Working Paper Series. Retrieved from <http://www.erf.org.eg/CMS/uploads/pdf/805.pdf>
- Assaad, R., & Krafft, C. (2013b). *The evolution of labor supply and unemployment in the Egyptian economy: 1998-2012* (No. 806). Economic Research Forum Working Paper Series. Retrieved from <http://www.erf.org.eg/CMS/uploads/pdf/806.pdf>
- Assaad, R., Binzel, C., & Gadallah, M. (2009a). Transitions to employment and marriage among young men in Egypt. *Middle East Development Journal*, 2(1), 89-120.
- Assaad, R., Roushdy, R., & Rashid, A. (2009b). *Measuring and Operationalizing Job Quality in Egypt* (Working Paper No. 1). Population Council: Gender and Work in the MENA Region Working Paper Series. Retrieved from <http://www.popcouncil.org/uploads/pdfs/wp/mena/01.pdf>
- Assaad, R., Salehi-Isfahani, D., & Tunalı, I. (2009c). A comparative study of returns to education of urban men in Egypt, Iran, and Turkey. *Middle East Development Journal*, 1(2), 145-187. Retrieved from <http://filebox.vt.edu/users/salehi/medj2009.pdf>
- Assaad, R., & Barsoum, G. (2007, September). *Youth exclusion in Egypt: In search of "second chances"* (Working Paper No. 2). The Middle East Youth Initiative Working Paper Series. Retrieved from http://www.academia.edu/4881842/Youth_Exclusion_in_Egypt_In_Search_of_Second_Chances
- Assaad, R., Levison, D., & Zibani, N. (2007, July). *The effect of child work on schooling: Evidence in Egypt* (Working Paper No. 2007-04). MPC Minnesota Population Center Working Paper Series. Retrieved from http://www.researchgate.net/publication/46453560_The_Effect_of_Child_Work_on_School_Enrollment_in_Egypt/file/9fd506d7fddd2321.pdf

- Assaad, R., & El-Badawy, A. (2004, June 8-10). Private and group tutoring in Egypt: Where is the gender inequality? Paper presented to the Workshop on Gender, Work and Family in the Middle East and North Africa, University of Minnesota, Mahdia, Tunisia. Retrieved from <http://www.mafhoum.com/press7/222S22.pdf>
- Assaad, R., El-Hamidi, F., & Ahmed, A. U. (2000, June). *The determinants of employment status in Egypt* (Working Paper No. 88). FCND Discussion Paper Series. Retrieved from <http://ageconsearch.umn.edu/bitstream/16440/1/fc000088.pdf>
- Bahaaeddin, H. K. (2001, September 22). Egyptian Minister of education battling in vain against banned private tuition. *Albawaba News*. Retrieved from http://www.albawaba.com/news/report-egyptian-minister-education-battling-vain-against-banned-private-tuition?quicktabs_accordion=0
- Baker, E. L. (1988, January). *Can we fairly measure the quality of education?* (Technical Report No. 290). Center for Research on Evaluation, Standards, and Student Testing CSE Technical Report Series. Retrieved from <http://www.cse.ucla.edu/products/reports/TR290.pdf>
- Barro, R. J., & Lee, J. (1993, April). *International comparisons of educational attainment* (Working Paper No. 4349). NBER National Bureau of Economic Research Working Paper Series. Retrieved from <http://www.nber.org/papers/w4349.pdf>
- Barsoum, G. (2007, February). *Egypt labour market panel survey 2006: Report on methodology and data collection*. Economic Research Forum Working Paper Series. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1208864279_Barsoum.pdf
- Barsoum, G. (2013, December 7-8). *Young people's job aspirations in Egypt and the continued preference for a government job*. Paper presented at The Egyptian Labor Market in a Revolutionary Era: Results from the 2012 Survey Economic Research Forum Conference, Cairo, Egypt. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/Youth_Job_Aspirations_Barsoum.pdf
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. New York, NY: Columbia University Press for the National Bureau of Economic Research.
- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). Chicago, IL: University of Chicago Press.
- Behrman, J. R., & Birdsall, N. (1983). The quality of schooling: Quantity alone is misleading. *The American Economic Review*, 73(5), 928-946. Retrieved from <http://www.jstor.org/stable/1814663>

- Bellew, R., & Moock, P. (1990). Vocational and technical education in Peru. *Economics of Education Review*, 9(4), 365-75.
- Bennell, P. (1996a). Rates of return to education: Does the conventional pattern prevail in sub-Saharan Africa? *World Development*, 24(1), 183-199.
- Bennell, P. (1996b). Using and abusing rates of return: A critique of the World Bank's 1995 education sector review. *International Journal of Educational Development*, 16(3), 235-248.
- Benzel, C. (2011, November). *Decline in social mobility: Unfilled aspirations among Egypt's educated youth*. (Discussion Paper No. 6139). Institute for the Study of Labor (IZA) Discussion Paper Series. . Retrieved from <http://ftp.iza.org/dp6139.pdf>
- Bhagwati, J. N., & Srinivasan, T. N. (1977). Education in a 'job ladder' model and the fairness-in-hiring rule. *Journal of Public Economics*, 7, 1-22.
- Birdsall, N., & O'Connell, L. (1999, March 2). *Putting education to work in Egypt*. Paper presented at the Egyptian Center for Economic Studies Growth Beyond Stabilization: Prospects for Egypt Conference, Cairo, Egypt.
- Bivens, J., Avirgan, T., & Gammage, S. (2005). *Good jobs, bad jobs, no jobs: Labor markets and informal work in Egypt, El Salvador, India, Russia, and South Africa*. Retrieved from http://www.epi.org/publication/books_good_jobs/
- BMZ. (2013). Moving jobs to the center stage. *Berlin Workshop Series 2013*. Edited by GIZ and World Bank. Retrieved from http://siteresources.worldbank.org/EXTNWDR2013/Resources/8258024-1320950747192/8260293-1320956712276/Moving_Jobs_to_the_Center_Stage.pdf
- Bouassida, I. & Lahga, A. (2010, October). *Household expenditure polarization: Evidence from the Arab region* (Working Paper No. 559). Economic Research Forum Working Paper Series. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1287903518_559.pdf
- Bourguignon, F., & Verdier, T. (2005). The political economy of education and development in an open economy. *Review of International Economics*, 13(3), 529-548.
- Bray, M. (2002). *The costs and financing of education: Trends and policy implications*. Manila, Philippines: Asian Development Bank.
- British Council. (2013). *The revolutionary promise: Youth perceptions in Egypt, Libya and Tunisia*. British Council Report. Retrieved from

http://www.britishcouncil.org/sites/britishcouncil.uk2/files/revolutionary-promise-summary_0.pdf

- Broadfoot, P., & Black, P. (2004). Redefining assessment? The first ten years of *Assessment in Education*. *Assessment in Education*, 11(1), 7-26. Retrieved from https://cmap.helsinki.fi/rid=1G5ND18R4-1QLJN7R-1SB/assessment_redefining.pdf
- Campante, F. R., & Chor, D. (2012). Why was the Arab World poised for revolution? Schooling economic opportunities, and the Arab Spring. *Journal of Economic Perspectives*, 26(2), 167-188.
- Central Agency for Public Mobilization and Statistics (CAPMAS). (2013). *Egypt statistical yearbook 2013*.
- Carnoy, M. (1985). The Political Economy of Education. *International Social Science Journal*, 37(2), 157-173.
- Coy, P. (2011, February 2). The youth unemployment bomb: From Cairo to London, too many young people are jobless and disaffected. Inside the global effort to put the next generation to work. *Bloomberg Businessweek*.
- Cuesta, M. B., & García-Pérez, J. I. (2007, August). *School to work transitions and the impact of public expenditure on education* (Working Paper No. 8/2007). Economic Analysis Working Paper Series. Retrieved from <http://www.uam.es/departamentos/economicas/analecon/especifica/mimeo/wp20078.pdf>
- Curtin, T. R. C. (1996). Project appraisal and human capital theory. *Project Appraisal*, 11(2), 66-78.
- Curtin, T. R. C., & Nelson, E. A. S. (1999). Economic and health efficiency of education funding policy. *Social Science & Medicine*, 48(11), 1599-1611.
- Datt, G., Jolliffe, D., & Sharma, M. (1998, August). *A profile of poverty in Egypt: 1997* (Working Paper No. 49). Food Consumption and Nutrition Division Working Paper Series. Retrieved from <http://www.ifpri.org/sites/default/files/pubs/divs/fcnd/dp/papers/dp49.pdf>
- De Grip, A. et al. (2007, July). *Job-worker mismatch and cognitive decline* (Discussion Paper No. 2956). Institute for the Study of Labor (IZA) Discussion Paper Series. Retrieved from <http://ftp.iza.org/dp2956.pdf>.
- Dixon, M. (2010). Investing in inequality education reform in Egypt. *Middle East Report*, 255, 40-47. Retrieved from

http://www.academia.edu/799043/Investing_in_Inequality_Education_Reform_in_Egypt

- Dore, R. (1976). *The diploma disease: education, qualification and development*. Berkeley, CA: University of California Press.
- Dore, R. (1980). The diploma disease revisited. *Institute of Development Studies IDS Bulletin*, 11(2), 55-61. Retrieved from <http://www.ids.ac.uk/files/dmfile/Dore11.2final.pdf>
- Dore, R. (1997). Reflections on the diploma disease twenty years later. *Assessment in Education*, 4(1), 189-206.
- Eckwert, B., & Zilcha, I. (2010). Improvement in information and private investment in education. *Journal of Economic Dynamics and Control*, 34(4), 585-597. Retrieved from <https://economics.indiana.edu/home/about-us/events/conferences-and-workshops/2009/files/2009-09-03-01.pdf>
- Egypt Ministry of Education. (2007). *National strategic plan 2007/2012: Towards an educational paradigm shift*. PowerPoint slides from the Egypt Ministry of Education Policy and Strategic Planning Unit. Retrieved from <http://planipolis.iiep.unesco.org/upload/Egypt/Egypt%20National%20Strategic%20Plan%20for%20Education%20in%20Egypt%20Towards%20a%20Paradigm%20Shift.pdf>
- Elbadawy, A., Ahlburg, D., Assaad, R., & Levison, D. (2007, October). Private and group tutoring in Egypt: Where is the gender inequality? (Working Paper No. 0429). Economic Research Forum Working Paper Series. Retrieved from <http://iussp2009.princeton.edu/papers/91279>
- El Baradei, M., & El Baradei, L. (2004, December). Needs assessment of the education sector in Egypt. *ZEF Bildungsstudie, Cairo*. Retrieved from http://www.zef.de/fileadmin/webfiles/downloads/projects/el-mikawy/egypt_final_en.pdf
- El-Bilawy, H. (2010, September 22). Personal interview.
- El-Mahdi, A. (2003). *Labor in Egypt*. Washington, DC: Global Policy Network.
- El-Khawaga, D. (2010, Nov. 24). Personal interview.
- El-Zanaty & Associates (2007, February). *School-to-work transition: Evidence from Egypt*. ILO Employment Policy Papers. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/documents/publication/wcms_113893.pdf

- Economic Research Forum (ERF). (2010, January). ERF 16th Annual Conference, November 7-9, 2010, Cairo, Egypt. *Forum: The Newsletter of the Economic Research Forum*, 17(1). Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1264959607_Forum_Vol_17_No_1_10.pdf
- European Commission (EC). (2005). *Private household spending on education and training*. Final Project Report. EDZ European Documentation Centres – Archiving of EU Online Documents. Retrieved from http://www.pedz.uni-mannheim.de/daten/edz-b/gdbk/05/private_household_spend.pdf
- Fahim, Y., & Sami, N. (2010) Access to and Equity in Financing Higher Education in Egypt. In Galal, A. & Kanaan, T. *Financing higher education in Arab countries*. ERF Policy Research Report, No. 34. Cairo, Egypt: ERF Economic Research Forum.
- Fahim, Y. (2009, June 17-18). *Financing higher education in Egypt*. Paper presented at the Regional Conference on Access and Equity in Financing Higher Education in Arab Countries, Cairo, Egypt.
- Fergany, N. (1998). Human capital and economic performance in Egypt. *Mimeo*.
- Fergany, N. (2000). Arab higher education and development: An overview. *Almishkat Center for Research, Cairo*.
- Fergany, N. (2014, March). Elmosheer wa tawagohat el thawra [The Field Marshal and the direction of the revolution]. *Al-Ahram Newspaper*, No. 46494.
- Frost, J. (2008, September). *Returns to qualification in informal employment: A study of urban youth in Egypt* (MPRA Paper No. 12599). Ludwig-Maximilians-University Master's Thesis. Retrieved from <http://mpa.ub.uni-muenchen.de/12599/>
- Galal, A. (2002, March). The paradox of education and unemployment in Egypt. *The Egyptian Center for Economic Studies ECES*. Retrieved from http://www.eces.org.eg/Uploaded_Files/%7BB6065D33-E098-455B-828717E03C608A79%7D_ECESWP67.pdf
- Galal, A. (2009, May 18). *The road not travelled: Education reform in the MENA region*. PowerPoint slides from the Knowledge of Economy Event by World Bank Institute, Alexandria.
- Galal, A. (2010, July 21). Personal interview.
- Galal, A. F. (1993). Taha Huessein (1889-1973). *Prospects: the quarterly review of comparative education*, XXIII (3/4), 687-710.

- Galal, A., & Kanaan, T. (2010, July). *Financing higher education in Arab countries*. ERF Policy Research Report, No. 34. Cairo, Egypt: Economic Research Forum. Retrieved from <http://www.erf.org.eg/CMS/uploads/pdf/PRR34.pdf>
- Gamal El-Deen, M. (2010, August 31). Personal interview.
- Gameel, S. (2011, September). *Wakfa ehtegagyya letollaab elthanwyya amaam eltaaleem totaleb betatweer el manaheg wehal moshkelet el doroos*. [A demonstration by secondary education students in front of the Ministry of Education to request better education and a solution for the private tutoring problem]. *Almasry alyoum*. Retrieved from <http://www.almasryalyoum.com/news/details/114288>
- Gindling, T.H., Goldfarb, M., & Chang, C. (1995). Changing returns to education in Taiwan: 1978-91. *World Development*, 23(2), 343-356.
- Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. Chicago: Aldine Publishing Company.
- Gradstein, M., & Justman, M. (1996). The political economy of mixed public and private schooling: A dynamic analysis. *International Tax and Public Finance*, 3, 297-310.
- Gradstein, M., Justman, M., & Meier V. (2004). *The political economy of education: Implications for growth and inequality*. Cambridge, MA: The MIT Press.
- Green F., Sung, J., & James, D. (2002). The evolution of education and training strategies in Singapore, Taiwan and S. Korea: A developmental model of skill formation. *Journal of Education and Work*, 15(1), 5-30.
- Grubb, W. N. (2011). *Strengthening the school-to-work transition*. World Bank course materials on Education for Development and Competitiveness: Linking Education and Training to the Labor Market. Retrieved from <http://info.worldbank.org/etools/docs/library/250815/day%204%20Grubb%20presentation.pdf>
- Grunwald, E., Lotz, G., Nitschke, K., & Sakr, N. (2009, February). *Vocational education and training in the context of labour mobility – country report "Egypt"*. Cairo, Egypt: Vocational Education, Training and Employment Programme & GTZ German Technical Corporation. Retrieved from <http://www2.gtz.de/dokumente/bib-2009/gtz2009-0403en-labour-mobility-egypt.pdf>
- Haddad, W. D., Conroy, M., Rinaldi, R., & Regel, O. (1990, August). *Education and development: Evidence for new priorities* (Discussion Paper No. 95). World Bank Discussion Paper Series. Retrieved from <http://www->

wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2000/01/11/000178830_98101903574266/Rendered/PDF/multi_page.pdf

- El-Hamidi, F. (2005, January 7-9). *General or vocational? Evidence on school choice, returns and "Sheep Skin" effects from Egypt 1998*. Twenty-fifth Annual Meeting of the Middle East Economic Association Allied Social Science Associations, Philadelphia, PA. Retrieved from <http://ecommons.luc.edu/cgi/viewcontent.cgi?article=1058&context=meea>
- El-Hamidi, F. (2009, March). *Education-occupation mismatch and the effect on wages of Egyptian workers* (Working Paper No. 474). Economic Research Forum Working Paper Series. Retrieved from <http://www.erf.org.eg/CMS/getFile.php?id=1408>
- El-Hamidi, F., & Said, M. (2008, February). *Have economic reforms paid off? Gender occupational inequality in the new millennium in Egypt* (Working Paper No. 128). The Egyptian Center for Economic Studies Working Paper Series. Retrieved from http://www.academia.edu/533352/Have_Economic_Reforms_Paid_Off_Gender_Occupational_Inequality_in_the_New_Millennium_in_Egypt
- El-Hamidi, F., & Wahba, J. (2005, December 19-21). *The Effects of Structural Adjustment on Youth Unemployment in Egypt*. 12th Annual Conference of the Economic Research Forum, Cairo, Egypt. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1184493727_ElHamidi_Wahba.pdf
- Hango, D., & de Broucker, P. (2007, November). *Education-to-labour market pathways of Canadian youth: Findings from the youth in transition survey*. Ottawa, ON: Canadian Policy Research Networks. Retrieved from <http://www.cprn.org/doc.cfm?doc=1787&l=en>
- Hansson, S. O. (1994). *Decision theory: A brief introduction* (minor revisions made in 2005). Stockholm, Sweden: Royal Institute of Technology.
- Hanushek, E. A., Lavy, V., & Hitomi, K. (2007, November). *Do students care about school quality? Determinants of dropout behavior in developing countries* (Working Paper No. 12737). National Bureau of Economic Research Working Paper Series. Retrieved from <http://www.nber.org/papers/w12737.pdf>
- Hardin, G. (1968). The tragedy of the commons. *American Association for the Advancement of Science*, 162(3859), 1243-1248. Retrieved from <http://www.jstor.org/stable/1724745>
- Hargreaves, E. (2001). Assessment in education: Principles, policy & action. *Assessment in Education*, 8(2), 247-260. Retrieved from <http://dx.doi.org/10.1080/09695940124261>

- Hassan, K. E. (2003, December 8-12). *Impact of early work experience on Egyptian adolescents*. Paper presented to the 4th African Population Conference, Tunis, Tunisia. Retrieved from <http://www.zohry.com/dwb/khassan/pub/african.pdf>
- Hassan, M., & Sassanpour, C. (2008, March 17-18). *Labor market pressure in Egypt: Why is the unemployment rate so stubbornly high?* Paper presented at the Arab Planning Institute International Conference on "The Crisis of Unemployment in the Arab Countries", Cairo, Egypt.
- Haveman, R. H., & Wolfe, B. L. (1984). Schooling and economic well-being: The role of nonmarket effects. *Journal of Human Resources*, 19(3), 377-407. Retrieved from <http://www.terry.uga.edu/~mustard/courses/e4250/R-Haveman-Wolfe.pdf>
- Haveman, R. H., Wolfe, B. L., & Spaulding, J. (1991). Childhood events and circumstances influencing high school completion. *Demography*, 28(1), 133-157.
- Heggi, A. (1996). *El taa'leem fe masr: madeeh, wa haderoh wa mostkbaloh*. [Education in Egypt: its past, present and future]. Cairo, Egypt, El-Nahda el Arbya.
- Herrera, S., & Badr, K. (2011, July). *Why does the productivity of education vary across individuals in Egypt? Firm size, gender, and access to technology as sources of heterogeneity in returns to education* (Working Paper 5740). World Bank Policy Research Working Paper Series. Retrieved from <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-5740>
- Hight J. E. (1998). Young worker participation in post-school education and training. *Monthly Labor Review*, 121(5), 14-21.
- Holm, J. R. (2010, June 21-24). *Labour market signaling and scale adjustment. An evolutionary theory of the effects of asymmetric information in labour markets and how firms resolve the asymmetry*. Paper prepared for the 2010 International Joseph A. Schumpeter Society Conference on Innovation, Organisation, Sustainability and Crises, Aalborg, Denmark.
- Holtham, G., & Kay, J. (1994). The assessment: Institutions of policy. *Oxford Review of Economic Policy*, 10(3), 1-16.
- International Labour Organization (ILO). (2001). *Poverty, employment and policy-making in Egypt: A country profile*. Towards Decent Work in North Africa, No. 1.
- ILO. (2007, February). *School-to-work transition: Evidence from Egypt*. Employment Policy Department. Geneva, Switzerland: ILO.
- ILO. (2011). *Global employment trends for youth: 2011 Updates*. Geneva, Switzerland: ILO.

- ILO. (2013). *Global employment trends for youth 2013: A generation at risk*. Geneva, Switzerland: ILO.
- ILO & United Nations Conference on Trade and Development (UNCTAD). (2014). *Transforming economies: making industrial policy work for growth, jobs and development*. Geneva, Switzerland: ILO. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_242878.pdf
- Johnson, D. (2011, April). Nasser's Egypt and Arab nationalism. *Socialism Today*, Socialist Party Magazine, (147). Retrieved from <http://www.socialismtoday.org/147/nasser.html>
- Kabbani, N., & Kothari, E. (2005, September). *Youth employment in the MENA region: A situational assessment* (Working Paper No. 0534). SP Discussion Paper Series. Retrieved from <http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Labor-Market-DP/0534web.pdf>
- El-Khawaga, D. (2012, October). Ay falsafa lesyasat el ta'leem fe masr ba'ad el-thawra [What kind of education policies are there after the revolution]. Bawabet el Shorouk. Retrieved from <http://www.shorouknews.com/columns/view.aspx?cdate=06102012&id=fe74d2d8-4760-404b-86ad-245e71544fbc>
- Kambhampati, U. (2008). *Does household expenditure on education in India depend upon the returns to education?* Henley University of Reading.
- Kebede, T., Hatløy, A., Zhang, H., & Bjørkhaug, I. (2012). Perceptions of good jobs: Analytical report--Urban Cairo and rural Fayoum, Egypt.
- Khedr, H. (2003, September). *A socio-economic profile of Egypt: Manpower (1980-2002)*. PEMA Study No. 4. Retrieved from <http://www.pema.gov.eg/FileUpload/Publication/Files/109.pdf>
- Klees, S. J. (2010). Aid, development, and education. *Current Issues in Comparative Education*, 13(1), 7-26.
- Klerman, J. A., & Karoly, L. A. (1994). Young men and the transition to stable employment. *Monthly Labor Review*, 117(8), 31-51.
- Kozma, R. B. (2004, October 30). *Technology, economic development, and education reform: Global changes and Egyptian response*. Retrieved from http://robertkozma.com/images/kozma_egyptian_report.pdf
- Krueger, A. B., & Lindahl, M. (2001). Education for growth: Why and for whom? *Journal of Economic Literature*, 39(4), 1101-1136.

- Krueger, A. O. (1974). The political economy of the rent seeking society. *The American Economic Review*, 64(3), 291-303. Retrieved from <https://www.aeaweb.org/aer/top20/64.3.291-303.pdf>
- Langohr, V. (2005). Colonial education systems and the spread of local religious movements: The cases of British Egypt and Punjab. *Comparative Studies in Society and History*, 47(1), 161-189.
- Lawson, F. H. (1992). *The social origins of Egyptian expansionism during the Muhammad 'Ali Period*. Cairo, Egypt. The American University in Cairo Press.
- Levitt, S. D. (2004). Why are gambling markets organized so differently from financial markets? *The Economic Journal*, 114, 223-246.
- List of Egyptian public, private universities and Egyptian research institutes*. Ministry of Higher Education and Scientific Research. Retrieved from <http://www.rdi.eg.net/DocumentLibrary/Documents/Universities%20%20Institutions%20List.pdf>
- Lloyd, C. B., El Tawila, S., Clark, W. H., & Mensch, B. S. (2003). The impact of educational quality on school exit in Egypt. *Comparative Education Review*, 47(4), 444-467. Retrieved from <http://www.jstor.org/stable/3542151>
- Lochner, L., Stinebrickner, T., & Suleymanoglu, U. (2013, April). *Analysis of the CSLP Student Loan Defaulter Survey and Client Satisfaction Surveys* (Working Paper No. 2013-3). CIBC Working Paper Series. Retrieved from http://economics.uwo.ca/cibc/workingpapers_docs/wp2013/Lochner_Stinebrickner_Suleymanoglu03.pdf
- Lofgren, K., Persson, T., & Weibull, J. W. (2002). Markets with asymmetric information: The contributions of George Akerlof, Michael Spence and Joseph Stiglitz. *The Scandinavian Journal of Economics*, 104(2), 195-211. Retrieved from <http://www.jstor.org/stable/3441066>
- Lord, M. J. (1998). *The state of poverty and unemployment research in Egypt: A survey of the literature*. Retrieved from <http://www.montaguelord.com/downloads/reports-from-recent-consultancies>
- Loveluck, L. (2012, March). *Education in Egypt: Key challenges*. MENA Programme, Chatham House Background Paper.
- Lucas, R. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22, 3-42.

- Marks, M. E. (2011). *Determinants of delayed male marriage in Egypt*. Retrieved from <http://stanford.edu/group/avicenna/cgi-bin/wordpress/wp-content/uploads/2011/12/Miriam-Marks.pdf>
- El-Megharbel, N. (2007, May). *The impact of recent macro and labor market policies on job creation in Egypt* (Working Paper No. 123). Egyptian Center for Economic Research Working Paper Series. Retrieved from http://www.eces.org.eg/Uploaded_Files/%7BDF772483-1D99-4231-90E7-42A78900764B%7D_ECESWP123e.pdf
- Merrett, S. (1966). The rate of return to education: A critique. *Oxford Economic Papers*, 18(3), 289-303. Retrieved from <http://oep.oxfordjournals.org/content/18/3/289.citation>
- Metz, H. C. (1990). *Egypt: A country study*. Washington: GPO for the Library of Congress. Retrieved from <http://countrystudies.us/egypt/>
- MEYI. (2009). *Missed by the boom, hurt by the bust: Making markets work for young people in the Middle East*. Middle East Youth Initiative. Retrieved from http://www.shababinclusion.org/files/1352_file_MEYI_report_final.pdf
- Michael, R. T. (1973). Education for nonmarket production. *The Journal of Political Economy*, 82(2), 306-327. Retrieved from <http://www.jstor.org/stable/1830515>
- Mikhail, M., Arafa, L., Sallam, Z., & Ismail, F. (2014). Education: A Step into the Future. *The Undergraduate Research Journal*, 3. Retrieved from <http://www.aucegypt.edu/research/conf/eureca/Documents/URJ%20V3/Mikel%20Mikhail.pdf>
- Mincer, J. (1974). *Schooling, experience and earnings*. New York: National Bureau of Economic Research.
- Moenjak, T., and Worswick, C. (2003). Vocational education in Thailand: a study of choice and returns. *Economics of Education Review*, 22(1), 99-107.
- Moustafa, A. (2006, December 2-3). *Does Income Inequality Effect the composition of Growth? The Case of Egypt*. Paper presented at the Political Economy Research Institute (PERI) New School/ University of Massachusetts Amherst Workshop in Economics, Amherst, MA. Retrieved from http://www.peri.umass.edu/fileadmin/pdf/UM-NS_Workshop/Moustafa_Egypt.pdf
- Moustafa, T. (2007). *The struggle for constitutional power: law, politics and economic development in Egypt*. Cambridge: Cambridge University Press.
- National Center for Educational Research and Development (NCERD). (2001). *Education development: National report of Egypt from 1990 to 2000*. Cairo,

Egypt: Arab Republic of Egypt National Center for Educational Research and Development.

- NCERD. (2008). *The development of education in Egypt 2004-2008: A national report*. Cairo, Egypt: Arab Republic of Education Ministry of Education. Retrieved from http://www.ibe.unesco.org/National_Reports/ICE_2008/egypt_NR08.pdf
- Nordblom, K. (2003). Is increased public schooling really a policy for equality?: The role of within-the-family education. *Journal of Public Economics*, 87(9-10), 1943-1965.
- Nugent, J. B., & Saleh, M. (2009, February). *Intergenerational transmission of, and returns to human capital and changes therein over time: empirical evidence from Egypt*. (Working Paper No. 468). Economic Research Forum Working Paper Series. Retrieved from http://www.erf.org.eg/cms.php?id=NEW_publication_details_working_papers&publication_id=1093
- O'Higgins, N. (2008). *Guide to the school-to-work transition*. Retrieved from <http://www.aiel.it/Old/bacheca/BRESCIA/papers/ohiggins.pdf>
- Ostrom, E. (1998). A behavioral approach to the rational choice theory of collective action: Presidential address. *American Political Science Review*, 92(1), 1-22. Retrieved from <http://www.jstor.org/stable/2585925>
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, United Kingdom: Cambridge University Press.
- Paczynska, A. (2006). Globalization, structural adjustment, and pressure to conform: Contesting labor law reform in Egypt. *New Political Science*, 28(1), 45-64. Retrieved from <http://dx.doi.org/10.1080/07393140500518208>
- Patton, M. (1990). *Qualitative evaluation and research methods* (2nd ed.). Beverly Hills, CA: Sage.
- Penrose, P. (1998). *Cost sharing in education: Public finance, school and household perspectives*. Department for International Development Education Research Paper, No. 27. Retrieved from <http://ageconsearch.umn.edu/bitstream/12878/1/er980027.pdf>
- Pissarides, C. A. (2000, November). *Human capital and growth: A synthesis report* (Working Paper No. 168). OECD Development Centre Working Paper Series. Retrieved from <http://www.oecd-ilibrary.org/docserver/download/5lgsjhvj79wl.pdf?expires=1419836711&id=id&acname=guest&checksum=56F65A2D06915868C3C0914B491FEF91>

- Population Council. (2007). *Providing new opportunities to adolescent girls in socially conservative settings: The Ishraq Program in rural Egypt*. New York, NY: Population Council.
- Population Council. (2012). *Barriers to equity of access and success in higher education: Annotated bibliography*. Retrieved from http://www.popcouncil.org/uploads/pdfs/2012PGY_AccessHigherEdEgypt_Biblio.pdf
- Pritchett, L. (1999, December). *Has education had a growth payoff in the MENA region?* (Working Paper No. 18). World Bank Middle East and North Africa Working Paper Series. Retrieved from http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2000/10/14/000094946_00093005462856/Rendered/PDF/multi_page.pdf
- Pritchett, L. (2000, December). *Where has all the education gone?* World Bank and Kennedy School of Government. Retrieved from <http://www.hks.harvard.edu/fs/lpritch/Education%20-%20docs/ED%20-%20Econ%20Growth,%20impact/where%20has%20all%20the%20education%20gone.pdf>
- Private and Public Universities in Egypt* (n.d.). Cairo, Egypt: Investia Venture Capital.
- Psacharopoulos, G. (1973) *Returns to education: an international comparison*. Amsterdam, Netherlands: Elsevier Scientific Publishing Company; San Francisco, CA: Jossey-Bass Inc.
- Psacharopoulos, G. (1985). *Returns to education: A further international update and implications*. *Journal of human resources*, 20(4), 583-604.
- Psacharopoulos, G. (1987). *To vocationalize or not to vocationalize? That is the curriculum question*. *International Review of Education*, 33(2), 187-211.
- Psacharopoulos, G. (1994). *Returns to investment in education: A global update*. *World Development*, 22(9), 1325-1342.
- Psacharopoulos, G. (1995, December). *The profitability of investment in education: concepts and methods*. Human Capital Development and Operations Policy Working Paper Series. Retrieved from http://commdev.org/files/1863_file_Profitability_Investment_Edu.pdf
- Psacharopoulos, G. (1996). *A Reply to Bennell-Rates of Return to Education: Does the Conventional Pattern Prevail in sub-Saharan Africa?* *World development: the multi-disciplinary international journal devoted to the study and promotion of world development*, 24(1), 201-202.

- Psacharopoulos, G. (2009, March 5). *Returns to investment in higher education: A European survey*. Retrieved from http://www.eu-bildungszusammenarbeit.de/uploads/dokumente_hochschule/2010_04_cheps_stu_dyhighereducation_finance_3.pdf
- Psacharaopoulos, G., & Patrinos, H. A. (2002, September). *Returns to investment in education: A further update* (Working Paper No. 2881). World Bank Policy Research Working Paper Series. Retrieved from http://www-wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2002/09/27/000094946_02091705491654/Rendered/PDF/multi0page.pdf
- Psacharopoulos, G., & Patrinos, H. A. (2004). Returns to investment in education: A further update. *Education Economies*, 12 (2), 111-134.
- Public Opinion Poll Centre and Information and Decision Support Centre (IDSC). (2010, December). *Istitlaa raa'y awlyaa' elomoor hawla moshkelet el doroos el khososyya: takreer mokaran* [Heads of households opinions on the problem of private tutoring: comparative report].
- Quintini, G., Martin, J. P., & Martin, S. (2007, January). *The changing nature of the school-to work transition process in OECD countries* (Discussion Paper No. 2582). Institute for the Study of Labor (IZA) Discussion Paper Series. Retrieved from <http://ftp.iza.org/dp2582.pdf>
- Radwan, S. (2002, August). *Employment and unemployment in Egypt: Conventional problems, unconventional remedies* (Working Paper No. 70). ECES Working Paper Series. Retrieved from <http://www.mafhoum.com/press4/117E13.pdf>
- Romer, P. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94(5), 1002-1037.
- Romer, P. (1994). The origins of endogenous growth. *Journal of Economic Perspective*, 8(1), 3-22.
- Rusalkina, V., & Hicks, V. (2002). *Individual returns to educational investment*. Huntington, WV: Marshall University Center for Business and Economic Research.
- Russell, M. (2001). Competing, overlapping, and contradictory agendas: Egyptian education under British occupation, 1882-1922. *Comparative Studies of South Asia, Africa and the Middle East*, 21(1-2), 50-60.
- Ryan, P. (2001). The school-to-work transition: a cross-national perspective. *Journal of Economic Literature*, 39, 34-92).

- Ryan, P. (2001, March). *The school-to-work transition: Problems and indicators*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.194.7832&rep=rep1&type=pdf>
- Ryan, P. (2011, October). *Apprenticeship: Between theory and practice, school and workplace* (Working Paper No. 64). Leading House Working Paper Series. Retrieved from http://repec.business.uzh.ch/RePEc/iso/leadinghouse/0064_lhwpaper.pdf
- Said, M., & El-Hamidi, F. (2005, September). *Wage inequality by education and gender in MENA: Contrasting the Egyptian and Moroccan experiences in the 1990s*. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1184494128_El-Hamidi_Said.pdf
- Said, M., & El-Hamidi, F. (2008). *Taking technical education seriously in MENA: Determinants, labor market implications and policy lessons* (Working Paper No. 450). Economic Research Forum Working Paper Series. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1225955519_450.pdf
- Salehi-Isfahani, D. (2006). Microeconomics of growth in MENA: The role of households. *Contributions to Economic Analysis*, 278, 159-194. Retrieved from http://www.filebox.vt.edu/users/salehi/MENA_hholds.pdf
- Saxton, J. (2000, January). *Investment in education: Private and public returns*. Joint Economic Committee United States Congress. Retrieved from <https://www.sba.muohio.edu/econwe/courses/eco361/f04/readings/investment%20in%20education.pdf>
- Sayed, F. H. (2006). *Transforming Education in Egypt: Western Influence and Domestic Policy Reform*. Cairo, Egypt: The American University in Cairo Press.
- Schneider, K. (Dec. 2006). The political economy of education. *European Journal of Political Economy*, 22(4), 1014-1016.
- Schultz, T. P. (2003, December). *Evidence of returns to schooling in Africa from household surveys: Monitoring and restructuring the market for education* (Discussion Paper No. 875). Yale University Economic Growth Center Discussion Paper Series. Retrieved from http://www.econ.yale.edu/growth_pdf/cdp875.pdf
- Schultz, T. W. (1961). Investment in human capital. *American Economic Review*, 51(1), 1-17.

- Scott, J. (2000). Rational choice theory. In G. Browning, A. Halcli, & F. Webster, (Eds.), *Understanding contemporary society: Theories of the present* (pp. 126-138). Thousand Oaks, CA: SAGE Publications.
- Selim, T. H. (2007, December 28-30). *The education market in Egypt: A game theory approach* (Working Paper No. 422). Economic Research Forum Working Paper Series. Retrieved from http://www.erf.org.eg/CMS/uploads/pdf/1217766817_422.pdf
- Sen, A. K. (1966). Economic Approaches to Education and Manpower Planning. *Indian Economic Review*, 1(1), 1-21. Retrieved from <http://www.jstor.org/stable/4196924>
- Sgobbi, F., & Suleman, F. (2009, September 24-26). A methodological contribution to the measurement of skill (mis) match. In *Proceedings of the Development of Competencies in the World of Work and Education (DECOWE) Conference, Ljubjan, Slovenia*. 24-25. Retrieved from http://www.iesif.pk.edu.pl/attachments/021_DECOWE-februar_gr_corrected.pdf
- Shafik, N. (1996, June). *Big spending, small returns: The paradox of human resource development in the Middle East* (Working Paper No. 2). ECES Egyptian Center for Economic Studies Working Paper Series. Retrieved from <http://www.eces.org.eg/Publication.aspx?Id=227>
- Sianesi, B., & Van Reenen, J. (2000, November). *The returns to education: A review of the macro-economic literature*. London, England: CEE Centre for the Economics of Education.
- Sieverding, M. (2012). *Youth perspectives on entrepreneurship in Egypt: Barriers to entrepreneurship as a means to combat youth unemployment*. SYPE Policy Brief, No. 5. Cairo, Egypt: Population Council.
- Silberberg, E. (1995). *Principles of Microeconomics*. Upper Saddle River, NJ: Prentice Hall.
- Solow, R. M. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics*, 70(1), 65-94.
- Solow, R. M. (1957). Technical change and the aggregate production function. *Review of Economics and Statistics*, 39(3), 312-320.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3). Retrieved from <http://www.jstor.org/discover/10.2307/1882010?sid=21104931441621&uid=4&uid=2&uid=3737720>

- Sylwester, K. (2002). A model of public education and income inequality with a subsistence constraint. *Southern Economic Journal*, 69(1), 144-158. Retrieved from <http://www.jstor.org/stable/1061561>
- Swan, T. W. (1956). Economic Growth and Capital Accumulation. *Economic Record*, 32(2), 334-361.
- Takii, K., & Tanaka, R. (2009). Does the diversity of human capital increase GDP? A comparison of education systems. *Journal of Public Economics*, 93(7-8), 998-1007.
- Tilak, J. B. G. (1989). *Education and its relation to economic growth, poverty, and income distribution: Past evidence and further analysis*. World Bank Discussion Papers No. 46. Washington, DC: World Bank.
- Tilak, J. B. G. (2002, August). *Determinants of household expenditure on education in rural India* (Working Paper No. 88). National Council of Applied Economic Research Working Paper Series. New Delhi: National Council of Applied Economic Research.
- Tilak, J. B. G. (2007a, January). Rate of return to education: best practice. NORRAG News, Policy Brief No. 39. Retrieved from <http://www.norrag.org/es/publications/boletin-norrag/online-version/best-practice-in-education-and-training-hype-or-hope/detail/rate-of-return-to-education-best-practice.html>
- Tilak, J. B. G. (2007b, September). Inclusive growth and education: On the approach to the eleventh plan. *Economic and Political Weekly*, 42 (38), 3872-3877. Retrieved from <http://www.jstor.org/stable/40276423>
- Todd, P. E. (2010, September). *Effectiveness of alternate strategies for improving educational outcomes in developing countries* (Working Paper No. 6). Egypt Information and Decision Support Center Working Paper Series. Retrieved from http://www.researchgate.net/publication/228736932_EFFECTIVENESS_OF_ALTERNATIVE_STRATEGIES_FOR_IMPROVING_EDUCATIONAL_OUTCOMES_IN_DEVELOPING_COUNTRIES
- Tsang, M., & Levin, H. (1985). The economics of over education. *Economics of Education Review*, 4(2), 93-104.
- Tzannatos, Z., & Jones, G. (1997). Training and skill development in the East Asian newly industrialized countries. *Journal of Vocational Education and Training*, 49(3), 431-454.
- Understanding Children's Work (UCW). (2005, November). *School-to-work transitions in Sub-Saharan Africa: An overview*. ILO, UNICEF and World Bank. Retrieved

from http://www.ucw-project.org/attachment/standard_youth_SSA_16dec200520110420_114045.pdf

United Nations Development Programme (UNDP). (1998). *Egypt human development report 1997/98*. United Nations Development Programme. Retrieved from http://hdr.undp.org/sites/default/files/egypt_1998_1999_en_1.pdf

UNDP. (2000). *Egypt: Human development report 1998/99*. Institute of National Planning & United Nations Development Programme. Retrieved from http://hdr.undp.org/sites/default/files/egypt_1998_1999_en_1.pdf

UNDP. (2003). *Egypt human development report 2003*. United Nations Development Programme. Retrieved from http://hdr.undp.org/sites/default/files/egypt_2003_en.pdf

UNDP. (2005). *Egypt human development report: Choosing our future: Towards a new social contract*. United Nations Development Programme. Retrieved from http://hdr.undp.org/sites/default/files/egypt_2005_en.pdf

UNDP. (2010). *Egypt human development report: Youth in Egypt: Building our future*. United Nations Development Programme. Retrieved from <http://www1.umn.edu/humanrts/research/Egypt/Egypt%20Human%20Development%20Report%202010.pdf>

UNESCO. (1968). *Manpower aspects of educational planning: Problems for the future*. Paris: International Institute for Educational Planning.

UNESCO. (2006, November). *World Data on Education: Egypt* (6th ed.). Retrieved from http://www.ibe.unesco.org/Countries/WDE/2006/ARAB_STATES/Egypt/Egypt.pdf

UNESCO. (2008, October). *UNESS: Republic of Egypt*. Retrieved from <http://unesdoc.unesco.org/images/0017/001777/177703e.pdf>

UNESCO. (2010, November). *World Data on Education* (7th ed.). Retrieved from http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Kyrgyzstan.pdf

UNESCO. (2011). *UIS statistics in brief: Education (all levels) profile – Egypt*. UNESCO Institute for Statistics.

UNESCO. (2012). *Youth skills: Putting education to work*. EFA Global Monitoring Report. Paris, France: UNESCO.

- UNESCO, & OECD. (2002). *Financing education - Investments and returns: Analysis of the world education indicators* (2002 Edition). Retrieved from http://www.uis.unesco.org/Library/Documents/wei02_en.pdf
- UNICEF. (2008, May). *Education statistics: Egypt*. Division of Policy and Practice, Statistics and Monitoring Section. Retrieved from http://www.childinfo.org/files/MENA_Egypt.pdf
- van Eekelen, W., Luca, L., & Ismail, N. (2002, January). *Youth employment in Egypt* (Working Paper No. 2). InFocus Programme on Skills, Knowledge and Employability Working Paper Series. Retrieved from http://www.ilo.int/skills/pubs/WCMS_104021/lang--en/index.htm
- van Eijck, J. (n. d.). *Collective rational action: Is it possible?* PowerPoint slides at the Social Software Mini-Conference. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.217.1391&rep=rep1&type=pdf>
- Vercimak, L. (n. d.). *Gambling and portfolio selection using information theory*. The University of Illinois at Chicago. Retrieved from http://www.ece.uic.edu/~devroye/courses/ECE534/project/project_Luke_Vercimak.pdf
- Wade, R. (2013, May). Industrial policy is a better toolkit for recovery. Financial Times.
- Wahba, J. (1996, January). *Earnings and regional inequality in Egypt* (Working Paper No. 9613). Economic Research Forum Working Paper Series. Retrieved from <http://idl-bnc.idrc.ca/dspace/bitstream/10625/34804/1/126377.pdf>
- Wahba, J. (2000). *Returns to education and regional earnings differentials in Egypt* (Discussion Paper No. 0025). University of Southampton Discussion Papers in Economics Series. Retrieved from <http://eprints.soton.ac.uk/33062/>
- Wahba, J. (2005, September). *The influence of market wages and parental history on child labour and schooling in Egypt* (Discussion Paper No. 1771). Institute for the Study of Labor (IZA) Discussion Paper Series. Retrieved from <http://ftp.iza.org/dp1771.pdf>
- Wahba, J. (2009, August). *The Impact of Labor Market Reforms on Informality in Egypt* (Working Paper No. 3). Population Council: Gender and Work in the MENA Region Working Paper Series. Retrieved from <http://www.popcouncil.org/uploads/pdfs/wp/mena/03.pdf>
- Wahba, J. (2013). *Five decades of international migration in Egypt*. Conference Paper for The Egyptian Labor Market in a Revolutionary Era: Results from the 2012 Survey

- ERF Conference, Cairo, Egypt. Retrieved from <http://www.erf.org.eg/CMS/uploads/pdf/FiveDecadesInternationalMigration.pdf>
- West, E. G. (1995, October). *Education with and without the state* (Working Paper No. HCO61). World Bank Human Capital Development and Operations Policy Working Paper Series. Retrieved from http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079934475/547667-1135281552767/Edu_With_Without_State.pdf
- Westbrook, R. (1993). John Dewey (1859-1952). Originally published in *Prospects: the quarterly review of comparative education* (Paris, UNESCO: International Bureau of Education), 23(1/2), 277-91. Retrieved from <http://www.ibe.unesco.org/publications/ThinkersPdf/deweye.PDF>
- White, S. (1999, December). *Job quality and small enterprise development* (Working Paper No. 4). International Labour Organization Working Paper Series. Retrieved from http://www.ilo.org/public/libdoc/ilo/1999/99B09_448_engl.pdf
- Wilson, K. (2001). The determinants of educational attainment: Modeling and estimating the human capital model and education production functions. *Southern Economic Journal*, 67(3), 518-551.
- Workshop on labour and growth: Better jobs under globalisation.* (2006, November 15-16). Workshop hosted by IDRC and NPSIA, Ottawa, Canada.
- World Bank. (1992, March). *Review of World Bank Fiscal 1991: Education sector work*. PHREE Background Paper Series. Washington, DC: The World Bank.
- World Bank. (1995) *Priorities and Strategies for Education: A World Bank Sector Review*. Washington, D.C. World Bank Education and Social Policy Department. Retrieved from http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099080118171/Priorities_and_Strategies_for_Ed_WB_Review.pdf
- World Bank. (2000, February). *Higher education in developing countries: peril and promise*. Washington, DC: World Bank. Retrieved from <http://www.tfhe.net/report/downloads/report/whole.pdf>
- World Bank. (2002a, October). *Arab Republic of Egypt education sector review: Progress and priorities for the future* (Vol. 1 Main Report). Washington, DC: World Bank.

- World Bank. (2002b, October). *Arab Republic of Egypt education sector review: Progress and priorities for the future* (Vol. 2 Statistical Annexes). Washington, DC: World Bank.
- World Bank. (2003, March). *Closing the gap in education and technology*. World Bank Latin American and Caribbean Studies. Washington, DC: World Bank.
- World Bank. (2005, July). *Making Egyptian spending more effective: Egypt public expenditure review*. Policy Note 2. Washington, DC: World Bank.
- World Bank. (2006). *Equity and development*. WDR World Development Report. Washington, DC: World Bank.
- World Bank. (2007, June 29). *Arab republic of Egypt improving quality, equality, and inefficiency in the education sector: Fostering a competent generation of youth*. Report No. 42863-EG. World Bank MNSHD. Retrieved from http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2008/06/26/000334955_20080626033032/Rendered/PDF/428630ESW0P08910gray0cover01PUBLIC1.pdf
- World Bank. (2007). *World Development Report 2007: Development and next generation*. Washington, DC: World Bank.
- World Bank. (2008). *Egypt: Country Profile 2008*. IFC International Finance Development World Bank Group.
- World Bank. (2008). *Linking education policy to labor market outcomes*. Washington, DC: World Bank.
- World Bank. (2008). *The road not travelled: Education reform in the Middle East and North Africa*. MENA Development Report. Washington, DC: World Bank.
- World Bank. (2009). *From privilege to competition: Unlocking private-led growth in the Middle East and North Africa*. MENA Development Report. Washington, DC: World Bank.
- World Bank. (2009). *Education: The way forward*. International Development Association. Retrieved from <http://siteresources.worldbank.org/IDA/Resources/IDA-Education.pdf>
- World Bank. (2010). *Young people in Arab countries: Promoting opportunities and participation*. Background Paper to the Marseille Conference. Retrieved from <http://siteresources.worldbank.org/INTMENA/Resources/finalbackgroundpaper.pdf>

- World Bank. (2011). *Assessing sector performance and inequality in education*. Washington, DC: World Bank. Retrieved from http://siteresources.worldbank.org/EXTEDSTATS/Resources/3232763-1252439241095/ADePTeducation_Consolidated_Web.pdf
- World Bank. (2012). *World Development Report 2013: Jobs*. Washington, DC: World Bank. Retrieved from http://siteresources.worldbank.org/EXTNWDR2013/Resources/8258024-1320950747192/8260293-1322665883147/WDR_2013_Report.pdf
- World Bank. (2013). *World Development Report 2013 Main Messages: Moving jobs center stage*. Washington, DC: World Bank. Retrieved from http://siteresources.worldbank.org/EXTNWDR2013/Resources/8258024-1320950747192/8260293-1322665883147/Main_Messages_English.pdf
- World Bank. (2014). *World Development Report 2014: Inside Inequality in the Arab Republic of Egypt: Facts and Perceptions across People, Time, and Space*. Washington, DC: World Bank. Retrieved from <http://www.worldbank.org/content/dam/Worldbank/egypt-inequality-book.pdf>
- World Bank, & OECD. (2010). *Higher education in Egypt. Reviews of National Policies for Education*. Paris, France: OECD Publishing. Retrieved from <http://siteresources.worldbank.org/INTEGYPT/Resources/REPORTHigherEducationinEgypt-2010FINAL-ENGLISH.pdf>
- World Bank, & Oxford University Press. (2004). *A better investment climate for everyone*. World Development Report 2005. Washington, DC: The World Bank & Oxford University Press.
- Yates, J. A. (2005). The Transition from School to Work: Education and Work Experiences. The *Monthly Labor Review*, 128(21). Retrieved from <http://www.highbeam.com/doc/1G1-131280249.html>
- Ziederman, A. (1997). Tracing graduates through reunion parties: secondary technical education in Mozambique. *Comparative Education Review*, 41(2), 142-160.

Appendix 1-1: Sector of Employment of the First Job for Secondary and Post-Secondary Graduates (1980-2011)

Source: Assaad and Kraftt (2013a)

Appendix 1-2: The Structure of Egypt's Education System

Slightly modified from: UNESCO National Education Support Strategy (UNESS), Egypt (2008)

Appendix 1-3: Approval for Access to Household Addresses

West Asia & North Africa Regional Office

59 Misr-Helwan Agricultural Road, Maadi

PO Box 168, Maadi

Cairo, Egypt

Tel: +20 2 2525 5965/7/8

Fax: +20 2 2525 5962

E-mail: pcouncil@pccairo.org

www.popcouncil.org

To: Carleton University Research Ethics Board

The Population Council agrees to give permission to Doaa Mohie Mahmoud to access the contact information of the potential research participants she will select from the 2006 Egypt Labour Market Panel Survey for her research titled "*Private Investment in Education and the Effect on Youth Insertion in the Labour Market in Egypt.*"

Rania Roushdy, PhD

A handwritten signature in blue ink, appearing to read 'Rania R.', with a long horizontal flourish extending to the right.

Senior Research Manager
Data Analysis & Economic Research Unit

Appendix 1-4: Heads of Households Interview Guide

(40 minute interview)

Household standard of living and source of income:

1. What are the different sources of income for the family?
2. Do you own this house you are currently living in or is it rented?

Education and Job searching (Parents' views):

1. In your opinion, what is mostly needed for your children to find a job after graduation? (Options that could be read to the interviewee: good education, some connections at the work place, some training courses... etc.) (Why?)
2. Is there anyone of your children working now after finishing education? (**Tips to interviewer:** ask about all children not necessarily the one who will be interviewed)
3. In case the parents mentioned that one of their children is working now:
 - a. Did this person find this job easily after finishing education? If not: What are the problems this person faced until he/she landed this job?
 - b. How did he/she get this job? (Did anyone help him get it?)
4. In your opinion, is it true that the higher the level of education the easier the person will find a job? Or you think education levels and job finding are not related? (Why do you think so?)

Quality of Schools: (Private vs. Public Schools):

1. Did your children attend private or public schools?

2. In case of private schools: Why did you choose private schooling?
3. Do you think there is a difference between the quality of education offered at private and public schools? What is it?
4. Do you think that young people who attended private education have better chances of getting a job after graduation than those who attended public education? (Why?)

Private Tutoring:

1. In case it was mentioned in the family roster that one of the children received private tutoring:
 - a. Did the children receive private tutoring at every level of education?
 - b. Was it for all courses?
2. What was the level of education on which more private tutoring was needed, and why?
3. What is the importance of private tutoring in your opinion?

Costs of Education:

1. How much do you spend on education annually? (Including: tutoring, uniforms, tuition fees and books) **(Tips to interviewer:** Ask about last year to make it easy for them to recall.)
2. Do you think that when your children finish education they will be able to earn an income that covers this cost of education?

Evaluating Children's education:

1. What do you like/dislike about your children's education?
2. What do you think could be done to improve the education system in Egypt? (Why?)
3. What do you think was the most important benefit your children gained from their education?
4. Do you think girls benefit from this system of education like boys do?

Appendix 1-5: Youth (18-28) Interview Guide

(1-hour interview)

Introduction:

1. Are you still studying or have you finished education?
2. What level and type of education did you stop at?
3. Was it your choice or somebody else's choice?

Quality of schooling:

1. Have you attended private or public schools?
2. What was the problem in your school, from your point of view?
3. Is there any difference between public and private schools? What do you think is this difference?
4. Do you think that young people who attended private education have better chances of getting a job after graduation than those who attended public education? (Why?)

Private Tutoring:

1. Have you ever received private tutoring?
2. In case of yes: Have you received private tutoring in all subjects or only some of them? What were these?
 - a. Why have you taken private tutoring?
 - b. Did school teachers force you to take these lessons?
 - c. What was the benefit of these lessons?

3. In case of no: Why you did not take private tutoring? (**Probes:** Expensive or you did not need it?)

Education-Labour Market Relationship:

4. Do you think your education equipped you with the skills necessary for your professional life?
 - a. In case of yes: What are these skills?
 - b. In case of no: Do you have any suggestions as to how the school could have helped you gain the necessary skills? (Like what?)
5. In your last year at school did the school organise any employment fair or something similar to introduce you to the possible future employers?

From School to Work:

Only for participants who currently work or worked in the past

First Job

1. What are the jobs you have taken since you left education until now (briefly)?
2. Is the job you are currently working in your first job since you finished education?
3. How long did you stay in your first job?
4. How did you manage to get the first job after graduation?
5. Was it easy/ difficult to get this job? (Why?)
6. How long did it take you to get your first job after leaving education?

7. In your opinion, why have you taken that long (whether short or long period of time)?
8. Do you think your first job was related to what you studied in school/university?
(How relevant?)
9. Did your first employer give you any training before you start working?
10. Was it required that you have previous work experience or any specific requirement for your first job?

Formality of the first job

1. Did you agree on your salary and any other bonus payment before you got your job?
2. Did you sign a contract for your first job? Do you remember what the items of the contract were?
3. What was your role in your first job? (Responsible for what and doing what?)
4. Did the first job involve any work hazards? Were there any safety or security measures taken against these hazards?
5. Have you signed a contract in your current job? (to compare if there is any difference with the first job)

The decision to accept a job:

1. What influenced your decision to accept your first job? (**Probes:** money, proximity to house, good working hours, you liked this job ... etc.)

Only for the participants who do not work and have never worked before

1. How long have you been unemployed since you left school?
2. Are you searching for a job now? How are you doing this search?

3. Is anyone in your family helping you in looking for a job?
4. How do you finance your needs currently until you get a job? (Who helps you)?
5. While searching for a job have you had some opportunities that you rejected? If so, why?

Questions asked for everyone (employed and unemployed)

Assessing the current situation

1. Do you think your education has managed to prepare you well for the labour market?
In case of yes, how? If no, why?
2. What are the current job opportunities that are available to young people (your age) (friends and relatives)? Have any changes taken place in the nature of these jobs from the time you left education until now?
3. What do you think the policy makers in Egypt should do to provide job opportunities for young people?
4. What is the job that you think best suits you and that you would really want to get?
What do you think you need to get this job?

Appendix 1-6: Household* Roster

								To be asked for 4 years old or more			
No	1	2	3	4	5	6	7	8	9	10	11
	Please tell me the name of everyone living in this place in order from old to young starting by the head of the household	Relationship to the head of the HH	Gender 1) Male 2) Female	Age	1) Lives daily in this house 2) Lives daily in another house 3) Abroad 4) Others (specify)	Marital Status 1) Married 2) Never Married 3) Divorced 4) Widowed 5) Legally married 6) Less than 12 years old	Education Status <i>(In case the person never been to school go to Q11)</i> 1) Currently studying 2) Studied in the past 3) Never gone to school 4) Attending illiteracy classes	The highest education level reached 1) Pre-school education 2) Illiteracy classes 3) Primary 4) Preparatory 5) Secondary (General and vocational) 6) Above Secondary 7) University	Last year finished in the reported level of education	Took private tutoring or group tutoring at school 1) Private tutoring 2) Group tutoring 3) Both 4) None	Employment status 1) Waged worker 2) Self-employed 3) Helping family members at work 4) Does not work
1											
2											

* The Definition of the Household: all family members living together and eating together over the past 3 months (This table can be filled by either the head of the households or the young respondent interviewed)

Add comments on the house and living standard of the family (Observations during the interview):

Appendix 1-7: Key Informant Interview Guide

(40-min Interview)

1. Education or labour market problem

- a. Researches show that Egypt has a high unemployment rate among the more educated youth. How could you explain this? Is it due to a problem in the education system or in the labour market or a mismatch between education and labour market in Egypt?

2. Household Spending on Education

- a. If the current education system as it stands does not prepare the graduates well to join the labour market, in your opinion, what then is the motivation for households in spending on their children's education?

3. Employment Guarantee Scheme

- a. Even though it was abandoned if you ask young people and their families about the job they would like to join they would say a government job. Why this is the case?

4. Inequality and education

- a. Education is nominally free at all levels in Egypt. Would not this lead to inequality in the provision of the service which defies the main aim of the free education concept? What should be the solution to this problem?

- b. Does government spending on secondary and university education aggravates or lessens inequality? (Why?)
- c. The World Bank (and other foreign donors of funds) works closely with the government of Egypt of developing Egypt's education system. How efficient were the World Bank recommended policies in addressing this inequality issue in the provision of different levels of education? (Why?)

5. Quality of education (Private and Public schools)

- a. Regarding the quality of schooling in Egypt. It is established among households in Egypt that private schools and universities provide better quality than public ones? How could this claim be evaluated?
- b. In your opinion, does privatizing the education sector solve the problems in the education system? (Why?)
- c. Why does private tutoring continue to exist even though the Ministry of Education made it illegal?
- d. How could the phenomenon of private tutoring be eliminated?

6. How could the government maintain the balance between inequality and quality of education, in the light of tight government budget?

Appendix 1-8: Carleton University Research Ethics Clearance

Carleton University Research Office
5th Floor Tory Building
1125 Colonel By Drive
Ottawa ON K1S 5S6 Canada
Tel: 613-520-2516
Fax: 613-520-2521
www.carleton.ca/culresearch/curo/

Ethics Clearance Form

This is to certify that the Carleton University Research Ethics Board has examined the application for ethical clearance. The REB found the research project to meet appropriate ethical standards as outlined in the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* and, the *Carleton University Policies and Procedures for the Ethical Conduct of Research*.

☒ **New clearance**

☐ **Renewal of original clearance**

Original date of clearance:

Date of clearance **10 May 2010**
Researcher **Doaa Mohie Mahmoud**
Status **Ph.D. student**
Department **School of Public Policy and Administration**
Supervisor **Professor Manfred Bienfield and Professor Frances Abele**
Title of project **Investment in Education and the effect on the youth school to work transition in Egypt**

Clearance expires: **31 May 2011**

All researchers are governed by the following conditions:

Annual Status Report: You are required to submit an Annual Status Report to either renew clearance or close the file. Failure to submit the Annual Status Report will result in the immediate suspension of the project. Funded projects will have accounts suspended until the report is submitted and approved.

Changes to the project: Any changes to the project must be submitted to the Carleton University Research Ethics Board for approval. All changes must be approved prior to the continuance of the research.

Adverse events: Should any participant suffer adversely from their participation in the project you are required to report the matter to the Carleton University Research Ethics Board. You must submit a written record of the event and indicate what steps you have taken to resolve the situation.

Suspension or termination of clearance: Failure to conduct the research in accordance with the principles of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* and the *Carleton University Policies and Procedures for the Ethical Conduct of Research* may result in the suspension or termination of the research project.

Leslie J. MacDonald-Hicks
Research Ethics Board Coordinator
For the Chair of the Carleton University Research Ethics Board
Prof. Antonio Gualtieri

Appendix 1-9: Approval for Data Collection from the Central Agency for Public Mobilization and Statistics (CAPMAS)

جمهورية مصر العربية
الجهاز المركزي للتعبئة العامة والإحصاء

قرار رئيس الجهاز المركزي للتعبئة العامة والإحصاء
بالتفويض
رقم (٢٢٨) لسنة ٢٠١٠

في شأن قيام الباحثة / دعاء محي محمود - المتدربة بمركز البحوث للتنمية الدولية (كندا) IDRC بإجراء دراسة ميدانية بعنوان (صرف الأسر المصرية علي التعليم ومدى تيسير عمالة الشباب في مصر) وذلك للحصول علي درجة الدكتوراه .

رئيس الجهاز:

- بعد الإطلاع على القرار الجمهوري رقم (٢٩١٥) لسنة ١٩٦٤ بشأن إنشاء وتنظيم الجهاز.
- وعلى قرار رئيس الجهاز رقم (٢٣١) لسنة ١٩٦٨ في شأن إجراء الإحصاءات والتعدادات والاستفتاءات والاستقصاءات.
- وعلى قرار رئيس الجهاز رقم (١٣١٤) لسنة ٢٠٠٧ بشأن التفويض في بعض الاختصاصات.
- وبعد الإطلاع على مذكرة العرض على رئيس الجهاز وموافقة سيادته على ما ورد بها.
- وعلى كتاب مركز البحوث للتنمية الدولية (كندا) المكتب الإقليمي للشرق الأوسط وشمال أفريقيا الوارد للجهاز بتاريخ ٢٠١٠/٨/١٠ .

ق ر ر

مادة ١: تقوم الباحثة / دعاء محي محمود - المتدربة بمركز البحوث للتنمية الدولية (كندا) IDRC بإجراء الدراسة الميدانية المشار إليها بعلانية.

مادة ٢: تجرى هذه الدراسة على عينة حجمها (٤٠) أربعون أسرة (رب الأسرة وأحد الشباب في الأسرة) بمحافظات القاهرة - الغربية - المنيا .

مادة ٣: تجمع البيانات اللازمة لهذه الدراسة طبقاً للاستمارة المعدة لهذا الغرض والمعتمدة من الجهاز المركزي للتعبئة العامة والإحصاء وعدد صفحاتها ٣ صفحات (ثلاثة) .

مادة ٤: يراعى ضرورة موافقة مفردات العينة ومراعاة سرية البيانات الفردية طبقاً لأحكام القانون وعدم استخدام البيانات التي يتم جمعها لأغراض أخرى غير أغراض هذه الدراسة.

مادة ٥: يجرى العمل الميداني خلال ثلاثة أشهر اعتباراً من ٢٠١٠/٩/١ .

مادة ٦: يوافق الجهاز المركزي للتعبئة العامة والإحصاء بنسختين من النتائج الأولية لهذه الدراسة ثم يوافق بنسختين من النتائج النهائية عند الانتهاء من إعدادها.

مادة ٧: يقوم بجمع البيانات اللازمة لهذه الدراسة باحثين مصريين فقط

مادة ٨: تلتزم الباحثة / دعاء محي محمود بإبلاغ مديريات الأمن بمحافظات القاهرة - الغربية - المنيا بصورة من هذا القرار وقبل البدء في التنفيذ مرفقاً بها بيانات القائمين بالدراسة (الاسم - الرقم القومي - تاريخ بدء وانتهاء تنفيذ الدراسة بكل محافظة) .

مادة ٩: ينفذ هذا القرار اعتباراً من ٢٠١٠/٩/١ .

صدر في ٢٩ / ٨ / ٢٠١٠ .

محمد مختار زايد
مدير عام الإدارة العامة للأمن

Appendix 1-10: Letter of information and Consent Form read to and signed by the young interviewee

Name of researcher: Doaa M. Mahmoud

Supervisors: Prof. Frances Abele and Prof. Manfred Bienefield

Department affiliation: School of Public Policy and Administration, Carleton University

Researcher's contact phone numbers: _____

I am a PhD researcher and I am doing a research, which has the objective of studying the relationship between household spending on education in Egypt and youth labour market opportunities and the policies affecting this relationship. My research is reviewed and received ethics clearance by the Carleton University Research Ethics Board and Egypt Central Agency for Public Mobilization and Statistics (CAPMAS).

In order to be able to reach my research objective I have to visit some Egyptian households and talk with young Egyptians about the extent to which his/her education helped him/her find a job after finishing schooling. I also want to meet with one of your parents who would normally make the decisions to spend on their children's education to talk about their decisions and discuss their opinion on the education of their children. We are going to spend around an hour and half for both interviews.

Please note that if you agreed to be interviewed now each family will get 15 dollars as honorary fees at the end of the interview for taking some of the family time.

You are free not to participate if you want. You can stop me during the interview if you do not like any of the questions or want to skip answering any of the questions.

If you agree to be interviewed I also want to take your permission to tape record the interview as it goes because this will help me in analyzing the data collected from different households later.

Record the interview

Yes	
No	

Please note that your responses are going to be anonymous when I am writing the final report for the study. All the data collected will be stored in a locked file cabinet and no one will have access to it except the main researcher. Moreover the tape and all the data collected are going to be destroyed after I finish my research. Also please know that if you feel you want to withdraw from this research please contact the main researcher on this phone number ____ or this email address _____. The deadline for withdrawal is August 2011.

If you agree to participate, please sign this form for me.

Consent form for young Egyptian (above the age of 15):

I, _____ have read the above letter and understand that I am participating in a research project and I voluntarily agree to participate.

If you have any questions about my research please contact CAPMAS at this address:

Address: Salah Salem Road- Nasr City
Tel: +202- 24023031 Fax: +202- 24024099
E-mail: alamn@capmas.gov.eg

Participants' signature

Researcher's signature

**Appendix 1-11: Letter of information and Consent Form read to and signed by the
by one of the parents**

Name of researcher: Doaa M. Mahmoud

Supervisors: Prof. Frances Abele and Prof. Manfred Bienefield

Department affiliation: School of Public Policy and Administration, Carleton University

Researcher's contact phone numbers: _____

I am a PhD researcher and I am doing a research, which has the objective of studying the relationship between household spending on education in Egypt and youth labour market opportunities and the policies affecting this relationship. My research is reviewed and received ethics clearance by the Carleton University Research Ethics Board and Egypt Central Agency for Public Mobilization and Statistics (CAPMAS).

In order to be able to reach my research objective I have to visit some Egyptian households and meet with the parents who would normally make the decisions to spend on their children's education to talk about their decisions and discuss their opinion on the education of their children. I also want to meet with one of your children to talk about the extent to which his/her education helped him/her find a job after finishing schooling. We are going to spend around an hour and half for both interviews.

Please note that if you agreed to be interviewed now each family will get 15 dollars as honorary fees at the end of the interview for taking some of the family time.

You are free not to participate if you want. You can stop me during the interview if you do not like any of the questions or want to skip answering any of the questions.

If you agree to be interviewed I also want to take your permission to tape record the interview as it goes because this will help me in analyzing the data collected from different household later.

Record the interview

Yes	
No	

Please note that your responses are going to be anonymous when I am writing the final report for the study. All the data collected will be stored in a locked file cabinet and no one will have access to it except the main researcher. Moreover the tape and all the data collected are going to be destroyed after I finish my research. Also please know that if you feel you want to withdraw from this research please contact the main researcher on this phone number ____ or this email address _____. The deadline for withdrawal is August 2011.

If you agree to participate, please sign this form for me.

Consent form for parents:

I, _____ have read the above letter and understand that I am participating in a research project and I voluntarily agree to participate.

If you have any questions about my research please contact CAPMAS at this address:

Address: Salah Salem Road- Nasr City
Tel: +202- 24023031 Fax: +202- 24024099
E-mail: alamn@capmas.gov.eg

Participants' signature

Researcher's signature

Appendix 1-12: Letter of information and Consent Form read to the key informant interviewees

Name of researcher: Doaa M. Mahmoud

Supervisors: Prof. Frances Abele and Prof. Manfred Bienefeld

Department affiliation: School of Public Policy and Administration, Carleton University

Researcher's contact phone numbers: _____

I am a PhD researcher and I am doing a research, which has the objective of studying the relationship between household spending on education in Egypt and youth labour market opportunities and the policies affecting this relationship. My research is reviewed and received ethics clearance by the Carleton University Research Ethics Board and Egypt Central Agency for Public Mobilization and Statistics (CAPMAS).

In order to be able to reach my research objective I am visiting some Egyptian households and also would like to meet with education experts (who worked inside or outside the government of Egypt) in order to get some background information about the government decision to invest in certain levels and types of education and also to get the experts assessment of the current education policies and system. We are going to spend around 40 minutes in the interview.

You are free not to participate if you want. You can stop me during the interview if you do not like any of the questions or want to skip answering any of the questions.

Please note that your responses are going to be anonymous when I am writing the final report for the study. All the data collected will be stored on computer files that will be secured and no one will have access to it except the main researcher. Also please know that if you feel you want to withdraw from this research please contact the lead researcher on this phone number ____ or this email address _____. The deadline for withdrawal is August 2011.

Consent form for key informant interviewees:

Based on this background would you like to participate in this research?

I, _____ understand that I am participating in a research project and I voluntarily agree to participate.

If you have any questions about my research please contact CAPMAS at this address:

Address: Salah Salem Road- Nasr City

Tel: +202- 24023031 Fax: +202- 24024099

E-mail: alamn@capmas.gov.eg