

# Analyzing the External and Internal Efficiency Considerations in Public Subsidization of Education in Egypt

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## Abstract

The goal of public investment in education is to create the skills and attitudes needed for higher levels of productivity and growth. Whether or not such goals would be achieved will depend not only on the amount of resources invested, but also on the efficiency with which the inputs are managed. Hence, the issue is whether the Egyptian education system is efficient, in terms of achieving an optimal allocation of spending, and meeting the ultimate objectives of the educational process, or the government just throws money in an idle way. Accordingly, this paper spots the light on the efficiency of subsidizing the Egyptian education system through differentiating between the concepts of internal and external efficiency. The available data revealed the existence of both internal and external inefficiency of the Egyptian education sector, despite the investments devoting to it, reducing the dropout rate, achieving a considerable progress in getting kids into schools, and closing the gender gap over the past thirty five years. More efforts should be exerted; with greater investment in education, Egypt could take advantage of many more growth opportunities in high-skilled economic sectors, and develop the current generation's entrepreneurial capacities and skills and capitalize on the existing potential.

**Key words:** External efficiency, Internal efficiency, Subsidizing the Egyptian education system.

## 1-Introduction

Human capital theory, pioneered by (Schultz, 1960) and (Becker, 1964), holds that well-being of a society is a function not only of traditional stocks of physical capital, labor and natural resources but also of knowledge and skills of individuals that will improve the economic outcome for both individuals and societies, especially in modern societies, where it is widely hold that knowledge and skills convey a greater economic and social premium than in the past.

Education is a key element of human capital theory, because it is viewed as the primary means of developing knowledge and skills. Besides, the level of education is a way of quantifying the quality of labor force (Schaffner, 2013, p496).

Investment in the education is generally very useful for economic development due to its positive direct effects on production per capita, and its contribution to increase endowment of social and physical capital per capita, and thus its effects is amplified by these increases. Besides, human capital has a long lasting effect on development because its dynamic impact is generally amplified through time and don't diminish as part of the income it generates is generally reinvested in human capital (Guisan, 2006).

Moreover, public education expenditure is supposed to bring into the economic system the externalities and other indirect effects such as higher education attainment and achievement of children, better health and lower mortality of children, better individual health and lower number of birth which subsequently cause higher productivity in terms of increased earnings, more participation in the labor force; all these coupled with lower population growth and better health of population tend to positively influence higher economic growth (Michaelowa, 2000). These positive externalities have always been the major justification for governments, as rational investors, to subsidize the educational system.

Subsidizing education is considered as an investment in human resource, and reflects government commitments toward the educational system, as a guarantee of both free and better educational quality.

Article 19 in the Egyptian's 2014 constitution comes to expand on the right to free education included in previous constitutions, dating back to 1971, and includes important new language about instilling the values of "citizenship, tolerance and non-discrimination". Also, it stipulates that the government has to "spend no less than 4 percent of the GDP on education." and specifies that no less than 2 percent of GDP will be spent on university education. It was differentiated from previous constitutions in making the education compulsory until secondary education level (Mikhail, 2014). In addition, the new constitution's commitment to increase spending on scientific research is promising. Egypt has significantly increased the share of its GDP devoted to research and development in recent years, from 0.24 percent of GDP in 2009, to 0.42 percent in 2011. Article 23 commits the country to spending "no less than 1 percent of Gross National Product to scientific research," which would entail more than doubling current levels (Counsel on foreign affairs).

It should be noted that the size of public education expenditure is not merely a vital tool in improving economic growth and promoting equity (Chu, 1998), but it is the efficiency of subsidizing the educational system is really matter in improving socioeconomic performance (Gupta, Verhoeven and Tingson, 1999; thorbeke, 2001).

Hence, the issue is whether such public education subsidization is an efficient investment, in terms of achieving high enrollment rate, educational attainment, gender parity, lower dropout rate yielding a higher quality education system enabled to meet the ultimate aim of the educational policies, to speed the development, or it is just wasting the government's resources. On this ground, this paper is an attempt to spot the light on the efficiency of subsidizing the Egyptian educational system through differentiating between the concepts of internal and external efficiency, to recognize whether the investments that are directed to the education sector meet the goals of the education system or not.

The rest of the paper will be organized as follows: the coming section demonstrates the evolution of Egypt's education system. . Section 3 outlines the efficiency of subsidizing the Egyptian education system by differentiating between internal and external efficiency concepts and their measures. Section 4 reports the concluding remarks.

## **2-An overview on the education system in Egypt**

The evolution of Egypt's education system has long been influenced by political developments. A European-style system was first introduced by Ottoman rulers in the early nineteenth century in order to nurture a class of well-educated, loyal administrators, and army officers who would become the national army (Hartman, 2008).

Under the presidency of Gamal Abdel Nasser, education became a central part of the modernizing project. In the 1950s, he phased in free education for all Egyptian citizens, starting with schools and later extending this to include higher education. The Egyptian curriculum became a model for the region, greatly influencing other Arab education systems, which often employed Egyptian-trained teachers.

Nasser also offered guarantees that all university graduates would be able to find employment in the public sector, a promise that contributed to a rapid increase in university enrolment rates in the following decades. Demand soon outstripped the level of available state resources, causing the quality of publicly provided education to deteriorate; rapid growth necessitated the hiring of insufficiently qualified teachers and placed immense strain on school facilities. Many schools started to operate in shifts, especially in densely populated urban areas. This trend in public-sector education has culminated in poor teacher–student ratios (often around one to fifty) and persistent gender inequality.

In 1970s till mid of 1980s Female enrolment ratios are typically around 20 per cent lower than those of males, drop-out ratios are higher, and although there have been substantial improvements in female literacy rates, there remains a sizeable gender gap in educational attainment (Osman, 2011).

There also exists a parallel private education sector that dates back to President Anwar Sadat's 'Open Door' policies of the 1970s. The quality of education provided by many of these schools is vastly superior to that on offer in the state system, and its beneficiaries often find themselves better equipped than their state-school counterparts for the labor market ( Loveluck, 2012).

Until the mid-1990s, there was a significant and unchallenged gender bias in schooling and education in Egypt. In order to address this problem, and in an attempt to improve the overall quality of education, the Egyptian government initiated the Basic Education Enhancement Program. As a result, female literacy rose by 10 percent from 57% in 1992 and to 67 % in 2002, and has reached 65.75% in 2012; also, among the (15–24) year old age group, illiteracy fell by 10 percent, from 28% in 1990 to 18% a decade later. Adult literacy has increased from 51.3% in 1977 to 89.28% in 2012. While these figures still fall short of documented objectives, they are still considered a significant advancement in narrowing the gender gap in education (fan et al. 2006 ; El Araby, 2012).

The challenges facing Egypt's education system in the post-Mubarak era are numerous and pressing. The demographics underscore the urgency of reform: 32 percent of Egyptians are under the age of fifteen. A slow response to the large-scale shifts in society over the past year risks depriving another generation of an education that meets the needs of the changing labor market as well as responding to the evolving political system. The mismatch between the graduates' qualifications and the needs of the job market is one of the key reasons behind the persistently high level of unemployment in Egypt, which is officially estimated at 12 percent but generally assumed to be significantly higher.

Unemployment is particularly high among the under-25s and among university graduates, who, according to estimates from a regional NGO, Injaz Al Arab, typically take five years to find a job. Youth unemployment poses a number of social and political, as well as, economic risks. The poor quality of much of the state education system, and the widespread reliance on private tutoring to supplement it, also contribute to Egypt's

high level of economic inequality, raising concerns about social justice. Skills shortages remain a constraint on growth opportunities and on investment prospects.

With greater investment in human capital, Egypt could take advantage of many more growth opportunities in high-skilled economic sectors. Therefore, the planned high quality education that yields well-trained and qualified labor force that matches labor market requirements is essential to reduce the unemployment rate. Also, education indicators call for the need of more concentration on education sector reform through rising the percent of GDP that is devoted to the education sector (Qutb, 2015).

In 2014, Egypt has got a step forward in reforming its education system in order to increase the quality of the educational services; as the new constitution commits the government to assign 7% of its GDP to the education sector to be distributed as follows : 4 percent of the GDP on pre- higher education.” and specifies that no less than 2 percent of GDP will be spent on university education with a promise to increase such a ratio gradually till reach the accepted global rate (Mikhail , 2014). In addition, the new constitution’s commitment to increase spending on scientific research is promising; article 23 commits the country to spending “no less than 1% of Gross National Product to scientific research”, which would entail more than doubling current levels (Counsel on foreign affairs, 2014).

But, in fact, quality issues are not addressed by simply throwing more money at the problems, but the new spending quotas might help Egypt catch up to other emerging markets.

### **3. The efficiency of subsidizing the Egyptian education system.**

The concept of efficiency describes how available resources are used to achieve desired outcomes. An inefficient education system would be one where better educational outcomes are attainable with no additional deployment of resources. Of course in the real world, all education systems operate inefficiently to a greater or lesser extent (Taylor, et.al. 2013).

Education is considered a productive investment in human capital; therefore, both external efficiency and internal efficiency are among the most important considerations for public subsidization of education., As Psacharopoulos has pointed out, ‘the choice of investments must, therefore, be based on an analysis of the external efficiency of all competing uses of resources, from the point of view of society’s objectives, as well as the internal efficiency of resource use.’ (Psacharopoulos, et al., 1985, 23). On this ground, the concepts and the major indicators of internal and external efficiency will be illustrated in the following sub-sections.

#### **3.1 Internal Efficiency**

The public education subsidization can contribute to internal efficiency at least by two ways: choosing most effective input bundles to maximize outputs; and improving management in both education systems and individual institutions by changing the methods of public subsidization.

In Egypt, the size of public spending on education has got an increasing trend from 650 million LE in 1970, to 94400 million LE in 2015 (CAMPAS, statistical year book, 2014).

But in fact what really matter is not only the size of public subsidy that is devoted to the education sector, but also the way of its allocation between investment expenditures and current expenditures.

Thus, internal efficiency concerns about the allocation of the given public spending among competing uses (investment expenditures); training teachers, curriculum reform and improving facilities and so on. And it could be indicated by several factors such as: the public investment spending on education as a percent of gross public spending, the share of “wages and compensations of workers” in the balanced budget, and Pupil-teacher ratio. This will be illustrated as follows:

##### **3.1.1 The public investment spending on education as a percent of gross public spending:**

As indicated by table (1), there is a high degree of internal inefficiency in allocating education spending in Egyptian educational system; where about 86% on average of gross public education spending is devoted to current expenditures, whereas only 14% public spending on education on average is devoted to investment spending. This calls for more concentration in the way of allocating the resources devoted to the education sector.

**Table (1): Public education Investment spending as a % of public education spending  
 Over the period (1980-2014).**

year	Public investment spending on education (million L.E)	Public investment spending on education as a % of public spending on education	Public current spending on education as a % of public spending on education
1980	162	11	88
1985	147.9	3.8	96.2
1990	501.1	16.6	83.4
1995	2413.1	25.7	74.3
2000	2767.2	18.8	81.2
2005	2978.2	13.2	86.8
2010	4607	11.2	88.8
2014	5200	6.4	93.6

SOURCE: world development indicators

\* calculated

### 3.1.2 The share of “wages and compensations of workers” in the balanced budget:

Another indicator of internal efficiency is the share of “wages and compensations of workers” in the balanced budget. In this context, around 83600 Egyptian million pounds has been spent on the education sector in the financial year 2013/2014, where 86% of that budget is devoted to wages.

**Table (2): the allocation of public expenditure on education for the financial year 2013/2014**

The item	The value (million LE)	% of total expenditure
Workers’ wages and compensations	71896	86%
purchasing non-financial assets (investments)	5350	6.4%

Source: ministry of financial affairs, Egypt.

It should be noticed that the large share of wage in the government budget doesn’t reflect a high wages of education academic stuff, rather it reflects the high share of nonacademic stuff to the total workers compared to the accepted global rate. Thus reflects the high degree of wasting the public resources, and the mismanagement in allocating the public subsidization in the Egyptian education sector (The Egyptian cabinet information and Decision support center, 2014; Alaraby, 2012).

### 3.1.3 Pupil-teacher ratio:

Also, Pupil-teacher ratio is high and reached on average around 28 pupils per a teacher in the primary education, and 19 pupils per a teacher in the secondary education. This, in turn, has a negative impact on the quality of educational services received by pupils.

**Table (3): Pupil-teacher ratio in primary and secondary education  
 (Selected years)**

Year	1971	1980	1990	2000	2010	2013
Pupil-teacher ratio, primary	38	33	25	23	27.7	23.3
Pupil-teacher ratio, secondary	25	25	21	17	12	12

Source: world development indicators

To sum up, all the above indicators reflect the existence of high internal inefficiency in allocating the public education spending. And it should be cleared that low internal efficiency of the education system could act as a “black hole” absorbing the outcomes of public education subsidization, and hence education outcomes will not be achieved even with the increased public expenditures on education. (Yin and Wang, 2001, p 57).

### 3.2 External efficiency

Generally speaking, external efficiency, with the objective of social welfare maximization, is judged by the relation between input and output of the education system. By external efficiency analysis, we can justify the investment in education based on the higher social rate of return to investment in education than other alternatives. Also, external efficiency consideration affects not only the amount of public subsidization, but also affects the government's decision concerning which levels or which type of education should be given more attention in public subsidization, according to its social rate of return (Yin and Wang, 2002).

Hence, external efficiency reflects the quality of the education system, also indicates its ability to achieve the goals of the educational process, and it could be indicated by several factors such as net enrollment rate, gender parity, dropout rate, repeaters rates, density of classrooms, literacy rate, the extent of education outcomes to match labor market needs, education quality index on science and mathematics TIMSS, and so on.

In this regard, the available data revealed that, over the past thirty five years, Egypt has made a considerable progress in getting kids in school, closing the gender gap, and reducing primary education dropout rates; where the primary school net enrollment rates have raised dramatically over the past three decades and nearly achieved the universal primary enrollment. And, today, more than 97 percent of children attend primary school.

Adult literacy has increased from 51.3% in 1977 to 73% in 2014, While these figures still fall short of documented objectives, they are still considered a significant advancement in narrowing the gender gap in education (fan S., et al., 2006). This rough parity between boys and girls is indicated by the third column in table (4), as the enrollment rates in public schools have been gradually increasing during the period (1971-2015)<sup>1</sup>.

**Table (4): Gross and Net Enrolment in State Primary Schools and female to male ratio**

year	Gross enrollment rate	Net Enrolment Ratio	Female male ratio
1971	65%	64.2	68.5
1980	69.7	91.3	69.7
1990	84.3	94.9	83.3
2000	92.3	95.1	92.3
2004	96	95.4	95.9
2010	96	95.9	95.9
2015	97.5	97.3	98.9

Source: SESERIC, millennium development goals indicators.

In 1971, around 64% of children aged between 6 and 10 were enrolled in state primary schools and this percentage has jumped to 97.3% in 2015. Besides, the Female male ratio has been raised from 68.5% in 1971 to 98.9% in 2015, which indicates the increasing possibility of labor market participation (Qutb,2015).

Also, it is known that the dropout from basic education wastes the human resources; as it raises the illiteracy rate, unemployment rates and weakens the economic structure and the productivity of the society. The table below demonstrates that in year 2006, the basic education dropout of individuals between 6 and 8 years old has been reached 416.023 thousands, constituting around 2.4% of individuals, where males took the large percent; 58.3%. In 2012, the total number of students that drop out from basic education has been fallen, around 93% decreasing rate, compared to that in 2006.

**Table (5): basic education drop out by gender (individuals from 6 to less than 18 years old) according to the final results of population, housing and establishment 2006 census**

gender	No. of individuals from 6 to less than 18 years N# (million)	Never enrolled		Enrolled and drop out		Enrolled & did not drop out	
		%	N# (thousand)	%	N# (thousand)	%	N# (million)
Male	9.084.69' 7	4.65%	422.4	2.7%	242.6	92.7%	8.419
Female	8.500.384	6.95%	590.8	2.04%	173.4	915%	7.736
Total	17.585.081	5.8%	1013.2	2.4%	416	91.9%	16.155

CAMPAS, statistical year book, 2014.

<sup>1</sup> The Gross Primary enrolment rate (GER) is calculated by taking the number of children enrolled in primary school and dividing by the number of children of primary school age.  
 The Net Primary enrolment rate (NER) is the number of children enrolled in primary school who belong to the age group that officially corresponds to primary school.

In general, despite achieving many goals related to enrollment rates, gender parity, basic education's dropout rate reduction, there is still many indicators of educational system quality assured the existence of a weak external efficiency of public subsidization of education in an indirect way, such as High intensity of classrooms, a high youth's illiteracy rate, high dropout rates from the preparatory and secondary education, the increased unemployment rate of the educated people, and low average years of adults' education, as illustrated below:

#### **-High intensity of classrooms:**

Whilst the increase in net enrolment ratio is favorable and in line with Egypt's Millennium Development Goal of reaching 100% net enrollment by the year 2015, this has evidently strained the education system. Growing demand for education has been coupled by increased need for funding. Furthermore, merely increasing enrolment without improving the quality of education is an empty goal; cramping more children in classrooms (50 students per classroom on average) without the means to deliver an adequate quality of education serves to demote from the very essence of education.

Besides, the educational buildings consider one of the inputs and determinants of the quality of the educational process. Thus most countries that have a distinctive education system concern about the average density of classroom, and the number of hours the student stays at school, as those elements affect the quality of the education process.

In Egypt, the High intensity of classrooms and operating in several school shifts is the most serious problems facing the educational buildings; where the number of public schools suffering from high intensity of classrooms reached 9.4 thousand schools constituting around 37.8% of the total public schools. Also, there are 4.2 thousands public schools operate in shifts representing around 18% of the total public schools, which reduce the number of hours the student stays at school, and in turn affect negatively the quality of education received (The Egyptian cabinet information and Decision support center, 2014; Qutb,2015). While the available data from the CAMPAS revealed that the intensity of each classroom in public school has been on average 43 in Cairo city, 47 students in Alexandria city, and more than 52 pupils/ classroom in El Fayoum city, the fact reveals that intensity of classroom in most public school has reached more than 80 pupil per classroom.

#### **- A high youth's illiteracy rate:**

The real wealth for any society is its ability to make a better use of and develop its available human resources. The illiteracy considers as one of the quantitative indicators of human capital stock; where the high youth illiteracy rates reflect deterioration in the stock of human capital. Also, it constrains achieving a sustainable economic growth, which represent, in turn, an obstacle to reduce the poverty rates.

In Egypt, teaching quality is poor, and Egyptian children still struggle with basic literacy and numeracy. Adult illiteracy also remains a significant problem and detracts from the country's overall economic competitiveness. It was reached around 40%, owing to the high poverty rate. And that limits the reform programs 'aims. According to CAMPAS' data, there were 24.6 million illiterate people in Egypt in year 2014; where the illiteracy rate is high among girls and more concentrated in rural areas.

#### **- High Dropout rates from the preparatory and secondary education:**

A situation in which large numbers of talented school-aged children are for some reason not continuing education at least up to secondary school level must certainly be regarded as an inefficient use of the country's human resources.

In Egypt, despite the relative success of educational policies in absorbing a large number of students during the past thirty five years, keeping them until the end of educational stage still needs more improvemet; where the drop out rate from preparatory education about 6%.

The solution to drop out from education problem requires government intervention in terms of conditional monetary transfers including families' financial aids, removing illiteracy's programs, and increasing the capability of the graduates, through education and training, to meet the requirements of labor market.

#### **- The average of education years of adult is low:**

Years of education has reached on average in Egypt around 5 years during (1980-2013) which is relatively low compared to that in Jordan, around 7.4 years. In addition, when calculating the weighted average years of education of population (above15 years) according to educational quality, which indicates both qualitative and quantitative knowledge capital, its value approaches 2.3 years in Egypt in 2010, while in Jordan it

was 3.4 years, and in south Korea, one of Asian tigers that achieved high rates of economic growth during few decades, the value approaches 6.2 years (Alaraby, 2010).

**Table (7): the average years of education years of adult population (25 years and above) in Egypt during (1980-2013)**

years	1980	1985	1990	1995	2000	2005	2010	2011	2012	2013
<b>Education index</b>	<b>0.28</b>	<b>0.35</b>	<b>0.39</b>	<b>0.434</b>	<b>0.486</b>	<b>0.525</b>	<b>0.57</b>	<b>0.57</b>	<b>0.573</b>	<b>0.57</b>

Source: SESIRIC.

#### The increased unemployment rate of the educated people :

The mismatch between the outcomes of the education system and the needs of the job market is one of the key reasons behind the persistently high level of unemployment in Egypt, which is officially estimated at 12 per cent but generally assumed to be significantly higher.

Unemployment is particularly high among the under-25s and among university graduates, who, according to estimates from a regional NGO, Injaz Al Arab, typically take five years to find a job.

The International Labor Organization's 2014 Global Employment Trends report found that Egyptian schools "struggle to deliver graduates with the necessary skills for finding productive jobs," this contributes to unemployment and economic stagnation.

**Table (6): the distribution of unemployed persons by educational status and gender for the year 2013**  
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<b>Educational status</b>	<b>male</b>	<b>female</b>	<b>total</b>
<b>illiterate</b>	<b>2741</b>	<b>826</b>	<b>3567</b>
<b>Read and write</b>	<b>1133</b>	<b>108</b>	<b>1241</b>
<b>Lower than intermediate</b>	<b>2647</b>	<b>480</b>	<b>3127</b>
<b>intermediate</b>	<b>8277</b>	<b>7294</b>	<b>15571</b>
<b>upper intermediate and lower than university</b>	<b>968</b>	<b>662</b>	<b>1630</b>
<b>University and above</b>	<b>5077</b>	<b>6283</b>	<b>11360</b>
<b>total</b>	<b>20843</b>	<b>15653</b>	<b>36496</b>

Source: CAMPAS.

The unemployment rate is lower among individuals with lower than intermediate certificate, and reaches its maximum rate among universities graduate (22%). This could be due to a low education quality and the mismatch between the graduates' specialties and job requirement. In this context, it is noticed that approximately 74% of students enrolled in government universities in the year 2013, around 1.3 million, were specialized in theoretical areas, whereas 26% of them were enrolled in practical faculties.

The table above demonstrates the distribution of unemployed persons according to the educational status and gender for the year 2013. Accordingly, the number of unemployed persons was 3.6 million in the year 2013, which represents 13.6% of the total labour force. The graduate with intermediate certificate form about 42.7%, this percent becomes 78.3% after adding those with upper intermediate and university degrees. Also, the unemployment rate is high between female compared to males and it reaches its maximum rate among those with an intermediate certificate (36.3%). The unemployment of female with university degree constitutes around 34% of total female unemployment, which could be due to concentrating in specialties that don't match with labor market needs compared to males.

Therefore, the planned high quality education that yields well-trained and qualified labor force that matches labor market requirements is essential to reduce the unemployment rate. Also, education indicators call for the need of more concentration on education sector reform through rising the percent of GDP that is devoted to the education sector (Qutb, 2015; Alaraby, 2010)

In this regard, Egypt has got a step forward in reforming its education system to increase the quality of the educational services; as the new constitution commits the government to assign 7% of its GDP to the education sector with a promise to increase such a ratio gradually till reach the accepted global rate, hoping that the new spending quotas might help Egypt catch up to other emerging markets.

But In fact, quality issues are not addressed by simply throwing more money at the problems. Prior to the 2011 revolution, Egypt was an emerging market darling (investors dubbed it a CIVET country, grouping it with Columbia, Indonesia, Vietnam, and Turkey). But several of those countries are investing considerably more resources in schools than Egypt is and are outperforming Egypt in education. Also, the Egyptian government has

for years acknowledged the need for better vocational training programs, but has fallen short of delivering quality training.

Establishing workforce development programs that provide Egyptian youth with technical training has been a focus of USAID efforts in recent years. Germany has also worked with the Egyptian government to establish a version of its vaunted apprenticeship programs. But more is needed.

#### 4. Concluding remarks

The goal of public investment in the education sector is to create the skills and attitudes needed for higher levels of productivity and growth. Whether or not such goals would be achieved will depend not only on the amount of resources invested, but also on the efficiency with which the inputs are managed.

Accordingly, this paper analyzes the efficiency of subsidizing the Egyptian education system through differentiating between internal efficiency and external efficiency concepts.

Concerning the internal efficiency, the available data revealed the existence of high degree of internal inefficiency in allocating education spending in Egypt; where minor part of it has been devoted to investment expenditures. Also the share of wages and compensations of workers in the balanced budget is high and constitutes 86% where it doesn't reflect a high wages of education academic stuff rather it reflects the high share of nonacademic ones to the total workers compared to the accepted global rate. Besides, Pupil-teacher ratio is high and reached on average around 28 pupils per teacher in primary education, and 19 pupils per teacher in secondary education. All those factors affect negatively the quality of educational services received by pupils.

Concerning the external efficiency, despite achieving many goals related to enrollment rates, gender parity, basic education's drop-out rate reduction, there is still many indicators which indirectly assured the existence of a weak external efficiency of public subsidization of education such as high intensity of classrooms, a high youth's illiteracy rate, high Dropout rates from the secondary education, the increased unemployed educated people as a percent of total unemployed individuals, and The lower education years of adult on average. This is calls for the need to reform the Egyptian education system with a notice that the outcomes from that reform will be shown in the future not in the current time.

To sum up, Egypt over the past thirty five years has underinvested in education and has few resources other than its abundant human capital. On the education ground, it has fallen behind other developing countries both in terms of input (spending) and outcomes. Also, the current level of education funding in Egypt may be inadequate to deliver high quality education. And in order for Egypt, as a developing country to move forward, it has to invest in its "oil"; its human capital.

With greater investment in human capital, Egypt could take advantage of many more growth opportunities in high-skilled economic sectors, and develop the current generation's entrepreneurial capacities and skills and capitalize on the existing potential.

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