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ABSTRACT

After the 1952 revolution Egypt committed itself to expanding educational opportunity in pursuit of social justice and economic development. Enrollments have expanded rapidly, further encouraged by a large school construction program in the last three decades. Some assume that educational expansion, in itself, will reduce socioeconomic disparities in educational access and attainment. To assess attainment we examine educational transitions. Studies in industrial societies using similar methods differ on whether expansion leads to greater equality of opportunity, but tend to agree that socio-economic disparities are greatest at the earliest transitions. Few studies have been done in a developing country context; these too have found mixed evidence of a lessening effect of socio-economic background on attainment and none has assessed differential effects by level of transition. We use data from the 1988 through 2005 Egypt Demographic and Health Surveys to examine these two issues. Family-wealth is our measure of socio-economic status; we also consider gender and region—two key correlates of educational attainment in Egypt. Though large socioeconomic inequalities persist, the effects of parental background on attainment have declined. Effects are strongest at the beginning of children's educational careers, diminishing in later transitions. We discuss implications for further research and educational policy.

Education Transitions in Egypt

Introduction

In Egypt, despite some early efforts to make education more accessible, before the 1952 revolution education remained the province of a privileged few. After 1952, in pursuit of social justice and economic development, Egypt's leaders re-emphasized the goal of free education for all children (el-Geziri 2009). The post-1952 government took an early pledge to achieve universal primary education (UPE) by 1965 (Hopwood 1982). While that target went unmet, the 1971 constitution affirmed that education is a right that fulfills two basic principals: equity and equal opportunity (el-Baradei and el-Baradei 2004). At the beginning of this current decade Egypt committed itself to the Millennium Development Goals (MDGs), including "Education for All" (EFA). That is: "ensuring that by 2015 all children ... have access to and complete, free and compulsory primary education of a good quality" (UNESCO 2002:44). Indeed, Egypt pledged not just "education for all", but "excellence for all" (NCERD 2001; UNESCO 2003; Ministry of Education [MOE] 2003; NCERD 2004). The education MDGs also include the requirement that nations should eliminate "gender disparities in primary and secondary education by 2005" (UNESCO 2002:68).

Following the 1952 revolution, programs to reform education and expand opportunity were undertaken. Efforts were made to improve curricula, teacher training, and educational administration (Szyliowicz 1973). Educational access and attainment increased rapidly. Between 1952 and 1976 the number of schools doubled while primary enrollment grew more than fourfold (Waterbury 1985). In the two decades following the revolution, the percentage of

girls enrolled at all levels increased two- to three-times (Khattab and el-Daeiff 1984; Bach et al. 1985). However, still in 1988, only 78 percent of all young adults 19-22 years of age had ever enrolled in school, and just 44 percent of the people in this age group had completed secondary education.

To further improve educational opportunities a series of projects began in the 1980s. These included the Basic Education Project (Creative Associates International [CAI] 1991), the Basic Education Improvement Project (World Bank 1993), the Education Enhancement Project (World Bank 1996), the Secondary Education Enhancement Project (World Bank 1999), and the Girls' Education Initiative (GEI) (Sultana 2008). These projects were designed to facilitate access to education through school construction, improve the quality of education through curriculum reform and teacher training, encourage girls' education through "girl friendly" structures and curricula, and enhance efficiency through administrative reform. For the most part these projects ended by 2006¹. Largely as a result of these programs more than 1800 schools were built during the decade of the 1980s (CAI 1991). The pace of construction picked up dramatically in the 1990s with another 13,000 schools added between 1992 and 2006 (MOE 2007), thus bringing primary schools to virtually every Egyptian village (World Bank 2002), as well as expanding the number of preparatory and secondary schools. Recent assessments document steady growth in school enrollment at all levels (MOE 2007; World Bank 2007b). A number of reports claim that Egypt is close to, or has even already achieved, UPE and gender

¹ Though this series of projects has ended, the MOE has plans to continue school construction. In the coming years, however, projects will concentrate on improving the *quality* of education (MOE 2007).

equality (NCERD 2004; MOE 2007; World Bank 2007a; 2007b; 2008; Sultana 2008; UNESCO 2008 ????? other refs on gender equality ?????).

Other analysis suggests, however, that despite substantial progress, even today many Egyptian children never enroll in school, while others drop out, often before completing primary education (Langsten and Hassan 2007). A recent MOE (2008) report estimates that between 400,000 and 3,000,000 school age children are outside the educational system. As of 2005, 87 percent of Egyptian young people 19-22 years of age had ever-enrolled in school, and 81 percent had completed 5 years of education. In that same year, among young adults in this age group, 73 percent had completed 8 years of education while only 65 percent had finished secondary school.

In this paper we will assess the government of Egypt's efforts to provide equal educational opportunity to all citizens by expanding access, and supporting improved educational quality through the programs mentioned above. We consider three family background characteristics (indirect determinants of education) that have a major influence on the educational chances of Egyptian children and important policy implications: family wealth, gender, and region of residence.

Theory

Some believe that expansion of educational opportunity of itself, and particularly in combination with modernization and supporting government programs, will benefit the poor and generally decrease the effects of socio-economic origins on educational attainment (Breen and Jonsson 2005; Lewin 2005; 2008). Reproduction theorists, on the other hand, argue that in the developing world particularly, schooling underpins the advantages of society's elites; they tend to

perpetuate their advantages even as education expands (Carnoy 1974). Only as advantaged groups saturate their demand for education at a given level will those less advantaged begin to close the educational gap (Raftery and Hout 1993).

Numerous efforts, most following on the pioneering work of Mare (1980; 1981), have sought to determine whether status discrepancies in school enrollment and educational attainment decline as overall enrollment increases. Mare's work and an influential cross-national study of 13 developed countries (Shavit and Blossfeld 1993) found that, for the most part, the association between socio-economic origins and educational transitions was stable. Of the 13 countries studied, only Sweden and the Netherlands showed a decline over time in the effects of socio-economic background on the likelihood of transitioning across educational levels. The results of an early study in the Phillipines (Smith and Cheung 1986) were consistent with the prevailing developed country findings: over time there was no real change in the effect of family background on educational attainment. However, more recent work in Italy led Shavit to conclude that "Inequalities in educational attainment are somewhat less persistent" than previously thought (Shavit and Westerbeek 1998:45). In Korea, Park (2005) found a reduction in the effect of family background on the completion of middle school, no change in the relationship with high school completion, and an increase in the impact of father's education on attending higher education. In both Italy and Korea, growing equality of educational attainment is said to result from saturation effects.

Whether or not a change in the relationship between family background and educational attainment is found, all studies that investigate multiple transitions report that socio-economic background has a greater effect early in an educational career than it does on later transitions

(Mare 1980; Smith and Cheung 1986; Shavit and Blossfeld 1993; Park 2005). There are two possible explanations: 1) a life-course effect—i.e. older children are better able to make educational choices independent of family influence; 2) differential selection—i.e. as children drop out of the educational system those remaining have a greater commitment to education, irrespective of their socio-economic background (Shavit and Blossfeld 1993; Park 2005).

Another issue that plays into the question of transitions has to do with the MDGs' focus on completion of primary education. Some argue that without expanded access in post-primary education the education MDGs cannot be met. For example, Lewin (2005; 2008) maintains that in sub-Saharan Africa focus on the education MDGs has deprived post-primary education of needed planning and development. As a result, where primary enrollment has risen most quickly, post-primary access has not increased and thus post-primary transition rates have decreased.

In countries such as Egypt, gender is also inter-related with the issue of socio-economic background effects on educational attainment. It is often claimed that poor families, unable to afford to send all their children to school, will send their sons, in preference to their daughters (????? refs ?????). This implies that socio-economic background will have a greater impact on girls' attainment than on that of boys. Other views of gender and education have implications for the pattern of transitions across educational careers. It has been said that Egypt's schools are "often girl-repulsive"; sanitation facilities are inadequate, female students are subject to harassment (Sultana 2008:14). Moreover, girls may be taken out of school to help with household chores, or to enter into early marriages (Assaad et al. 2008; MOE 2008; Sultana 2008). Many have suggested that as girls reach puberty and marriageable age (preparatory and

secondary school age) their movements are likely to be restricted (Mensch et al. 2003; Ibrahim and Wassef 2000). Some claim that these restrictions cause a decline in girls' school attendance (Assaad et al. 2008), thus implying that later educational transition rates of females will be lower than: 1) earlier transition rates; and 2) those of males making the same transition. At the same time, while many reports and projects have focused on the educational obstacles confronted by girls, Knodel and Jones (1996) have warned that in seeking to help girls, the needs of poor boys should not be ignored. This is an important admonition when assessing the Egyptian experience, as will be seen below.

Educational Transitions

We begin our analysis using the proximate determinants of education framework we have developed in earlier work (Langsten and Hassan 2005; 2007). This framework: 1) measures educational attainment and the proximate/direct determinants of attainment (ever enrollment, timely enrollment, timely progress through the years of schooling, and retention); and 2) partitions the failure to attain a given level of education—in this case, failure to complete secondary school. In partitioning the failure to attain secondary education we show the relative contribution to this failure made by each of the proximate determinants (or more correctly, their complements: 1) never having enrolled in school; 2) drop out; and 3) delay in completing education—whether due to late enrollment, grade repetition, or temporary absence from school). In this work we also examine the components of school retention—that is, each of the transitions between enrollment and completing secondary school: 1) retention through primary; 2) enrollment in preparatory school; 3) retention through preparatory; 4) enrollment in secondary

school; and 5) retention through secondary. Mare (1980; 1981) has argued that analysis of the conditional probabilities of advancing from one stage of education to the next is the correct way to measure the effect of a student's socio-economic background on her/his educational chances. Analysis of transitions also allows us to specify more precisely what in the educational process poses the greatest obstacles to attaining a secondary education.

Measuring Educational Attainment and the Proximate Determinants

Educational Attainment

Most recent analyses of education in Egypt (NCERD 1999; World Bank 2002; UNDP 2003; Gazaleh, et al. 2004; Iqbal and Riad 2004; NCERD 2004; El-Saharty et al 2005; El-Zanaty and Gorin 2007; MOE 2007) and in other settings measure attainment using Gross and Net Enrollment Ratios (GER - NER), based on government service statistics, or the Gross and Net Attendance Ratios (GAR - NAR) based on survey data. Other reports (Lloyd and Blanc 1996; Filmer and Pritchett 1999; Bruns et al. 2004), though none focusing specifically on Egypt, use completion rates: the percent of children in a given age group who have completed at least a given number of years, or a given level, of schooling². Completion rates are sometimes based on service statistics (e.g. Bruns et al. 2004), but more commonly use survey data (Lloyd and Hewett 2003). In this work we use the Grade 11 Completion Rate (G11CR) as our outcome indicator measuring educational attainment: that is, the number of young adults 19-22 years of age³ who

² Most of these analyses have focused on basic education, using 4 or 5 years of schooling completed, or completed primary education irrespective of the number of years of schooling in primary education. However, completion rates can be computed for any number of years, or any level, of schooling.

³ Other age groups could be used. We use 19-22 because this gives us an adequate sample of young adults who have had time to complete their secondary education, while using data from as close to the survey date as possible.

have completed 11 or more years of schooling divided by the total number of people aged 19-22 years in the sample. In Egypt, between 1988 and 2005, the G11CR approximates secondary school completion.⁴ While our outcome indicator is grade 11 completion, in the partitioning exercise we disaggregate its complement—the failure to complete 11 years of education.

The Proximate Determinants

As mentioned earlier, there are four proximate determinants of educational attainment (each with a complement): 1) ever enrollment / failure to enroll; 2) timeliness of enrollment / late enrollment; 3) timely progress through the grades / grade repetition—interruption of studies; 4) pupil retention / dropout. Separate indicators of two of the determinants (timeliness of enrollment and timely progress) require elaborate computations when using existing data, and the results are difficult to interpret⁵ (Langsten and Hassan 2005). By combining these two indicators, however, we can create a single measure of “timely progress /delay” which shows whether those currently in school are studying substantially below the age-appropriate year. Computation of

⁴ For most of the study period primary education in Egypt had 5 years, thus secondary education was completed after 11 years of schooling. However, those who completed secondary schooling in 1988 would have attended 6 years of primary. Despite this, when we look at the 1988 data, we see that 11 years of schooling also seems to be a major break point, with a large number of people clustered on that value. Therefore, we have used 11 years of schooling as a proxy for complete secondary for all years studied.

⁵ Although it is difficult to compute good measures of timely enrollment and timely progress using the variables currently found in most DHS household listings, some recent DHS studies include questions that provide straightforward measures of these indicators. Two very good questions are in the EdData module that collects detailed education data for children 6-15 years of age and is included in the woman questionnaire in some countries. They ask: 1) the age when the child first started going to school (timeliness of enrollment), and 2) whether the child has ever repeated a grade (repetition). Routine use of these questions, plus an additional questions about temporary interruptions of study, would permit computation of separate indicators of timeliness of enrollment and timely progress for the same age group as is used for attainment and the other proximate determinants. Currently, even when used, these questions are part of the woman questionnaire, and thus potentially subject to selection bias (mothers of some eligible children will be older than the eligible woman age range). However, the questions could, without difficulty, be added to the household listing.

this single measure is straightforward and this timely progress indicator is in a metric consistent with the other indicators used in this paper.

Ever-Enrollment / Failure to Enroll

Ever-enrollment is the number of young adults 19-22 years of age who have ever attended school divided by the total number of people age 19-22 years. This important determinant of educational attainment is often overlooked in analyses based on enrollment and attendance ratios (Langsten and Hassan 2005) and is not a component of the MDG NER-based assessment structure (UNESCO n.d.). However, enrollment in primary school is a critical step in a child's education: failure to enroll has a greater effect on failure to complete basic education in more countries than any of the other proximate determinants (Langsten and Hassan 2005). As we shall see, for the children in some sub-groups of the population failure to enroll dominates their educational profile.

Timely Progress / Delay

Timely progress through education is computed as the number of young adults 19-22 years of age who are still studying and have completed at least 11 years of education, divided by the total number of people aged 19-22 who are still in school. Students who have progressed normally through the Egyptian school system should have completed secondary school by age 18. Thus ours is a conservative measure of timely progress, allowing a student to be a year or two, or even more, behind the expected level of studies without considering that student to be delayed. Young adults who are in school can fall behind their age-appropriate grade by: 1) enrolling in school after the statutory age; 2) repeating years; or 3) interrupting their studies for a period of

time. Almost all Egyptian children enroll within one year of the statutory age (Ahlburg et al. 2004), thus virtually eliminating late enrollment as a cause of serious delay. Grade repetition, which is said to have declined during the 1990s (World Bank 2002; NCERD 2004), was found in recent data to be “extremely low”, never exceeding 3 percent of children in any one year (El-Zanaty and Gorin 2007:47). This measure, however, considers only young students, under 16 years of age, and there are indications that grade repetition is higher for students in preparatory and secondary school. There are no data on the likelihood that Egyptian students temporarily interrupt their studies, but this possibility is also believed to be rare. Since, all these effects are believed to be small, and, among them, only grade repetition is believed to potentially play a significant role, we feel safe in combining the three factors into a single measure of timely progress.

The true effects of delay may be underestimated by the indicators used. Late enrollment and grade repetition are said to be precursors to dropout (Lloyd et al. 2000; Rose and Al-Samarrai 2001; World Bank 2002; Ahlburg et al. 2004). Thus many students who were delayed in their progress through school, but who have dropped out without completing secondary school and before the age of 19-22 years, will appear as dropouts in our data.

Retention / Dropout

For the purposes of our analysis, retention is the number of young adults 19-22 years of age who have completed 11 years of schooling and are still studying, or who completed 11 years of education before leaving school, divided by the total number of people 19-22 years old who ever went to school. All sources agree that the level of dropout has been declining (or

conversely, retention has been increasing) over time (World Bank 2002; Iqbal and Riad 2004; NCERD 2004). However, these results generally refer to dropout from primary education only.

Partitioning the Failure to Complete Basic Education

In addition to measuring the levels of the G11CR and the proximate determinants, as described above, we can partition those children who have failed to complete secondary education, the complement of the G11CR. For example, in 1988, 44.4 percent of young adults 19-22 years of age had completed secondary school. Thus, we partition the 55.6 percent of these young people who have not completed 11 years of education, between those who: 1) never went to school; 2) dropped out before completing grade 11; or 3) remain in school, but have been so delayed as to have not yet finished secondary education. Every young person who has not completed secondary education falls into one, and only one, of these groups.

A mathematical explanation and detailed example of the computation of attainment, the proximate determinants, and partitioning can be found in Langsten and Hassan 2007.

Measuring Transitions

In addition to the above analysis we consider each of the transitions between enrollment and leaving secondary school. These are: 1) completion of primary (5 years of schooling); 2) enrollment in preparatory school; 3) completion of preparatory (8 years of schooling); 4) enrollment in secondary; and 5) completion of secondary (11 years of schooling). In each case we use the *conditional* rate of making the transition: i.e. the computation of each step is conditional on having completed the previous step. For example, the rate of enrollment in preparatory school divides those 19-22 years of age who ever enrolled in prep, by students of the

same age who completed primary school. In this conditional analysis, when we speak of the timely completion of secondary school, the denominator includes only those students who ever-enrolled in secondary school—*not*, as in the case of the basic retention indicator, all students who ever enrolled in school. Moreover, the denominator for completion of secondary is restricted to those who have either: 1) completed secondary; or 2) completed their educations by leaving school. Those who are still studying in secondary (i.e. who are delayed in their educations) are excluded from consideration in the completion of secondary results.

The proximate determinants framework provides descriptive results that clearly illustrate educational change. In a later section, we supplement these results with multivariate logit analysis to assess the relative effects of the variables studied.

Data

For this analysis we use data from the Egypt Demographic and Health Surveys (DHS) collected periodically from 1988 to 2005⁶. The DHS are large scale sample surveys of households⁷ focusing on fertility and maternal and child health. However, all Egypt DHS begin with a “household listing” that records the name, age, sex, and basic background characteristics,

⁶ The surveys for the years 1988, 1992, 1995, 2000, 2003, and 2005 are downloadable from Macro International’s DHS website (<http://www.macrint.com/content/research/>). An interim survey was conducted in 1997. We have been given access to basic data from this survey, but do not have the data necessary to compute the family wealth index, nor the region of residence variable. Therefore, the 1997 results are used only in Tables 1 and 2.

⁷ DHS data are collected from representative samples of households. In the Egypt DHS of 1988 through 1995, the lightly populated frontier governorates were excluded from the sample frame. Therefore, we have excluded this region from our analysis for all years. However, all other households are eligible for selection using probability sampling techniques. Although the main focus of most DHS analyses is women 15-49 years of age, the household listing data set includes information for all selected households, whether or not there is a resident “eligible” woman. Therefore, the samples of young adults used in this work are representative of all young adults in the population who are resident in households. Young adults who live on the street or who are institutionalized are not included in the sample.

including education, of all members of all sample households. The variables we use for most of the present analysis are simple and few. Our measures of educational attainment, the proximate determinants, and all transitions are based on just five questions:

1. How old is (name)?
For everyone 6 years of age, or older:
2. Has (name) ever been to school?
If (name) has ever been to school:
3. What is the highest level of school (name) has attended?
4. What is the highest grade (name) completed at that level?
For those less than 25 years of age:
5. Is (name) still in school?

In addition, we use information on family wealth⁸ (divided into quintiles), gender of the child, and region of residence (urban/rural, upper-/lower-Egypt). All of these variables come from the household questionnaire, and are available for all sample households.

Throughout our analysis we use “usual residents” only, and weighted data.

RESULTS

Attainment and Proximate Determinants

Over the 18 year period included in our research there has been substantial progress in grade 11 attainment (Table 1). The percentage of young people aged 19-22 years who completed their secondary schooling increased by more than 20 percentage points, from 44 percent in 1988 to 65 percent in 2005. The increase was gradual and steady over the study period. Attainment has increased as a result of improvements in both ever enrollment and retention. Timely progress has been high and relatively stable since 1992.

⁸ Socio-economic status is estimated using a measure of household wealth, as described by Filmer and Pritchett (2001).

Turning to the partitioning results, it is useful to begin with some general comments about how the partitioning works. One might expect that as one of the proximate determinants, e.g. retention, increases, the relative role that determinant's complement (dropout) plays in limiting grade 11 completion would decline. But this is not necessarily the case: the relative role of each of the proximate determinants is also influenced by the level of the other determinants. For example, in Table 1 compare the results for 1988 with those for 2005. All three of the proximate determinants have increased, with retention making the greatest absolute (14.7 percentage points) and relative (22.9 percent) increases. Despite these changes, the partitioning results for 1988 and 2005 are strikingly similar, with the role of dropout increasing slightly. The point is that it is impossible to predict changes in the partitioning results, based on changes in the basic proximate determinants.

With that caution in mind, throughout the study period dropout has been the main determinant of grade 11 attainment, accounting for at least 50 percent of the failure to complete secondary school. Failure to enroll was responsible for about 32 to 39 percent of the failure to attain secondary education, while delay accounted for around 10 percent or less. While the results of the partitioning exercise exhibit considerable survey to survey variation, the results for the beginning and ending years (1988 and 2005) are remarkably similar. That is, even as attainment, ever-enrollment, and retention have all improved, the proportionate share of each of the reasons for failure to complete secondary education has remained fairly stable.

Although dropout has consistently played the most important role in limiting grade 11 completion, as we will see below, dropout rates are highest in the earliest transitions. Moreover, because of the education MDGs' focus on primary school completion, we are particularly

interested in the roles entry into, and completion of, primary play in educational attainment. Therefore, we have added the percent of young people who never enrolled with those who left school before completing primary. In the seven surveys for which data are available, children who failed to get through primary, (with just one exception) account for half, or more of those who failed to complete secondary school. That is, most of the failure to get an education occurs early in the educational career, leaving these young people completely illiterate. It is also interesting to note that dropout during primary appears to be contributing an increasing share to those who fail to complete secondary.

Males have enjoyed an educational advantage throughout the study period (Table 2). However, the advantage has been declining steadily over time: in 1988, males were 25 percent more likely than females to have completed secondary education; by 2005 the male advantage had shrunk to just 8 percent. *All* of the male advantage is attributable to males' greater likelihood of entering school. Between 1988 and 2005 ever-enrollment of males increased very slowly, while females' ever-enrollment grew at a more rapid pace. Thus the relative enrollment advantage of males declined from 36 percent in 1988 to just 16 percent in 2005. Even as retention has increased for both males and females throughout the study period, females who ever-enrolled have consistently had slightly *higher* levels of retention. This point merits emphasis: throughout the period from 1988 through 2005, a female who started school had, on average, as good a chance, or even a slightly better chance, to complete secondary school as a

male who entered school⁹. Similarly females consistently enjoyed a slight advantage in timely completion of their studies.

The gender-specific partitioning (Table 2, Partitioning the Failure) illustrates an important issue in Egyptian education, and reinforces our emphasis on the gender disparities in ever-enrollment and dropout in the preceding paragraph. Failure to enroll plays a much more important role in limiting the attainment of females than of males. Indeed, in several years, including the beginning and ending years of our study period, females' failure to enroll is the most important determinant of their educational attainment, accounting for more than 50 percent of their failure to complete 11 years of schooling. This means that, in these years, the number of girls who never started school in the first place is greater than the total number of girls who dropped out of school throughout the entire 11 years of primary and secondary education. For boys, on the other hand, dropout is consistently the dominant factor in determining their educational attainment—accounting for about two-thirds or more of their failure to achieve secondary education. Another consistent finding is that although delay is the least important determinant of educational attainment for both males and females, it always plays a greater role in limiting the attainment of males than it does for females.

For gender too it is useful to add the role of failure to enroll with dropout during primary to again place attention of the goal of the education MDGs to ensure that all children complete primary education. Failure to enroll always accounts for 45 percent or more of females' failure to complete secondary. And dropout during primary, which always accounts for around 11 to 16

⁹ Though not commonly recognized, this result is consistent with other findings (Mensch et al. 2003; Elbadawy 2006).

percent of the failure to complete secondary ensures that in all years between 58 and 69 percent of the females who did not complete secondary never got past primary. Since the mid-1990s failure to enroll has always accounted for only around 20 percent of males' failure to complete secondary. Dropout during primary, however, always plays a greater role for males than for females, with 13 to 22 percent, or more of males who failed to complete secondary leaving school during primary. As a result, over the study period, 35 to 42 percent of those who did not get a secondary education, in fact, did not get even a primary education. And dropout during primary appears to be playing an increasing role for both females and males.

Turning to the wealth-specific results (Table 3), we see that between 1988 and 2005, the G11CR and all of the proximate determinants improved for young people in all five quintiles. In addition, over time, there was a general tightening of the distribution of attainment across wealth groups. In all paired comparisons between wealth quintiles the *relative* disadvantage of the poorer quintile declined vis-a-vis all the quintiles above. This overall tightening is best illustrated by comparing the wealthiest and poorest quintiles. In 1988, secondary completion among young people in the wealthiest group was 61 percentage points higher than that of the poorest quintile: i.e young people from wealthy families were more than 4 times as likely to have completed secondary school as were those from the poorest quintile. By 2005, this advantage had been reduced to 51 percentage points, with those from wealthy families just over two times as likely to complete secondary schooling as those from the poorest backgrounds.

As for the proximate determinants: in 1988 young people in the wealthiest quintile already had very high levels of ever-enrollment, thus there was almost no potential for further improvement. While there was still some slight scope for this wealthy group to improve its

retention, it was very close to saturating its demand for primary and secondary education. Under these circumstances wealth differentials are likely to decline as educational opportunities trickle down to poorer groups. At the same time, it is notable that even as children from the poorest quintiles increased their ever-enrollment, they also improved their rates of retention and timely progress. Thus, the greater heterogeneity in the student population introduced by increasing ever-enrollment rates did not result in higher dropout, or more grade repetition.

The wealth-specific partitioning results (Table 3 - Partitioning the Failure) show that as wealth increases failure to enroll decreases in importance, while both dropout and delay generally increase in importance as constraints on grade 11 completion.

Effects of Gender, Wealth and Region

To assess the combined effects of the three indirect determinants studied (family wealth, gender, region of residence), we have created seven region - wealth categories. We have collapsed the wealth quintiles into three groups: a) poor - the bottom 40 percent of families; b) middle class - families in the two middle quintiles; and c) wealthy - the top 20 percent of families. We use three regional groupings: maintaining a) upper-rural and b) lower-rural as distinct regions, while c) combining all urban areas, including upper-urban, lower-urban, and the urban governorates into a single category. The analysis in Tables 4-6 below is based on a total of 7 groups. Six groups result from combining each of the three regions with each of the poor and middle class wealth categories. The seventh group consists of all wealthy families, with no regional differentiation. For each region-wealth group we show results for males and females separately.

Levels of Attainment and the Proximate Determinants

Table 4 shows the levels of secondary school completion and of the proximate determinants for the seven region-wealth groups of 19-22 year old young adults, separately for males and females, for 1988 and 2005. (Tables for the remaining years are in Appendix ??????)

These results show that in 1988, the poor especially, but even the middle class, had very low levels of secondary school completion. Only 5 of the 14 groups had G11CRs greater than 50 percent, with 3 of these having rates in the low- to mid-50 percent range. In that year, in four of the seven region-wealth groups, the G11CR of males was twice or more that of females from the same group. Only among the urban middle class and the wealthy were females as likely to complete 11 years of schooling as males. At the same time region-wealth differentials were also very large. Among males, the poor in each region were less than half as likely to complete secondary school as were males from wealthy families. The disparities were much greater for females. Females from poor families in all three regions (rural lower, rural upper, and urban) were less than one-quarter as likely to complete 11 years of education as were females from wealthy families, with poor females from rural upper-Egypt having an extremely low completion rate, just a fraction of that of the wealthy. Even middle class rural females were less than half as likely to finish secondary school as wealthy females.

By 2005, the situation had changed substantially. In most (11 of 14) groups, at least 50 percent of those 19-22 years old had completed secondary schooling. Completion rates for poor females doubled or tripled or, in the case of poor rural upper-Egyptian females, improved 5-fold. Moreover, both gender and wealth disparities in the G11CR declined. By 2005 the female disadvantage seen earlier among the poor in urban and rural-lower Egypt had been completely

eliminated. Gender differentials in secondary school completion remained only in rural upper-Egypt, and even there females had substantially reduced the male advantage.

Over the study period, despite continuing disparities, poor young people made both absolute and relative educational gains compared to students from wealthy families. Rural upper-Egyptian females from poor families remain the most severely disadvantaged group (just 27 percent having completed secondary school), while poor urban females also have a very low completion rate. Both of these groups, however, have moved closer in both absolute and relative terms to the educational attainment of females from wealthy families.

Interestingly, the group that has made the least progress between 1988 and 2005 is poor urban *males*. Their secondary school attainment increased by just 3 percentage points from 35 to 38 percent. Over this 18 year period, they lost ground relative to males from wealthy families, indeed, relative to all other region-wealth and gender groups. Although the decline was small (in 1988 educational attainment of poor urban males was 44 percent of the attainment of the wealthy; in 2005 it had slipped to 42 percent) they are the only group not to have improved, vis-a-vis the wealthy. In 1988, the attainment of poor urban males was at least as high as, and often substantially higher than, other poor males, and all groups of females with the exception of those from urban middle class and wealthy families. Their attainment was almost twice that of poor urban females. In 2005, by contrast, poor urban males lagged behind every other group, except poor rural upper-Egyptian females. And the gender differential in attainment of poor urban children shows the largest *female* advantage of any region-wealth group.

One final point: in 1988, middle class urban males were about as likely to have completed secondary education as were middle class males from the two rural regions. Over the course of

the study period, however, the gains of urban middle class males were less than those of their rural brothers, and in 2005 the urban males were 10 to 13 percent *less* likely to complete secondary schooling than were those from the two rural regions.

The remaining columns of Table 4 show the levels of the proximate determinants by gender for each of the region and wealth groups for 1988 and 2005. Both ever-enrollment and retention increased for both males and females, in every region-wealth group. As with grade 11 completion, for both of these key proximate determinants the male advantage declined over time. This is particularly true of retention. In 2005, amongst children from poor families in rural-lower Egypt and from urban areas, males maintain an ever-enrollment advantage of 18-26 percent. But, the female retention advantage in these two groups completely offsets the male enrollment advantage, resulting in female equality, or even a female advantage, in grade 11 completion.

Even in 1988 the wealthy had high levels of ever-enrollment and retention. They are now approaching a ceiling on both these determinants; future improvements in these areas will be difficult to achieve. As a result, all other region and wealth groups, with the notable exception of poor urban males, reduced both their absolute and relative disadvantage on these indicators vis-a-vis the wealthy group.

By 2005, more than 90 percent of the students in all groups, with, once again, the exception of poor urban males, were making timely progress through the educational system. Females had an advantage in timely progress in every region-wealth group.

Partitioning the Failure to Complete Grade 11

The partitioning results in Table 5 clarify the role that each proximate determinant plays in the completion of secondary schooling, and once again illustrate the common gender difference in the obstacles to grade 11 completion we have mentioned above. For four of seven region-wealth groups of females, especially for poor females, failure to enroll is the most important constraint on educational attainment. On the other hand, dropout *always* plays the most important role for males. Only when female ever-enrollment approaches or exceeds 90 percent does dropout emerge as the main determinant of their educational attainment. Even when males have ever-enrollment rates in the low 80s, drop out is the main factor affecting their educational attainment.

As a further illustration of the gender differences revealed by the partitioning, consider the two groups with the lowest levels of grade 11 completion in 2005: poor rural upper-Egyptian females and poor urban males. The poor rural upper-Egyptian females have very low ever-enrollment and low, but slightly better, levels of retention. As a result, 70 percent of their failure to complete secondary schooling is the result of never having enrolled in school. That is, among the females in this region and wealth group who failed to complete 11 years of education, all the dropout that took place over the course of 11 years of schooling accounts for less than half of the effect of failure to enter school in the first place. For poor urban males the picture is very different. Their level of ever-enrollment is much better than the enrollment of the poor rural-upper Egyptian females, while their level of retention is slightly worse. As a result, failure to enroll is a relatively minor obstacle to their secondary attainment. Rather, dropout accounts for about two-thirds of the failure of poor urban males to complete 11 years of schooling.

In general, delay plays a small role in limiting educational attainment in this age group: generally less than 10 percent for females, and usually less than 20 percent for males. Still, in every wealth and region group, males are more likely to have been seriously delayed in their studies while remaining in school. Most notable are males from the wealthiest quintile of families: 39 percent of the relatively small number of young adults from this group who have not completed secondary education are still studying—an exceptionally high component of delay.

Assessing Educational Transitions

Table 6 shows conditional transitions from one stage of education to the next by gender for the seven region-wealth groups. To illustrate how these transition rates are computed consider poor rural upper-Egyptian males in 1988. Table 4 shows that 74.0 percent of these males ever-enrolled in primary school. The first column of Table 6 indicates that, of this 74 percent, 84.9 percent completed their primary education. Then, of those who completed primary, we can see that 82.2 percent enrolled in preparatory school. And of those who enrolled in prep, 92.5 percent completed this level. Of those who completed prep, 95.6 percent went on to enroll in secondary, and of those who enrolled in secondary, 92.5 percent had completed 11 years of schooling. Finally, returning to Table 4, we must take consideration of the 86 percent of young people who made timely progress. If all these percentages are multiplied out, the result is the 36.4 percent of poor rural upper-Egyptian males who have completed secondary, as shown in the first column of Table 4.

There are several important points to notice about these transitions that follow ever-enrollment. First: in cases where females have ever-enrollment rates below 90 percent,

subsequent transitions equal or exceed the level of primary enrollment. This was generally true in 1988, and always true in 2005. Second: wealth differentials in these transitions are much smaller than the differentials for ever-enrollment. This is always true in 1988; by 2005 the region-wealth differentials in post-enrollment transition rates are smaller still. Finally: although in 1988 there were substantial female disadvantages in transitions for several region-wealth groups, by 2005 the male advantage in these transitions was almost completely gone. Some concrete examples will illustrate these points.

Consider first, the poor rural upper-Egyptian females who have by far the lowest grade 11 completion levels. In 1988 just 25 percent of these females had ever studied, and they were only about one-quarter as likely to ever-enroll as females from wealthy families. By 2005, 50 percent of the poor rural upper-Egyptian females had enrolled in school, and they were 51 percent as likely as wealthy females to have ever-enrolled. But, already in 1988 56 percent of the poor girls who entered primary, completed that level. And of those who completed primary, 66 percent entered prep. Subsequent transitions are even higher. In 2005, the transitions were generally higher still. Of those who entered primary, 85 percent completed it, with 93 percent of those students continuing into preparatory school. Some subsequent transitions are a bit lower, but always exceed 87 percent. Fully 98 percent of poor rural upper Egyptian females who entered secondary have completed 11 years of schooling, or a par with females from all the other region-wealth groups. Since transition rates of the wealthy were already 95 percent or above in 1988, and could hardly go much higher, it is clear that the substantial gains in rates of transition by poor rural upper-Egyptian females result in a substantial reduction in the wealth differentials in the transitions.

Poor rural upper-Egyptian females suffer the greatest gender differentials: in 2005 they were 42 percent less likely to enroll in school than males from the same region-wealth group. In the case of subsequent transitions, however, the greatest female disadvantage occurs in the move from preparatory to secondary, with females just 8 percent less likely than males to make that step. Among poor rural upper-Egyptian young people who enter prep or enter secondary school, females are as likely to complete these levels of schooling as are males. Moreover, note that for all of the later transitions (enrollment in preparatory, retention through preparatory, enrollment in secondary, retention through secondary) in all region-wealth groups, with just two exceptions for one transition, females are at least as likely to make the transition as males. And these transitions are made at high levels. Among females who begin preparatory, in all region-wealth groups 88 percent or more complete that level. Among females entering secondary 97 percent or more complete that level. Note too that 93 percent or more of females from poor and middle-class *rural* lower Egyptian families make all of the later transitions, after completing primary school. These transitions are made as girls are entering puberty, maturing physically, becoming young women, and entering the age for early marriage. Despite these changes, and social norms that demand that young females must be protected, and in some cases supporting early marriage, few females are leaving school during the years of preparatory and secondary education.

In contrast to the general picture of educational progress, poor urban males present an example of educational stagnation. Reflecting the low level of retention of these males seen in Table 4, with the exception of the transition from primary to preparatory school and retention through secondary, all the rates for 2005 in Table 6 are about equivalent to, or less than the likelihood of making the same transition in 1988. In 2005 retention through primary of this

group of males is the lowest transition rate of any group, whether male or female, for any transition. The low and stagnant transition rates of these poor urban males and the slight, but consistent progress of poor urban females, means that the advantages males in this group enjoyed in some transitions in 1988 have completely disappeared. In 2005, among poor urban young people, though males have a substantial advantage in terms of ever-enrollment, females enjoy an advantage at every subsequent transition, and end up being 10 percent more likely to complete 11 years of schooling.

Multivariate Analysis

Under Construction.

Discussion

Much previous work has found that as educational opportunities expand over time, the effect of background characteristics on transition rates remains largely constant (Mare 1980; Smith and Cheung 1986; Blossfeld and Shavit 1993; Raftery and Hout 1993). In contrast, our descriptive results, using the proximate determinants framework, suggest that in Egypt, over the 18 year period between 1988 and 2005, the effect of background characteristics on most transitions has been substantially reduced. In all regions, attainment of the children of poor families has increased at a faster pace than enrollment of those from wealthy families. Our multivariate results (not yet shown) are largely consistent with those of others. However, interpreting them using the logic of Arum, Gamoran and Shavit (2007) they also indicate some convergence of educational opportunities. We believe that the expansion of education has opened opportunities for all socio-economic groups—perhaps because the wealthy have saturated

their demand for education through secondary school (Raftery and Hout 1993), or perhaps because the expansion of education has been sufficiently broad as to reach into all corners of the country.

It is also possible that the expansion of technical secondary education now permits tracking of poor students into lower status education, thus maintaining educational inequality by new means. Unfortunately, the DHS data include no information on the type of secondary school attended.

The increased socio-economic equality in educational attainment found represents one step toward the greater social justice promised by the 1952 revolution. Moreover, our results show clearly that females, though still severely disadvantaged, have substantially reduced their educational gap during the study period.

More than a decade ago, Knodel and Jones (1996) observed that in countries like Egypt “girls from the lower socioeconomic groups are severely disadvantaged” both because they are poor and because they are girls. They warned, however, that in providing special help to poor girls, the needs of poor boys should not be ignored (Knodel and Jones 1996:697). Our results re-enforce their warning.

In Egypt, disadvantaged groups (girls, the poor, and rural residents, particularly those from upper Egypt) have made substantial progress. However, only children from the wealthiest quintile of families are approaching universal secondary school completion. Educational attainment of all poor children, boys as well as girls, continues to lag. Attention has rightly focused on rural upper-Egyptian girls from poor households, since these girls constitute a large group that continues to experience the lowest levels of educational attainment. However, if left

unattended, low attainment on the part of poor urban girls, and the educational stagnation of poor urban boys, may emerge as serious problems in the future.

Future Steps

A critical question remains: what steps can be taken to meet the educational needs of Egypt's poor children? The results presented in this paper provide a starting point for assessing this issue.

When considering the future of Egyptian education, there are two groups that merit special attention: 1) poor females in rural upper-Egypt who continue to have by far the lowest levels of educational attainment; 2) poor urban children, particularly males, who made relatively little progress in improving their G11CR over the course of the study period, and who, other than the poor rural upper-Egyptian females, have the lowest levels of grade 11 attainment. For poor rural upper-Egyptian females, still in 2005, failure to enroll remains extremely low, accounting for almost 70 percent of these girls' failure to complete secondary school. No other group is so completely excluded from the advantages of education at such a young age.

What obstacles prevent these girls from ever enrolling in school? Some have suggested that conservative customs and traditions¹⁰ prevent rural girls, and particularly those from rural upper Egypt, from attending school (NCERD 2004; MOE 2008; Sultana 2008). It is striking, however, that poor rural upper-Egyptian females who enter school make all subsequent transitions at fairly high rates—even if these rates are slightly lower than those of most other groups (Table 6). Similarly while only 79 percent of middle class rural upper-Egyptian females

¹⁰ Some even speak of a “visceral rejection of [girls’ education that] can be seen as a threat to a way of life” (Sultana 2008:69).

enter school, once having entered more than 90 percent of eligible females make each subsequent transition. The only transition that less than 95 percent of these young women make is that from preparatory to secondary school. It is likely that distance to school plays a substantial role in preventing girls from making this move. Many upper Egyptian villages will not have secondary schools, requiring students to make sometimes long journeys to and from school. Thus, even as these females from rural upper-Egyptian families pass through puberty and into marriageable age the vast majority who are in school, stay in school, even as they move from level to level. These results, in combination with earlier work, indicate that, while conservative upper Egyptian values may have affected ever-enrollment in the past, and may continue to play some role, they are no longer central to most educational decisions.

Our results show that poverty has a very strong impact on failure to enroll and on the failure to make subsequent transitions. In the zero-order analysis, residence in conservative rural upper Egypt also negatively affects almost all transitions. In the multivariate analysis poverty retains a strong impact. The affect of region, on the other hand, either becomes not significant, or, in the case of some transitions in 2005, residence in rural upper Egypt significantly reduces the risk of cutting short an educational career. (See also Langsten and Hassan 2007; Assaad, et al. 2008). Thus the emphasis in much of the Egyptian literature on the impediment to education posed by conservative cultural values is called into question. Poverty appears to be the most important obstacle to education.

However, consistent with the results for other countries, the effect of poverty declines substantially in later transitions. Poverty plays a huge role in the failure to enroll. The impact of poverty on the risk of dropout during primary is still large, but much reduced. By secondary

school, poverty still has a significant effect on dropout, but this role has been further reduced. There may be several mechanisms through which poverty operates (el-Baradei and el-Baradei 2004). School fees and other school-related costs may be unaffordable. Poor access to schools may impose time and transportation costs beyond the abilities of poor families to pay. Females from poor families may have to work in the household or for wages to help their families.

We are unable to assess these alternatives with the data available. A recent paper, however, finds a “causal relationship work and lack of school attendance” (Assaad et al. 2008: 34). On the other hand, information from an education project in rural upper-Egypt indicates that poor girls living close to schools enroll, as do almost all girls from wealthier families, regardless of the distance to school. Failure to attend, and ever to enroll, is said to be concentrated among girls from poor families who live far from schools, particularly if they live in a satellite village isolated by fields from the mother village where the school is located¹¹. If this is true, difficult access to school may be an important factor preventing ever-enrollment by poor rural upper Egyptian females.

Some maintain that, in Egypt, the problem of access to primary schools has been solved (World Bank 2002). Moreover, some argue that, in general, “although increasing school availability can be a tool for increasing enrollments, it cannot typically be expected to have a large effect”, even for poor children (Filmer 2004: 1; see also Burke and Beegle 2004; El Baradei and El Baradei 2004). On the other hand, in some settings, improved school availability has been

¹¹ The authors were involved in assessment of this project. Our information on patterns of enrollment comes from discussions with the interviewers collecting assessment data. We hope that in the future there will be an opportunity to analyze this issue.

found to raise enrollment (Duflo 2001; Handa et al. 2004). Future research should assess the effect of primary school access on ever-enrollment in Egypt.

Table 4 shows that, with the exception of poor rural upper-Egyptian females, poor urban young people, both males and females, have the lowest levels of grade 11 completion. The main obstacle to education for poor urban females is failure to enroll, just as for their rural sisters. It is unlikely, however, that access to primary schools is an important cause of non-enrollment for the urban females. Costs, household work, or other factors are more likely to play a significant role. We are unable to assess these alternatives with the available data.

Poor urban males are the group that made the least progress in educational attainment over the years studied. The 1988 survey found that 35 percent of these males had completed 11 years of schooling. By 2005, 38 percent had completed secondary education, a gain of just 3 percentage points. It is notable that poor urban males have the lowest level of retention through primary school of any group, male or female. Those poor urban males who complete primary, however, have a 91 percent chance of entering preparatory school, and of those who enter prep, 87 percent complete that level. That is, transitions and retention are higher for urban males after they complete primary.

When seeking the reasons that these poor urban boys leave school at young ages we should once again consider costs and the need for them to contribute financially to their families. We must, however, also note that parents report that the main reasons children leave school early are lack of interest and poor performance in school (UNICEF 2002; El-Zanaty and Gorin 2007). These latter factors are related to the quality of education provided, which is said to have deteriorated from the 1970s into the 1990s (UNDP 1999).

The Basic Education Improvement Project and Education Enhancement Program, begun in 1993 and 1996 respectively, included a number of efforts to improve the quality of student performance and outcomes (World Bank 1993; World Bank 1996; World Bank 2007a; World Bank 2008). Few published studies have assessed this work, and the limited existing research has produced mixed results. For example, while one report finds that in-service training reduces girls' dropout (Iqbal and Riad 2004), another study finds teachers to have been frustrated in introducing changes into their classrooms after in-service training (Johnson, Monk, and Swain 2000). Similarly, a recent assessment by the World Bank (2008) found that though learning outcomes seem to have improved, the effects were small and the findings contradictory. Moreover, there was no "clear line of reasoning that would link interventions with outcomes" (World Bank 2008, 20).

Conclusion

Some have criticized the Education MDGs for their emphasis on primary education. These critics suggest that without expanded post-primary education the MDGs cannot be attained (Lewin 2005). While this may be true for some countries, our analysis shows that in Egypt the initial steps in education are the most difficult, and that those who manage to succeed at the primary level have a very good chance of continuing through secondary education. It is especially important to note that, as ever-enrollment has increased, transition rates are all subsequent levels of education have also increased. That is, growing primary enrollments have not resulted in greater competition for secondary school places, nor have they resulted in higher dropout that might be expected from a more heterogeneous group of students. Although Egypt

has focused on the MDGs and primary school completion, it has also provided sufficient support to secondary education to allow students to progress. This is especially important in Egypt, which has been described as a “conspicuous example of ... too rapid upper-level educational expansion” (Todaro and Smith 2002: 407). Under these circumstances we believe that the MDG focus on admission to, and completion of, primary education is appropriate for Egypt. Egypt has made good strides toward providing universal education. In the immediate future, education policy must continue efforts to extent enrollment in primary to those groups that remain disadvantaged. And, over the longer term, efforts must be made to improve the quality of education—ensuring not just “education for all”, but “education of good quality”, as required by the Education MDGs and promised by the Egyptian government.

Table 1. Educational Attainment, Proximate Determinants and Partitioning of Failure to Complete 11 Years of Education for Young Adults 19-22 Years of Age – Egypt: 1988 through 2005.

Year	Educational Attainment		Enrollment		Retention		Pace of Progress		Partitioning the Failure to Complete Grade 11		
	G11CR	Failure to Complete Grade 11	Ever	Never	Still or Drop After Grade 11	Dropout Before/In Grade 11	Timely	Delayed	Failure to Enroll	Drop Out	Delay
1988	44.4%	55.6%	78.5%	21.5%	64.1%	35.9%	88.3%	11.7%	38.8%	50.7%	10.6%
1992	51.5%	48.5%	79.3%	20.7%	66.9%	33.1%	97.1%	2.9%	42.7%	54.1%	3.2%
1995	52.0%	48.0%	83.5%	16.5%	63.9%	36.1%	97.5%	2.5%	34.5%	62.7%	2.8%
1997	56.1%	43.9%	83.7%	16.3%	70.2%	29.8%	95.6%	4.4%	37.3%	56.8%	5.9%
2000	57.8%	42.2%	86.4%	13.6%	70.0%	30.0%	95.6%	4.4%	32.3%	61.4%	6.3%
2003	63.5%	36.5%	88.1%	11.9%	76.1%	23.9%	94.6%	5.4%	32.5%	57.6%	10.0%
2005	65.1%	34.9%	87.5%	12.5%	78.8%	21.2%	95.3%	4.7%	37.2%	53.4%	9.4%

Table 2. Grade 11 Completion, the Proximate Determinants, and Partitioning of Failure to Complete 11 Years of Education, for Young Adults 19-22 Years of Age, by Gender – Egypt 1988 through 2005.

Year	G11CR			Ever-Enrolled			Retention			Timely Progress			Partitioning the Failure to Complete Grade 11					
	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio	Failure to Enroll		Drop Out		Delay	
	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Male	Female	Male	Female
1988	49.1%	39.2%	125.3	89.6%	66.1%	135.6	63.2%	65.5%	96.5	86.8%	90.6%	95.8	20.5%	55.8%	64.8%	37.5%	14.7%	6.7%
1992	56.8%	45.5%	124.8	89.4%	67.9%	131.7	65.7%	68.8%	95.5	96.8%	97.6%	99.2	24.5%	59.0%	71.1%	38.9%	4.4%	2.1%
1995	56.8%	46.9%	121.1	91.7%	74.8%	122.6	63.8%	63.9%	99.8	97.1%	98.0%	99.1	19.3%	47.6%	76.7%	50.7%	4.0%	1.8%
1997	60.7%	50.9%	119.3	92.1%	73.9%	124.6	69.8%	70.8%	98.6	94.3%	97.3%	96.9	20.0%	53.2%	70.7%	44.0%	9.3%	2.9%
2000	60.5%	55.0%	110.0	92.8%	79.6%	116.6	69.1%	71.2%	97.1	94.3%	97.2%	97.0	18.3%	45.4%	72.5%	51.0%	9.2%	3.6%
2003	66.0%	60.7%	108.7	93.4%	82.5%	113.2	76.4%	75.8%	100.8	92.5%	97.1%	95.3	19.5%	44.5%	64.8%	50.9%	15.7%	4.7%
2005	67.7%	62.5%	108.3	93.8%	81.1%	115.7	77.7%	80.0%	97.1	93.4%	97.4%	95.9	19.9%	52.2%	65.1%	43.2%	14.9%	4.6%

Table 3. Grade 11 Completion, the Proximate Determinants, and Partitioning of Failure to Complete 11 Years of Education, for Young Adults 19-22 Years of Age, by Family Wealth. Egypt: 1988 and 2005.

Year and Wealth Quintile	G11CR	Ever-Enrolled	Retention	Timely Progress	Partitioning the Failure to Complete Grade 11		
					Failure to Enroll	Drop Out	Delay
1988							
Wealthy 1/5	79.6%	97.8%	88.1%	92.4%	10.7%	57.1%	32.1%
Second 1/5	57.7%	93.2%	69.3%	89.3%	16.1%	67.6%	16.3%
Mid 1/5	39.4%	81.1%	55.9%	86.8%	31.2%	59.0%	9.9%
Fourth 1/5	28.4%	66.9%	50.3%	84.4%	46.3%	46.4%	7.3%
Poor 1/5	18.6%	50.0%	45.8%	81.5%	61.5%	33.3%	5.2%
2005							
Wealthy 1/5	91.2%	99.0%	95.0%	97.7%	13.1%	60.7%	26.2%
Second 1/5	78.6%	96.6%	84.9%	96.5%	16.8%	69.4%	13.8%
Mid 1/5	66.1%	91.3%	76.4%	95.5%	26.8%	64.0%	9.3%
Fourth 1/5	52.8%	83.3%	69.1%	93.0%	36.7%	54.7%	8.6%
Poor 1/5	39.8%	68.6%	64.3%	91.0%	53.3%	40.2%	6.5%

Table 4. Grade 11 Completion Rates, Ever-Enrollment, Retention, and Timely Progress, by Gender, Region and Wealth – Egypt 1988 and 2005.

Year, Region, and Wealth	G11CR			Ever-Enrolled			Retention			Timely Progress		
	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio
1988												
Upper Rural Bottom 40%	36.4%	5.4%	674.1	74.0%	24.6%	300.8	57.4%	26.0%	220.8	86.0%	84.2%	102.1
Upper Rural Next 40%	52.5%	25.2%	208.3	93.4%	53.4%	174.9	68.4%	47.3%	144.6	82.1%	100.0%	82.1
Lower Rural Bottom 40%	33.3%	16.1%	206.8	81.6%	43.5%	187.6	50.8%	45.0%	112.9	80.4%	82.5%	97.5
Lower Rural Next 40%	47.8%	36.0%	132.8	90.8%	71.1%	127.7	57.4%	56.8%	101.1	91.7%	89.1%	102.9
Urban Bottom 40%	35.2%	17.9%	196.6	87.2%	53.3%	163.6	46.8%	41.1%	113.9	86.3%	82.6%	104.5
Urban Next 40%	50.6%	54.8%	92.3	96.5%	86.1%	112.1	61.5%	69.7%	88.2	85.1%	91.1%	93.4
Top 20%	79.8%	79.3%	100.6	98.9%	96.7%	102.3	87.6%	88.6%	98.9	92.1%	92.7%	99.4
2005												
Upper Rural Bottom 40%	54.8%	27.4%	200.0	85.9%	49.9%	172.1	70.4%	59.5%	118.3	91.1%	93.3%	97.6
Upper Rural Next 40%	78.7%	60.4%	130.3	94.8%	77.5%	122.3	89.0%	79.5%	111.9	93.7%	98.0%	95.6
Lower Rural Bottom 40%	55.7%	55.0%	101.3	91.4%	77.6%	117.8	66.9%	73.5%	91.0	91.2%	97.3%	93.7
Lower Rural Next 40%	76.4%	77.2%	99.0	97.7%	93.3%	104.7	83.9%	84.9%	98.8	93.5%	98.2%	95.2
Urban Bottom 40%	38.4%	42.2%	91.0	88.6%	70.5%	125.7	54.5%	67.8%	80.4	83.5%	91.0%	91.8
Urban Next 40%	68.8%	71.4%	96.4	98.3%	93.5%	105.1	74.0%	79.7%	92.8	94.8%	97.4%	97.3
Top 20%	91.1%	91.6%	99.5	99.3%	98.6%	100.7	95.6%	94.6%	101.1	96.6%	98.9%	97.7

Table 5. Partitioning the Failure to Complete Grade 11, by Gender, Region and Wealth – Egypt 1988 and 2005.

	Failure to Enroll		Drop Out		Delay	
	Male	Female	Male	Female	Male	Female
1988						
Upper Rural Bottom 40%	40.9%	79.7%	49.8%	19.2%	9.3%	1.1%
Upper Rural Next 40%	13.8%	62.3%	62.1%	37.7%	24.1%	0.0%
Lower Rural Bottom 40%	27.6%	67.4%	60.2%	28.5%	12.2%	4.1%
Lower Rural Next 40%	17.6%	45.2%	74.1%	47.9%	8.3%	6.8%
Urban Bottom 40%	19.8%	57.5%	71.6%	37.9%	8.6%	4.6%
Urban Next 40%	7.0%	30.6%	75.2%	57.6%	17.8%	11.8%
Top 20%	5.6%	15.9%	60.6%	53.6%	33.8%	30.4%
2005						
Upper Rural Bottom 40%	32.2%	69.9%	55.8%	27.4%	11.9%	2.7%
Upper Rural Next 40%	25.4%	58.0%	49.2%	38.9%	25.4%	3.1%
Lower Rural Bottom 40%	19.8%	50.9%	68.2%	45.7%	12.0%	3.4%
Lower Rural Next 40%	9.8%	30.8%	67.4%	62.8%	22.7%	6.4%
Urban Bottom 40%	20.1%	53.4%	66.7%	39.2%	13.2%	7.4%
Urban Next 40%	5.7%	24.6%	82.1%	68.3%	12.2%	7.1%
Top 20%	8.1%	17.9%	52.7%	68.7%	39.2%	13.4%

Table 6. Conditional Percentages of Children Making Each Transition After Entering School Through Secondary, by Gender, Region and Wealth – Egypt 1988 and 2005.

	Retention Through Primary			Enrollment in Preparatory			Retention Through Preparatory			Enrollment in Secondary			Retention Through Secondary		
	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio
1988															
Upper Rural Bottom 40%	84.9%	56.2%	151.1	82.2%	65.9%	124.8	92.5%	92.7%	99.8	95.6%	83.3%	114.7	92.5%	88.9%	104.0
Upper Rural Next 40%	93.9%	81.8%	114.7	90.7%	86.7%	104.6	91.6%	80.0%	114.5	98.9%	90.0%	109.8	87.7%	96.3%	91.0
Lower Rural Bottom 40%	86.7%	69.3%	125.1	78.5%	75.3%	104.4	89.3%	95.9%	93.1	90.4%	92.8%	97.5	94.6%	100.0%	94.6
Lower Rural Next 40%	88.8%	84.0%	105.8	83.2%	80.1%	103.9	95.2%	97.1%	98.1	91.6%	92.4%	99.2	89.2%	93.2%	95.7
Urban Bottom 40%	79.8%	78.9%	101.1	77.0%	77.8%	99.0	89.7%	84.4%	106.2	94.8%	89.3%	106.2	91.7%	95.0%	96.5
Urban Next 40%	92.7%	92.5%	100.2	85.4%	85.2%	100.3	92.3%	95.6%	96.5	92.7%	95.7%	96.9	90.7%	97.4%	93.1
Top 20%	97.1%	99.4%	97.7	97.0%	95.7%	101.5	97.0%	97.5%	99.5	99.1%	96.3%	102.8	96.2%	99.3%	97.0
2005															
Upper Rural Bottom 40%	89.9%	85.2%	105.6	95.5%	92.9%	102.8	88.5%	88.4%	100.1	95.0%	87.6%	108.4	97.4%	98.1%	99.3
Upper Rural Next 40%	97.6%	96.6%	101.0	97.2%	95.7%	101.6	97.5%	96.4%	101.1	97.8%	91.0%	107.4	98.4%	98.6%	99.8
Lower Rural Bottom 40%	88.0%	89.5%	98.3	89.9%	93.3%	96.4	92.6%	93.5%	99.0	95.1%	96.8%	98.3	96.8%	97.3%	99.4
Lower Rural Next 40%	95.0%	93.6%	101.6	95.3%	98.1%	97.2	95.3%	96.6%	98.7	97.7%	97.1%	100.6	99.1%	98.2%	100.9
Urban Bottom 40%	78.2%	82.0%	95.4	91.5%	96.1%	95.2	87.5%	90.3%	96.9	91.4%	94.8%	96.4	95.1%	98.3%	96.8
Urban Next 40%	93.5%	94.4%	99.1	94.3%	97.3%	97.0	92.5%	93.8%	98.6	93.9%	94.8%	99.0	97.4%	98.5%	98.9
Top 20%	99.0%	98.7%	100.3	99.3%	99.0%	100.4	98.4%	98.1%	100.3	99.1%	98.9%	100.2	99.5%	99.5%	100.0

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