

The Value of Education and The Indonesian Economic Crisis

Mayling Oey-Gardiner

Abstrak ✓

Selama periode sebelum krisis berbagai macam indikator di sektor pendidikan telah mengalami perbaikan yang cukup signifikan, di mana jumlah penduduk usia sekolah yang tak pernah menikmati pendidikan di sekolah telah mengalami penurunan, terjadinya peningkatan jumlah murid yang sekolah, dan penurunan jumlah murid yang drop-out. Peningkatan school enrollment ratio bukan hanya terjadi di kelompok penduduk berpendapatan tinggi saja, tetapi juga di kalangan penduduk berpendapatan rendah (miskin). Juga ada dua fenomena yang menonjol dalam hal ini, yaitu terjadinya peningkatan yang cukup cepat dalam jumlah anak yang mulai sekolah pada usia lebih dini (early starters) dan penurunan drastis dalam jumlah anak yang mulai sekolah pada usia lanjut (late starters).

Namun akibat terjadinya krisis ekonomi, beberapa indikator tersebut mengalami penurunan kembali, walaupun dampaknya tidaklah separah seperti yang diperkirakan sebelumnya. Sebelumnya, akibat krisis ekonomi diperkirakan akan terjadi penurunan tingkat partisipasi sekolah (enrollment rate) sebesar 30%, yaitu dari sebesar 78% menjadi hanya 54% (terjadi kenaikan tingkat putus sekolah yang cukup besar). Namun ternyata menurut hasil studi atas data Survei 100 Desa, IFLS2+ (Indonesian FamilyLife Survey ke 2+) dan survei khusus di sekolah-sekolah, ternyata hanya terjadi penurunan tingkat partisipasi sekolah sebesar 4-5%.

Penurunan tingkat partisipasi sekolah yang tidak terlalu besar tersebut ternyata sejalan dengan meningkatnya persepsi akan pentingnya pendidikan baik di kelompok penduduk kaya dan maupun kelompok penduduk miskin. Program wajib belajar 6 tahun yang dijalankan pemerintah telah memberikan manfaat lebih besar pada kelompok penduduk miskin. Pentingnya pendidikan bagi kelompok penduduk miskin terrefleksikan dengan baik dalam pertumbuhan jumlah murid yang bersekolah dari kelompok penduduk miskin ini. Bahkan selama krisis ekonomi pun, kelompok penduduk miskin berusaha mengatasi krisis dengan cara mengurangi pengeluaran untuk pakaian dan meningkatkan produksi sendiri) bukannya membiarkan anak-anak mereka drop-out.

The early doomsday predictions of the effects of the crisis on education did not materialize (Poppele, Sumarto and Pritchett 1999). Supposedly widely repeated forecasts (no source) of declining enrollment rates from 78 to 54 percent, or a drop of 30 percent, implies in fact, an increase of every third child to drop out from school. More recent data indicate that school-age children did not drop out in droves. Instead, the trends are not that clear as more data have become available. Based on the 100 Villages data collected by BPS in August of 1997 and 1998, the IFLS2+ of Rand and Lembaga Demografi (Frankenberg et al., March 1999), and a special school survey conducted in October 1998 (Filmer et al., December 1998), the authors concluded that even though not as extreme, enrollment did drop more in the order of 4-5 percentage points (Poppele, Sumarto and Pritchett 1999).

To obtain an understanding of the impact of the crisis, in this section we shall first discuss the setting of education advances made during this decade of the 1990s with a focus on primary and secondary schooling.¹ This shall then be followed by an examination of the impact of the crisis and closes with suggestions on the future of the government scholarship program.

The period under discussion is dictated by the data. For this purpose we shall rely on data collected by the BPS, through the annual Susenas or national socio-economic survey, starting in 1993 to 1998, the latest available to this date. Even though Susenas had been carried out in earlier years, starting in 1993 the survey covered an expanded sample to around 220 thousand households (from around 60 thousand in earlier rounds of the survey). As the Susenas is conducted in the month of February, the 1998 round hardly showed any crisis impact, as true hardships had not yet permeated throughout society. A better data source to ascertain crisis impact is the more limited, much smaller sample and not representing the national scene, but rich data set, is the 100 villages, also conducted by the BPS with financial assistance from UNICEF. The small size allows for much faster processing. To obtain a pre-crisis picture

1 Post secondary education is not examined here for the focus of the analysis is on the poor and also due the limited numbers of students at this level when related to poverty. Besides, due to limited access, even fairly large scale surveys as the Susenas suffer from low incidence causing even greater fluctuations in the data.

we shall rely on the 1997 results that were conducted in August. A year later, well into the crisis are the results of the first round of 1998, which was also conducted in August. Then the second round was conducted in December 1998. This last survey was designed to assess the impact of the crisis on individuals.

1. RISING OVERALL ENROLLMENTS DURING THE 1990S

continuing from past trends (Oey-Gardiner and Suleeman 1997), all education indicators show rapid quantitative improvements during the 1990s, leading up to the crisis. Susenas data allows us to examine a variety of indicators with potential programming implications. Besides the usual measures of age specific, gross and net enrollment ratios, information was also gathered on whether the school going age population had ever attended school, were still attending school and were no longer attending school.

Very encouraging, the proportion of the school age populations who had never attended school declined, school attendance rose, and those no longer attending school, or drop outs, also declined (Table 1). Due to different levels of achievements, the pace of change differed by age group.

As past public policy emphasized primary education, the greatest advances in reducing the proportions of children who had never attended school were made among younger school-age children. At the beginning of the drive to achieve universal primary education, which was introduced in 1974 (implemented as the *SD Inpres* or special primary school program) when the numbers of schools were limited and enrollment still relatively low, admission into primary school required children to have reached age 7 years. Over time conditions have changed. Demand for education rose as the *SD Inpres* program brought primary schools closer to home, for the goal was to provide each village with at least one primary school. Besides, children attending public schools were also exempted from tuition-fees, starting in 1976 for grades 1 to 3 and in 1978 for grades 4 to 6. Moreover, Indonesia ran a very successful National Family Planning Program thereby rapidly reducing fertility. Consequently, overtime, schools became short new entrants. In response,

to maintain their existence, increasingly schools admitted children into grade one before their 7th birthday.²

Table 1
Percentage School Age Population Who Never Attended School, Were Attending School and Were no Longer Attending School, Indonesia 1993-1998

Age and Status	1993	1994	1995	1996	1997	1998
5-6 years	100.0	100.0	100.0	100.0	100.0	100.0
Never attended school	84.8	82.5	82.5	80.7	77.3	77.4
Attending school	14.9	17.3	17.3	19.1	22.5	22.3
No longer attending school	.3	.2	.2	.2	.2	.3
7-12 years	100.0	100.0	100.0	100.0	100.0	100.0
Never attended school	4.5	3.8	3.8	3.5	2.9	3.0
Attending school	92.8	94.1	93.9	94.4	95.4	95.1
No longer attending school	2.7	2.1	2.2	2.1	1.7	1.9
13-15 years	100.0	100.0	100.0	100.0	100.0	100.0
Never attended school	1.3	1.3	1.2	1.2	1.0	1.0
Attending school	68.9	72.4	73.2	75.8	77.5	77.2
No longer attending school	29.8	26.3	25.6	22.9	21.5	21.9
16-18 years	100.0	100.0	100.0	100.0	100.0	100.0
Never attended school	1.6	1.4	1.4	1.5	1.3	1.3
Attending school	42.6	45.3	44.6	47.6	48.6	49.3
No longer attending school	55.8	53.3	53.9	50.9	50.1	49.4

Sources: BPS, Special tabulations from Susenas 1993 to 1998

Thus the proportion of those who had never attended school declined most rapidly among the 5-6 years olds, from 85 percent in 1993 to 77 percent in 1997 and 1998, suggesting a leveling off already in the early phases of the crisis.³ The move to start primary school by age 6 seemed to have expanded rather rapidly, hence the rapid rise in school enrollment from 15 to 22 percent in only 6 years.

The indicators for the primary school age population (7-12 years) continued to be encouraging. But still somewhat nagging, are the proportions of those who had never attended school. Enrollment rose

2 Others were even forced to discontinue operations altogether.

3 While citing numbers throughout, the presentation of annual data show fluctuations and should therefore be taken as approximations only rather than indicative of exact levels.

from 93 to 95 percent,⁴ and the proportions of those who had never attended school declined from 4.5 to 3.0 percent. In absolute terms we are talking about a decline from 1.3 million to 0.8 million children age 7-12 years who had never attended school (Table 10). This is still a sizable number. Similarly, even though the proportions of drop-outs among this age group declined from almost 3 to close to 2 percent, these refer to an absolute decline from .8 million to 0.6 million children (Table 11).⁵ Combined we are still talking about 1.4 million children age 7-12 years who either had never attended school or were no longer attending school. Chances of most of these children ever attending school shall remain bleak, hampering their future social mobility.

By the time children reach lower secondary school ages of 13-15 years most had ever attended school, except for about .1 percent. The proportions in school rose from 69 to 77 percent. Still a long way to achieve universal basic education, even during relative good times. Notice also the slow down in the rise in enrollment ratios. Even though the proportions no longer in school declined from 30 to 22 percent, again the absolute numbers remain large as they declined only from 3.9 million to 3.1 million children, still about the size of the total Singaporean population (Table 11). A good proportion of these could well have dropped out from primary school already.

Compared to the lower secondary age youth, among the upper secondary school ages of 16-18 years, the proportions attending school are even lower and the proportions no longer attending school are substantially higher. Enrollment ratios for this age group rose from 43 to 49 percent, or still less than half. On the other hand, the proportions of those no longer attending school, declined from 56 to 49 percent, also almost half.

The age groups used above refer to formal and ideal ages by level. Of course children enter and leave school at different ages. While some enter earlier others enter the system at a later age. Hence, the discrepancy between the numbers of people and students by age and also students by level of schooling (Table 2). As noted above, some of the 5-6 years old were already attending school, most already attending primary school.

4 Also stable between 1997 and 1998.

5 Compared to the population in the relevant age group shown in Table 2.

As an early start will have significant implications for the future of the children, this point is an issue for further examination in regards to poverty.

Table 2
Population and Students Distribution by Age and Level of Schooling,
Indonesia 1993-1998

(in millions)

Age	1993	1994	1995	1996	1997	1998
Population by age						
5 - 6	8.99	8.53	9.13	9.21	8.96	8.33
7 - 12	29.23	28.83	28.28	28.20	27.52	27.27
13 - 15	13.09	13.72	13.88	14.28	14.06	13.93
16 - 18	12.09	12.37	12.14	12.35	13.14	13.24
Students by age						
5 - 6	1.34	1.55	1.58	1.76	2.02	1.85
7 - 12	27.13	27.11	26.57	26.63	26.25	25.92
13 - 15	9.02	9.93	10.16	10.83	10.90	10.75
16 - 18	5.15	5.60	5.42	5.88	6.39	6.53
Students by level						
Primary	30.73	30.88	30.26	30.22	29.74	29.34
Lower secondary	8.00	8.83	9.12	10.06	10.43	10.20
Upper secondary	4.85	5.32	5.15	5.54	6.12	6.25

Sources: BPS, Special tabulations from Susenas 1993 to 1998

In regards to primary school age children of 7-12 years, there are more children than students in these ages, and even more students attending primary school. The relations between numbers of children, students of the same age, and primary school students, changed in different directions. The excess of children over students aged 7-12 years declined from 2.1 million to 1.4 million while the excess of primary school students over students age 7-12 hardly declined from 3.6 to 3.4 million. These numbers are indicative of different directions of change in gross and net enrollment ratios. As the difference in gross and net enrollment ratios are a function of the share of early starters and late completions, and where late completion of a cycle will have important implications for one's future, this issue shall be further examined below.

Among secondary school age youngsters and students, a strikingly different pattern has been recorded. The number of youngsters exceeds the students, which, in turn, again exceed the number of secondary students. Compared to the earlier pattern for primary school age

children, this reversal in the pattern already suggest a first stage selection, as still only about two-thirds of primary school graduates continue to lower secondary school in 1994.⁶ The difference in the numbers of children and students age 13-15 declined from 4.1 to 3.2 million, and the difference between the numbers of students age 13-15 and lower secondary school students declined from 1.0 to 0.6 million between 1993 and 1998. Comparable differences among youngsters age 16-18 and upper secondary school students show even narrower declines. The difference between the number of youngsters and students age 16-18 years hardly declined from 6.9 to 6.7 million, and between students age 16-18 years and upper secondary students declined only from 0.30 to 0.28 million. These differences are related to changing shares of early starters and late participants, to be examined below.

2. EARLY STARTERS AND LATE PARTICIPANTS

As education expanded, there were two rapidly changing positive phenomena requiring attention. On the one hand, there was a rapid increase of early starters and also rapid decline in late participants. Early starters are those who are enrolled at a particular level of schooling before reaching the official ages while late participants are those still attending a particular level beyond the official ages for a particular level. At the primary level early starters are the 5 and 6 years old and late participants are those age 13 or more. At the lower secondary level early starters are those aged 11 and 12 and late participants are aged 16 and older. Early starters among upper secondary school students are 14 and 15 years old and late participants are 19 years or older.

6 Departemen Pendidikan dan Kebudayaan, Badan Penelitian dan Pengembangan Pendidikan dan Kebudayaan, Pusat Informatika (Februari 1996), *Rangkuman Statistik Persekolahan 1994/1995* (1994/1995 Summary of School Statistics). Jakarta, Table 109: 169.

Table 3
Age specific enrollment ratios among early starters attending a particular level of schooling, Indonesia 1993-1998

Level & Age	1993	1994	1995	1996	1997	1998
Primary						
5	.1	2.3	2.3	3.0	3.1	3.1
6	30.8	33.5	34.0	38.7	43.5	39.3
LSS						
11		.1	1.0	1.6	1.5	-
12	9.0	10.3	12.2	14.7	15.1	16.0
USS						
14	-	-	.8	.9	1.3	-
15	6.1	7.1	7.4	8.6	10.4	11.2

Sources: BPS, Special tabulations from Susenas 1993 to 1998

Notes : LSS = Lower Secondary School; and USS = Upper Secondary School

The rise in enrollment ratios of early starters is, of course fastest at the primary level to taper off at higher levels (Table 3). Even though not yet widespread, there appears a trend to start children at the primary level when they are still 5 years old, rising from 0.1 to 3.1 percent between 1993 and 1998. Most striking is the rapid rise in enrollment ratios among 6 years old children, from 31 percent in 1993 to 44 percent in 1997 and 39 percent in 1998. Notice the much higher ratio for 1997, which may well reflect an anomaly in the data (see also Table 9 showing a sudden ump in the absolute numbers of students). We suspect the true level to be around 40 percent for 1997, and thus 1998 is indicative of a leveling off. Some parents may well have decided to wait another year before enrolling their children at the first cycle of schooling. If this assertion is true, the effects may well be reflected in 6 years when this cohort starts lower secondary school.

Next, the proportion of 11 years old children attending lower secondary school had also risen albeit still rather slowly, from 0.1 percent in 1994 to 1.5 percent in 1997. Again disturbing is the decline recorded thereafter for 1998. The same is also recorded for the 14 years old attending upper secondary school, but again the proportions are still rather low. More positive is the continuing rising enrollment ratios among 12 years old attending lower secondary school, from 9 to 16 percent, and among 15 years old attending upper secondary school, rising from 6 to 11 percent.

Table 4
Age specific enrollment ratios among late participants attending a particular level of schooling, Indonesia 1993-1998

Level & Age	1993	1994	1995	1996	1997	1998
Primary						
13	42.2	41.6	40.7	37.8	34.3	34.4
14	12.8	12.5	12.9	11.8	9.9	10.9
15	4.4	4.3	4.2	3.8	3.3	3.9
16	1.5	1.4	1.3	1.3	1.0	1.3
LSS						
16	24.3	24.1	23.1	24.5	23.9	23.4
17	6.6	6.3	6.9	6.8	5.4	6.7
18	2.6	2.3	2.2	2.1	2.0	1.8
19	1.2	1.1	.8	1.0	.7	.8
USS						
19	17.9	17.9	16.7	16.4	15.9	16.0
20	5.2	4.9	4.0	4.1	3.5	4.0
21	2.4	2.1	1.7	1.7	1.4	1.7
22	1.0	.9	.7	.7	.6	.7

Sources: BPS, Special tabulations from Susenas 1993 to 1998

Notes:

LSS = Lower Secondary School; and

USS = Upper Secondary School, Even though there are even older school attendees than reported here, the percentages attending a particular level are less than 0.5 percent.

Another bright side of continuing progress made in education is the decline in enrollment ratios of late participants (Table 4). Again the sharpest declines have been recorded for the primary level and declining with higher levels and ages. Primary school enrollment among 13 years old children declined from 42 to 34 percent and among 14 years old children from 13 to 11 percent. The percentages of 15 and 16 years old youngsters still attending primary school is of course already rather low and declining. These substantial proportions among late participants at the primary level account for the rather wide discrepancy between gross and net enrollment ratios mentioned earlier. Enrollment ratios of late participants at the secondary level are substantially lower but remaining fairly stable and therefore a reason for concern.

Another way of looking at the issue is by examining the shares of early starters those in the proper ages and the late participants of a cycle

(Table 5). The best news is recorded for the primary level. The share of early starters (5 and 6 years old) rose from 4.4 to 6.8 percent between 1993 and 1997, but took a dip in 1998 to 6.3 percent.⁷ The proportion of those in the proper ages of primary school (7 to 12 years old) declined from 87 to 86 percent as the share of late participants (13 years and older) also declined from 9 to 8 percent.

Table 5
Percent distribution of early starters, proper aged participants, and late participants by level of schooling, Indonesia 1993-1998

Level & Age	1993	1994	1995	1996	1997	1998
Primary	100.0	100.0	100.0	100.0	100.0	100.0
5 - 6	4.4	4.8	5.2	5.8	6.8	6.3
7 - 12	86.7	86.0	85.5	85.3	85.5	85.6
13 +	9.0	9.2	9.3	8.9	7.7	8.1
LSS	100.0	100.0	100.0	100.0	100.0	100.0
11 - 12	6.2	6.4	7.7	8.3	8.0	8.0
13 - 15	76.5	77.7	77.6	77.4	78.0	77.9
16 +	17.4	15.9	14.7	14.3	14.0	14.2
USS	100.0	100.0	100.0	100.0	100.0	100.0
14 - 15	5.4	5.9	7.1	8.3	8.8	8.6
16 - 18	76.0	77.2	76.8	77.6	78.6	78.9
19 +	18.6	16.9	16.1	14.2	12.5	12.5

Sources: BPS, Special tabulations from Susenas 1993 to 1998

As enrollments were still rather low at the secondary level, the trends have been rather different from those at the primary level. Even though the share of early starters (11 and 12 years) at the lower secondary level also rose, from 6 to 8 percent, there was still room for share of those in the proper ages (13 to 15 years) to also rise slightly from 77 to 78 percent. More important is the decline in the share of late participants (16 years and older) from 17 to 14 percent.

At the upper secondary level a sharper rise was recorded among early starters (14 and 15 years old), from 5 to 9 percent. Also rising was the share of proper aged youth (16 to 18 years), from 76 to 79 percent due to a fairly sharp drop in the share of late participants (19 years and older) from 19 to 13 percent. Of course the main reason for the difference in the

7 This fall in the share of early starters is, of course, a result of the decline in enrollments among 6 years old children attending primary school discussed earlier (Table 3), and Table 9, partly attributable to statistical anomalies.

shares of late participants at lower the upper secondary school is the selection process. On the other hand, one may also want to pay closer attention to the slower rise in the share of early starter and also slower decline in the share of late participants at the lower secondary level.

The above fairly detailed discussion of ages of primary and secondary students sets the stage to examine the scholarship program introduced in response to the crisis with loans from the Asian Development Bank and the World Bank. As the program was initiated to prevent sudden rises in drop outs as a result of the crisis, scholarships were provided for students attending grades 4 to 6 of primary school, but the target is set at 6 percent of primary school students. At the lower secondary level the target was set at 17 percent and 10 percent of upper secondary students.⁸

For this purpose, we rely on the 2nd round of the 1998 100-Villages survey conducted in December. The survey includes almost 8 thousand primary school students, 3 thousand lower secondary students and 800 upper secondary students in 8 provinces,⁹ 11 *kabupaten*, 55 *kecamatan* and 100 villages. Twenty percent of the selected villages are urban villages. Even though not nationally representative, the selected areas represent a wide range of social and economic settings.

The survey includes a number of questions on the impact of the crisis, including information on scholarships. More specifically, students were asked sources of their school expenses. Alternatives were self-financed, scholarship, letter of poverty, school dispensation. Scholarship recipients were then asked the source of their scholarship. Alternatives were government, *GNOTA*, private, or other.

The results show substantially below target levels, but at least the relative percentages of scholarship recipients are comparable to the target, i.e. the lowest among primary school students and the highest among lower secondary students and in between among upper

8 Departemen Pendidikan dan Kebudayaan, Direktorat Jenderal Pendidikan Dasar dan Menengah bekerjasama dengan Departemen Agama dan Departemen Dalam Negeri (1998/99), *Beasiswa dan Dana Bantuan Operasional, Aku Anak Sekolah, Petunjuk Pelaksanaan untuk Komite Kabupaten/Kotamadya*.

9 Riau and Lampung in Sumatra, West and Central Java, Bali, East Nusa Tenggara, East Kalimantan and Southeast Sulawesi.

secondary students (Table 6). Of the almost 8 thousand primary school students, only 264 or 3.3 percent, were government scholarship recipients. This is only about half the target of 6 percent. Among the 2,034 lower secondary students, 205 or 10.1 percent were on government scholarships. Again this too is still substantially less than the target set for the program of 17 percent for this level. Among 838 upper secondary students, only 47 or 5.6 percent were on government scholarships, much less than the 10 percent target of the program. The difference between the findings of this data set and the target could very quickly be washed away with a statement on the small sample size. On the other hand, the results may well reflect the true condition for by the time of this survey, in December 1998, the program had only just started.

A more interesting issue worth considering in light of the government scholarship program is whether age should not also be a consideration in distributing scholarships. Of course it is not clear whether the government scholarship recipients are derived from the *Aku Anak Sekolah* program. As stated, the program is designed to prevent children from dropping out of school, especially from grades 4 to 6 at the primary level. Assuming that children in these grades are aged 9 to 12 years, then 4 percent of the scholarships went to younger and lower grades students. Even though this is a violation of the rules, if these scholarships were given to the poor then we consider that a good investment. Moreover, we strongly support extension of the program to these younger students, and especially potential new entrants into the first cycle of primary schooling, of course with the understanding that the program gives preference to the poor.

The debatable issue concerns the late participants. The question is whether late participants should be eligible to scholarships. If the primary criteria for eligibility for a government scholarship is poverty, and late participants are more likely found among the poor, then one would assume a fairly high percentage being government scholarship recipients. Instead, only very small percentages of late participants are government scholarship recipients. On the other hand, if another purpose of government scholarship distribution is to prevent 'potential' students from withdrawing, and a reasonable indicator of 'potentiality' is to be of a proper age for a particular level, then provision of scholarships to late participants may well be worth questioning.

Table 6
Students, scholarship and Government scholarship recipients

Age	No. Students			% Gov. Scholarship Recipients			% Composition of Gov. Scholarships		
	Prim	LSS	USS	Prim.	LSS	USS	Prim	LSS	USS
5	52								
6	601			.2			.4		
7	1,037			.2			.8		
8	1,166			.6			2.7		
9	1,219			2.4			9.8		
10	1,100			3.3			15.2		
11	910			7.0			29.2		
12	446	23		6.9	7.8		23.9	8.8	
13	180	531		7.4	12.8		12.5	33.2	
14	85	576		5.6	9.9		3.8	27.8	
15	21	399	115	4.7	10.0	6.1	1.5	19.5	14.9
16	7	186	246	4.8	9.7	4.5	.4	8.8	23.4
17	4	58	230		3.4	6.5		1.0	31.9
18	1	38	170		5.3	5.3		1.0	19.1
19	1	9	51			7.8			8.5
20		3	19						
21		1	4			*25.0			2.1
22		1	2						
23									
24			1						
Total	7,948	2,034	838	3.3	10.1	5.6	100.0	100.0	100.0

Sources: BPS, Special tabulations from the December round of the 1998 100-Villages Survey

Notes:

LSS = lower secondary school;

USS = upper secondary school; Early, Proper and Late refer to age relative to formal age rules by level.

* Caution, for this refers to only 1 case out of 4 students.

3. AND THE POOR HAVE CHILDREN

The relation between poverty and children is supported by the Susenas data. For purposes of examining poverty we divide households into quintiles by per capita household expenditures. The results show persistent more school age children among the poor than the better off and the difference widened over time (Table 7). Exact patterns of change over the period differ by age group. To understand the meaning of

poverty in regards to children and school attendance, we shall focus on contrasting the patterns of change among the poorest and richest quintiles.

Table 7
Population distribution by age and quintile, Indonesia 1993-1998

(in millions)						
Age and quintile	1993	1994	1995	1996	1997	1998
5 - 6 years	8.99	8.53	9.13	9.21	8.96	8.33
Poorest quintile	2.77	2.66	2.88	2.90	2.81	2.64
Second quintile	2.07	1.96	2.13	2.07	2.06	1.96
Third quintile	1.70	1.57	1.70	1.76	1.70	1.54
Fourth quintile	1.40	1.34	1.43	1.42	1.40	1.31
Richest quintile	1.04	1.00	.98	1.06	.99	.87
7 - 12 years	29.23	28.83	28.28	28.20	27.52	27.27
Poorest quintile	8.40	8.51	8.43	8.52	8.30	8.35
Second quintile	6.73	6.71	6.76	6.54	6.47	6.39
Third quintile	5.72	5.57	5.54	5.40	5.25	5.26
Fourth quintile	4.85	4.68	4.51	4.42	4.38	4.25
Richest quintile	3.53	3.35	3.05	3.32	3.12	3.01
13 - 15 years	13.09	13.72	13.88	14.28	14.06	13.93
Poorest quintile	3.32	3.54	3.61	3.68	3.69	3.75
Second quintile	2.92	3.13	3.16	3.18	3.28	3.24
Third quintile	2.59	2.76	2.83	2.86	2.81	2.77
Fourth quintile	2.32	2.40	2.43	2.51	2.46	2.40
Richest quintile	1.93	1.90	1.86	2.05	1.82	1.77
16 - 18 years	12.09	12.37	12.14	12.35	13.14	13.24
Poorest quintile	2.61	2.75	2.63	2.67	2.94	3.03
Second quintile	2.47	2.51	2.51	2.51	2.80	2.85
Third quintile	2.34	2.45	2.45	2.48	2.66	2.62
Fourth quintile	2.33	2.42	2.41	2.43	2.50	2.53
Richest quintile	2.33	2.24	2.15	2.26	2.23	2.21

Source: BPS, Special tabulations from Susenas 1993 to 1998.

The number of children age 5-6 years old appears to still hover between 9 and 8 million. In the poorest quintile, there are around three times as many children of this age compared to the richest quintile (almost 3 million among the poorest and around 1 million among the richest quintile).

A more definite declining trend is shown among primary school age children of 7-12 years old, from 29.2 to 27.3 million children. The contribution of the poorest quintile in this decline is minimal. A larger decline, of 0.5 million children (from 3.5 to 3.0 million), has been recorded

for the richest quintile than the poorest quintile (only 50 thousand or from 8.40 to 8.35 million). Consequently the absolute difference in the number of children between the poorest and richest quintiles widened from 4.9 to 5.3 million children.

Again a somewhat different trend is shown for lower secondary school age children 13 to 15 years old. Initially, the absolute number rose steadily from 13.1 to 14.3 million between 1993 and 1996 to decline thereafter to 13.9 million in 1998.¹⁰ This initial rise and later decline was mainly contributed by children belonging to the better off (for the richest quintile, the numbers fluctuate around 2 million). The poorest quintile, on the other hand, is characterized by still steady increase from 3 million in 1993 to 3.8 million in 1998. Consequently, the difference in the size of youngsters in this age group between the poorest and richest quintiles rose from 1.4 to 2.0 million.

Again a slightly different trend can be observed for the upper secondary school age youth of 16 to 18 years old. One more million was added to this age group in only one-half decade. The main contributors to this growth are the poorer households. Thus among the poorest quintile the number of 16-18 years old youth rose from 2.6 to 3.0 million, while among the richest quintile the numbers fluctuate around 2.3 and 2.2 million youth.

The detailed discussion on the growth and decline of the school age population by quintiles sets the stage for a better understanding of their attendance patterns.

4. AND THE POOR ALSO VALUE EDUCATION

The good news is that enrollment ratios were rising for most age groups and especially among the poorest as well as richest quintiles (Table 8).

Among 5-6 years old children, overall enrollment rose from 15 to 22 percent, slightly slower among the poorest quintile (from 11 to 16 percent), than among the richest quintile (27 to 37 percent). Consequently, a widening gap in enrollment ratios from 16 to 21 percentage points.

10 Yet, one would have expected a continuing decline in the size of this age group as these youngsters were born since 1980 when the national family planning program, which started in the early 1970s, was already quite well developed

As enrollment ratios were already high among 7-12 years old children, there was little room for improvement, a rise of only 2 percentage points from 93 to 95 percent. This is especially true for children belonging to the richest quintile, for whom the ratio rose by 1 percentage point only, from 98 to 99 percent. The ratio rose faster for children belonging to the poorest quintile (from 88 to 91 percent or 3 percentage points). Consequently the enrollment ratio gap between the poorest and richest quintiles narrowed from 10 (88 to 98 percent) to 8 percentage points (91 to 99 percent).

Children age 13 to 15 years experienced the fastest rise in enrollment ratios, from 69 to 77 percent, or 8 percentage points. Most encouraging was the rise among the poorest quintile children, from 52 to 63 percent, or some 11 percentage points. As the ratio was already rather high among the richest quintile, they could experience only a slower rise of 4 percentage points (from 89 to 93 percent). As the result, the enrollment gap between the poorest and richest quintile narrowed substantially from 38 (89 to 52 percent) to 30 percentage points (93 to 63 percent).

Somewhat slower was the rise in enrollment ratios experienced by 16-18 years old youngsters, overall only 6 percentage points (from 43 to 49 percent). On the other hand, for this age group too, it appears that the poor were making slightly better progress. Youngsters belonging to the poorest quintile experienced a faster rise in enrollment ratios of 8 percentage points (from 18 to 26 percent). The richest quintile youngsters experienced a rise of 5 percentage points (from 70 to 75 percent). Even though the gap in enrollment ratios between the richest and poorest quintiles narrowed, but by only 1 percentage point (from 51 to 50 percentage points), the gap will remain almost insurmountable for the poor. In other words, reaching even upper secondary schooling is still very selective. By the turn of the century still only about one out of every four children of the poorest quintile would have attended upper secondary school.

Table 8
Age specific enrollment ratios by level and quintile, Indonesia 1993-1998

Age and quintile	1993	1994	1995	1996	1997	1998
5 – 6 years	14.9	17.3	17.3	19.1	22.5	22.3
Poorest quintile	10.7	12.7	12.9	14.2	16.3	15.9
Second quintile	12.7	15.3	14.8	17.2	19.8	19.8
Third quintile	14.7	17.5	17.9	19.6	23.0	23.5
Fourth quintile	17.6	20.8	21.6	23.4	28.5	27.6
Richest quintile	27.4	28.4	28.7	30.0	36.6	36.8
7 – 12 years	92.8	94.1	93.9	94.4	95.4	95.1
Poorest quintile	88.3	89.9	90.1	90.3	91.8	91.4
Second quintile	92.3	93.9	93.8	94.4	95.4	95.2
Third quintile	94.1	95.6	95.4	96.1	96.8	96.4
Fourth quintile	96.1	96.8	96.6	97.2	97.9	97.6
Richest quintile	98.1	98.6	98.3	98.5	98.8	98.9
13- 15 years	68.9	72.4	73.2	75.8	77.5	77.2
Poorest quintile	51.6	55.8	57.4	60.3	62.7	63.3
Second quintile	63.1	67.9	69.0	71.6	74.7	74.1
Third quintile	71.2	76.5	76.8	79.4	81.9	80.5
Fourth quintile	81.8	84.6	84.4	86.8	87.6	87.4
Richest quintile	89.3	89.3	91.0	91.9	92.3	92.9
16 – 18 years	42.6	45.3	44.6	47.6	48.6	49.3
Poorest quintile	18.2	20.8	20.7	22.5	25.6	25.6
Second quintile	30.8	33.6	33.2	36.9	39.2	38.7
Third quintile	42.1	47.2	46.0	47.6	50.5	51.5
Fourth quintile	56.3	59.2	58.5	61.6	62.7	64.3
Richest quintile	69.5	71.3	70.3	74.2	72.9	75.4

Source: BPS, Special tabulations from Susenas 1993 to 1998.

The value of education has permeated through all classes of society. Even though the poor are also interested in starting the cycle of formal education earlier than the formal requirement, it is the best off who have taken greater advantage of this possibility. Hence the widening gap in enrollment ratios among early starters between the poorest and richest quintiles. On the other hand, the government emphasis to pursue 'universal' basic education enrollment has disproportionately benefited the poorest, thereby causing the enrollment gap to narrow at among children age 7-12 and 13-15 years old. Thereafter, schooling is much more a prerogative of the better off, as only one-fourth of the poorest youth were attending school as opposed to three-fourths of the best off youngsters.

Table 9
Numbers of school attending children, by quintile, Indonesia 1993-1998

(in thousands)

Age and Quintile	1993	1994	1995	1996	1997	1998
5 - 6 years	1,343.3	1,474.3	1,582.6	1,760.8	2,018.2	1,861.2
Poorest quintile	296.5	339.1	371.3	411.5	458.6	419.3
Second quintile	263.9	298.7	315.1	356.0	408.6	392.2
Third quintile	250.6	275.4	305.3	344.8	391.1	362.6
Fourth quintile	246.7	278.4	309.6	332.0	398.1	363.6
Richest quintile	285.6	282.7	281.5	316.4	361.8	323.3
7 - 12 years	27,127.9	27,114.4	26,570.1	26,625.2	26,248.0	26,021.9
Poorest quintile	7,415.9	7,650.7	7,593.3	7,700.5	7,617.3	7,630.5
Second quintile	6,210.5	6,301.2	6,340.8	6,173.5	6,180.2	6,129.6
Third quintile	5,384.4	5,327.7	5,281.1	5,185.6	5,083.4	5,099.6
Fourth quintile	4,659.1	4,533.8	4,353.4	4,293.4	4,286.4	4,063.3
Richest quintile	3,458.0	3,301.0	3,001.4	3,272.2	3,080.7	2,998.9
13- 15 years	9,022.7	9,933.6	10,163.1	10,832.7	10,899.6	10,796.3
Poorest quintile	1,712.9	1,973.3	2,072.2	2,214.8	2,312.3	2,380.1
Second quintile	1,839.4	2,129.2	2,176.7	2,279.7	2,452.4	2,409.9
Third quintile	1,846.2	2,109.4	2,172.5	2,274.4	2,300.6	2,244.1
Fourth quintile	1,901.7	2,025.8	2,047.4	2,176.5	2,153.6	2,107.9
Richest quintile	1,722.5	1,696.0	1,694.3	1,887.3	1,680.7	1,654.2
16 - 18 years	5,154.1	5,604.6	5,421.2	5,876.9	6,392.2	6,547.6
Poorest quintile	474.6	571.9	543.9	600.3	752.6	776.3
Second quintile	761.3	843.3	833.3	924.3	1,097.8	1,104.0
Third quintile	983.8	1,155.1	1,125.0	1,181.7	1,343.5	1,363.2
Fourth quintile	1,311.8	1,434.3	1,410.1	1,493.1	1,570.9	1,629.6
Richest quintile	1,622.7	1,600.1	1,508.9	1,677.5	1,627.4	1,674.4

Source: BPS, Special tabulations from Susenas 1993 to 1998.

On the other hand, in absolute terms, the importance of schooling to the poor is better reflected by the growth in absolute numbers of children attending school (Table 9). The existing system of widely available primary schools and exemption from tuition fees if children attend public schools, has benefited the poor more than the better off. A major reason for this statement is that there are more children belonging to the poorest quintile than the richest quintile.

The numbers of early starters into the first cycle of schooling did not only rise among the better off, but even among the poor, suggesting that increasingly poor parents too realize the value of early schooling for their children's future. Thus in 5 years only between 1993 and 1998, almost 123 thousand children of the poorest quintile entered primary school, while

among the riches quintile only about 38 thousand net new entrants were recorded at the primary level.¹¹

A very different pattern was recorded for 7-12 years old children. Overall the number attending school declined from 27.1 to 26.0 million children between 1993 and 1998. Such a decline characterizes children belonging to all other quintiles except for the poorest. In fact, the number of 7-12 years old children attending school belonging to the poorest quintile still fluctuates between 7.6 to 7.7 million between 1994 and 1998.

A reversal in the pattern of growth in numbers of children attending school between quintiles characterizes children age 13-15 years. While there was an overall net increase of about 1.8 million children, except for the group of children belonging to the richest quintile, all others were still growing. Almost 700 thousand more children belonging to the poorest quintile were attending school in 1998 compared to 1993. Slightly smaller net additions were recorded for children belonging to the 2nd to 4th quintiles, and the number for the richest quintile even shrunk a little by some 68 thousand.

Even though the benefits of upper secondary schooling still accrue much more to the better off, in absolute terms, the increase of school attendees among the poorest youngsters age 16-18 years was greater than among the best off. There was a net increase of some 300 thousand students among the poorest as opposed to only around 50 thousand among the best off.

The purpose of the above discussion is to present a flavor of the magnitudes the education system has absorbed, especially among the poorest children. On the other hand there remain other challenges to draw into the system the children who had never attended school and also prevent others from dropping out, as those numbers also remain fairly large (Tables 10 and 11).

11. Of course the number of children belonging to the poorest quintile is substantially lower than the number belonging to the richest quintile (Table 7).

Table 10
Numbers of school age children who had never attended school by quintile,
Indonesia 1993-1998

(in thousands)

Age and Quintile	1993	1994	1995	1996	1997	1998
5 - 6 years	7,624.6	7,035.5	7,532.1	7,427.9	6,926.9	6,462.6
Poorest quintile	2,462.3	2,318.9	2,507.1	2,485.9	2,349.9	2,204.7
Second quintile	1,803.8	1,656.5	1,811.1	1,710.9	1,648.8	1,579.8
Third quintile	1,449.7	1,293.2	1,396.1	1,408.4	1,304.8	1,174.7
Fourth quintile	1,152.8	1,055.1	1,119.1	1,085.4	997.6	950.8
Richest quintile	756.0	711.8	698.6	737.3	625.8	552.7
7 - 12 years	1,320.7	1,094.7	1,082.2	991.8	800.8	833.7
Poorest quintile	632.1	565.2	554.3	549.3	446.1	466.5
Second quintile	317.0	253.2	248.0	219.0	178.0	180.7
Third quintile	211.2	151.5	158.1	125.0	101.8	108.8
Fourth quintile	119.0	94.9	88.3	70.0	52.8	59.8
Richest quintile	41.4	29.9	33.5	28.6	22.0	17.9
13- 15 years	167.4	175.4	172.0	176.7	134.5	138.1
Poorest quintile	93.2	90.6	90.9	96.9	77.9	81.1
Second quintile	33.4	42.0	39.2	39.3	30.9	29.1
Third quintile	20.1	20.7	18.7	23.2	14.6	14.2
Fourth quintile	14.7	13.9	16.0	12.1	7.1	8.6
Richest quintile	6.0	8.1	7.1	5.4	4.1	5.0
16 - 18 years	188.3	176.7	172.9	188.2	169.2	169.8
Poorest quintile	101.6	86.9	84.8	92.7	85.5	92.0
Second quintile	34.8	36.3	35.5	44.5	37.7	41.5
Third quintile	23.4	24.9	22.9	26.9	24.8	18.8
Fourth quintile	14.9	20.7	20.3	14.9	13.4	11.5
Richest quintile	13.7	7.8	9.5	9.2	7.8	6.0

Source: BPS, Special tabulations from Susenas 1993 to 1998.

Table 11
Numbers of school age population no longer attending school by quintile,
Indonesia 1993-1998

(in thousands)

Age and quintile	1993	1994	1995	1996	1997	1998
5 - 6 years	21.2	16.1	15.1	17.9	17.9	25.5
Poorest quintile	6.7	5.6	5.3	6.0	5.8	7.5
Second quintile	3.8	2.7	3.5	3.2	3.5	6.1
Third quintile	3.5	3.4	2.7	2.9	3.9	5.2
Fourth quintile	5.1	1.9	2.6	3.2	2.5	5.2
Richest quintile	2.1	2.6	1.0	2.7	2.2	1.6
7 - 12 years	777.9	616.9	632.5	579.9	473.7	571.3
Poorest quintile	353.6	295.0	282.2	273.3	234.1	252.7
Second quintile	199.7	154.8	169.2	145.0	116.6	125.4
Third quintile	129.2	95.8	96.3	86.2	67.7	80.7
Fourth quintile	69.0	53.1	65.3	52.9	39.3	41.6
Richest quintile	26.4	18.3	19.4	22.5	16.0	16.9
13 - 15 years	3,896.4	3,614.2	3,548.9	3,273.6	3,027.3	3,058.2
Poorest quintile	1,516.7	1,473.6	1,448.3	1,363.9	1,297.7	1,300.1
Second quintile	1,044.2	962.9	939.2	864.3	800.4	812.8
Third quintile	726.8	625.8	637.5	565.5	494.4	529.8
Fourth quintile	407.6	356.0	362.6	318.6	298.5	294.1
Richest quintile	201.0	196.0	161.4	161.1	136.3	121.4
16 - 18 years	6,745.3	6,589.1	6,547.7	6,547.7	6,579.6	6,569.4
Poorest quintile	2,038.4	2,087.0	1,996.9	1,996.9	2,103.1	2,163.2
Second quintile	1,675.1	1,629.5	1,644.5	1,644.5	1,665.2	1,706.9
Third quintile	1,330.2	1,269.6	1,298.6	1,298.6	1,293.1	1,263.3
Fourth quintile	1,002.9	968.3	978.8	978.8	920.6	895.2
Richest quintile	698.6	634.7	628.9	628.9	597.6	540.8

Source: BPS, Special tabulations from Susenas 1993 to 1998.

Then, differential growth in beneficiaries of the education system between the poorest and richest children can also be shown in terms of the percentage composition of students by quintile and level (Table 12). The share of the poorest children at each level increased while decreased among the richest children. The patterns of change were, however, not the same at each level. At the primary level the change in the shares of the poorest and richest children was the least, between 1 and 2 percentage points only. The quintile composition of lower secondary school children experienced greater changes. The poorest children made up 4 percentage points more in 1998 compared to 1993, while the richest children made up 5 percentage points less during the same period. Again

a different pattern of change in the quintile composition occurred among upper secondary school students. While the share of the poorest students rose by 3 percentage points, the share of the richest students declined much more, by 6 percentage points, over the same period. This is of course a function of upper secondary schooling still being somewhat 'elitist', permeating only slowly through the less fortunate.

Table 12
Changes in percentage composition of students by quintile and level,
Indonesia 1993 – 1998

Level and quintile	1993	1994	1995	1996	1997	1998
Primary school	100.0	100.0	100.0	100.0	100.0	100.0
Poorest quintile	28.1	29.0	29.4	19.9	29.6	29.9
Second quintile	23.5	24.0	24.6	23.9	24.2	24.3
Third quintile	20.2	19.9	20.1	19.9	19.7	19.9
Fourth quintile	16.9	16.4	16.1	15.6	16.1	15.8
Richest quintile	11.3	10.8	15.6	10.7	10.4	10.0
Lower Secondary	100.0	100.0	100.0	100.0	100.0	100.0
Poorest quintile	13.8	15.9	15.8	16.4	18.1	18.5
Second quintile	19.2	20.0	20.5	20.2	22.2	22.0
Third quintile	21.6	22.1	22.6	21.7	22.1	22.1
Fourth quintile	24.0	22.8	22.8	22.4	21.4	21.2
Richest quintile	21.4	19.2	18.2	19.1	16.2	16.2
Upper Secondary	100.0	100.0	100.0	100.0	100.0	100.0
Poorest quintile	6.2	7.3	7.4	7.4	8.8	8.7
Second quintile	13.2	13.5	13.8	13.4	16.7	14.7
Third quintile	18.4	20.5	21.0	20.3	20.6	20.3
Fourth quintile	26.7	27.9	27.9	26.6	26.5	27.5
Richest quintile	35.0	30.9	29.9	32.4	27.4	28.7

Source: BPS, Special tabulations from Susenas 1993 to 1998.

5. AFTERMATH OF THE CRISIS

The conclusions derived on the basis of the 1997 and first round of the 1998 100-villages survey are being challenged when the results of the 2nd round of the 1998 100-villages survey became available. Poppele, Sudarmo and Pritchett (1999) concluded that the crisis affected mostly the lower secondary students.¹² The additional results of the 2nd round of the

¹² Regrettably, the authors did not examine the implied changes for the older age group of 16-18 years to obtain a better understanding of patterns of change in their assessment.

100-villages survey seem to suggest that the first round of the 1998 survey may well have suffered from some underestimation in enrollment ratios rather than being indicative of a real trend.

The above assessment is based on age specific, gross and net enrollment ratios computed from the last three 100-villages surveys (Table 13). Consistent with the results from other surveys, the formal primary school age population, 7-12 years, did not seem to have been affected by the crisis related rising drop outs, as all ratios continued to rise, even though only slightly. A question may be raised in regards to the slight rise in enrollment ratios between August and December of 1998. This may well be a real trend, and attributable to the scholarship scheme, which as shown in Table 6, was received by 10 percent of the students. It is reminded here that in response to the crisis, children were allowed late enrollments, even after August (even though school started in July). The first tranche of scholarships was distributed in December. If these statistics are acceptable, then it appears that the scholarship scheme did not have such a widespread impact on preventing children from dropping out of primary school, for they did not drop out in large numbers as was feared. This assertion is consistent with coping mechanisms admitted by parents discussed below.

The debatable issue concerns the lower secondary school age youngsters. Poppele, Sumarto and Pritchett (1999) claim this group to have suffered the most as a result of the crisis, resulting in declining enrollment. Taken on face value, such a conclusion is warranted. All enrollment ratios show a decline of 4 percentage points. If, however, they also examined enrollment ratios for the 16-18 years old, then they may well have questioned the drop from 1997 to 1998, for only the age specific enrollment ratio declined, and only slightly, from 33 to 32 percent. Yet, neither gross nor net enrollment ratios for this age group declined, but instead still rose. One would have expected that, given even higher schooling costs at the upper secondary compared to the lower secondary level, if parents were to withdraw their children, they would have done so for upper secondary school children. Second, if they conducted even

Similarly disappointing is the analysis of the IFLS results by Frankenberg et al. (1999), which combined all secondary school youngsters age 13-19 years, for attendance patterns differ significantly between 13-15 and 16-18 years old youngsters.

further analysis, as shown in Table 14, examining net enrollment ratios among lower secondary age children by quintile, then they would have questioned the sudden drop in enrollment among this age group. Assuming that the poorest would have the greatest problems in retaining their children in school, then it should have been the children belonging to the poorest quintile of households who should have withdrawn from school causing a decline in net enrollment. Instead, net enrollment rose for this group, and declined by increasing larger percentage points for the better off.

Based on the above analysis and the results for the 2nd round of the 1998 survey we resign from supporting the view of a true decline in enrollment. Instead, we believe that the true level of net enrollment for the first round of the 1998 survey may well lie at around 42 percent. Thus, there occurred no true decline overall, even if, maybe a few youngsters had to withdraw but not really affecting overall statistics.

Table 13
Age specific, gross and net enrollment ratios by gender
derived from the 100-Villages Survey, 1997, 1998-1 and 1998-2
(in percentages)

Ratio and Age	1997	1998-1	1998-2
Age specific			
7 - 12	89.8	92.7	93.0
13 - 15	69.0	65.2	66.7
16 - 18	33.1	31.5	32.2
Gross			
7 - 12	105.5	108.5	109.3
13 - 15	54.0	50.0	58.3
16 - 18	26.0	28.6	27.7
Net			
7 - 12	88.6	88.8	89.8
13 - 15	41.7	37.0	43.1
16 - 18	20.1	22.1	21.3

Sources: BPS, 100-Villages Survey. The 1997 and 1998-1 rounds were conducted in the month of August while 1998-2 was conducted in December.

Table 14
Net enrollment rates by level and quintile
 (in percentages)

Level and Quintile	1997	1998-1	1998-2
Primary	88.6	88.8	89.8
Poorest	84.8	86.8	87.5
Second	87.9	90.4	89.8
Third	91.2	89.6	91.3
Fourth	92.0	89.4	92.1
Richest	92.0	88.8	90.6
LSS	41.7	37.0	43.1
Poorest	25.2	29.3	33.6
Second	35.4	33.1	38.2
Third	45.4	38.9	42.8
Fourth	58.2	45.1	53.1
Richest	62.6	48.2	63.3
USS	20.1	22.1	21.3
Poorest	7.2	8.3	8.3
Second	12.6	14.7	14.8
Third	18.7	22.2	22.6
Fourth	31.4	34.5	33.0
Richest	39.2	41.3	39.9

Sources: BPS, 100-Villages Survey, 1997 and 1998-1 were conducted in the month of August while 1998-2 was conducted in December.

Table 15
Percentages of households according to coping means for daily needs by quintile
 (percent households)

Coping Means	Unit	Q1	Q2	Q3	Q4	Q5	Total
Reduce food consumption							
Quality (%)	%	44.3	36.3	31.5	28.6	22.2	32.6
Quantity (%)	%	50.8	49.4	46.5	44.2	33.1	44.8
Reduce exp. for recreation	%	34.3	47.1	46.3	44.6	43.7	43.4
Reduce exp. for clothing	%	60.4	66.7	64.3	62.0	55.8	61.8
Reduce exp. for transport	%	37.1	48.4	45.8	43.0	38.0	42.4
Withdraw savings	%	3.5	9.1	10.9	12.1	11.6	9.7
Sell household goods	%	10.1	9.0	9.1	8.0	6.1	8.5
Borrow	%	33.0	34.1	31.8	30.5	19.8	29.9
Increase use of own production	%	62.1	59.5	53.4	48.2	34.0	51.4
Withdraw children from school	%	3.2	2.0	2.0	1.4	0.6	1.9
Pawn off goods	%	1.5	1.5	1.4	2.1	1.5	1.6

Sources: BPS, 2nd round of the 1998 100-Villages Survey conducted in December.

Our assertion is further strengthened by data on coping means for daily needs (Table 15). Households are much more likely to reduce expenses for clothing (62 percent of all households and among the poorest quintile 60 percent of households) and increase own production (51 percent overall and among the poorest quintile of households 62 percent). Reduction in food consumption is, of course, also a strategy widely practiced in coping with the crisis, especially among the poor. On the other hand, very few households would withdraw their children from school (2 percent overall and still only 3 percent among the poorest quintile). In other words, consistent with our earlier findings that the poor too value education of their children, withdrawal of children from school is about a last resort in coping with the crisis.

We further argue that an important reason for the low priority given to withdrawal of children from school as a coping strategy in dealing with the crisis, is the low share of education expenses in their scheme of overall household expenditures, only around 1 percent (Table 16).

Table 16
Percentage composition of household expenditures

Expenditure	1997	1998-1	1998-2
Food	69.1	76.3	78.1
Non food	30.9	23.7	21.9
Housing	15.2	11.5	10.9
Goods and services	2.9	2.5	2.2
Schooling	1.3	1.1	.9
Health	1.4	1.4	1.2
Clothing	3.9	3.3	3.1
Durable goods	2.4	1.5	1.2
Taxes and insurance	.6	.4	.3
Parties and ceremonies	1.5	1.1	1.1
Total	100.0	100.0	100.0
Average Rp.	199.945	356.225	400.227

Sources: BPS, *100-Villages Survey*, 1997 and 1998-1 were conducted in the month of August while 1998-2 was conducted in December.

Besides, households applied a variety of means in coping with their children's school expenses (Table 17). Interestingly, the strategies identified were not only associated with the poor, but even though to a

lesser extent, households belonging to the richest quintile too applied the same strategies. The main reason may well be that even households belonging to the richest quintile generally did not have that much more to spend. While the poorest had only less than Rp.600 per capita per day to spend and the top in the poorest quintile were spending only Rp.2,057 per capita per day, households that were spending Rp.4,564 per capita per day already belonged to the richest quintile.

Table 17
Coping with difficulties to pay for education
(Rp. and percent households)

Expenditure	Q1	Q2	Q3	Q4	Q5	Total
Daily per capita expenditures (Rp.)	1,615	2,390	3,045	3,915	6,615	3,516
Mean	1,669	2,394	3,040	3,882	5,761	3,040
Median	581	2,057	2,711	3,416	4,564	581
Minimum	2057	2,711	3,415	4,563	91,853	91,853
Maximum						
Delay payment	33.3	31.5	25.4	20.3	16.4	26.6
Borrow	32.3	30.6	21.6	16.9	9.5	23.8
Ask for assistance	12.6	8.5	5.7	5.6	3.6	7.7
Sell/pawn goods	11.8	6.7	5.8	4.6	3.9	7.0
Additional work	26.7	19.9	16.9	12.2	7.3	17.8
Poverty letter	2.2	.7	.4	.3	.1	.8

Sources: BPS, 2nd round of the 1998 100-Villages Survey conducted in December.

Most common, and also often heard, has been for parents to delay payment, and/or borrow to pay for school fees (overall one-fourth and among the poorest quintile one-third of households). Acceptance of additional work is another important strategy adopted, especially by the poor (one fourth of the poor but only 7 percent among the top quintile of households). The value of schooling for children of the poor is reflected by the poorest being far more likely to ask for assistance (13 percent) or to sell or pawn off whatever they have (12 percent), than the better off (only about 4 percent). Most surprising is the finding that only very few, even among the poorest households requested poverty letters (2 percent), a public policy to obtain assistance. This is an issue requiring further study. An initial hypothesis suggests that even the very poor would be embarrassed to request such a letter, or second, that such letters are not easy to obtain.

Moreover, it is also doubtful that schools and teachers would actually have sent children home for their inability to pay their fees on time. During visits to schools we heard teachers say that they felt sorry for some of the poor students and that they would not turn students away when they can not pay the fees during the crisis. Besides humanitarian reasons, there are also practical reasons as well. In the past, even during the good times before the crisis, the media frequently reported on schools being forced to discontinue operation for lack of students. Hence we suggest that it is in the interest of the administration and the teachers to maintain their students during these difficult times.

6. ON SCHOLARSHIPS AND THE POOR

Even though in this sample survey not only children belonging to the poorest quintile were recipients of governments scholarships,¹³ the distribution by quintile of household expenditures was in the right direction (Table 18). At both the primary and lower secondary levels more children and also proportionately more children of the poorest households were beneficiaries of government scholarships. At the upper secondary level there are fewer students belonging to the poorest quintile. Hence even at similar absolute numbers of scholarship recipients the percentage of poor students being government scholarship recipients was higher than at the upper end of the household expenditure spectrum.

To households as they more than cover school fees (SPP and BP3), which, on average range between Rp.1-2 thousand for primary school students, close to Rp.6 thousand for lower secondary students and around Rp.10 thousand for upper secondary students. The balance can cover other school-related expenses such as books and school supplies, extracurricular tutorials, transport, meals and clothing.

The survey also captured the size of the scholarships reasonable well (Table 19). According to the rules, primary school scholarships are worth Rp.10,000, lower secondary Rp.20,000 and upper secondary Rp.30,000, per month. These scholarships provide reasonable assistance.

13 We are not suggesting that these government scholarships were 'misallocated' to the 'rich', for even in the top quintile minimum per capita daily household expenses were only Rp.4,564 (Table 17) or less than 50 cents US. Besides, as selection of scholarship recipients was also left to schools, the poorest students at particular schools may not necessarily belong to the poorest quintile on a wider sample.

Table 18
Numbers of students, government scholarship recipients and percent government scholarship recipients, by level and quintile

	Q1	Q2	Q3	Q4	Q5	Total
Number of Students						
Primary	2,336	1,992	1,549	1,184	895	7,956
LSS	437	456	395	406	343	2,037
USS	88	140	172	221	218	837
Gov. scholarship recipients						
Primary	140	58	34	18	14	264
LSS	82	49	36	25	13	205
USS	8	7	11	12	9	47
% recipients						
Primary	6.0	2.9	2.2	1.5	1.6	3.3
LSS	18.8	10.7	9.1	6.2	3.8	10.1
USS	9.0	5.0	6.4	5.4	4.1	5.6

Source: BPS, 2nd round of the 1998 100-Villages survey.

Table 19
Average monthly school fees for all students, for government scholarship recipients and value of government scholarships, by quintiles of per capita household expenditures

(in Rupiah)

Average Fees & Scholarships	Q1	Q2	Q3	Q4	Q5	Total
Government Scholarships						
Primary	11,425	11,599	12,750	11,778	10,714	11,620
LSS	20,854	21,429	19,267	20,000	20,000	20,554
USS	36,250	24,286	24,545	30,556	30,556	27,447
School fees of government scholarship recipients						
Primary	1,242	1,164	3,897	1,117	2,075	1,602
LSS	5,970	5,211	6,262	5,680	5,269	5,760
USS	9,250	12,429	6,955	9,233	8,889	9,113

Source: BPS, 2nd round of the 1998 100-Villages survey.

Notes: School fees combine charges for SPP and BP3.

Given rather low welfare levels as indicated by per capita daily household expenditures, even among households belonging to the top quintile, these scholarships provide substantial financial contributions to the beneficiaries. This program is an important means of welfare transfers, allowing the few lucky beneficiaries fewer worries about their children's school expenses.

7. THE FUTURE OF SCHOLARSHIPS FOR PRIMARY AND SECONDARY STUDENTS

Even though based on our analysis of the latest available data, we believe that overall enrollment ratios did not decline, not even among lower secondary school age children, the government scholarship program introduced in response to the crisis is a valuable social welfare program, providing financial assistance to poor children. As such, we suggest that the program be maintained, not as a crisis response program preventing children from dropping out of school, but rather as a social investment program to develop Indonesia's human resources. More specifically, the following adjustments are suggested.

1. The current scholarship program should not be limited as a crisis policy only but it is desirable that the program be further extended. Targeting a higher proportion of students with preference for the poor can contribute to further raising enrollment ratios at all levels.
2. As the above analysis has shown, children increasingly start primary school at an earlier age, mostly when they reach 6 or are almost 6 years old. Even though increasingly poor children too start at around 6 years old, there remains a significant difference in the shares of early starters among the poorest and the better off. It would benefit especially the poor if more scholarships could be made available for early starters.
3. It is further suggested that the scholarship program also include age in the selection criteria of scholarship beneficiaries with preference given to early starters and properly aged students rather than late participants.

8. REFERENCES

- Departemen Pendidikan dan Kebudayaan, Badan Penelitian dan Pengembangan Pendidikan dan Kebudayaan, Pusat Informatika (Februari 1996), *Rangkuman Statistik Persekolahan 1994/1995* (1994/1995 Summary of School Statistics). Jakarta, Table 109: 169.
- Departemen Pendidikan dan Kebudayaan, Direktorat Jenderal Pendidikan Dasar dan Menengah bekerjasama dengan Departemen Agama dan Departemen Dalam Negeri (1998/99), *Beasiswa dan Dana Bantuan Operasional, Aku Anak Sekolah, Petunjuk Pelaksanaan untuk Komite Kabupaten/Kotamadya*.
- Filmer, Deon, Haneen Sayed of the World Bank and Boediono, Jiyono, Nanik Suwaryani and Bambang Indiyanto of the Ministry of Education and Culture, Indonesia (1998), *The Impact of Indonesia's Economic Crisis on Basic Education: Findings from a Survey of Schools*.
- Frankenberg, Elizabeth, Kathleen Beegle, Duncan Thomas and Wayan Suriastini (March 1999), *Health, education, and the economic crisis in Indonesia*, paper prepared for the 1999 Population Association of America meetings, New York, March 25-27.
- Gardiner, Mayling Oey and Evelyn Suleeman, *Gender Differentials in Schooling and Labor Market Implications* (1997), report prepared for the Asian Development Bank in fulfillment of contract No. ADM/96-248, INO/Gender Differentials in Schooling and Labor Market Management.
- Poppele, Jessica, Sudarno Sumarto and Lant Pritchett (1999), *Social impacts of the Indonesian crisis: New data and policy implications*. A SMERU Report: Draft. ■