How do periods of economic adjustment touch children and schools? This article delves into this issue, focusing on the southern African nation of Malawi. The story begins with a sample picture.

Three basic trends are illustrated in Fig. 1. Since 1980 child population has been growing by at least 3.9 per cent a year. Primary school enrolment, despite absolute declines in some years following economic shocks, has grown by 3.2 per cent annually. Yet the Malawi government's capacity to keep pace with this widespread demand for basic schooling has been severely constrained. Total recurrent spending on education has grown just 0.6 per cent a year (in real kwacha terms). Spending per pupil is falling at a rate of -2.6 per cent each year!

This graph reveals trends that have emerged over the last decade — and patterns which persist, independent of shorter term economic jolts. The gentle sounding term, 'economic adjustment', is distracting in that it focuses governments and donors on immediate effects stemming from change in economic conditions or policy. Such shocks have affected the education sector in Malawi in ways which I detail below. But throughout this article I emphasise that the actual outcomes of economic adjustment are best viewed over longer spans of history.

The long term forces pictured in Fig. 1 will touch the lives of children — seen in the declining availability of school places and eroding educational quality found within increasingly crowded classrooms. Growth in child population and burgeoning social demand for primary schooling are secular trends upon which flashes of adjustment have had little effect.

On the other hand, the government's capacity to support the education sector may be sensitive to short term downturns. Certainly to the extent that Malawi and multilateral banks boost lending levels to cushion economic shocks, the share of recurrent spending allocated to debt service will continue to increase. This year, 38 per cent of Malawi's recurrent budget will be sent to Western banks [Ministry of Finance 1988].

Next, I briefly describe Malawi's economic adjustment experience, including modest evidence on short term school enrolment effects. Second, longer term forces are detailed, linked to historical demand for schooling and diminishing government capacity to keep up. Third, I report on how the government has responded within the education sector, reacting both to economic shocks and these long term trends. The role of donors — and their limited success — in spurring policy reforms is also outlined. Fourth, I put forward some lessons learned from the Malawi situation over the past decade.

Erratic Economy

Over the past decade Malawi's economy has spluttered along in fits and starts. Total domestic production has been hampered by three periods of drought since 1978. Agricultural output has grown just 0.5 per cent annually during the decade (in real value terms). Absolute declines in production have been experienced in four of the past eight years. Industrial output has barely grown during the period, also showing absolute declines in several years [World Bank 1988].

One growth industry dominates the Malawian economy: rising debt. Over the past decade lending activity has picked-up considerably. Much of this new
lending activity is on concessional terms from the World Bank. Nevertheless, debt service now eats up 38 per cent of the government's recurrent budget, as mentioned above. These foreign transfers, on top of an erratic domestic product, virtually place a lid on any potential growth in the gross national product. Aggregate GNP has grown just 0.7 per cent, while population has risen 3.6 per cent annually over the past 10 years.

The strength of the Malawian kwacha, of course, has suffered from this rocky path of economic activity. Against the dollar, the kwacha's value has declined 150 per cent since 1978. Annual inflation has run between 15 and 20 per cent over the period.

Impact on Children and Schools

Economic shocks do appear to have short term effects on parents and the school enrolment behaviour of their children. Over the entire 1970-87 period, for instance, primary school enrolments have grown at 6.3 per cent per year (compounded). But since 1980 — a rougher period economically — enrolments have risen just 3.2 per cent annually, at least 0.7 per cent less than child population growth [Ministry of Education and Culture 1986]. This slowing of enrolment expansion is not an artifact of entrance rates hitting a ceiling: the overall primary enrolment rate remains at about 40 per cent. The precise figure is now in doubt, since the 1987 census revealed thousands more children than had been projected earlier in Malawi [National Statistical Office 1987]. Absolute primary enrolments actually dropped by 35,000 children (4.0 per cent) between 1981 and 1983, corresponding closely to a period of drought and falling agricultural output.

The mechanisms through which economic shocks shape the action of parents and children are not at all clear in Malawi. Recent research is suggestive but inconclusive. For instance, we do know that the level of labour demand placed on children affects levels of literacy acquired in primary school [Lockheed, Fuller and Nyirongo, in press]. Another recent survey, involving interviews of over 6,000 children, revealed that 40 per cent feel hungry while at school [Mundangepfupfu 1988]. These initial pieces of evidence indicate that declines in family production or cash income often places significant pressure on even young children — which may in turn lower school attendance and actual achievement.

Recognising Longer Run Forces

We must now look at the long term effects of economic decline. Too often governments and donors react exclusively to immediate balance of payments problems, or mount quick projects that disguise the underlying deterioration of basic school institutions. I have already mentioned one startling medium term trend: the substantial slowing of enrolment growth, now visible over the last eight years.

In addition, the central government's capacity to support the education sector is narrowing dramatically. Part of this is linked to government policy — struggling to expand 'opportunity' by accommodating more and more children, building more and more schools. Resisting this popular pressure is difficult, even when no new resources are available to the education ministry. External factors undoubtedly also play a role.

First, debt service has the first call on the recurrent budget. Malawi is considered a 'good borrower', meaning that it does not suspend payments and generally goes along with economic advice offered by the IMF and the World Bank. The government tries hard to maintain this reputation and keep lines of credit open. Spending on debt service has increased by 7.3 per cent annually since 1980 (constant kwacha). All other recurrent appropriations have grown just 1.2 per cent (and education spending by just half of this rate). Second, declining terms of trade placed greater demand on foreign currency. So the foreign exchange component of even social sector loans is often held in the treasury for protracted periods of time. Third, external constraints on economic production — drought, prices of imported farm inputs, and overall capital investment levels — clearly impact on public resources available to government for the social sectors. Much of the Malawian government's capital is tied up in parastatal business enterprises, particularly the agricultural marketing system. So any downturn in the rural economy directly pulls resources from social institutions into 'public' enterprises.

Steady Decline of School Quality

Like all African nations, Malawi's young government invested heavily in mass schooling following independence. Primary school enrolments have tripled since 1964. Secondary enrolments have increased five-fold. Until the mid-1970s, GNP grew twice as quickly as did population. The government's fiscal capacity to expand schooling was generally strong, yet the subsequent unfolding of erratic economic events — appearing on graphs like waves of upturns and downturns — has increasingly limited government support for education.

As static recurrent budgets are spread over a burgeoning number of students, educational quality steadily erodes. Economic shocks and engineered adjustment programmes do exacerbate pressures on the sector. But deeper and longer term forces are also at play. The symbolic value of extending educational opportunity, for example, is deeply internalised in
rural villages and towns across Malawi. Accommodating rising enrolments can be handled — that is, if one ignores the sharp trade-off in declining quality and diminishing levels of pupil achievement.

Fig. 2 illustrates the collapse in educational quality resulting from this clash between ever rising demand and levelling government resources. Since 1970 the ratio of primary pupils per teacher has risen from 41:1 to 63:1. It has levelled in recent years due simply to the slowing of enrolment growth. Per pupil spending has declined in dollar terms from $14 to $6 over the same period, but this may overstate the fall, since education budgets and teachers are linked only occasionally to world prices (reflected in the dollar to kwacha exchange rate). In domestic currency terms, primary spending per pupil has fallen from 12 to 9 kwacha (in real terms) since 1980. Spending per secondary school pupil has fallen from 670 kwacha to 441 kwacha over the same period [Ministry of Education and Culture 1986].

Instructional materials are very scarce — especially as pressures build to allocate more and more of the recurrent budget for teachers' salaries. Spending on materials now represents only two per cent of the recurrent budget at the primary school level. The bulk of this comes from student fee revenues. Thus the only cost-recovery mechanism supports those inputs (textbooks, teacher guides, exercise books) that are empirically linked to higher achievement [Fuller 1987]. This revenue device, however, is a highly visible user fee, unpopular, and very difficult to increase. Only two textbooks are available for every three pupils, as reported in Fig. 2. Desks are in short supply. I visited one urban school last year where the headmaster was cutting 16-sheet exercise books in half and rationing them (about three halves to each pupil) over the school year. Schools report that 64 pupils are enrolled for every roofed classroom. Average class size is somewhat lower, since many classes meet outside under a shady tree.

Only 23 per cent of all children entering Standard 1 persist through school to Standard 7. This persistence rate has remained unchanged (or at least falls within the margin of statistical error) over the past decade. In both standards 1 and 2, 20 per cent of the children are repeating the grade level. In Standard 8, the final year of primary school, a staggering 40 per cent of all pupils are repeating. Thus the unit cost of producing one

Note: Secondary school data excludes enrolment in the Malawi College of Distance Education. University enrolment includes all four affiliated colleges. Most recent estimates come from either 1986 or 1987. Declines in per pupil spending reflect decreasing spending in real kwacha terms and the kwacha's decline relative to the dollar. Spending levels in dollar terms are more useful in comparing across primary, secondary, and higher education than comparing change over time.
primary school graduate is enormous, for less than eight per cent of all Standard 8 pupils will pass their exams and be awarded a coveted place in secondary school. By this first year of secondary school, girls comprise only one-third of all enrolments.

**Policies aimed at Quality and Efficiency**

Recognising this steady erosion in school quality, the Malawian government and donors have been discussing several policy reforms over the past three years. The World Bank is the principal actor here. Bilateral agencies also have been involved. At times the African Development Bank's programme has fitted into this new found focus on quality, efficiency, and improvements in sector policies.

Policy efforts generally aim at (a) reducing the recurrent cost burden presently borne by central government, (b) moving scarce resources to instructional materials and teacher training, presumably helping to boost pupil literacy acquired in primary school, and (c) addressing spending inequities observed between levels of instruction. Empirical research also is being supported to test the assumptions regarding what school inputs and teaching processes most effectively boost pupil achievement.

The government is successfully moving on some fronts. For example, concrete steps have been taken to consolidate a complex and costly primary school curriculum. The number of subjects is being reduced. Simpler textbooks may be produced in the near future. This consolidation effort requires considerable negotiation. Some subjects are either sensitive or carefully guarded, including instruction in religion, agriculture, and health practices. The government has also moved to rationalise the national examinations machinery, consolidating two separate bureaucracies into one. Hopefully, this organisational reform will prompt substantive improvements in the testing system. One item on the agenda is to bring test items on the school-leaving exam into closer correspondence with the actual curriculum. Other discussions centre on designing an exam that assesses more complex writing and cognitive skills, not one that simply requires recall of disconnected facts. The education ministry also is moving aggressively to upgrade the skills of underqualified primary teachers. This priority placed on improving teacher quality is a courageous step in that it pulls resources away from simply turning out more new teachers quickly. Donors are, in part, supporting the production of more teachers but as a secondary priority within the policy reform package.

Other policy and budget reforms have proved more difficult to implement. These proposals either require more technical capacity or the expenditure of considerably more political capital than that spent on the successful reforms outlined above. The latter set involves change internal to central institutions. But the organisational and political rigidities are stronger as policy adjustments more directly touch local communities and schools. The World Bank, for example, has urged the government to restrict pupil repetition of primary grades. This, of course, means restricting the entitlement of educational opportunity — so dear to post-colonial African states. Proposals are now being entertained that would partially address the problem, while being politically saleable to parents and schools.

Political and resource constraints are also blocking increased support of non-salary school inputs: textbooks, exercise books, and teacher guides. Only about five per cent of all recurrent primary school spending goes to acquiring these essential materials. The World Bank has shown great agility, pushing for a one million kwacha government supported textbook fund while juggling this within Bank and IMF spending guidelines (linked to capital and currency allocations from these two donors). But the Malawian government has yet to bite on the proposal: competing demands on the recurrent budget are simply too strong.

Earlier debates over inequitable spending levels between levels of schooling have faded. Reallocations from relatively rich secondary schools, and especially the university, to spartan primary schools appear to be politically impossible. Expenditures per secondary school pupil are 15 times greater than per primary student. University spending is almost 200 times higher, compared to primary school support per pupil! The pupil: teacher ratio at secondary school now equals 20:1. The ratio at the university is a mere 7:1. Since access is highly restricted both for secondary school and university places, graduates are a scarce and highly paid commodity. Resources are disproportionately allocated to those pupils who will benefit most from advanced schooling. Making this tax structure even more regressive is the fact that social class background predictably plays a role in shaping both pupil achievement and the proficiency of their teachers [Lockheed et al., in press]. The most advantaged students, in general, go further in school, receive much greater subsidies, and eventually earn a higher income due to their longer schooling.

Small steps are being pursued to lessen these inequities. The university is being pushed to raise its student: teacher ratio, preferably by serving more students. Tuition at the university is increasing incrementally, improving pricing policies. Boarding facilities are being phased-out for some new secondary schools, again reducing cost subsidies. But overall, the high social status associated with secondary schooling and the university, not to mention the class interests which they manifest, will limit serious moves toward
equitable distribution of public resources and fairer price structures.

**Lessons learned in Malawi**

1. **Short term social effects from economic shocks can be sharp and damaging.** As we have seen, economic disruptions within Malawi contributed to temporary declines in primary school enrolment, and a long term slowing of enrolment growth. This sharply counters a rapid and secular expansion of school attendance experienced in Malawi since independence. Nevertheless we have little understanding of the processes through which economic events affect the behaviour of parents and children. Does the decline in subsistence production heighten labour demand placed on young children? Do expectations of future opportunity lessen? Are school fees and incidental costs (uniforms, books, writing materials) prohibitive when income falls incrementally? These possible causal links will remain as hypotheses in the absence of empirical data.

2. **Short-lived economic jolts differ from rationalised 'adjustment programmes'.** Immediate crises caused by drought, falling production levels, balance of payments shortfalls, or capital shortages may have significant effects on children and schools. But these forces differ from the dynamic factors which unfold under managed adjustment programmes. Multilateral banks are getting a bit better at coordinating macroeconomic activities and sector-specific policy reforms. (Sometimes these operations have moved in conflicting directions.) The point is simply that careful adjustment programmes — linked to the education sector — can relieve the effects of unpredictable economic shocks. The Malawi education policy adjustment strategy is one example.

3. **Don't be distracted from long term trends and underlying institutional forces.** In the case of Malawi, intervening effects of economic shocks are swamped by much larger historical forces. Demography presents one big factor. Growth in child population, apparently now accelerating, creates pressure on government to continue its focus on school expansion. The enormous faith placed in more and more schooling — embedded in the leadership of both post-colonial African states and international agencies — has been internalised across rural villages and towns. School construction has become synonymous with 'modern progress'. The African state is, in part, judged by its ability to deliver more schooling. This second force further presses governments to emphasise school expansion over improvements in educational quality and efficiency. A third force, likely to intensify in the future, is the growing debt burden felt by Malawi and most other sub-Saharan nations. Despite the concessional terms granted for many recent loans, remarkable shares of recurrent spending are allocated to interest payments and principal. This will continue to eat into government resources, at the expense of the social sectors.

Malawi is turning its attention, at least in part, to issues of school quality and efficiency. Despite strong economic shocks over the past decade, the government remains willing to focus policy adjustments on this important area — even though quality gains do not yield the immediate political points reaped by simply building more schools. Both government and donors recognise these underlying forces — demography, burgeoning demand for schooling, and increasingly constrained resources. Unless minimal levels of educational quality, and thus acquired literacy, are maintained, the economic returns to basic education will probably decline. In this way, government and donor attention is rational. Whether the political will, strength, and technical competence demonstrated within Malawi's government can be found in other sub-Saharan states remains an open question.

4. **The African state's legitimacy will be balanced against economic objectives.** The education policy adjustment programme, to date, has been constrained by how far the education ministry can move politically. Reducing grade repetition rates, for instance, could lead to confrontations between the central government and local communities. No post-colonial state can begin to retract the entitlement of educational opportunity without some cost to its own popularity. Avoiding these costly conflicts requires two actions from donors. First, it demands a recognition that political rationality often overrides economic logic — donors often just shrug their shoulders when faced with political constraints. But strategies can be devised that balance political realities with economic ideals.

The second prerequisite for minimising institutional constraints is technical support for easing political repercussions. Oppositions will always be just around the corner when important policy adjustments are raised — whether factors are setting educational pricing policies, encouraging support of private schools, or thoughtfully thinning-out low achieving pupils. Yet various technical strategies exist for constructing policy change and arguing its merits before various constituencies. This type of advice and technical assistance is rarely provided by donors, who prefer instead to stick to the economic or educational merits to controversial proposals. They then ask government leaders to commit political suicide by fronting these 'adjustments'. Deeper sensitivities to institutional beliefs and political constraints are required, blended with the will to help design and carefully advocate policy change. Otherwise rational policy and budget reforms will fall to the state's (understandable) desire to avoid burning political capital or sacrificing its own popular legitimacy.
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