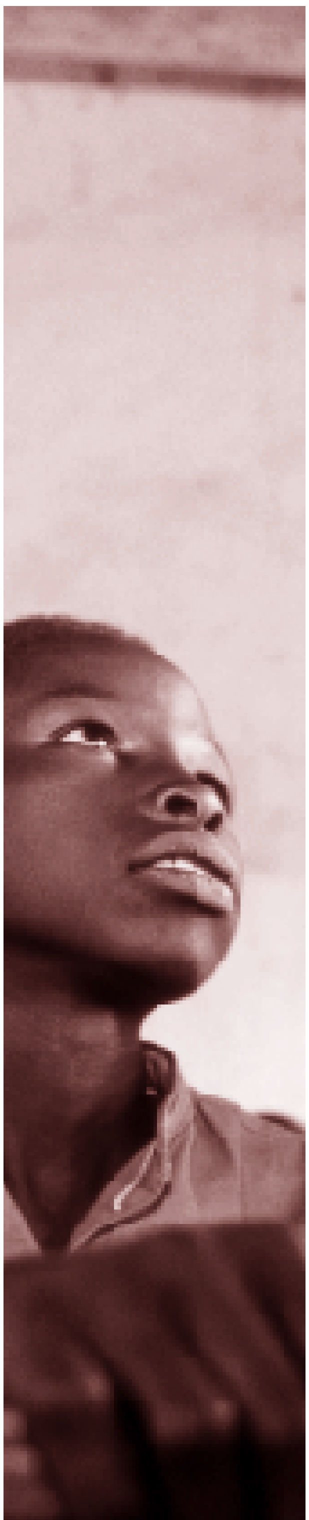
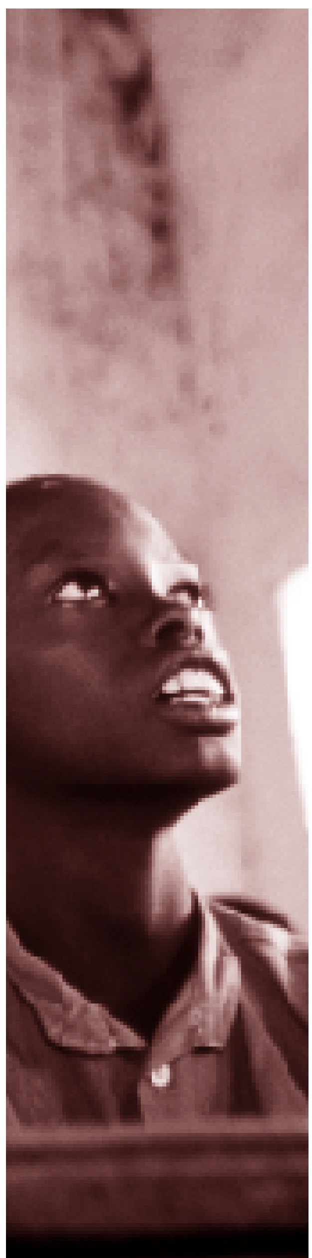
# Confronting the Contradictions

## The IMF, wage bill caps and the case for teachers





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Tim Hetherington / Panos Pictures / ActionAid

## Contents

page

# Abbreviations and acronyms

| | |
|---|---|
| CSO | civil society organisations |
| DfID | Department for International Development UK |
| DRC | Democratic Republic of Congo |
| EFA | Education For All |
| EFA-FTI | Education For All – Fast Track Initiative |
| FTI | Fast Track Initiative |
| GDP | gross domestic product |
| GNP | gross national product |
| HIPC | heavily indebted poor countries |
| ICRW | International Center for Research on Women |
| IEO | Independent Evaluation Office (of the IMF) |
| IMF | International Monetary Fund |
| MDGs | Millennium Development Goals |
| MEST | Ministry of Education, Science and Technology (Sierra Leone) |
| MoF | Ministry of Finance |
| PRGF | poverty reduction and growth facility |
| PRSP | poverty reduction strategy paper |
| PSI | policy support instrument |
| PSIA | poverty and social impact assessment |
| PTR | pupil-teacher ratio |
| UIS | UNESCO Institute for Statistics |
| UNDP | United Nations Development Program |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation |
| UPC | universal primary completion |
| VAT | value-added tax |

# EXECUTIVE SUMMARY

## The case against the IMF on education

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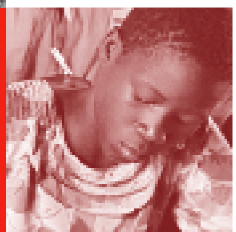
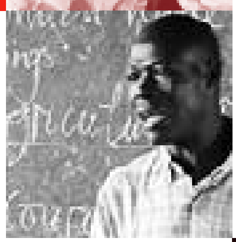
Right and below:
Gideon Mendel / Corbis / ActionAid





In the world's poorest countries many children have gone without quality education for far too long, and as a result, the human capital that these countries need to grow and develop sustainably is still in desperately short supply. One reason is that the key ingredient to learning is missing: there are not enough trained teachers. Our research in **Malawi**, **Mozambique** and **Sierra Leone** shows that a major factor behind the chronic and severe shortage of teachers is that International Monetary Fund (IMF) policies have required many poor countries to freeze or curtail teacher recruitment.

Ceilings are placed on the public sector wage bill[1] to keep it from pushing up spending or spiralling out of control. IMF policies have led to excessively low wage bill ceilings at the very same time that the World Bank and other donors are pushing poor countries to rapidly expand enrolments, so as to achieve the Millennium Development Goal (MDG) of getting all children into primary school by 2015.

This report recognises that wage bill ceilings are necessary: there are always limits that need to be set and no government should spend irresponsibly. However, questions remain unanswered: *How are the ceilings calculated? By whom? Are they too low as a result?*

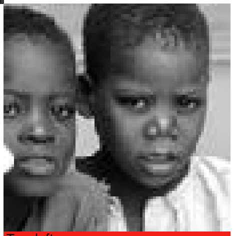
In all three countries, the IMF exercises considerable influence in the setting of annual ceilings on the budget and consequently on the wage bill. A recent IMF report conceded that between 2003 and 2005 it included wage bill ceilings as a notable criterion in its loan arrangements with 17 countries in Asia, Central America and sub-Saharan Africa, including Malawi, Sierra Leone and until recently, Mozambique (Fedelino *et al* 2006).[2] In other countries with an IMF loan arrangement, the Fund does not directly require a wage bill ceiling. Instead it targets single-digit inflation rates and low fiscal deficit levels, effectively limiting the size of the government budget relative to gross domestic product (GDP), including the budget for teachers. Based on these overall budgetary restrictions, the Ministry of Finance (MoF) may set specific 'caps' on the number of teachers and health

1 The public sector wage bill is a line item in any national budget that covers the central government payroll.
2 In four additional countries wage bill conditionality related only to structural reforms – for example, computerising the payroll.

workers that can be hired. However, the formula or criteria used in setting the ceilings remain unclear. Did the MoF and the IMF assess the number of teachers needed to ensure quality education? Was there any analysis of rising enrolment rates in primary and secondary schools? Was there any consideration of the impact of these ceilings, especially on how they discourage girls' schooling and compromise long-term development goals? It seems not.

The IMF argues that wage bill ceilings are sometimes necessary when governments lose control over public sector pay increases or inherit a civil service bloated by patronage. In such cases, they say, tight ceilings allow government to cut back wage spending in non-priority sectors, redirecting more expenditure to wages in priority sectors (Fedelino *et al* 2006). However, in the three countries studied, the wage bill ceiling appears to be designed and understood primarily as a tool for achieving IMF fiscal and monetary conditions, not for increasing staffing and pay in priority sectors such as education. And their main impact has been to prevent or slow the recruitment of new workers, not just to control pay increases for existing workers.

Ministries of Education are in the best position to determine how many teachers are needed and to predict the impact of not hiring these additional teachers on the education system. Yet in none of the three case study countries was the Ministry of Education directly involved in setting the wage bill ceiling. Rather it is simply told, after the decision has been taken, how many new teachers can be hired. As a senior education official in Sierra Leone explained, "*It is the ceiling that dictates how many more teachers we can hire. Schools tell us their needs, but we are rarely able to meet those requests.*"



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Above:
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In examining the basic macroeconomic policies that require the use of excessively low wage bill ceilings in Malawi, Mozambique and Sierra Leone, we concluded that there are a variety of arguments for and against these policies. A growing number of economists worldwide challenge the basic model of the IMF and highlight areas where government, alongside civil society, should consider other options. Regrettably, our case studies indicate that governments are given neither the policy space nor the technical support to determine for themselves the most appropriate macroeconomic policies to promote equitable growth and achieve national education goals. Moreover, civil society is not involved in discussions surrounding macroeconomic policy. As a result, such policies continue to be divorced from the reality on the ground, failing to take into account the persisting teacher shortage and its devastating impact on the quality of education.

The IMF claims that wage bill ceilings can be flexibly applied so as not to impact teachers and health workers directly. They argue that many other factors are primarily to blame for the lack of enough teachers in the classrooms: skewed staff deployment, corruption (ghost teachers inflating the payroll), skills shortages, a failure to train enough teachers, and the lack of predictable donor aid to help finance the expansion of the teaching force (Interviews with representatives of the IMF and finance and education ministries in Malawi, Mozambique and Sierra Leone).

All of these are real constraints, and the findings from the three countries show that both the ministries of finance and education and the donor community are aware of these problems and in some cases are working to address them. The solutions will require more investment, not less – for example in building more teacher training colleges or providing incentives for rural postings (thus increasing the wage bill).

The IMF is correct to point to the notoriously short-term, project-related and unreliable nature of donor aid as a major problem. In all three countries, a massive upfront investment by donors will be needed to help finance the large-scale expansion of the education system and the workforce that is needed to provide a decent education to every child. Yet all three countries are massively short of funds and donors do not have a firm plan for closing the gap. Governments do not know how and when additional aid flows might arrive over the next five to ten years, making it impossible for them to plan for additional hiring off the back of increased aid.

At the same time, however, finance ministries and the IMF must move faster and further to loosen constraints on public spending so that aid can be used to expand teacher numbers as well as to build schools and print textbooks. However, in our three case study countries there continues to be little or no discussion – particularly between the IMF, MoF, Ministry of Education and civil society – around the level of the wage bill ceiling, and more broadly, how to balance the need to invest in education for the future with the desire to maintain fiscal discipline over the short run.

Malawi has a wage bill ceiling as a performance criterion, while Sierra Leone and Mozambique have ceilings as indicative targets (Fedelino *et al* 2006).[3] As of April 2007, all three countries were still applying a ceiling. It remains a performance criterion in Malawi's loan agreement with the IMF and an indicative target in Sierra Leone's; in Mozambique it is still a part of the national budget despite being dropped from Mozambique's loan agreement. The IMF has had varying degrees of influence in setting the actual wage bill ceilings in all three countries and seems to have condoned different degrees of flexibility in their implementation. In Sierra Leone, the IMF determined the level of the ceiling, and the government placed a cap on the number of teachers it could hire as a result. In Malawi, the MoF set the wage bill ceiling based on IMF recommendations to meet other macroeconomic targets. Although the education sector is officially exempt from the recruitment freeze, the Ministry of Education has not undertaken any pre-service training since 1995, and as a result there has not been a significant cohort of new teachers to recruit.[4] The most recent poverty reduction and growth facility (PRGF) also includes an automatic 'adjuster' to allow for additional wage spending on health care workers when donor funding for salaries is larger than expected.

In Mozambique, under pressure from donors, the Ministry of Education and Ministry of Health, the IMF was forced to remove the wage bill ceiling as an indicative target and allow the MoF to raise the ceiling. However, the new ceiling still does not allow the Ministry of Education to hire the full number of teachers needed.

Despite the differences between the implementation of the wage bill ceiling in these three countries, there were also some striking commonalities. Ministry of Finance officials from the three countries indicated to us that the main reason for not raising the wage bill ceiling was fear that expanding the public sector workforce would push up inflation beyond the targets contained in their loan agreement with the IMF. **The IMF may have varying degrees of influence in directly setting the wage bill ceilings. However, by insisting on overly restrictive macroeconomic policies that constrain government spending on wages, it is in part responsible for the persisting teacher shortage.** In all three countries, the wage bill ceiling is too low to allow the government to hire the teachers they need to achieve the pupil-teacher ratio (PTR) of 40:1 recommended by the Education for All – Fast-track Initiative (EFA-FTI). There is considerable evidence that the current ceilings compromise the quality of education in each of these countries.

3 Performance criteria are activities or macroeconomic targets that must be respected for the agreed amount of credit to be disbursed. Indicative targets are activities or macroeconomic targets that, if not met, alert the IMF that additional measures must be taken to ensure government meets this target in the future. However, failure to meet such targets will not jeopardise future loan disbursements.

4 All resources for training were diverted to train the 22,000 untrained teachers that were hired in response to the elimination of user fees under the free primary education policy.

## Malawi

- The Ministry of Education continues to struggle with the aftermath of the launch of free primary education in 1994. The government initially responded to the huge increase in demand by hiring 22,000 untrained teachers. Only a handful of additional new teachers have been hired since then as there no new teachers have been received pre-service training in the last 10 years.

- Though enrolment rates have continued to rise the quality of education is poor. The PTR remains high at 72:1. Malawi has the lowest completion rate for girls and boys of all three countries studied: 27% and 32% respectively. To provide quality primary education, the PTR needs to fall to 40:1 by 2015, which would require government to hire 90,477 teachers. At the moment 45,268 teachers are employed.

- There continues to be a wage bill ceiling at 7.2% of GDP (IMF 2006b); inflation is targeted to decrease to 5% by 2009/10, and the fiscal deficit target is expected to fall to 0% in the same period (Government of Malawi 2005). Ambitiously, the government hopes to meet these targets by limiting the size of government expenditure to 39.5% of GDP (IMF 2006b) This will also have the effect of limiting government expenditure on the wage bill.

## Mozambique

- The rapid expansion of the primary school system has meant that more children now have access to a full cycle of primary education. However, despite some improvement completion rates remain low, particularly for girls.

- Only 51% of girls enrol into the last two years of primary education. Of these, only 45% complete the final year. The national PTR is 74:1 leading to poor learning environments. For girls and their families this is another disincentive to send girls to primary school: others include social and traditional prejudices; long travelling distances to school; a lack of appropriate sanitary facilities; and fear of abuse in schools. As a result few girls complete primary school, and even fewer complete secondary – the minimum requirement to enter a teacher training college. At present less than 40% of primary teachers are female – an increase in the number of female teachers is expected to have a positive impact on girls' enrolment (Handa 2002). Yet the government must address the teacher shortage to keep these girls in school and ensure they receive a quality education.

- The government will need to hire 109,172 primary school teachers by 2015. Although the MoF raised the wage bill ceiling from 6.5 to 7.5% of GDP, with the IMF's consent it continues to constrain teacher recruitment in 2007. In 2007, the Ministry of Education asked for 12,000 extra teachers to reduce the PTR, but was only allowed to hire 9,000 and 1,000 administrative staff. At best on present projections the Ministry of Education will achieve a 54:1 PTR by 2015.

## Sierra Leone

- Sierra Leone is faced with the dual challenge of reconstructing schools destroyed during the 11-year conflict and providing free and quality education to all children. In recent years there has been a dramatic, four-fold increase in enrolment in schools, but this has not been matched with increases in trained teachers. Lack of resources has led to a high PTR of 57:1. Two-in-five teachers are untrained 'para-professionals' and the attrition rate is high, with many teachers leaving after four years' service due to chronic delay or absence of pay and poor working conditions.

- A World Bank-funded project to build additional schools had to be slowed down, as too many schools did not have adequate teachers due to a cap on teacher hiring. To prevent over-flooding in this limited number of classrooms, the Ministry of Education, Science and Technology (MEST) has set a ceiling on the maximum enrolment for each school. The result is that children are being turned away at the schools gates.

- The wage bill ceiling is set at 6.1% of GDP and is expected to decrease to 5.9% by 2008. The number of teachers that could be on the payroll in 2007 was capped at 33,122 (for all teachers). Although the IMF has allowed for 'overruns' and for the hiring of approximately 2,000 additional teachers this year, a total of 28,895 teachers are required just in primary schools[5] to improve the quality of education by bringing the PTR down to 40:1 by 2015. In the 2007 Article IV Consultations, the IMF emphasised that "*…reining in the wage bill and improving control of wage expenditures needed to be addressed with urgency*" (IMF 2007 page 15). However, government officials stressed that managing the wage bill in the aftermath of a conflict was a daunting task. They felt compelled to reinstate displaced civil servants as they return (IMF 2007).

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5 See the tables in Annex 2. Calculations for Mozambique and Malawi are also drawn from the calculations in these tables.

The IMF's power to effectively shut down foreign aid means that countries have not dared to challenge these policies without the support of the donor community – even if they are not in the best interests of their citizens.

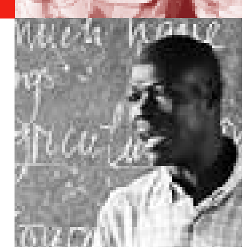
We want government officials in ministries of finance and education, and civil society organisations, to recognise that the IMF continues to be influential in determining the level of resources available for education. We hope they will make use of the evidence we provide on the limitations of these policies to challenge the rationale and justification that underpins the IMF's approach, and claim back their own policy space by formulating alternatives. Maintaining sound public finances is essential – but macro stability needs to be complimentary to the achievement of development objectives and rights, not elevated to an end in itself.

This report is about confronting the contradictions between the restrictive macroeconomic policies and the need to scale up spending to meet education and other development goals. In recent years, many governments (including those of Malawi, Mozambique and Sierra Leone) have formally abolished user fees in primary education – a key step towards achieving universal enrolment. It has worked: primary enrolments have dramatically increased. Yet, teacher recruitment and training has not been able to keep up. Getting more children into primary school without a corresponding effort to employ more trained teachers does not fulfil their right to education.

Governments and national parliaments, not the IMF, are best placed to determine this, and to decide whether to set public sector wage bill ceilings. The level of these ceilings should enable the achievement of education and other development goals, particularly recognising the need to recruit more teachers, year on year, to ensure that all children learn in class sizes of 40:1 by 2015.

## To achieve this, we make the following recommendations:

- The IMF should stop attaching specific policy conditions to their lending and surveillance programmes, including on inflation levels, fiscal deficits and wage bills. Any advice they give must provide a range of policy options to enable governments and other stakeholders – including parliaments and civil society – to make informed choices about macroeconomic policies, wage bills and the level of social spending.
- Governments should place education and development goals at the centre of their macro-economic planning. They should develop long-term and costed education plans detailing the actual need for teachers and resources for training in order to provide quality learning outcomes for all girls and boys
- Donors need to keep their promises by committing to close the annual US$15b financing gap needed to achieve education for all with increased and predictable aid over the long term. There is an urgent need to front-load increases in aid to education.
- Civil society organisations need to develop their own economic literacy so they can better scrutinise government budgets, increase the sensitivity of budgets to the needs of girls, poor people and other excluded groups, and engage in discussions about alternative macroeconomic policies.



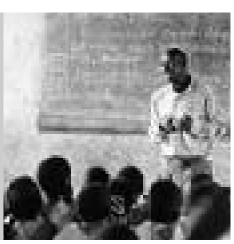
# Section 1

# The importance of education and investment in teachers

## 1.1 Introduction

In 2005 ActionAid International published two reports on the impact of International Monetary Fund (IMF) policies on government investment in education, including teacher recruitment.[6] Our research highlighted the glaring contradiction between low wage bill ceilings and the desperate need to hire more teachers to achieve the Millennium Development Goal (MDG) and Education for All (EFA) objective of universal primary school completion by 2015.

In 2006, the IMF published a report acknowledging that it includes wage bill ceilings either as a performance criterion or as an indicative target in 21 countries (Fedelino *et al* 2006). The report confirmed that, albeit unintentionally, wage bill ceilings can have a negative impact on the recruitment of teachers and health workers, given that these two groups make up such a large portion of the wage bill. The IMF now claims that it is more flexible and selective in its use of wage bill ceilings in low-income countries.



This study takes a closer look at wage bill ceilings in three countries: Malawi, Mozambique and Sierra Leone. All three were cited in the Fedelino report as having an explicit wage ceiling either as a performance criterion or an indicative target in their loan arrangement.[7] Through extensive interviews with government officials in the Ministry of Finance (MoF), Central Bank, the Ministry of Education, the IMF, and civil society organisations (CSOs), we sought to understand the IMF's role in directly setting – or indirectly influencing through broader macroeconomic policies – the level of wage bill ceilings. Either way, we found that low wage bill ceilings have a significant impact on teacher recruitment in each country.

The unique contribution of this report is to clearly demonstrate the link between macroeconomic policies and the inevitable consequences they have for the education sector.

We deliberately chose three countries with seemingly different circumstances in relation to wage bill ceilings and the associated influence of the IMF. In Sierra Leone the IMF continues to have a direct influence in determining the level of the wage bill ceiling. In the 2007 Article IV Consultations, the IMF emphasised that "*…reining in the wage bill and improving control of wage expenditures needed to be addressed with urgency*" (IMF 2007, p 15). However, government officials stressed that managing the wage bill in the aftermath of a conflict was a daunting task. They felt compelled to reinstate displaced civil servants as they returned (IMF 2007).

6 Marphatia, A and Archer, D. *Contradicting commitments: how the achievement of education for all is being undermined by the International Monetary Fund.* ActionAid International, 2005. See www.actionaid.org/assets/pdf/contradicting_commitments4.pdf
Rowden, R. *Changing course: alternative approaches to achieve the millennium development goals and fight HIV/AIDS.* ActionAid International USA, 2005. See www.actionaidusa.org/pdf/Changing%20Course%20Report.pdf

7 Performance criteria are activities or macroeconomic targets that must be respected for the agreed amount of credit to be disbursed.
Indicative targets are activities or macroeconomic targets that, if not met, alert the IMF that additional measures must be taken to ensure government meets this target in the future. However, failure to meet such targets will not jeopardise future loan disbursements.

Despite this concern, the wage ceiling has led the government to set a specific cap on the number of teachers it can hire. In Malawi, there is still a wage bill cap and corresponding recruitment freeze on non-priority sectors. Officially, the education and health sectors are exempt. However, the Ministry of Education has not undertaken any new pre-service training and as a result there has not been a significant cohort of new teachers to recruit.[8] In Mozambique, the wage bill ceiling is no longer an explicit target in the poverty reduction and growth facility (PRGF) programme.

The IMF has shown itself to be flexible in each of these countries. In Mozambique, the wage bill ceiling increased to allow the recruitment of new teachers. In Malawi, the IMF is responding to government requests to adjust wage bill ceilings mid-year. In Sierra Leone, the IMF has allowed annual 'overruns' on the wage bill to accommodate the hiring of more teachers.

What we ask is whether this flexibility is enough to allow countries to hire the required number of teachers to provide quality primary education. If not, are there other policies governments can consider to allow for a scaling-up of investment in education, particularly in the recruitment teachers?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## Section 1
sets the stage. It makes the case for education and outlines the commitments that the governments of these and most countries have made to children, while recognising the many capacity constraints they face to recruit more trained teachers and make effective use of the resources designated to the education sector.

## Section 2
explores how the ceilings are calculated and the extent to which the IMF macroeconomic framework informs the level of the wage bill ceiling.

## Section 3
uncovers the impact low wage bill ceilings have on the quality of education provided in schools, taking a global perspective by illustrating how the dwindling quality of education in Malawi, Mozambique and Sierra Leone is but an example of the experience of most poor countries under the IMF's tutelage.

## Section 4
lays out possible alternative policies that could better enable countries to select those macroeconomic policies best suited to achieve education objectives.

## Section 5
sets forth recommendations for the IMF, governments, donors and civil society.

8 In 2000 the government hired 4,000 teachers; all were untrained.

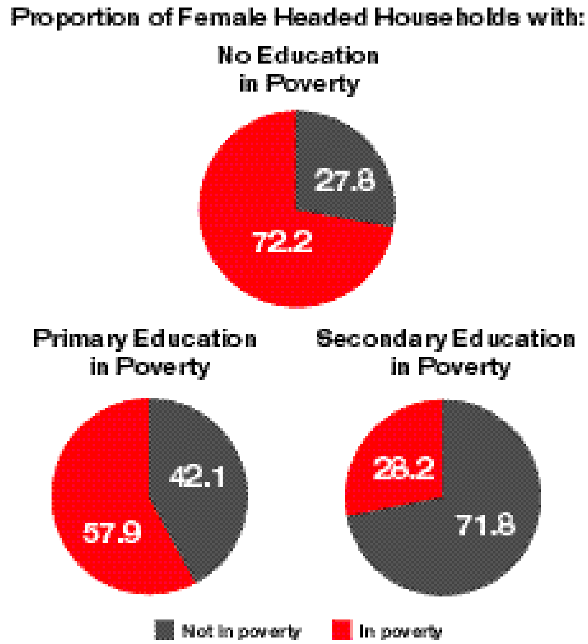
## 1.2 The link between education, poverty and economic growth

The importance of education goes beyond national goals and global commitments. Education is both a fundamental and an enabling right, which "*…creates the 'voice' through which rights can be claimed and protected*" (Watkins 2000). However, the mere fact that more children go to school does not mean they will automatically learn. Teachers must be present, well trained and skilled to provide equal learning opportunities for both girls and boys: if not, it is unlikely that children – especially girls – will achieve acceptable learning outcomes. Without well-trained teachers children will not master basic literacy, which will enable them to access the information and services they need to lead a healthy and dignified life free of poverty.

Nowhere is this truer than in the three focus countries of this study – Malawi, Mozambique and Sierra Leone. Graph 1 shows how the people of Sierra Leone – 85% of whom live on less than US$2 a day – are more likely to rise out of poverty with more education.[9] This is especially true in female-headed households, which research shows are more likely to spend their income on education, health and food. A similar situation is reproduced worldwide.

According to Malhotra *et al* (2003), an educated, skilled and knowledgeable workforce – especially if women have equal opportunity to contribute – is one foundation for sustained growth. The government of Malawi (2006) claims that "*…education is the key for attaining prosperity. It is a catalyst for socio-economic development, industrial growth and an instrument for empowering the poor, the weak and the voiceless.*" Even the IMF's own research shows the positive impact of education on economic growth: "*An increase in education spending of 1 percent of GDP is associated with three more years of schooling on average and a total increase in growth of 1.4 percentage points in 15 years*" (Baldacci *et al* 2004). Similarly, a 1% increase in enrolment rates yields a 0.1% increase in per capita gross domestic product (GDP) growth.

### Graph 1:
### The link between female education and poverty




Source: Sierra Leone Integrated Household Survey, 2003/4 in Poverty Reduction Strategy Paper 2005, p 24 (as cited in World Bank Education Sector Review). The poverty line is estimated at SLL 770,648 per year or US$328 (US$1 per day).

We now know that countries that fail to invest in female education will face considerable costs both in foregone economic growth and in being able to achieve reductions in fertility, child mortality and malnutrition. The cost of these to the economy will increase over time – for example, two-thirds of the countries in sub-Saharan Africa are not on track to achieve the education MDGs, which jeopardises their growth. Hill and King (1995) estimate that gross national product (GNP) in countries where the ratio of boys to girls enrolled in primary or secondary school is less than 0.75 can be 25% lower than in countries with smaller gender disparities in education. They estimate that countries would have grown on average 0.1-0.3% faster each year between 1995 and 2005 if they had embarked on education programmes to achieve gender parity in primary education goal by 2005. Conversely, Abu-Ghaida (2004) estimated that failing to invest in education will lead to 0.4% of growth being forgone between 2005 and 2015, and that proper investment in education would have increased per capita income by 14% for the period of 1985 to 2015.

9 The UNDP's *Human Development Index 2007* ranks Sierra Leone second-to-last on a scale of 177 countries.

### Box 1:
## Why investing in teachers makes good economic sense

To get high-quality education, the empowerment of women and higher economic growth, it is necessary to invest in the 'full package'. This means an adequate number of female and male teachers, liveable wages, housing and transport allowances, training opportunities, school infrastructure (including toilets) and appropriate teaching materials. Returns on education depend not just on years of education, but on the actual skills and cognitive abilities acquired. Glewe (2002) finds that measures of cognitive skills are a strong determinant of earnings; while ICRW (2005) finds that a combination of years of schooling and good quality education leads to the empowerment of women and brings about greater returns on education. However, these do not come automatically – the quality of instruction and levels of teacher motivation both affect students' ability and success in school (Lee and Barro 2001; López-Acevedo 2004). In addition to providing adequate pre- and in-service training, it is essential to remove other obstacles that undermine the capacity of teachers – such as low wages, lack of housing and transportation – and support the progression of female teachers. Similarly, it is important to provide an environment that is conducive to learning, by providing materials, teacher aids and smaller class sizes. In particular, increasing the pupil-teacher ratio (PTR) has been shown to have a significant negative effect on attainment, the probability of employment and returns on education for students. A study in South Africa found that increasing the PTR by five students led to a 1% decrease in pupils' wage-earning potential (Case and Yogo 1999). Evidently the PTR is determined by the number of teachers that are employed. UNESCO's Institute of Statistics (UIS) has estimated that 18 million teachers are needed globally between now and 2015 to achieve acceptable PTRs (UNESCO 2006a).

However, investment in building schools, good teaching-learning materials and programmes to support the higher enrolment of girls (such as stipends) will not automatically lead to higher economic growth. It is the learning process, how good a teacher is, and how well s/he has mastered basic teaching skills and techniques, that ensure equal participation and success in the classroom. Only trained teachers can provide the high quality of education required to lead to higher economic growth. Box 1 shows why investing in teachers and providing them training and support is not only necessary, it also makes good economic sense.

Acquiring skills and knowledge is the first step. The ripple effect of education is felt most when people are able to access and take advantage of opportunities to apply their skills to productive sectors, making the economy grow. The benefits of education to agricultural development are particularly significant because this sector employs the majority of people – especially women – in the poor, agrarian-based economies in sub-Saharan Africa. The agriculture sector makes a sizeable contribution to the gross domestic product (GDP) of the three countries we studied – for example, 40% in Sierra Leone (IMF 2007a). Investing in education will boost agricultural production and therefore lead to greater economic growth. It is once again the investment in female education that contributes most to higher agricultural productivity. For example, a study looking at household incomes in Ghana finds that one additional year of schooling increases on-farm productivity by 1-3%, and off-farm productivity by 6-11%, depending on the specification of the model (Jolliffe 2004).

All of these aspects are particularly significant in countries where agricultural development is a key strategy. The findings suggest that education – particularly for girls at primary level – is a prerequisite to maximise the opportunities presented by agricultural development and can contribute significantly to economic growth. And of course, greater economic growth provides governments with more domestic resources to channel into education, health, and HIV and AIDS. In Malawi it is expected that agriculture will provide the central thrust for economic growth. The Ministry of Agriculture's Director of Planning stated that agricultural modernisation is fundamentally dependent upon education. "*We have been concerned by the limited take-up of modernisation techniques. It is only people who have at least primary education who are adopting these techniques.*"

## 1.3 The state of education and teachers in Malawi, Mozambique and Sierra Leone

The link between education, poverty reduction, agricultural development and economic growth is very strong in all three focus countries for this study. Governments have recognised this and are currently developing 10-year education sector plans. Nevertheless, the potential of education to reduce poverty and bring about greater growth is constrained by: the dismal state of education; disparities in enrolment and achievement between girls and boys; the chronic shortage of trained teachers; and a challenging social and economic context. In this section we summarise the state of the education system in Malawi, Mozambique and Sierra Leone, to identify the changes that need to be made, and how macroeconomic policies can play a central role in bringing about positive change.

In **Sierra Leone** the disenfranchisement of youth – mostly due to a lack of education – was one of the root causes of the civil war. After peace was established in 2002, the government promptly set out to re-establish education as a right, and abolished user fees. However, with demand surging, the government faces the dual challenge of reconstructing schools, most of which were destroyed during the war, and providing quality inputs at the school level – for example, an adequate number of trained teachers, teaching and learning materials. It also must find a way to provide education to the thousands of children and youth who have had no schooling due to the war and those who were maimed and disabled. The government has resorted to short-cuts – such as hiring untrained and unqualified teachers – to deal with increased enrolment. Precise data is hard to find, as data systems were destroyed during the war. This makes it difficult to gain an accurate and complete picture of education and the different experiences of girls and boys.

Although the government of **Mozambique** has set education as a national priority since independence was achieved in 1975, the ensuing civil war (1977-1992) undermined its investment in education. Enrolment rates have been steadily rising for girls and boys since the end of the war, but teacher recruitment and school construction have not been able to keep up, leading to overcrowded classrooms and the use of untrained teachers. The recent floods and cyclones in early 2007 damaged around 1,000 classrooms in the provinces of Tete, Zambézia, Manica and Inhambane. The government needs to rebuild these classrooms while meeting the rising demand for new schools and more teacher training colleges. In addition, as enrolment rates and completion rates for primary continue to rise, there is mounting pressure on government to expand the secondary school system. This would require not only the construction of more secondary schools, but also the recruitment of more secondary school teachers.

In **Malawi**, the Ministry of Education is still struggling to re-establish itself after its tarnished dealings with corruption during the last administration. It is also still grappling with the aftermath of the launch of universal free education in 1994, when enrolment surged and government schools struggled to cope. There has been some progress in classroom construction and textbook provision – and the government has recruited 22,000 untrained teachers to respond to the new demand. However, these teachers have not been given adequate in-service training and the quality of schools remains poor. Drop-out rates are high and completion rates low. One donor representative went so far as to call the last 10 years a "*…lost decade for education in Malawi*". A member of local health organisation the Malawi Health Equity Network asked: "*Where are we heading to? We've lost direction as a country with respect to education.*"

Although enrolment rates in primary education have increased, the results on learning achievement have been mixed. Table 1 shows that, although there is disparity in net enrolment rates between the three countries (in Malawi it is as high as 95%[10] while in Sierra Leone it remains low at 63%), they all have high drop-out, low completion and poor transition rates to secondary school, indicating that that children are not staying in school long enough to gain basic literacy skills. This becomes even more apparent when looking at the PTR, which is well above the recommended class size of 40 or less, adopted by the World Bank and donor community as a standard for developing countries, in response to compelling research that shows deterioration in the quality of teaching and learning where class sizes exceed this figure.

Moreover, there are concerns that some of the data disguises deeper problems, such as the use of automatic promotion instead of the previous practice of testing children at the end of each year and making them repeat the year if they failed. In Mozambique, for example, automatic promotion in grades 1, 3, 4, and 6 has considerably reduced repetition rates and raised promotion rates (Republic of Mozambique 2005a), disguising the underlying issues of negligible learning attainment.

Table 1:

Primary education in Malawi, Mozambique and Sierra Leone

| | Net Enrolment Ratio (NER) | Current pupil-teacher ratio | Universal Primary Completion (UPC) target pupil-teacher ratio | Drop-out rates grade 1* | Completion rates | Transition to secondary |
|---|---|---|---|---|---|---|
| **Malawi** (2006) | 95%<br>98% girls | 72:1 | 60:1 | 22% for girls and boys | 30%<br>27% girls<br>32% boys | 47% girls<br>41% boys ** |
| **Mozambique** (2006/7) | 71%<br>67% girls | 74:1 | 54:1 | 14% girls<br>12.6% boys | 57.2%<br>49% girls<br>65% boys | 62% girls<br>61% boys |
| **Sierra Leone** (2003/4) | 63%<br>45% girls | 57:1 | 45:1 | n/a | 60%<br>47.6% girls<br>63.9% boys | 76% girls<br>78% boys |

Sources:
Different sources were used to find this data. Most comes from government documents but some are from other international sources.
* grade 1 drop-out rates from Global Education Monitoring Report 2007.
** calculated as the total secondary first grade intake for 2006 as a percentage of primary grade 8 pupils who sat the primary leavers exam in 2005.

Other data from:
Mozambique: Ministry of Education and Culture, Education Database; 2005 figures.
Sierra Leone: Net enrolment ratio from Household Survey 2003/4. Completion data for 2004, from *World Bank Education Sector Review 2006*; Sierra Leone Integrated Livelihoods and Household Survey 2003/4. Transition data from Ministry of Education and Vocational Training, *Education Statistics 2006*; remaining figures from PRSP Review 2007.

A key reason for poor levels of learning is the lack of skilled teachers. The shortage of qualified teachers and the vast numbers of untrained teachers already working in schools are impacting on the quality of education not only in Malawi, Mozambique and Sierra Leone, but in increasing numbers of low-income countries worldwide. To get all children into school in class sizes of less than 40, sub-Saharan Africa, which currently has 2.4 million teachers, will need to increase this number by 68%, to 4 million teachers (UNESCO 2006a). However, getting more teachers in schools is more complicated than just finding the resources to hire them. There are several other hurdles in the education sector that must also be addressed:

10 This is taken from the EFA Global Monitoring Report 2007. Note that this number differs from the data held by the Government Of Malawi, the EMIS data of 2006 stating that the NER is over 100%. Given that this is by definition impossible this alternative number is used for the purposes of comparison.

High rates of attrition: Attrition of primary teachers is very high in Malawi and Sierra Leone, with many leaving after just five and four years of service respectively. The total number of teachers has fallen in Malawi during the last three years: between 2000 and 2004, about 1,000 teachers per year left the profession or died (many of AIDS-related illnesses). A further 2,071 teachers were lost in 2006 (Government of Malawi 2006) – at least 25% to AIDS-related sickness or death. Low salaries are another key driver of attrition: while the government considers the salary rate reasonable, an independent costing exercise in 2005 revealed that the basic salary of a trained teacher was MK 7,700 (US$55), while the minimum wage required to buy a basket of primary goods was MK 15,000 (US$107).[11]

Weak capacity to train: The government of Mozambique has lacked the capacity to adequately train all teachers, leaving 38% of teachers without professional training. In response, the Ministry of Education implemented the new teacher-training programme that requires only one year of training after completing Grade 10, rather than two. This measure has nearly doubled teacher training capacity. Previously only 3,500 teachers completed training per year; now close to 6,000 teachers will complete pre-service training. There is a great deal of concern however, from civil society and even within the Ministry of Education that, unless the quality of pre-service training is significantly improved, this training scheme will undermine efforts to improve quality by hiring more teachers. More resources are needed to bolster the new teacher training courses, to ensure that quality is not compromised. But short cuts on training are not the answer.

Lack of female teachers: There are not enough female teachers, which directly impacts on the already low number of girls that enrol, attend and succeed in school (Handa 2002; Republic of Sierra Leone 2007a; Republic of Mozambique 2005 and 2005a). In addition, Unterhalter (2007) found that the low proportion of women teachers correlates with other aspects of gender inequality in education (low levels of primary and secondary enrolment rates, low retention, and the lack of women involved in public decision-making) in both Malawi and Mozambique. In Sierra Leone and Malawi, approximately 30% of primary and 20% of secondary teachers are female (Republic of Sierra Leone 2007a; World Bank 2005a; Government of Malawi 2006). In Mozambique, the presence of female teachers is a significant factor in determining demand for primary education (Handa 2002).

Unequal distribution of teachers: In principle this is true in all three countries, where PTRs range widely. For example, the PTR in Sierra Leone's Southern Region is 56:1; in the Eastern Region it 74:1 (Republic of Sierra Leone 2007a). However, redistributing teachers to rural areas – where PTR is highest and female teachers are the lowest in number – is costly. Incentives and allowances such as housing allocation, living stipends, and transportation costs are required to attract trained teachers to under-served areas. The most common solution used by countries including Sierra Leone is to recruit people from the community to teach. However, most people in rural areas have barely completed two-three years' schooling; they are not prepared or equipped to teach and when they do, the quality of education decreases.

Lack of a credible database on teachers: Sierra Leone lacks a central database to properly account for the number of teachers in service and their qualifications. Mozambique has three different civil servant databases, all of which provide different information on the number of teachers needed. This causes several problems, not only for accurately projecting how many additional teachers are needed and where, but also for calculating the cost of hiring them. In particular, there are many complaints that the wage bill is inflated as a result of ghost workers who continue to appear on the wage bill, but are not active employees. In Sierra Leone, ghost teachers are one consequence of the war, and often cited as a reason to keep teacher numbers, wage bill ceilings, and recurrent costs low. However, what is not revealed is that there are probably an equal number of working teachers not currently on the payroll.

11 These figures are from the Centre for Social Concern (2005), as reported to us by the Malawi's Coordinator of the Civil Society Coalition for Quality Basic Education.

These are all **absorptive capacity constraints** that limit the government's capacity to recruit and deploy more teachers effectively. However, they can all be seen to stem from an accumulated lack of sufficient investment in the education system over many years. There is evidence in all three countries studied that the governments are serious about dealing with these capacity constraints, but to do so properly and effectively requires more – not less – funding. It would be wrong to use these capacity issues as a reason not to increase investment: that would simply perpetuate the problem of absorptive capacity. Speaking in Mozambique, Jeffrey Sachs acknowledged that the country could achieve the MDGs if only more resources were made available. He was critical of donors and the IMF claiming that "*PARPA II*[12] *is not ambitious enough, and we know why…The backing of the international community is not there. They say 'Don't go too fast. You haven't got the absorptive capacity.'*" As a result, he says, they are reluctant to scale up funding for greater investment in social sectors (cited in Hanlon 2005).

Our findings suggest that countries faced with constrained budgets are making difficult choices and pursuing less than ideal solutions. With rising enrolment rates and a shortage of teachers, governments are hiring greater numbers of **untrained or unqualified teachers**. Close to 40% of primary school teachers in Sierra Leone and Mozambique are untrained (Republic of Sierra Leone 2007a; Republic of Mozambique 2006). In Malawi, like most countries, untrained teachers were hired to quickly respond to the surge of enrolment brought on by the elimination of user fees. Hiring untrained teachers has become official policy in Sierra Leone, where the wage scale for teachers is divided into 11 categories, based on level of education and training (Republic of Sierra Leone 2006b). Similarly, in Mozambique the government is implementing a new one-year training scheme; the Ministry of Education then pays these new teachers less than those with two years of training. Overall, the lack of training is having a detrimental impact on the quality of teaching and thus learning (Independent Evaluation Group 2006). Unfortunately all three countries lack the capacity to adequately provide in-service training to the vast number of unqualified teachers and train new teachers.

In sum, the governments of Malawi, Mozambique and Sierra Leone will have to overcome enormous challenges if all children are to gain a quality education. Adopting a long-term education plan is a step forward. However, securing adequate investment to fully fund this plan is another thing altogether. Although Mozambique spends 20% of its total budget (6% of GDP) on education, it still has a financing gap of US$26 million in 2007; around 30% of the education budget is financed through external sources.[13] Both Malawi and Sierra Leone spend under the recommended levels. In Malawi, education accounted for 11% of the national budget – 3.5% of GDP – in 2006/7 (Government of Malawi 2006a). In Sierra Leone, education occupies 19% of the total budget, or 4.9% of GDP. Domestic public spending represents 35% of total spending, donors contribute about 22%, and households finance 44% of costs despite education being supposedly fee-free since 2003. The estimated financing gap to meet UPC by 2015 is $28.4 million per annum; the total recurrent financing gap to meet the 45:1 PTR between 2007-2015 is $254 million. In order for Sierra Leone to meet this projected PTR of 45:1(which is higher than the FTI-recommended 40:1) by 2015, 5.5% of GDP will need to be spent on education: that means that 47.7% of recurrent costs will be spent on primary education alone (Republic of Sierra Leone 2007a).

Given these funding gaps, it is essential to create an enabling environment that allows for a scaling-up of both donor and government investment in education. However, this requires deliberate and unwavering attention to a host of constraints, some of which go well beyond the education sector. The level of investment in education and potential to increase it will depend on countries' ability to generate more domestic resources and on the volume, predictability and sustainability of external aid that can be spent on education. Both these variables are determined in part by fiscal and monetary policies. Are these designed to support growth, revenue generation and absorption of aid?

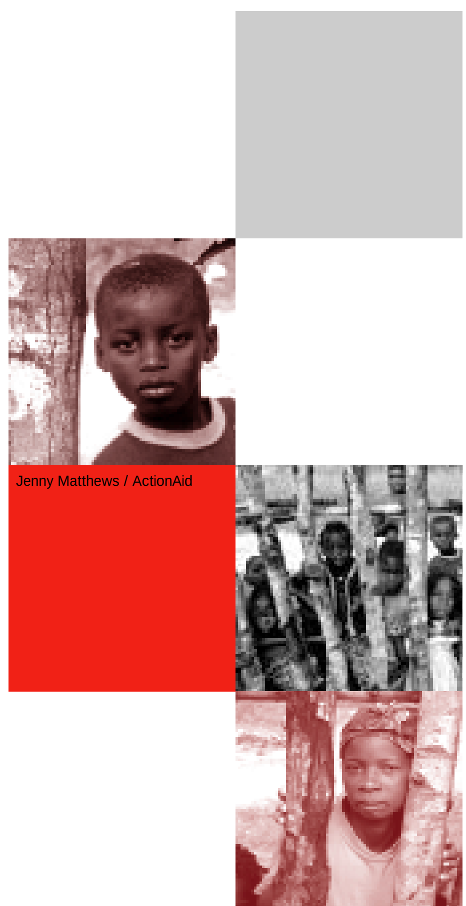
12 PARPA II is Mozambique's national action plan to reduce absolute poverty 2006-2009.
13 Though over 50% of the national budget is supported through direct budget support.

## 1.4 The macroeconomic framework in Malawi, Mozambique and Sierra Leone

The macroeconomic framework of these and most low-income countries is heavily influenced and guided by the IMF. All three countries are pursuing single-digit inflation rates and low fiscal deficit levels. In Malawi, these restrictive macroeconomic policies were necessary initially to rein in excessive and irresponsible government spending. Following the end of the civil war in 2001, the government of Sierra Leone has followed IMF advice, curtailing government expenditure to ensure macroeconomic stability, bringing inflation rates down from 12.1% in 2005 to 5 % in 2008. In 1987 Mozambique signed its first loan arrangement with the IMF as the country transitioned from a planned to market economy. The economic policies implemented during this period have continued to date.

However, all three countries have now reached a reasonable degree of stability, with strong positive growth of 5-6% per year, and annual inflation of 9-12%. Accordingly, these countries should now be turning their attention to achieving their broader social and economic goals, including the MDGs. An economist interviewed in Sierra Leone explained: "*A major question facing Sierra Leone is how to ensure macroeconomic stability, generate employment, restore growth and increase investment in education and healthcare. A post-conflict economy like Sierra Leone's faces some very hard trade-offs. The need to control inflation and debt may dictate austerity measures, which may run counter to social policy priorities and popular expectations of peace. Further, too tight a budget can lead to deflation and unemployment, especially while private investment is still very low.*"

However, when asked whether expenditure could be increased in the education sector to pursue these goals, the response of the finance and planning ministries in all three countries was: "*…not at the expense of macrostability*". It became clear that few government officials had a sense of what macrostability meant, other than meeting PRGF targets. Many officials expressed confusion at the justification for the levels set in their programmes. One senior official from the Reserve Bank of Malawi, stated that the levels were "*based on a rule of thumb*", and yet expressed a deep concern about moving away from these levels. It became abundantly clear that the levels set in the PRGF programmes help to define the fiscal space available for the consideration of additional education expenditure, and that these indicators constitute a primary determinant of planned education expenditures. It is therefore essential to understand the rationale for, and implications of, these macroeconomic targets and the theories that underlie them when considering the room for scaling up education expenditure in order to recruit additional teachers.



Jenny Matthews / ActionAid

# Section 2


Jenny Matthews / ActionAid

# Setting the wage bill: teacher need vs macroeconomics

## 2.1 Setting wage bill ceilings

"*There is a desperate need for greater policy coherence in a period when many governments, including Washington, are sensibly exhorting African governments to spend more on primary health care and education while international institutions largely controlled by those same Western governments have been pressing African countries to shrink their government payrolls, including teachers and health workers.*"
'Africa at the Summit', *New York Times* editorial, 4 July 2005.

Hiring and paying teachers is a domestic obligation. Their salaries – like those of health workers, ministry staff and those working in other government-run services – are covered through a line item on the national budget called the public sector wage bill. This wage bill makes up a sizeable share of recurrent expenditure – 50% in Mozambique; 25% in Malawi; and 43.8% in Sierra Leone (Ministry of Finance 2006), and therefore of the overall budget. Teachers and health workers are usually the most expensive item on the wage bill because of their sheer numbers. The percentages of the wage bill going to teachers' salaries were: 37% in Malawi; 35% in Mozambique; and 35% in Sierra Leone (Ministry of Finance 2006). Similarly, the teacher wage bill consumes an important percentage of the GDP: 2.7% in Malawi and Mozambique and 4.5% in Sierra Leone (Republic of Sierra Leone 2007a).

Therefore, controlling the wage bill is a convenient way of controlling the total budget size. Because the wage bill is primarily financed through domestic resources, if GDP fails to grow as projected, or decreases, less is available to spend on wages. Any target for the overall budget size will also inevitably present a limit on the size of the wage bill. Because teachers and health workers occupy the largest portion of the wage bill, any changes in the total wage bill will inevitably impact upon them.

Placing a ceiling on the wage bill is customary and makes financial sense: it is important to ensure that the wage bill does not spiral out of control. In Malawi, the government has previously struggled to control wage increases and recruitment, so it saw a payroll cap as a healthy measure to enforce budget discipline. Further, the IMF maintains that a ballooning wage bill can lead to macroeconomic instability in the short term, either by crowding out other government expenditure, pushing up total government expenditure or causing a wage-price spiral in the whole economy, which could lead to further inflation (Fedelino *et al* 2006). Accordingly, a wage bill ceiling is often included as a performance criterion or indicative target in the PRGF.

However, despite the seemingly solid rationale for constraining the growth of the civil service, it is important to look carefully at how the ceiling is calculated, which information is used in these calculations and the level at which the ceiling is set. There is also, in effect, an indirect ceiling on the wage bill. A stringent ceiling on overall government spending will, by default, result in a limit on the wage bill ceiling. The IMF maintains that country governments set wage bill ceilings, not the IMF. This is not strictly true for our country studies:

- In **Malawi**, the wage bill ceiling, currently set at 7.2% of GDP, is a performance criterion: breaching this ceiling would take the country off-track with its PRGF.
- The wage bill ceiling in **Sierra Leone** is set as an indicative target, but because it is so stringent the government was forced to place a cap on the recruitment of new teachers. In this case it is indeed the government that decided to place a cap on teachers, though it was a result of the recommended IMF ceiling on the wage bill. In order to enable better control of the wage bill, in 2006 a structural performance criterion was added for a database of

civil service employees including teachers.

- In **Mozambique**, the PRGF no longer includes a wage bill cap per se; however, stringency within the budget means that the government has continued to set a tight wage bill ceiling and even more restrictive monetary and fiscal targets.

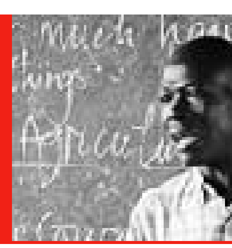
### Mystery formula = no accountability

So what information is used to set the ceilings, and is the shortage of teachers and health workers taken into consideration? Interviews with staff from the education and finance ministries in the three countries revealed that the level of the direct wage bill ceiling is based, not on any estimate of need, but on arbitrary international averages.[14] This differed from country to country – 6.1% of GDP in Sierra Leone; 7.5% in Mozambique and 7.2% in Malawi. In Sierra Leone it will fall slightly over the period (from 6.1% in 2005 to 5.9% in 2008). What could the rationale for this be, when the sector plans for these countries call for dramatic increases in the number of teachers, if only to keep apace with growing enrolments? No one that we interviewed knew exactly where their wage bill target came from, and the IMF had provided no justification for how it had been calculated, or what comparison was used.

The ceiling on the total budget is calculated by using a macroeconomic projections model. However, in all three countries there was considerable ambiguity around the actual formulas used – for example, in Malawi senior officials in the Ministry of Finance referred us to the Ministry of Economic Planning and Development for a copy of the macroeconomic model, who in turn referred us to the Ministry of Finance for the same! We found similar ambiguity around the actual formulas used in the other two countries too. Overall, we found that IMF programme documents failed to spell out the underlying rationale or justification for a particular policy stance, making it difficult for others to comment and challenge (IEO 2003) – a fact that also complicates mid-course corrections (Goldsbrough 2006). In Mozambique a government official noted that, "*The process of setting macro policies is one that mostly consists of 'reconciling data' between the government and the IMF. When the IMF mission comes to town, they compare their data with that of the government and adjust their data so they agree on the macro targets. It is only at the end that policies are discussed and that the real economy is considered.*"

### Lack of consultation

What is clear, however, is that the Ministry of Education is not involved in establishing the level of the ceiling or cap, and the needs of the sector are not systematically considered when setting wage bill ceilings or total expenditures. Rather, the ministries deals with the consequences, allocating teachers around the country once the ceiling is set. In Sierra Leone for example, very rarely did the Ministry of Education, Science and Technology (MEST) furnish information on its needs; the deficit of teachers; their qualification and training levels; or their salary scales before the cap was calculated. Further, few staff in the ministries of education have the confidence, capacity or opportunity to challenge this situation, and propose alternatives: they are expected to accept decisions taken by the MoF regarding the number of teachers they can hire. In Malawi, efforts to lobby for additional education spending have fallen on deaf ears – a cause of frustrations for parliamentarians. With increasing confidence – partly as a result of economic literacy training – they have sought to challenge the Ministry of Finance on this. However, the stringent macroeconomic framework pursued to date has meant that there is no room for negotiation. Yet if education is only 15% of the budget there would seem to be some room for negotiation! They are not optimistic that this will change.



14 In Sierra Leone the IMF views the wage bill as being 'high', absorbing 55% of domestic revenues. It is considered to be above the ECOWAS average.

## 2.2 Macroeconomic justifications for the wage bill

"*Wage bill ceilings usually provide only a short-term fix…but ultimately do not resolve the macroeconomic pressures they try to address*" (Fedelino *et al* 2006).

A macroeconomic framework with a tight focus on inflation, fiscal deficit rates and ceilings on public expenditure, will constrain the number of teachers and health workers government can employ. This creates trade-offs that directly impact on people's lives and influence the future development path of the country as a whole. It is therefore essential that governments have a range of robust options to consider, and that the final choices rest with elected governments accountable to the people, not with international financial institutions. However, the IMF's approach encourages nations to believe that there is just one truth, one concept of macroeconomic stability and that this is an on-off position, stable or unstable, on-track or off-track. The findings of a recent Independent Evaluation Office (IEO) report show that the same 'switch point' approach affects the absorption of donor aid (see Box 2, page 16).

Nevertheless a growing number of economists are challenging the restrictive nature of fiscal and monetary policies promoted by the IMF and questioning whether very low levels of inflation and fiscal deficits are relevant and appropriate for low-income countries. This has a direct effect on the validity of wage bill caps and expenditure ceilings and therefore, the employment of additional teachers.

The following discussion is by no means a comprehensive assessment of macroeconomic theory. Our intention is to draw attention to the diversity of opinion that exists in relation to some of the macroeconomic factors that countries are encouraged to adhere to, with the hope that this will enable countries to question, challenge and reach their own view as to the right path for their country.

### 2.2.1 Are single-digit inflation rates the best policy for all low-income countries?

"*The 7% rule is a rule for ordinary times, but these are not ordinary times*", senior official, Ministry of Finance, Malawi.

The primary mission of the IMF is to maintain 'macroeconomic stability', which, according to their definition, involves countries having "*…current-account and fiscal balances consistent with low and declining debt levels, inflation in the low single digits and rising per capita GDP*" (IMF 2001). According to the IMF, levels of inflation above 10% may hurt poor people because they raise the prices of basic consumer goods, drive away foreign investors, and undermine the prospects for future economic growth rates (IMF 1997). The main way to achieve this target inflation rate has been to quickly drive inflation from relatively moderate levels down into the very low single-digits, often by cutting public spending and raising short-term interest rates. Once this lower target for the inflation rate is attained, countries must do everything possible to maintain it. Current inflation targets are set at 6% in Mozambique, 7.4% in Malawi, and 9.3% in Sierra Leone, all three countries inflation is expected to fall to 5% by 2009/10 (IMF 2006). Similarly, as shown in Table 3 (see page 25) in this report, all 23 countries reviewed had inflation targets well below 10%; 20 of them below 5%. As Box 2 (see page 16) shows, in many low-income countries a standard 5% inflation target that has long characterised the central goal of IMF stabilisation programmes continues to determine spending and aid levels (IEO 2007).

However, economists disagree regarding the level at which inflation negatively impacts poverty and growth. While some argue that countries with single-digit inflation grow faster than countries with moderately higher inflation, there is competing evidence that long-term growth is not affected by moderate double digit inflation (Chang and Grabel 2004).

Indeed, many studies claim that squeezing economies through low single-digit inflation rates in order to reduce demand and government spending has actually resulted in slower growth for the poorest countries (Spiegel 2006, Weisbrot *et al* 2005, World Bank 2005, GAO 2001, Barro 1996). Pollin and Zhu (2005) conclude that "*…there is no justification for inflation-targeting policies as they are currently being practiced throughout the middle- and low-income countries, that is, to maintain inflation within a 3-5 percent band.*"

Even the World Bank – the IMF's sister agency in Washington – found that inflation rates below 20% had no obvious negative impacts for long-term economic growth rates in 127 countries from 1960 to 1992 (cited in Bruno 1995). This research indicates that maintaining moderate inflation rates would not necessarily jeopardise macroeconomic stability, while accommodating higher public spending on priority sectors, such as education. Similarly, a World Bank study found that "*…the search for macro stability, narrowly defined, may in some cases have actually been inimical to growth. Preoccupation with reducing inflation quickly induced some countries to adopt exchange rate regimes that ultimately conflicted with the goal of outcomes-based stability. Others pursued macro stability at the expense of growth enhancing policies such as adequate provision of public goods, as well as of social investments that might have both increased the growth payoff and made stability more durable*" (World Bank 2005).

In countries such as Malawi and Mozambique, that have stabilised and are now aiming for greater economic growth, the pursuit of single digit inflation rates may be especially harmful. Mozambique, for example, has consistently experienced inflation rates at moderate levels of 10-12% over the course of the past five years. Yet the government feels it must push inflation down further to 6% for fear that maintaining present levels will jeopardise macroeconomic stability. The IMF argues that at moderate rates of inflation, there is a greater risk that it could quickly spiral out of control (Roger and Stone 2005). Mozambique's recent track record shows that this has not been the case. If moderate inflation rates of 10-20% were accepted to constitute a 'stable' economy as many economists argue, it would allow Mozambique greater flexibility and fiscal space in the coming years, enabling them to increase public spending.

The IMF is concerned that increasing the wage bill ceiling by hiring more teachers will lead to inflation (Fedelino *et al* 2006). When government increases the wage bill – either by hiring new employees or raising salaries – it is in effect putting more money into people's pockets, causing an increase in the demand of goods. However, in the short term the amount of goods available remains unchanged. Until suppliers produce more goods to satisfy the new demand, prices will rise, causing inflation. Therefore, if government trying to meet a single-digit inflation target, it must strictly manage spending on the wage bill in order to achieve target inflation rates and so cannot afford to take the risk of hiring new teachers.

However, in all three countries, we found that wages were not blamed for rising rates of inflation. It was universally stated – by the IMF and government alike – that the main drivers for inflation are weather shocks, such as droughts, which damage agricultural production, or oil price hikes. In Mozambique, while the wage bill did increase in 2003, it was noted that the main reason the country failed to meet the 10.8% inflation target was due to a rise in food prices as a result of the drought the previous year (Republic of Mozambique 2004). Like rising oil prices, this was out of the government's control.

The fundamental point is that economic policy choices – such as what level of inflation is permissible – always involve trade-offs. Allowing inflation to rise will erode the purchasing power of wage earners while delivering a windfall to wealthy asset-owners. Keeping it low by raising interest rates leads to unemployment, which penalises the poor and uneducated, especially women;[15] while reducing

15 A cross-country study showed that "…the working class broadly defined, and those with lower occupational skill and status are more likely to prioritize combating unemployment rather than inflation" (Jayadev 2006). Women are often the first to be laid off (Elson and Cagatay 2000), partly because their literacy levels are so much lower than those of men. In Mozambique illiteracy is still much higher among women (68.8%) than men (36.7%) (Republic of Mozambique 2005b).

inflation by shrinking government spending will often require cutbacks in services that the poor rely on, such as education and healthcare provision. Higher food prices will be good for rural small-holders and bad for urban slum dwellers. Whatever the outcomes, they will have very significant political and social costs for some segments of the population. IMF conditionality effectively denies governments the right and responsibility to make these tough choices, thereby depriving them of one of the most important tools they have to balance the interests and needs of different sectors of society, and undermining the very fabric of democracy. Given the choice, poor people – particularly poor women – might actually prefer moderately higher inflation if it accommodates for better government services and greater employment opportunities. However, IMF conditionality leaves little policy space within government to negotiate these trade-offs, and few opportunities for citizens or their elected representatives to voice their preference.

### 2.2.2 Expanding fiscal space: how can a country scale up spending to meet social sector goals?[16]

The amount a government can spend is based on its capacity to finance expenditures from current and future revenues. The amount of revenue available to government defines fiscal space, an idea that is closely linked to the concept of fiscal sustainability. The IMF defines fiscal sustainability as "*…the capacity of a government, at least in the future, to finance its desired expenditure programs, to service any debt obligations…and to ensure its solvency*" (Heller 2005). In other words, any expenditure by a government over and above its own current revenues – called the fiscal deficit – requires an increase in fiscal space in the future.

Spending on government wages has serious implications for fiscal sustainability, as government wages are considered to be a recurrent or permanent cost. By hiring more teachers now, a government is committing to continue paying their salaries. Accordingly, government must guarantee sufficient revenue in the future to finance these costs. In an effort to maintain fiscal sustainability, the IMF advocates low, single-digit fiscal deficits, and in some cases balanced budgets (zero deficit levels) or even budget surpluses. Placing a ceiling on the wage bill then helps government to meet this fiscal target. The fear is that without a sufficiently low ceiling, government will hire more employees than it can afford to finance in the future. As a result, the government will be forced to direct more resources to cover wages, and will be have to spend into deficit to finance other expenditures. The targeted fiscal balances (after grants) for the three countries in our study are: Malawi 0.4% of GDP (IMF 2006b); Mozambique 4.5% and Sierra Leone 2.7% (IMF 2006).[17 18]

If government wants to hire more teachers, it must look at ways in which it can increase fiscal space without jeopardising fiscal sustainability. Government can increase fiscal space to finance greater investments in four ways. We discuss these below, particularly asking whether they can provide the fiscal space that is necessary to hire more teachers, and whether it is appropriate to do so.

16 In making proposals for the upscaling of fiscal space, we are not ignoring the issue of Dutch disease. The occurrence and extent of Dutch disease is determined by a number of factors, including the absorptive capacity of the economy to accommodate additional financial inflows and the way in which inflows are utilised. The IEO (2007) report says that the IMF does not consistently assess the absorptive capacity space of low-income countries. Further, as we have argued in section 1, education is a necessary input to productive sectors and therefore additional expenditures on education should boost medium-term productive activity, at least within 7-10 years, if the influence on agricultural modernisations (discussed in section 1.2) is considered. It is therefore reasonable to expect that there will be some scope for scaling up expenditures without triggering Dutch disease. This is something that must be calculated on a country-by-country basis.

17 There are a number of different definitions used to describe the fiscal deficit. The 'overall fiscal deficit' is the difference between revenues and expenditures. If this is measured excluding grants, the only revenues that are included are domestic revenues. If it is measured including grants, grant aid is included as part of revenues, and the resulting fiscal deficit will therefore be smaller. We have generally used the latter, as governments tend to increase their spending to match inflows of extra donor aid, and therefore to exclude grants in the measure of revenues misrepresents the excess in government spending compared to revenues. The 'primary fiscal balance' refers to the difference between total domestic revenues and total spending, excluding interest payments and external finance capital expenditure. This provides a measure of how much of a government's programmed expenditure is covered by domestic revenues.

18 A survey of IMF lending in 20 countries by Oxfam International showed that 15 out of the 20 countries had declining fiscal deficit targets over the three years of IMF programmes. The average reduction was around 2% of GDP.

1. Reprioritising spending within existing budgets

There are of course gains to be made in cutting expenditure in non-priority sectors, such as defence, to finance education. For instance, reducing the size of the military would make space on the wage bill for government to hire more teachers. In endorsing the MDGs, the IMF has encouraged such reprioritisation of funds towards education and health. But herein lies the danger: while there may be some room to make reallocations within the budget by diverting funds from a non-priority sector or by making efficiency savings, the amount liberated may be small. Governments also have a broad range of commitments – some for sound economic or social reasons, others for political reasons – but these are commitments nonetheless. Inevitably, the call to reallocate resources results in countries with restrictively small budgets is counter-productive and detrimental for long-term development. For example, a senior government official in Mozambique confirmed that "*…spending for education and health will not decrease; in fact it might increase, even if this means taking funds from agriculture.*" Cutting expenditure in agriculture or industry to finance social sector investment may reduce the future economic returns to education. Without agricultural inputs or new job opportunities for both women and men. So, although prioritising education is crucial, sacrificing spending in other priority sectors is not a worthwhile exchange.

2. Looking for additional donor aid

In all three country studies we found great expectation that donor aid would fill the funding gap, providing the extra fiscal space needed to pay for more teachers. For example, an IMF official speaking of Mozambique told us: "*If there is no scaling up [of aid] I do not think Mozambique will reach the MDGs. From our side we can do the [multilateral debt relief initiative] MDRI, we can put more resources, cancel debt*[19]*…We can encourage the government to better tax the mega projects to have more resources available for the MDGs but all that has to be done while maintaining macroeconomic stability.*"

Based on past experiences, both the IMF and the government expect donor aid to be unpredictable. If government uses donor funds to pay civil servants salaries one year, but aid is not forthcoming the next, then it will jeopardise fiscal sustainability. In response government will have to either reduce salaries or lay off public officials. As a result, governments are wary of using donor funding to pay for recurrent expenditures. In Mozambique, for example, though donors cover 54% of the national budget through direct budget support, government does not want to encourage the use of this aid to cover public sector salaries.[20] This hesitancy, however, is entirely dependant on the lack of reliability of donor aid disbursements. In Section 4 we explore how predictable donor aid that is offered over the long term (10 years) could contribute to supporting GDP growth and provide countries with greater domestic resources to spend on salaries without creating unnecessary long-term dependence on donor aid.

The provision of aid by donors, however, does not mean that it can be spent. The macroeconomic framework dictates how much of any additional resources received can be spent, and the IMF plays a vetting role in making donor-funding projections. The IEO report (2007) criticises the IMF for consistent pessimism in predicting donor aid flows. Empirical analysis carried out for the evaluation suggests that PRGF aid projections for sub-Saharan Africa were typically slightly optimistic for the programme year and significantly pessimistic for the outer years. In particular, IMF aid projections for the region have not changed much in the post-Gleneagles period, when donors at the G8 meetings in 2005 "*…agreed to double aid to Africa by 2010…at least $25 billion extra per year for Africa.*" A review of 30 IMF programmes and reviews

19 Debt relief has proven to be disappointingly small. The government of Mozambique recognises that "from a budgetary standpoint, debt forgiveness programs will not have a considerable impact in either the short or medium term" (Republic of Mozambique 2006a, p 42). In 2006/7 the combined resources for Malawi from the highly indebted poor country (HIPC) and multilateral debt relief initiatives were MK (Malawian Kwacha) 8.6 billion – that is 6.5% of revenues and 6.3% of expenditures. However, Malawi continues to be swamped by its domestic debt repayments, which are MK 13.8 billion, compared to MK1.9 billion for foreign debt repayments. In Sierra Leone, HIPC decision-point resources did go towards education, but recent debt relief is being allocated towards power generation and infrastructure.

20 However, aid given to specific government programmes or projects often includes salary expenses for those officials involved. As a result, donor aid does cover at least part of government officials' salaries.

Box 2:

## Not spending the aid: shocking findings from the new IEO report
*An evaluation of the IMF and aid to sub-Saharan Africa*

In March 2007 the IMF's Independent Evaluation Office issued a report criticising the role of the IMF in managing aid inflows and determining the external resource envelope in 29 low-income countries in sub-Saharan Africa between 1999 and 2005. Disappointingly, it did not question the assumptions on which the policies are advocated, leaving little room to discuss alternative policies. Nor did it recommend any radical shake-up of the institution or a change in the IMF's role in low-income countries. Overall it found that the IMF has "*…done little to address poverty reduction and income distributional issues, despite institutional rhetoric to the contrary.*" The report's other findings include:

- The inflation rate continues to be the main determinate of how much aid government can spend. Countries with inflation rates higher than 5% can spend only 15% of anticipated aid increases, while those with inflation rates lower than 5% are 'allowed' to spend 79% of such increases. Siphoning aid resources into reserves does not support efforts to alleviate poverty and strengthen education or health sectors.
- Ceilings on wage bills have undermined countries' capacity to absorb additional aid flows for hiring teachers and health workers. PRGF ceilings prioritise macro-focused goals over pro-poor concerns. They are not necessarily the best solution, and unintended consequences can include limiting a country's ability to absorb and spend unanticipated aid inflows for hiring teachers and nurses and decrease in benefits and allowances.
- The IMF has not only not been proactive in mobilising aid flows, but has tampered with expectations by setting low projections, which influences the amount of aid provided and has forced governments to adopt less ambitious plans to reduce poverty. It has also failed to set ambitious targets or identify additional aid opportunities where such absorptive capacity exceeds projected aid flows.
- While the IMF is mandated to take poverty and social impact assessments (PSIAs) into consideration when formulating macroeconomic policy, this is not systematically done. "*PSIAs carried out by World Bank staff, DFID, and other agencies have not systematically informed PRGF program design…most PSIAs prepared by other agencies generally lacked the necessary timeliness, relevance, and/or quality to underpin PRGF design.*"
- The lack of coherence between the IMF and the World Bank is striking. "*PRGF attention to aid absorptive capacity constraints in education, health, or infrastructure, where the Bank is the lead agency, were rare, as was the integration of the individual dimensions into an overall assessment that takes account of synergies and tradeoffs across individual dimensions.*"
- A lack of policy coherence within the IMF means that it continues to focus on macroeconomic stability, even if it claims to have taken on poverty reduction strategies. Government officials note a shift in the IMF's management style, but there continues to be no discussion of alternative macroeconomic policies.
- The IMF has missed opportunities to engage with civil society and in so doing has undermined its own goal of enabling greater country ownership of macroeconomic policies.

These criticisms come at a time when the IMF faces a crisis of legitimacy as its middle-income borrowers have disengaged and some sub-Saharan African countries no longer require their loans. Nigeria, Cape Verde, Uganda, Ghana and Tanzania have replaced their previous PRGF arrangement with the new policy support instrument (PSI), which does not include a loan arrangement. Mozambique also expects to shift to the PSI in 2007. However, the IMF maintains a strong influence over monetary and fiscal policies under the PSI.

The findings of the IEO report expose the IMF's power to shift donor aid intended for the social sectors towards measures to maintain macroeconomic stability. The IMF can indeed be held to account for the international community's failure to provide the resources needed for education and health. Although the IMF claims to endorse the MDGs, these findings indicate that it is not convinced of the value of investing in education and health for economic growth and poverty alleviation.

in sub-Saharan Africa that were completed in the post-Gleneagles period, showed that only four were more optimistic about foreseeing donor aid increases (Goldsbrough and Elberger 2007). These conservative projections encourage countries to make less ambitious plans for spending because they anticipate less money. This can lead to a destructive self-reinforcing dynamic: if the IMF projects less income, then government plans are less ambitious, and consequently donors see little need for scaling up aid. Thus the IMF is creating a no-win situation that is at odds with the commitments for scaling up aid to meet the MDGs.

Further, maintaining macroeconomic stability as defined by the IMF results in the use of restrictive monetary and fiscal policies that constrain overall government spending. Attempting to meet single-digit inflation rates means that government cannot spend much of the aid it receives for fear that this will result in higher inflation rates. Countries classed as weak economic performers are therefore required to siphon the vast majority of aid into reserves. The evidence presented by the IEO 2007 report (see Box 2) demonstrates a disturbing switch point – a threshold that polarises countries into those that are allowed to spend and those that are not. Of the 29 sub-Saharan countries in the study, those with inflation above the 5% threshold were allowed to spend only 15% of increases in aid (IEO 2007): the remaining 85% of the aid had to be placed in reserves or used to service domestic debt. This might be acceptable if there was a well-accepted justification for keeping inflation at or below 5%; however, as demonstrated above, this is not the case. In 2006, DFID made a 10-year pledge for education in Mozambique. If our study countries are unable to meet their inflation target, will these funds be diverted into reserves rather than being spent on the originally intended purpose? Will the shortage of teachers in Mozambique get worse because it is forced to stick to a highly debated monetary policy? Such an outcome flies in the face of the stated goals of enabling a scaling-up of spending to achieve the MDGs.

### 3. Increasing domestic revenue

"*In order to create fiscal space for poverty reduction, Sierra Leone authorities will need to increase domestic revenue-to-GDP ratio and rationalise public expenditure.*" (IMF 2007a)[21]

There are two ways government can expect to increase domestic revenue: one is to grow faster; the second is to increase tax collection as growth expands jobs and profits in the private sector. However, additional tax revenue through private sector growth is not guaranteed and countries may not automatically see the increases in tax revenues they expect. The initial tax base in Malawi, Mozambique and Sierra Leone, like most low-income countries, is extremely small – so much so that even good improvements will fall short of government's spending needs (McKinley 2005). A Ministry of Finance official from Malawi told us that "*The private sector is so under-developed here, it simply cannot provide the growth that is hoped for in the medium term.*" The high degree of informality makes it much harder to collect taxes and undermines the effectiveness of tax instruments to increase government revenue (Stiglitz and Emran 2004).

It is therefore naïve to encourage these countries to rely on the domestic tax base, reduce aid dependence on aid and – in the case of Sierra Leone and Malawi – aim for a budget surplus (Government of Malawi 2005). Without a careful analysis of the differential impact of tax structures and the private sector's real capacity for growth, these countries will be locked into a stalemate for education spending.

21 Text appears on page 1 of IMF Press Release number 06/285, December 18, 2006 attached to Article IV consultation.

## 4. Increased borrowing: is it appropriate for government to borrow to meet its development goals?

"*Living on our own resources won't work. The government should not be scared to borrow if it knows what the money is going on and it is accountable.*" Member of Parliament, government of Malawi.

The IMF has made it a priority to limit government borrowing in order to reduce debt payments and prevent the 'crowding out' of the private sector. When a government borrows from its own domestic economy, this can reduce the amount of resources available for borrowing by private sector investors. On the other hand, to attract more savings and make up for what is lost through government borrowing, the interest rate for savings must rise. This makes investment more expensive for the private sector, thus discouraging the private investment that is needed to stimulate economic growth. This is known as the 'crowding-out' of private sector investment.

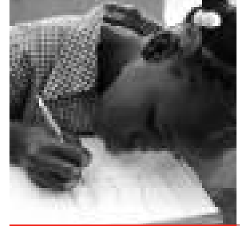
However, there is an equally compelling argument that government spending can have a 'crowding-in' effect. Government spending can provide a signal to the private sector that it is worthwhile investing in an area, especially where the government provides goods and services that are necessary inputs to private sector production (Cardim de Carvalho 1994). For example, public investment in education and health contributes to building a better-educated and healthier work force. Access to skilled labour is an incentive for domestic and foreign businesses to invest. Government expenditure on health and education could therefore be classed as 'investment' (McKinley 2004; Pasha and Palanivel 2004). Nevertheless, spending on wages for teachers, doctors and nurses is currently classed as government 'consumption' – the PRGF macro projections had not considered expenditure on health or education as government 'investment' in any of the three countries studied.

The IMF does recognise that education can contribute to growth and has conceded that "…public investment can crowd-in private investment in Sub-Saharan African countries [reflecting] the complementarity of private investments with some components of pubic investment" (Gupta *et al* 2006, p 26).

However, the IMF approach to borrowing has not fundamentally changed as a result of these new insights. In Mozambique, the IMF continues to discourage government from borrowing to finance greater public investment. The available credit to government is expected to decrease from 2.4% of GDP in 2006 to 0.6% by the end of 2007 (IMF 2006a).[22] The government of Malawi feels that the IMF is being far more flexible in its approach. One Ministry of Finance official stated that "*If the IMF has learned anything over the last few years, it is to listen!*" The fact that the IMF acquiesced to a mid-year change in the budget allocations to accommodate a large agriculture subsidy (2.4% of GDP) in 2005/6 is seen by the government as evidence of this change. However, the macro framework is still aiming for a reduction in the fiscal deficit to 0% of GDP by 2008/9 (IMF 2006b). As stated in the IMF's second review of Malawi's PRGF (IMF 2006b) "*Reducing the domestic debt burden will remain the cornerstone of the fiscal strategy. This will be attained by expenditure restraint.*" This restrictive fiscal policy continues even after research from the IMF has indicated that there is no relationship between low fiscal deficit rates and growth in a low-income country that has already achieved macroeconomic stability (Baldacci *et al* 2004). Malawi, Sierra Leone and Mozambique have all achieved macroeconomic stability, and yet the IMF continues to encourage the same fiscal policies it used when it feared government spending was out of control.

There are of course legitimate fears that lead the IMF to push governments to avoid excessive deficits. If governments borrow money to finance core public

22 The net credit to government target measures the amount of borrowing a government can undertake to cover the funding gap that remains once all aid funds available to government have been used. In Mozambique, the IMF has shifted from using the primary fiscal deficit target to the net credit to government target to determine the level of government borrowing.



Gideon Mendel / Corbis / ActionAid

expenditure, the borrowing is likely to continue year on year, and the cost of interest payments will undermine future government spending. For example, in the mid-1990s, Malawi was using up to 40% of its recurrent budget to finance debt repayments. Without a guarantee of GDP growth in the future, this debt may become impossible for government to pay back. This explains the IMF focus on deficit reduction; however, not all government borrowing inevitably leads to escalating government debt.

A primary reason for this scepticism towards government borrowing is that **the IMF lacks the capacity to project over the long term** and so cannot assess the positive development paybacks to investing in education over a 10-to-15-year period (Roy *et al* 2006). The IMF macroeconomic model is a short-term one spanning a three-to-five-year period used to assess fiscal sustainability. However, economic returns to education that would allow for higher GDP growth rates and an expansion of fiscal space may only become apparent over a 7-to-15-year period. As a result, the present IMF model cannot analyse the economic returns that could accrue from present investments that require higher deficit spending in the short-to-medium term. Without the capacity to project long-term returns to investment, it is unable to accurately assess fiscal sustainability. Because the IMF is either unwilling or unable to undertake this sort of analysis, it maintains that deficit spending is never appropriate: it affirms that investment in education will help to stimulate economic growth in the long term, but fails to factor this into its calculations when it matters.

Irresponsible borrowing should not be encouraged. However, to remove borrowing altogether from the set of policy options available to responsible governments is as problematic as promoting mindless borrowing itself.

Some of the IMF's advice is good, as far as it goes. It encourages the reprioritisation of spending towards education and an increase in domestic revenue through more tax collection. However, it recognises that these measures alone will not provide the fiscal space necessary for greater investments in education and to meet the MDGs more generally. Therefore, it calls for more predictable donor aid to finance these expenditures.

While all of this is uncontroversial, it is undermined by the IMF's power to insist on single-digit inflation rates and low or zero deficits, which prevent governments from expanding the overall envelope for public sector spending, either through the use of aid or through sensible government borrowing.

The IMF should desist from setting economic policy conditions, leaving the way open for governments to evaluate the evidence on inflation and decide what level is correct for them, in order to expand fiscal space by scaling up aid and to contemplate sensible borrowing that does not jeopardise fiscal sustainability.

At the moment, despite the availability of evidence and experience from other countries, the governments of our three case study countries effectively have little choice other than to follow the IMF's definition of stability and reduce inflation and deficits to arbitrarily low levels. Nor do poor people have a say in any of our case study countries; neither parliamentarians nor civil society are involved in the negotiations between the MoF and the IMF in which the macro targets are determined. Countries have the right to explore other development paths, and to receive reliable advice on a range of policy options.

# Section 3

# The impact of IMF policies on education

## 3.1 Impact in Malawi, Mozambique and Sierra Leone

"*It is the ceiling that dictates how many more teachers we can hire, not need. Schools tell us how many more teachers they need, but we are rarely able to meet this request,*" Senior official at Ministry of Education, Sierra Leone.

Under the current wage bill ceilings, it will be impossible for Malawi, Mozambique or Sierra Leone to hire the number of teachers they require to ensure children learn in class sizes of less than 40. Table 2 shows the impact of the ceiling on the wage bill in Malawi, Mozambique and Sierra Leone correlating the ceilings with the current number of teachers and the number required to meet the 2015 goal of universal primary completion (UPC).

Wage bill ceilings that prevent governments from hiring more teachers, including female teachers, lead to overcrowded classrooms with high PTRs, which in turn lead to poor learning outcomes. The World Bank recently acknowledged an urgent need to focus on improving learning outcomes, but this is impossible with insufficient trained teachers and unmanageable class sizes (Independent Evaluation Group 2006). Although the end result is that both girls and boys will drop out, prejudices against educating girls mean that they are less likely than boys to complete primary school (see Table 1, page 6). Therefore, placing a wage bill ceiling without considering the number of teachers needed has a different impact on girls and boys. This is particularly true in the absence of female teachers, and creates a vicious cycle where girls miss out on education – the one thing that would

Table 2

The Impact of wage ceilings in Malawi, Mozambique and Sierra Leone, 2007

| Country | Current number of teachers (female/ male %) | Current pupil-teacher ratio | Current number of untrained (para) teachers | Number of teachers needed to achieve UPC by 2015 at PTR 40:1 (includes rates of attrition)* | Ceiling on the public sector wage bill (as % of GDP) | % of wage bill going to teachers' salaries | Teacher wage bill as % of 2007 GDP | Is there a specific cap on number of teachers that can be hired? |
|---|---|---|---|---|---|---|---|---|
| **Malawi** | 45,268 | 72:1 | 0 | 90,477 | 7% | 37% | 2.7% | No |
| **Mozambique** | 47,193<br>31% f<br>69% m | 74:1 | 38% | 109,172 | 7.5% | 35% | 2.7% | No |
| **Sierra Leone** | 18,038<br>32% f<br>68% m | 57:1 | 40% | 28,895 | 6.1% | 35% | 4.5% | ceiling of 33,122 with a cap on 2,000 additional teachers |

Sources:

*** see Annex 2 for detailed calculations**

**Malawi:** Ministry of Education and Vocational Training, National Education Strategic Plan (Nov 2006 draft).

**Mozambique:** Ministry of Education and Culture, Education Database 2007.

**Sierra Leone:** all data from Republic of Sierra Leone 2007a and Republic of Sierra Leone 2006c.

enable them to improve their lives and contribute to economic development.

All three countries have made it a national priority to retain more girls in school, recognising that when the learning environment is not conducive, girls tend to perform less well than boys. Having female teachers in school would encourage more girls to enrol in, and complete, primary school. Some countries are pursuing policies to recruit more female teachers – Mozambique, for example, promotes positive discrimination policies for female candidates at teacher training institutions. But such targeted interventions struggle to make an impact when set against the wider picture of constraints on overall teacher numbers. This creates a vicious cycle: the lack of female teachers means fewer girls attend and succeed in school; and because fewer girls graduate to higher levels, fewer women enter teacher training. As a senior official in Sierra Leone's Ministry of Education explained: "*The low number of teachers is problematic and contradictory to efforts to provide subsidies for girls transitioning to secondary school, because research shows the importance of female teachers in maintaining attendance and success rates in school. There is a correlation between the low enrolment of female students in secondary school and in math, science and polytechnic universities and the low number of female teachers at these levels*".

Breaking this cycle means investing not only in teachers but also in promoting girls' education – for example, in discrimination and gender bias training to ensure teachers emulate values and principles of equality, justice and equal opportunity in the classroom. All this requires long-term investment: wage bill ceilings pose an unfortunate hurdle to tackling gender disparities in education.

The disastrous impact of wage bill ceilings on teacher numbers, quality and planning processes is illustrated in our three case countries:

## Sierra Leone

The assumptions that guide the wage bill ceiling and the inevitable caps on teacher numbers that follow create obstacles for long-term planning and building of human capacity. Once the cap level is set by the MoF, the Ministry of Education has to distribute teacher ceilings per school, determining how many teachers are required for any given school. These numbers are based on a target PTR, enrolment figures, number of classrooms/schools and the number of teachers on study leave. Because of the low ceiling and the cap on the number of additional teachers that can be hired, the ministry has established a target PTR at 50:1, far above the EFA-FTI's recommended 40:1. Setting a generic PTR means that the unique needs of different schools and schooling levels are not considered – for example, at primary level, one teacher teaches all subjects, but at secondary level, you need a different teacher for each specialised subject, which means a greater number of teachers overall.

Placing a cap on additional teachers also places a ceiling on the total enrolment figure and number of schools that can be built in each district. Sierra Leone's largest education project, Sababu, aims to construct more schools, but the caps mean that many of these now have an inadequate number of teachers, and in 2007 the government decided to slow down construction. To prevent over-flooding in the limited number of classrooms, the MEST has set a ceiling on the maximum enrolment for each school, which means children are turned away. Nevertheless, the need for schools and teachers continues to grow, as does the out-of-school population.

The consequences of wage ceilings are so severe in Sierra Leone that the new 10-year Education Sector Plan makes several observations on the impact of stringent macroeconomic policies on education, particularly in increasing the already high PTR:

"*The country average is 66 pupils to a teacher and 112 pupils per qualified teacher. There is an obvious need to hire more qualified teachers, but a ceiling on teacher employment made necessary by MoF/IMF requirements has made that impossible. Further,* *keeping to our commitment of free quality education as stated in the 2004 Education Act and meeting EFA-FTI benchmarks whilst at the same time keeping to teacher ceiling requirements which appear to take no cognisance of these facts places Sierra Leone in a very difficult position. The foregoing being the case, in setting the level of wage bill cap/reduction, reference must be made to the expenditures required to meet the MDGs and EFA goals in order to ensure that macroeconomic policies are not counter-productive to the realisation of these goals*" (Republic of Sierra Leone 2007a, p 23).

Not surprisingly, the wage bill caps undermine current efforts to reform the civil service and adequately plan throughout the year, never mind in the long term. For example, the Ministry of Education in Sierra Leone is informed of the ceiling/cap on teachers at the beginning of the financial year in January. It then has to project and distribute teachers across schools based on this cap. However, as the school year begins in September, the ministry must estimate how many teachers can be hired on current need and how many spaces to keep open for September – the start of the school year. Those schools that do not get the total number of teachers they require must wait five months until the new fiscal year in January to get new teachers.

## Malawi

In 1998 the government of Malawi began to use the wage bill as a way of containing the budget – first by limiting wage increases and then by imposing a recruitment freeze, introduced in 2003. From 2004, the new government brought with it a new level of stringency in macroeconomic planning and it has used the wage bill as a buffer to absorb other overruns in the budget. For example, planned annual salary increases were reduced and then delayed in 2005 and 2006 to compensate for budget overruns in other areas.

There continues to be a wage bill ceiling: a new PRGF began in 2005, committing the government to a ceiling of less than 8% (Government of Malawi 2005a). However, it has consistently been below this level: 7.4% for 2005/6 (IMF 2006b), 7.2% for 2006/7, and it is set to remain at the same level over the medium term. One MoF official stated, "*The 7% rule is a rule for ordinary times, but these are not ordinary times.*" No new teachers have been trained in the last 10 years,[23] so demand for recruitment has been limited. And while there is now a plan to expand pre-service training capacity, the wage bill ceiling is likely to limit the sector's ability to recruit the teachers that receive this training. Part and parcel of the wage bill ceiling is a rule that line ministries are only allowed to budget for filled posts. As a result, 2,500 teachers will graduate in October with no provision for their salaries in the new financial year budget. Despite desperately high PTRs, the government cannot budget for the recruitment of teachers.

Although there is optimism in government that the wage bill ceiling will be removed, this does not seem to have been formally discussed or raised with the IMF. However, the overall budget is limited to 39.5% of GDP and can therefore only increase at 6% each year – the anticipated rate of economic growth. National priorities have recently changed and Malawi's Growth and Development Strategy places a growing emphasis on infrastructure development projects, while the development budget is gradually increasing at the expense of the recurrent budget. Accordingly there is little reason to believe that the wage bill will be able to grow in real terms over the coming years: even if the cap is removed, the limits on the overall budget size mean that the wage bill is still effectively constrained. All of Malawi's existing 43,000 teachers are officially qualified; however, 51% of them have only received six weeks of in-service training as part of a one-year reduced training programme. The quality of this programme has been questioned, leading to major changes in the proposed service training programme for future years.

## Mozambique

In 2005, the government set the wage bill at 6.5% of GDP (Republic of Mozambique 2005b). By the end

23 One reason for this is that most funding earmarked for training was diverted to provide basic training to teachers recruited after the abolition of user fees in 1994.

of that year, it reported that it had failed to meet this indicative target because it continued to hire contract teachers to meet the demand for primary education. At the same time, it indicated that it could not meet the indicative target set in the PRGF arrangement and follow through on its promise to provide free quality primary education to all. In 2005, the government was finally able to meet its indicative target. The wage bill decreased to 6.7% of GDP (Republic of Mozambique 2005). Despite the expansion of primary education, the Ministry of Education was only allowed to hire 4,715 teachers of the 11,500 requested in 2005, and the PTR rose to 74:1 (PAP 2006).

Donors alarmed by the rising PTR acknowledged that "*…the quality of education is being affected because funds are not sufficient to hire teachers in the required quantity and with adequate training*" (PAP 2006). Donors' emphasis on the need for quality education put additional pressure on government and the IMF to reconsider the wage bill ceiling as an indicative target. In 2006, working together, donors and the Ministry of Education succeeded in getting the wage bill ceiling increased from 6.5% to 7.5%of GDP, allowing the Ministry of Education to hire an additional 10,137 employees, 9,000 of whom are new primary and secondary teachers. This is an example to other countries: it shows that where concerted efforts are made to challenge the wage bill ceiling, significant progress can be made.

The unrealistic cap on teachers in Sierra Leone and the low level of the wage bill ceilings in Malawi and Mozambique are placing increasing pressures on the education system. Yet the impact of IMF policies in starving the public sector of workers is not restricted to these three countries. All countries with an IMF loan arrangement implement similar monetary and fiscal policies to those described above. Six also have a specific wage bill ceiling included as a performance criterion in their PRGF arrangement. The legitimacy of these caps is rarely questioned by those working in the education sector, but the example of Mozambique is one that could be followed in many other contexts.

## 3.2 Global impact

"*IMF program design has paid almost no systematic attention to the [millennium development] Goals when considering a country's budget or macroeconomic framework. In the vast number of country programs supported by the IMF since the adoption of the Goals there has been almost no discussion about whether the strategies are consistent with achieving them*" (UN Millennium Project 2005, p 93).

A recent IMF working paper (Fedelino *et al* 2006) acknowledges that between 2003 and 2005, the IMF imposed some conditionality on the public sector wage bill in half of the 42 countries with PRGF-supported arrangements; 17 of these faced quantitative ceilings on the wage bill, and for eight the ceiling was a 'hard' condition, a performance criterion that could cause an interruption in the IMF programme if breached. As of May 2006, the number of countries with wage ceilings as performance criteria was six. Conditionality was concentrated in sub-Saharan Africa and Central America: Benin, Burkina Faso, Burundi, Chad, Democratic Republic of Congo (DRC), Ghana, Kenya, Malawi, Mali, Mozambique, Niger, Senegal, Sierra Leone, Zambia, Nepal, Azerbaijan, Tajikistan, Dominica, Guyana, Honduras and Nicaragua. In reality, many more countries face limits on the number of teachers they can hire as a result of wider macroeconomic policies negotiated with the IMF.

The pursuit of single-digit inflation rates and low fiscal deficit levels in all countries with a PRGF arrangement means that many more face limits on their wage bill, as a result of overall budget ceilings. Table 3 includes all 17 countries, as well as others that do not have explicit conditionalities on their wage bill, but where overall budget ceilings have led the government to limit teacher recruitment or cap the number of teachers they can hire. None of the countries included in the table have achieved universal primary education. Most have PTR above the recommended 40:1 benchmark and more girls out of school than boys.

The fact that these targets are so similar despite the different country contexts serves to highlight how little a country's real social and economic problems inform its macroeconomic policies. Most of the countries in this table are presently under-spending on education, allocating less than the 6% of GNP recommended by Delors' UNESCO report (1996). Certainly they are not spending excessively or disproportionately. But they cannot realistically increase their spending to recommended levels without employing more teachers (who make up the bulk of any education budget). With these wage bill ceilings in place, it will be difficult to increase spending to hire the number of teachers needed to meet the 2015 goals.

In Kenya, for example, the government implemented free primary education in 2003. Enrolment rates soared from 5.8 million in 2002 to 7.1 million in 2004 (Republic of Kenya 2005). However, the cap on teachers agreed upon by the IMF and the Ministry of Finance in 1997 prevents the Ministry of Education from hiring more than 235,000 teachers. As a result the PTR, which in 2002 was 34:1, jumped to 41:1 by 2004. It is expected to increase as enrolment rates continue to increase with population growth (Republic of Kenya 2005a). In rural schools the PTR reached excessive levels. Nevertheless it is important to acknowledge that existing teachers, police and other civil servants did receive significant pay awards in this period.

In Uganda the Ministry of Finance capped the total number of teachers at 127,000 (Republic of Uganda 2006). Unlike Kenya, the wage bill ceiling is not included in Uganda's new PSI as either an indicative target or a performance criterion. However, targeting inflation at 4% has implications for how much the government can spend on wages (IMF2007b). As a result, it cannot afford to hire the 176,000 teachers needed to achieve universal primary education and the PTR is expected to remain high at 50:1 (Republic of Uganda 2005).

Cutting expenditure on education also has implications for teacher recruitment and training in the medium term. In Cameroon, measures to cut back investment in education in 1990 led to the closing down of teacher training colleges (World Bank 1997). It was estimated that, by the time these colleges reopened in 1996, as many as 15,000 teachers needed to be trained to cope with rising enrolment rates. It is now estimated that Cameroon would need to hire 69,100 teachers by 2015 to attain the MDG and EFA goals. Given this past history and the urgent need to substantially increase expenditure in education, maintaining a fiscal surplus is unnecessarily restrictive.

Box 3:

### IMF policies and health sector workers

In 2006 Wemos explored how Ghana, Kenya, Uganda and Zambia could finance a massive expansion in health services if the IMF's PRGF programmes and policy advice did not constrain these same governments from raising their budget ceilings. Not surprisingly, the findings highlighted the same paradox in the IMF's flawed logic. "*The IMF argues that wage spending must be cut to create resources to spend on fighting poverty. However, one of the most effective means to fight poverty is to employ more health workers, but they cannot be employed because IMF wage ceilings inadvertently restrict the hiring of health professionals.*" Wemos rejected the IMF's argument that higher wage spending would lead to inflation and erode macroeconomic goals.

In Ghana for example, the most important constraint in the health sector was found to be the lack of adequate numbers of the right type of worker, in the right places and with appropriate training. The doctor-population ratio is 1:17,617 and the nurse-population ratio is 1:1,513. Reducing the maternal mortality rate from the current 210 per 1,000 live births to 54 per 100,000 by 2015 is extremely challenging. Nevertheless, given its dependence on the IMF, the government of Ghana agreed to cut back the wage bill in 2005 from 9 to 8.5% of GDP. New health staff could not be employed, nor wages and allowances increased, without prior approval of the MoF. Although the IMF finally agreed to issue a waiver on Ghana's overrun, the ceiling nevertheless led to suspension of additional duty hours allowances and the government could not honour in full a wage agreement with registered nurses.

Overall the report highlighted the need to calculate wage bills on a country-by-country basis, taking into consideration staffing levels, appropriate wage rates and the government's capacity (including aid resources) to finance wage spending over the medium to long term. These should be determined by the MoF in consultation with each ministry.

Table 3

## Impact of macroeconomic polices on teachers worldwide

| Country | Number of out of school children / (girls) in 1,000s | Pupil-teacher ratio | Number of teachers needed to achieve UPC by 2015 (includes attrition rates)** | Education budget as % of GNP | Wage bill ceiling as % of GDP | Cap on teachers | Inflation rate target | Fiscal balance after grants target |
|---|---|---|---|---|---|---|---|---|
| Malawi | 89 (19) | 72:1 | 90,477 | 6.2% | 7.2% | - | 7.4% | -0.4% |
| Mozambique# | 1,089 (614) | 74:1 | 109,172 | 5% (GDP) | 7.5% | - | 6% | -4.5% |
| Sierra Leone | **** | 57:1 | 28,895 | 4.9% (GDP) | 6.1% | 33,122 | 9.3 % | -2.7% |
| Azerbaijan | 101(51) | 14:1 | - | 3.7% | 8.3% | - | 5% | 1.8% |
| Bangladesh# | 404 (51) | 55:1 | 397,900 | 2.1% | 2.5% | - | 5.2% | 3.5%*** |
| Benin | 220 (176.3) | 62:1 | 48,800 | 3.3% | 5.5% | - | 2.5% | -2.7% |
| Burkina Faso | 1,271 (681) | 49:1 | 83,500 | 2.4% (GDP) | 4.7% | - | 3.1% | -5.8% |
| Burundi | 518 (278) | 51:1 | 47,900 | 5.3% | 12% | 3,000 (in 2007) | 4% | 0.7% |
| Cameroon# | - | 54:1 | 69,100 | 4% | 4.8% | - | 1.9% | 0.6% |
| Chad | 657 (243) | 69:1 | 67,800 | 2% | 6.5% | - | 7.9% | -1.5% |
| Dominica | 0.7 (0.4) | 19:1 | - | 5.5% | 12.2% | - | 1.5% | 0.7% |
| DRC | - | - | - | - | - | - | - | - |
| Ghana | 1,129 (557) | 33:1 | 96,200 * | - | 8.9% | - | 7.1% | -5.2% |
| Guyana | - | 27:1 | 1,300 | 5.8% | - | - | 3.5% | -4.4% |
| Honduras | 70 (27) | 33:1 | 26,000 | 4.2% | 9.6% | - | 5% | -2.1% |
| Kenya | 1,226 (607) | 43:1 | 161,700 | 7.1% | 6.6% | 235,000 | 5% | -1.5% |
| Mali | 1172 (615) | 55:1 | 89,000 | 3% | 4.8% | - | 2.5% | -3.7% |
| Nepal | 698 (434) | 40:1 | 81,200 | 3.4% | - | - | 6% | -3.1% |
| Nicaragua | 124 (62) | 35:1 | 18,400 | 3.2% | 6.7% | - | 6.2% | -1.3% |
| Niger | 1,326 (717) | 44:1 | 91,400 | 2.3% | - | - | 2% | -5.8% |
| Pakistan# | 6,463 (4,204) | 37:1 | 536,400 | 2% | - | - | 6.5% | -3.6% |
| Senegal | 616 (320) | 54:1 | 55,200 | 4.1% | 5.7% | - | 1.7% | -3.4% |
| Tajikistan | 20 (17) | 22:1 | - | 4% (GDP) | 4.5% | - | 5% | -0.5% |
| Uganda# | - | 50:1 | 176,000 | 5.3% | 5% | 127,000 | 4% | -2.2% |
| Zambia | 435 (214) | 49:1 | 61,200 | 2.9% | 7.9% | - | 5% | -2% |

Sources: UNESCO (2006 and 2006a); on IMF caps: Fedelino *et al* (2006); most recent IMF loan arrangement www.imf.org/external/country/index.htm

# countries that no longer have a ceiling in IMF programmes
* There is some discrepancy in this figure: the UN Millennium Project has projected the 2010 teacher shortage in Ghana to be 134,694
** Data for Malawi, Mozambique and Sierra Leone from tables in Annex 2
*** Overall balance excluding grant
* **** Data from 2007 Education Sector Plan shows 30% of children of primary school going age are out of school
No data is available for DRC and other areas where figures were not available.


# What needs to change?

## 4.1 Greater flexibility by the IMF?

As noted in the introduction, we chose Mozambique, Malawi and Sierra Leone as case studies because the IMF claims to have shown some flexibility in all these countries. In Mozambique, the wage bill ceiling was expanded by 1% of GDP specifically so the government could hire more teachers. The government of Sierra Leone has been granted annual 'top-ups' for hiring more teachers. In Malawi, the education sector was exempted from the recruitment freeze and an automatic adjuster was added to the ceiling to allow the payment of salary top-ups for health sector workers and to hire more health sector workers if additional donor financing became available through the Sector Wide framework.

Undoubtedly, these were steps in the right direction and enabled governments to make some progress in hiring more teachers. However, our research also showed that the IMF needs to move further and faster to allow governments to reclaim control over hiring decisions.

### Malawi

In Malawi, the IMF is showing flexibility in two ways. First, when the Ministry of Health successfully made the case for expanding the wage bill ceiling to hire more health workers, the IMF proposed an adjuster in the wage bill, allowing the salary top-ups provided by DFID to be accommodated within the wage bill ceiling. This adjuster means that the planned wage bill ceiling for any one year will be adjusted – in other words, it will rise or fall – in line with the variation in the donor disbursements. The IMF resident representative stated that the IMF proposed this adjuster, convinced of the need to create incentives to reign in the cross-border brain drain in health sector personnel. The Ministry of Health developed a credible, long-term plan for financing health and there was great confidence in the Ministry's capacity to deliver it. Accordingly, boosted by the introduction of the health sector-wide plan, substantial backing came from donors, who significantly increased resources to the sector, constituting MK6.85bn for 2005/6 and MK6.1bn in 2006/7 (Government of Malawi 2006a).

The extent of the IMF's flexibility will could soon be revealed as both the education and agricultural sectors have expressed interest in pursing a similar path as health. If these ministries were able to present strong plans, making a good case for expanding investment, having garnered the resources to do so, would it not be reasonable to replicate the flexibility shown to the health sector and include adjusters for both education and agriculture?

All of this brings into question whether the wage bill ceiling should continue at all. The IMF has noted that omitting certain priority sectors from the wage bill ceiling may not help to control a ballooning wage bill (Fedelino *et al* 2006). However, as noted by senior officials in the government of Malawi, the wage bill is now largely under control. There is a general expectation within the Ministry of Finance that the wage bill ceiling set as a performance criterion will be short-lived. Indeed, it was the IMF resident representative who volunteered the information that the wage bill cap would not be in place in one to two years' time.

The situation in Malawi seems to be changing partly because of the capacity of the Health Ministry to develop a solid long-term plan for investment in health workers but also because of increased donor support which is designed to finance salaries. Another reason which was cited by several officials in the health, finance and education ministries was that the MoF, now headed by the former IMF Africa division chief, has a new, growing confidence and technical ability and is capable of presenting information in a convincing manner to the IMF.

## Sierra Leone

The IMF has shown a willingness to issue waivers where the wage bill ceiling has been breached in Sierra Leone. Although the actual ceiling on the number of teachers that can be hired is determined by the MoF, we learned through several interviews that it is the IMF that determines whether the Ministry of Education can be granted a waiver to 'top-up' beyond the amount set in the ceiling. For example, in 2007, the Ministry of Education was able to hire 2,000 teachers in addition to the 33,122 allowed for in the ceiling. However a senior official from the MEST told us that even this adjustment was inadequate, calling it "an embarrassment to the MEST" that is not conducive to rational long-term planning and generally undermines the government's efforts to provide free basic education. The new Education Sector Plan echoes these concerns:

"The cap placed on the wage bill has to be expanded to reflect the real situation and need for increasing the number of trained teachers and ensuring that untrained teachers are able to access in-service training to improve their skills. Unless the wage bill is expanded to increase the adequate number of teachers required (not just a nominal increase per year), the MDG/EFA goal of universal primary education by 2015 will not be realised" (Republic of Sierra Leone 2007a, p 23).

While the IMF has recognised that Sierra Leone needs more teachers and has provided annual 'waivers' to hire a few thousand more teachers, this practice continues to place the decision-making power squarely with the IMF rather than the government. Whether or not hiring more teachers is a good enough reason to justify an increase in the wage bill ceiling should be a decision taken not by the IMF but by elected governments. Moreover, the IMF admits that "…once introduced, wage bill ceilings have been there to stay" (Fedelino *et al* 2006, p 12). These findings from the IMF itself indicate that there is little room for flexibility within ceilings once they are included in a country's PRGF. If Sierra Leone continues to incur overruns, could it be because the ceiling was set too low in the first place and has not adequately factored in the actual need for teachers?

## Mozambique

Under pressure from the donor community, the wage bill ceiling was raised and is no longer an indicative target in Mozambique's agreement with the IMF. As a result, we would expect the government to be able to hire the number of teachers it needs to ensure quality primary education. However, MoF officials claim that pressure to reduce the overall budget in order to achieve single-digit inflation rates and low fiscal deficit levels continue to limit the number of new employees that can be added to the government payroll. The MoF therefore continues to implement a stringent wage bill ceiling even though it is no longer strictly required to do so. As one government official noted "…the government has removed the cap as an indicative target. But really, the wage bill policy has not changed considerably. In effect, the inflation policy has become more rigid." Given these policies and the lack of long-term term predictable aid, the Ministry of Education only expects to meet a 54:1 PTR by 2015.

Flexibility requires the government and IMF to listen to alternative voices and explore different solutions. However, we found little evidence of any debate between the IMF and the MoF on possible ways to increase fiscal space or allow for slightly higher inflation rates. An IEO study of the IMF in Mozambique concluded that there is little to no discussion of alternative macroeconomic policies with government, and no significant discussion of such policy with civil society (IEO 2004).[24] Although the IMF has shown some flexibility in re-evaluating the wage bill ceiling in Mozambique, the pressure to reduce deficit spending even further means that the current wage bill is likely to be maintained.

24 Historical comparison shows that policy space available for today's developing countries is not the smallest it has ever been. However, policy space for developing countries has been constantly shrinking over the last quarter of a century and is at the risk of shrinking even further, to the point of making the use of any meaningful policy for economic development impossible (Chang 2005).

## 4.2 What more needs to change?

"*Whilst macroeconomic policy considerations such as maintaining single digit inflation and low fiscal deficit targets are important and determine the amount of funds available for education, a framework needs to be developed which would not compromise important education targets and impacts negatively on our fight against poverty in the long-term*" (Republic of Sierra Leone 2007a, p 23).

It is encouraging that donors in these three countries have shown a willingness to increase pooled funding, budget support and other mechanisms that can finance salary costs, and that the IMF, finally recognising the need to hire more teachers and health workers, has allowed some upward adjustments to the wage bill. However, this much-vaunted 'flexibility' is possible only within the very tight parameters that the IMF allows for inflation and deficits; and is not nearly enough to guarantee every child a trained teacher in a class of 40 or less. Before countries can use projected aid increases to hire enough teachers, there must be more fundamental changes to the IMF macroeconomic framework and much faster progress towards making all donor aid genuinely predictable and adequate.

There are three key areas in which change is needed. Because these areas are linked, advancement in one necessitates reform in another.

1. Needs-based macro planning: Overall, macroeconomic policy should be a tool, not only to ensure stability, but to enable the achievement of national development and social goals. At present, total government expenditure levels are set after macroeconomic targets. Governments are therefore forced to resort to 'negotiating' with the IMF to accommodate minor changes or additional programmes in the total expenditure ceiling. We propose that governments consider turning this process on its head, starting with a long-term needs-based assessment of expenditure requirements, in line with basic rights, obligations and national goals for eradicating poverty. This would enable governments to identify suitable macroeconomic targets to ensure macroeconomic stability, based on their country's individual needs rather than arbitrary targets based on world averages. The long-term returns of investment in education and health should also be factored into these new macro plans as should the disparities between women and men.

2. Long-term aid: The next change needs to come from donors: they need to provide the long-term, predictable, sustained aid flows that would enable countries to meet the MDG targets. We have already seen the success of increased aid in the health sector in Malawi. The same principle should be applied to all social sectors. Below we show how long-term aid can be made compatible with growth in national resources without making governments more dependent on aid.

3. Country-specific targets: Finally, governments should be able to choose the right mix of monetary and fiscal policies in order to accommodate an increase in spending as a result of increased aid where there is absorptive capacity. This entails that the default switch point in macroeconomic targets should be set aside, allowing governments to draw upon a wide array of sources and experiences, to explore the 'grey areas' in monetary and fiscal policies. This flexibility would allow governments to consider options and find a position which balances the need to increase spending on social sectors with the assurance of macroeconomic stability. A wide array of stakeholders should be involved in these discussions, including parliamentarians, donors, line ministries and CSOs.

### 4.2.1. Developing needs-based macroeconomic frameworks

#### National development goals guide public investment

Education and finance ministries must strive to achieve more ambitious social targets based on needs rather than the anticipated resource envelope. We have developed alternative scenarios suggesting how many teachers are required over the coming years to achieve optimal PTR (see Annex 2). Our projections are as follows:

- Sierra Leone: 28,895 teachers needed to ensure quality education in primary schools (about 10,000 more than present)
- Malawi: 90,477 primary teachers will need to be hired by 2015 to achieve the 40:1 PTR (almost exactly double the present number)
- Mozambique: 109,172 primary teachers are needed (more than double the present number).

Inflation and fiscal deficit policies would be determined from these or other teacher projections. This approach need not lead to exaggerated inflation or deficit levels: where levels exceed what is considered to be within a reasonable range, the iterative process would begin, with adjustments made to the expenditure target, until a balanced position is found. This approach is based on the assumption that the *assessment of needs* and gender disparities – rather than arbitrary macroeconomic target rates – should provide the starting point. The UNDP, working on a MDG-based macroeconomic framework, proposes that policies should then be defined with the objective of meeting these goals, which necessitate sustained long-term investment, because changes in education, health and gender inequalities take time (McKinley 2005, Roy *et al* 2006). A long-term perspective is also valuable in that it enables the economic returns to investment in education to be factored into projections.

Solid, long-term national plans need to be the foundation stone of this approach. The three countries of our study have already attempted to develop long-term national and education plans through a participatory process, bringing together government officials, intellectuals and civil society. Education is recognised as a key investment to ensure long-term economic and social development. However, in all three cases, these long-term development plans lack credibility and do not inform current macroeconomic policy debates. In Mozambique, the poverty reduction strategy paper (PRSP) guides the government's spending priorities and the PRGF lays out its macroeconomic policies (Derenzio and Hanlon 2007). Yet, the PRSP and the PRGF are only three-year plans, and the social targets government has set for itself are based on anticipated resources rather than needs. Seeing as the macroeconomic framework made explicit in the PRGF underpins the PRSP, monetary and fiscal policies are prioritised over social and economic development goals and the available resource envelope is limited (Norton 2004).

In sum, the IMF and government should no longer debate how much public spending would need to be restricted in order to meet single-digit inflation or to keep government from borrowing. Instead, the IMF should refrain from pre-empting government policy decisions by imposing specific policy conditions in their lending and surveillance programmes. Parliaments, civil society, the education and finance ministries should work together to align and transform macroeconomic policies to meet basic rights and achieve development goals as well as goals for growth. The IMF, alongside other agencies such as UNDP, could be a valuable source of technical advice, but only if they provide a range of policy options to enable governments and other stakeholders – including parliaments and civil society – to make informed choices about macroeconomic policies, wage bills and the level of social spending.

#### Projection models accommodate long-term factors

There are models in existence that project the economic returns to education over the long term. The Threshold 21 (T21) model developed by the Millennium Institute was used in both Malawi and Mozambique.[25] The model integrates economic, social and environmental objectives over a 10-30-

25 For more information, see www.millennium-institute.org/index.html

year framework and tries to assess the economic returns and impact of public investment. A multi-sectoral approach allows for different stakeholders to come to the negotiating table to discuss the trade-offs between prioritising certain policies over others, and can therefore be an effective planning tool. In Malawi, T21 was used to prepare its long-term development plan, Vision 2020, and informed the PRSP. In Mozambique, government and civil society officials came together to discuss and adapt T21 to the national context. The model influenced the social objectives the government chose to prioritise in the PRSP. However, to date the use of this model has been limited. It has primarily been used to determine the impact that specific agriculture and HIV and AIDS policies would have on growth, and not to explore alternative macroeconomic frameworks nor to clearly account for gender disparities. There is a clear need to build the capacity of government and civil society to use such models to understand and explore alternative macroeconomic policies.

In order to run different projections however, countries must have a comprehensive, credible and reliable database of macroeconomic variables; accurate assessment of the number of teachers and health workers needed; and long-term costings of teachers and health workers, financing gaps, etc. However, given the high level of informality that exists in many developing countries, collecting accurate statistical data proves difficult. This may also mean a new way of calculating variables. For example, even the economic indicators the IMF uses – such as GDP or the national inflation rate – only provide a partial image of the real economy. In Malawi, the government has changed the way it calculates GDP, given that the previous measure did not capture small and medium-sized enterprises. It is expected that this new measure will dramatically change the estimated size of GDP as it did in Tanzania, where a similar exercise found that GDP was 40% higher than had been previously estimated, meaning that government budgets could also increase significantly over previous levels without changing the ratio of public spending to GDP.

At present governments cannot enter into a balanced dialogue with the IMF because the macroeconomic model that frames the discussion is not only a condition for continuing to access IMF financing but also for continuing to receive a clean bill of health from the IMF. Going ‘off track’ with the IMF acts as a powerful signal for donors and even investors to withdraw their own support. Governments have little access to alternative macroeconomic models or technical assistance on macroeconomic policy form other sources, the IMF does not offer alternative policies, and donors too often endorse the IMF’s comparative advantage in determining macroeconomic policy. Those voicing alternative solutions are therefore few and far between (Sogge 2006). However, with the development of different models, like the UNDP’s MDG needs framework and the Millennium Project’s T21 model, governments should at least have the opportunity to test out different scenarios in meeting their development and social needs.

### 4.2.2. Long-term predictable aid

Given that all three countries are highly dependent on aid, donors play a significant role in making these national development plans a reality. Unpredictable, uncoordinated and projected donor aid given over a 3-to-5-year period effectively undermines national development plans that span over 10 to 15 years. For these plans to be effective, they must be accompanied with long-term financing. Without more long-term predictable aid from other development partners, such plans will never become a reality. This is a challenge to the donor community – one which it will hopefully begin to respond to at the major meeting on ‘Keeping our Promises on Education’ scheduled for 2 May 2007 in Brussels.

An estimated US$15 billion is needed each year to ensure that every child can complete a good quality primary education by 2015 and give second-chance opportunities to young people and adults who have missed out. There is an urgent need to front-load increases in aid to education and to increase the number of countries benefiting from the FTI. The current financing gap of US$750 million for countries endorsed by the FTI must be closed immediately.

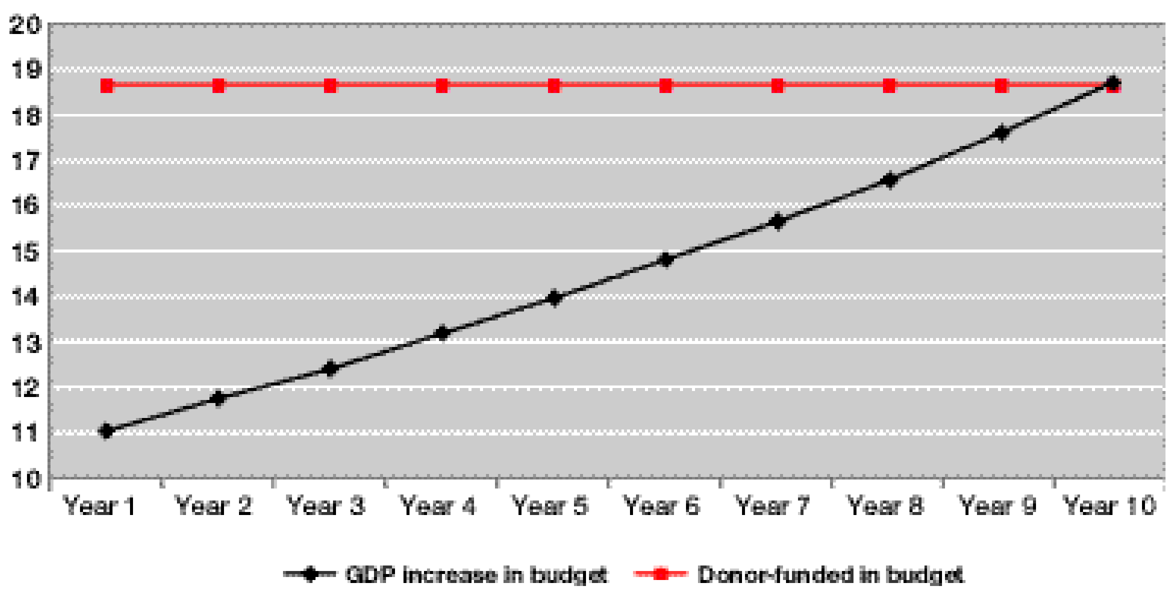
Donors should also confront the contradictions between the stated aims of their aid portfolios and support of stringent macroeconomic policies, working with the IMF and governments to remove conditions that prevent aid being spent on the intended purposes and ensure that macroeconomic policies provide the fiscal space required to absorb and expend the aid.

Following the example of Mozambique, in-country education donors can also play a crucial role in helping education ministries to challenge and remove present wage bill ceilings where these block the training and recruitment of urgently needed new teachers. Donors must also demand that longer-term perspectives are taken into account, enabling planners to consider the long-term developmental paybacks of strategic increases in public spending in the short to medium terms.

There is no doubt that long-term aid pledges can have a positive impact on pushing countries to develop more strategic national plans and that this can encourage them to demand more flexible macroeconomic policies. A month after the UK's pledge of long-term aid for education in April 2006, African finance ministers, donors and representatives from international finance institutions meeting in Abuja agreed that the IMF needs to detail how frameworks could be more flexible and how current budget ceilings could be expanded. The IMF agreed to "*...assist individual countries to review their macroeconomic frameworks with a view of strengthening and aligning them towards scaling up for meeting MDG targets.*"

Nevertheless, governments rightly fear using donor resources to fund the recurrent budget for fear of sustainability if donor funding is lost. There are, however, alternative approaches that could be used to map donor funding to government budget growth in a sustainable way. Consider the following example: the government of Malawi is expecting GDP to grow at 6% each year, over and above inflation. Accordingly, the government budget, set at a fixed percentage of GDP, can also grow 6% each year. If a constant share of the budget is allocated to the education budget, it too will grow at 6% above inflation each year. The diagram below shows that, over a 10-year period, the education sector's recurrent budget would grow by 70%, from MK11.0bn in year 1 (based on the 2006/7 budget level), to MK18.6bn. This calculation uses 2006/7 prices; the increase is therefore real.

## Sustainable medium-term donor funding



If all of this additional resource were allocated to teacher salaries, an additional 82,150 teachers with an average monthly salary of MK 7,700 (adjusted for inflation) could be included in the wage bill by year 10. This would bring the PTR down from 72:1 in year 1 to 27:1 in year 10. Alternatively, 45,268 teachers could be recruited to bring the PTR to 40:1, leaving MK 3.8bn (US$ 27 million) to spend on salary supplements, teachers housing or other incentives. This would be enough to give teachers an annual average of MK 44,000 – that's equivalent to a 47% increase in average salary.

This growth would be achieved slowly and steadily over the 10-year period. However, it is not necessary to wait for 10 years for this to come about. Donor funding, indicated by the pink line in the diagram, could be introduced in year 1, on the basis of a 10-year agreement, to top up the government budget in year 1, up to the year 10 level. The funding could be steadily reduced by 6% each year, and replaced by the natural growth in the budget. By year 10, donor funding would be phased out completely as government funding should have caught up. As a result, donor funding **front-loads** the government budget, providing an income-smoothing effect and allowing the government to spend today the income it expects to have in 10 years time.

This approach would allow for a dramatic increase in education spending in the short term, but with limited and controlled reliance on donor funding. This approach would of course require a reasonable forecast of incomes for government, a 10-year funding commitment from donors, and a clear commitment from government about its year-on-year allocations to the education sector. With careful consideration given to medium-term revenue forecasts and plans, a sensible level for the donor top-up could be envisaged that would allow an upsurge in education funding in the short term without placing the government under any burden in the medium term. This approach provides a realistic alternative to the funding stalemate the education sector currently faces and should therefore be considered as a funding approach.

However, to do this would require **greater flexibility in macroeconomic targets**. The increase in the education budget would represent a 3.5% increase in the government's share of GDP in year 1, falling to 1.9% by year 10. The limit on GDP share of government expenditures would therefore need to be raised.

Such an approach relies on donors to fill the gap. Alternatively, and perhaps controversially, governments could consider short-term increases in borrowing, matching the same principles as those described above.

A more complex model could also be developed along these lines that factors in the economic returns to investment in education – that would begin to be felt after the first few years. We call on the IMF, World Bank and UNDP to play an active role in developing this sort of model in order to help governments achieve their education and other development goals.

### 4.2.3. Country-specific debate over the right mix of macroeconomic policies

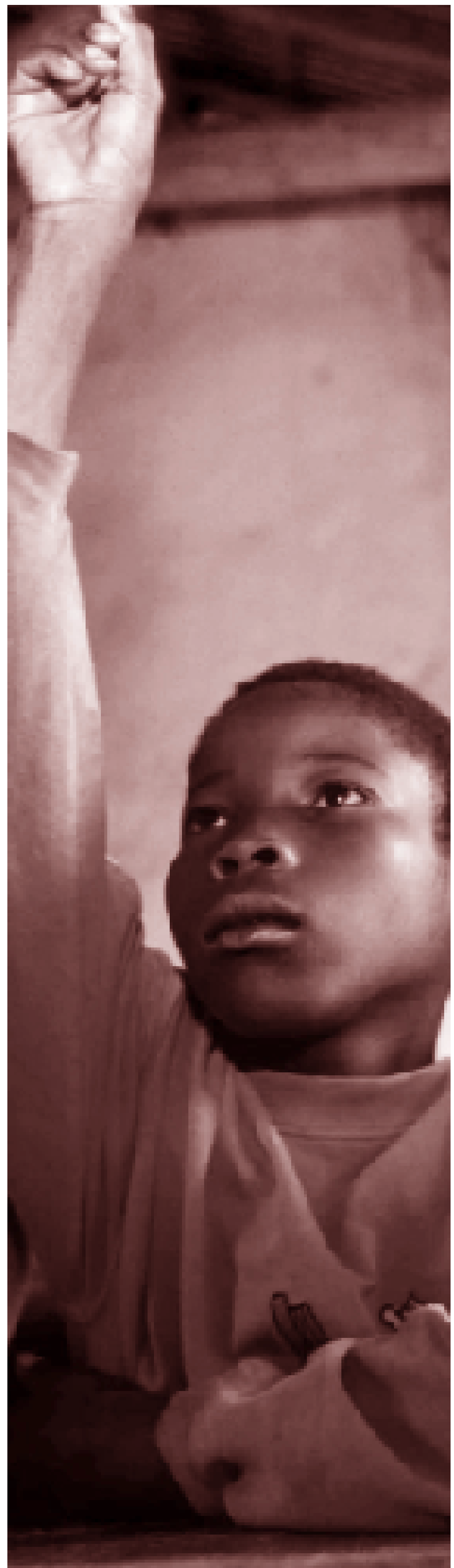
In all three countries we found there to be very little open debate over macroeconomic policies beyond the few appointed officials in the MoF and Central Bank who were appointed to negotiate with the IMF. These officials did not always take the needs of other sectors, such as education and health, into consideration when agreeing to monetary and fiscal targets. Nor did they consider the trade-off of sacrifices that they meant for these sectors. For example, we found that little dialogue took place at the planning stage of macro policies on how many teachers were needed, and how the wage ceiling should be reflected in accordance to this.

The government bodies in charge of fiscal (MoF) and monetary (Central Bank) policies must also consult with ministries of education, health and women's affairs to determine the disparity in access to services between women and men. Parliamentarians, the media and CSOs should also be consulted.

In reality however, even if policy space was expanded and such debates were taking place, few CSOs could actually engage at this level. They need to build up their economic literacy to enable them, to participate effectively in discussing macroeconomic policies and alternatives.

Unless scrutiny and engagement is strengthened on the domestic front, the IMF will continue to be the dominant voice, which has serious implications for democracy, good governance and sovereignty. Of course it should not be necessary to wait for a perfectly functioning civil society before demanding greater flexibility from the IMF. But this demand can become unstoppable if citizens are able to hold their own finance ministries accountable for the macroeconomic policies they pursue and are fully aware of the alternative options open to their government.

The achievement of education goals depends on the recruitment of millions of trained teachers over the coming years. It is time that macroeconomic policies were framed to facilitate the achievement of this and other key development goals. While this study is not attempting to present an alternative, holistic model for macroeconomic modelling, it is our intention to demonstrate that the current processes are not the only options available to governments. The suggestions proposed in this section should be considered as viable options for a new way forward to meet the needs of developing education sectors and the achievement of the MDGs.



Stuart Freedman / ActionAid

# Section 5

## Summary recommendations

Stuart Freedman / ActionAid

To achieve the goal of giving every child a decent education:

1. **The IMF should stop attaching specific policy conditions to their lending and surveillance programmes, including on inflation, fiscal deficits and wage bills.**

   - Any policy advice it gives must provide a range of policy options to enable governments and other stakeholders, including parliaments and civil society, to make informed choices about macroeconomic policies, wage bills and the level of social spending.

   - IMF policy advice should move away from giving absolute primacy to short-run macro stability and help countries move towards long-term planning so that they can factor in the returns to longer-run investments such as education. They need to recognise education as a productive investment and not just government consumption.

   - The IMF should engage in education policy forums internationally (alongside the EFA partners and civil society) and account for how its interventions are supporting or obstructing the achievement of education goals.

   - The IMF needs to make far-reaching changes to vote and voice on its Executive Board so that borrowing countries have a greater say in the policies that affect them.

2. **Governments should determine, as part of their long-term planning, staffing and pay levels that are consistent with their education goals and will permit the operation of a motivated and professional teaching force on a sustainable basis.**

   - Governments should develop costed long-term education plans detailing the actual need for teachers and resources for training in order to provide quality learning outcomes for all girls and boys. These education plans, along with plans to achieve other development goals (for example, in health, HIV and gender) should underpin future macro-economic planning.

   - These long-term plans must be supported by an open debate led by the government and national civil society (with advice from the IMF, World Bank, UNDP and donors) about the best mix of monetary and fiscal policies to deliver on national priorities, whilst ensuring economic stability.

   - Ministries of finance need to build their capacity to understand and use alternative macroeconomic models, using this knowledge to consider the full range of policies available to them.

   - Finance ministries should also call for detailed justification of targets and policies recommended by the IMF, and need to be fully transparent about any discussions they have with the IMF; all loan agreements with the IMF should be subject to parliamentary scrutiny and review.

   - Governments should demand more predictable aid from donors to fill the resource gaps; if this is not forthcoming, they should be free to explore other options to ensure adequate and sustainable financing.

3. Donors need to keep their promises by committing to close the annual US$15b financing gap needed to achieve Education for All with increased and predictable aid over the long term. There is an urgent need to front-load increases in aid to education and to make more aid available for spending on core costs, including salaries.

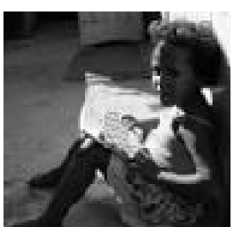
   - The EFA mid-term review process and 2008 EFA Global Monitoring Report must review the contradictions between wage bill ceilings, the continuing shortcomings in the provision of donor aid and the achievement of education goals.

   - Donors can help to make the case for investment in teachers as a major contributor to economic growth, challenging the IMF's view of spending on teacher wages as government 'consumption' when it should rather be seen as productive investment.

4. Civil society organisations need to develop their own economic literacy so they can better scrutinise government budgets, increase the sensitivity of budgets (to the needs of girls, poor people and other excluded groups) and engage in discussions about alternative macroeconomic policies.

   - They need to develop their ability to make the case for increases in the share of the budget for education and for increases in the overall size of the national budget.

   - They need to forge stronger links with parliamentarians and the media in order to ensure greater transparency of all macroeconomic decision-making, ensuring that what is presently decided behind closed doors is decided fully in the public eye, with clear awareness of the alternatives that exist to the present IMF model. They also need to call for justification for macroeconomic targets, which are set according to international standards rather than local assessments and obstruct social sector progress.


Sophia Evans / NB Pictures / ActionAid

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# Annex 1

# Review of inflation literature:

Some empirical studies on 'kinks' in the relationship between inflation and growth

*See bibliography for full reference*.

| IMF papers | Outside papers | Estimated Inflation Threshold |
|---|---|---|
| | Fisher (1993) | 15-30 % |
| | Bruno and Easterly (1998) | 40% |
| | Burdekin, *et al* (2000) | 3% for developing countries<br>8% for industrialized countries |
| | Gylfason and Herbertsson (2001) | 10-20% |
| | Pollin and Zhu (2005) | 15-18% |
| | Bruno (1995) | 20% |
| | Barro (1996) | Finds that a 10% increase in the annual inflation rate is associated on impact with a decline in GDP's annual growth rate of only 0.24%. While this is interesting ,it does not justify IMF targeting inflation from a moderate range of 10-20% into the mid-single digits in PRGFs |
| Sarel (1996) | | 8% |
| Khan and Senhadji (2001) | | 11-12% for developing countries<br>1-3 % for industrialized countries |
| Ghosh and Phillips (1998) | | Finds that the inflation-growth relationship is convex, so that the decline in growth associated with an increase of 10-20% inflation is much larger than that associated with moving from 40 to 50% inflation. While this is interesting, it does not justify the IMF's targeting of inflation from a moderate range of 10-20% into the mid-single digits in PRGFs. |

# Annex 2

## Alternative teacher projection scenarios

These projections are designed to provide a simple illustration of the number of teachers that might be required to meet the target PTR of 40:1 by 2015. The enrolment and number of teachers at the start of each school year is given. (This coincides with the calendar year in the sample countries). Attrition rates and the addition of extra teachers through training are then applied, to give a total end of year number of teachers. This end of year total provides the start of year total for the following academic year, upon which the PTR for that new year is based.

We run two alternative scenarios, the first adding only those teachers that the governments currently plan to train. In all three cases this includes a scaling up of teacher training over the period. It should be noted that the Ministries of Education do not necessarily have the budgets for these extra teachers, therefore this baseline calculation represents a measure of the capacity of the sector, rather than a guarantee of this number of teachers in schools.

The alternative scenario calculates the number of teachers that would be required to be added to the total teachers stock in any one year, to achieve a target PTR in the following year. The end of year target number of teachers is therefore the enrolment rate of the following year, divided by the PTR target rate for the following year.

The wage bill estimates are for illustrative purposes only. It should be noted that these do not exactly match the Government budget allocations, particularly in the case of Mozambique and Malawi. This is partly because these basic salary rates do not include the variety of allowances payable to teachers, and also that this approach uses basic or average grade salaries, whereas in reality there are a large number of different pay scale for different grades of teachers (based on position and length of service etc). It is also difficult to translate calendar years into financial years, as half of each academic year falls into a different financial year. Accordingly, the wage bill estimate for 2006/7 is based on the number of teachers at the mid point of 2006, (assumed to be the teacher stock at the start of the year, less half of the total annual attrition), with additional trained teachers being added in September/October, allowing nine months of salary for those teachers.

These calculations are overly simple and should not be used as an estimate of total budgetary needs. However, they provide an illustration that allows the reader to consider the teacher training and recruitment requirements over the period. Even a simple forecast like this demonstrates that significant increases in the training and recruitment of teachers are required if we are to meet the target ratio of 40:1 by 2015.

# Annex 2a

## Alternative teacher projection scenarios for Malawi, Mozambique and Sierra Leone

Alternative Teacher Projection Scenarios for Malawi

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Current Outcomes** | | | | | | | | | | |
| Enrolment | 3,280,714 | 3,274,129 | 3,276,622 | 3,290,669 | 3,317,170 | 3,354,178 | 3,382,164 | 3,437,783 | 3,457,734 | 3,587,710 |
| Total teachers (start year) | 45,268 | 43,197 | 44,153 | 46,446 | 48,636 | 51,268 | 53,780 | 56,180 | 58,472 | 60,661 |
| PTR (start of the year) | 72.5 | 75.8 | 74.2 | 70.8 | 68.2 | 65.4 | 62.9 | 61.2 | 59.1 | 59.1 |
| Attrition (4.5% per year) | -2,071 | -1,944 | -1,987 | -2,090 | -2,189 | -2,307 | -2,420 | -2,528 | -2,631 | -2,730 |
| Newly trained – pre service | | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 |
| Planned expansion of training | | 400 | 1,780 | 1,780 | 2,320 | 2,320 | 2,320 | 2,320 | 2,320 | 2,320 |
| Total teachers (end year) | 43,197 | 44,153 | 46,446 | 48,636 | 51,268 | 53,780 | 56,180 | 58,472 | 60,661 | 62,751 |

| **Planning for 40:1** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Target PTR (start of the year) | 72.5 | 70 | 66 | 62 | 58 | 54 | 50 | 46 | 43 | 40 |
| Total teachers (start of the year) | 45,268 | 46773.3 | 49645.8 | 53075.3 | 57192.6 | 62114.4 | 67643.3 | 74734.4 | 80412.4 | 89692.8 |
| Attrition (4.5% per year) | -2071 | -2104.8 | -2234.1 | -2388.4 | -2573.7 | -2795.1 | -3043.9 | -3363 | -3618.6 | -4036.2 |
| Newly trained – pre service | | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 |
| Planned expansion of training | | 400 | 1,780 | 1,780 | 2,320 | 2,320 | 2,320 | 2,320 | 2,320 | 2,320 |
| Additional teachers required | 3576.3 | 2077.3 | 1383.6 | 2225.7 | 2675.5 | 3504 | 5315.1 | 4221.1 | 8078.9 | |
| Total teachers (end year) | 46,773 | 49,646 | 53,075 | 57,193 | 62,114 | 67,643 | 74,734 | 80,412 | 89,693 | 90,477 |

| | 2006/7 | 2007/8 | 2008/9 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|---|---|---|---|---|
| Average monthly wage | 7,700 | 8,239 | 8,651 | 9,083 | 9,538 | 10,015 | 10,515 | 11,041 | 11,593 | 12,173 |
| Inflationary wage increase | | 7% | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 5% |
| Total wage bill current scenario (MK m) | 4,278 | 4,582 | 5,020 | 5,527 | 6,106 | 6,734 | 7,395 | 8,090 | 8,820 | 9,588 |
| Total wage bill 40:1 scenario (MK m) | 4,526 | 5,098 | 5,711 | 6,447 | 7,336 | 8,383 | 9,687 | 11,023 | 12,784 | 13,925 |

Note that this average wage rate does not reconcile exactly with the wage bill in the budget as the latter allows for additional allowances and the salaries of head teachers etc.

Note that the Government of Malawi budgets only for in post teachers at the start of any financial year, therefore the additional teachers who graduate in September/ October are not included in the financial year budget estimates, rather, must access the budget by supplementary mid year. This is not an efficient way to budget, and therefore they have been included here.

The model is based on our own estimates of population growth, but this provides a similar 2015 to that stated by the Ministry of Education. Salary rates were provided for 2006/7, but the amount are estimated assuming a standard inflationary increase for the rest of the period.
Teacher training expansion is planned but not guaranteed at this time.

## Alternative Teacher Projection Scenarios for Mozambique

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|---|
| **Current Outcomes** | | | | | | | | | |
| Enrolment | 3,658,418 | 3,757,158 | 3,868,983 | 3,882,659 | 3,852,905 | 3,945,375 | 4,040,064 | 4,137,025 | 4,236,314 |
| Total teachers (start year) | 47,193 | 51,305 | 55,753 | 60,023 | 64,622 | 69,537 | 74,256 | 78,785 | 83,134 |
| PTR (start of the year) | 77.5 | 73.2 | 69.4 | 64.7 | 59.6 | 56.7 | 54.4 | 52.5 | 51 |
| Attrition (4.5% per year) | -1,888 | -2,052 | -2,230 | -2,401 | -2,585 | -2,781 | -2,970 | -3,151 | -3,325 |
| Newly trained – pre service | 6000 | 6500 | 6500 | 7000 | 7500 | 7500 | 7500 | 7500 | 7500 |
| Total teachers (end year) | 51,305 | 55,753 | 60,023 | 64,622 | 69,537 | 74,256 | 78,785 | 83,134 | 87,309 |
| *of whom are (10+2) grade* | 9,130 | 7,321 | 7,453 | 7,387 | 7,243 | 6953 | 6675 | 6408 | 6152 |

| **Planning for 40:1** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Target PTR (start of the year | 77.5 | 72 | 67 | 62 | 57 | 52 | 48 | 44 | 40 |
| Total teachers (start of the year) | 47,193 | 52182.8 | 57746 | 62623.5 | 67594.8 | 75872.6 | 84168 | 94023.3 | 105907.8 |
| Attrition (4% per year) | -1887.7 | -2087.3 | -2309.8 | -2504.9 | -2703.8 | -3034.9 | -3366.7 | -3760.9 | -4236.3 |
| Newly trained – pre service | 6000 | 6500 | 6500 | 7000 | 7500 | 7500 | 7500 | 7500 | 7500 |
| Additional teachers required | 877.5 | 1150.6 | 687.4 | 476.2 | 3481.6 | 3830.3 | 5722 | 8145.5 | |
| Total teachers (end year) | 52,183 | 57,746 | 62,624 | 67,595 | 75,873 | 84,168 | 94,023 | 105,908 | 109,172 |

| | 2007/8 | 2008/9 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|---|---|---|---|---|---|---|---|---|
| Average teacher salary (10+2) (US$)(month) | 211 | 222 | 233 | 245 | 257 | 270 | 283 | 297 |
| Average teacher salary 10+1 (US$) (month) | 100 | 105 | 110 | 115 | 121 | 127 | 134 | 140 |
| Inflationary wage increase | | 5% | 5% | 5% | 5% | 5% | 5% | 5% |
| Total wage bill current scenario (MK m) | 75.228 | 82.190 | 92.481 | 103.558 | 115.872 | 128.830 | 142.493 | 156.897 |
| Total wage bill 40:1 scenario (MK m) | 76.016 | 84.399 | 95.844 | 107.728 | 124.083 | 143.091 | 165.595 | 193.365 |

The number of 10+2 teachers is based on information from the Government of Mozambique up to 2010, we have assumed the number falls thereafter at the average rate of attrition.
Assume 5% inflationary increase in the wage rate each year.

Uses Government of Mozambique enrolment projections up to 2010, assuming an annual 2.4% increase in enrolment from 2011/12 p.a. which is the rate of population growth.

Note that the total wage bill amount here does not reconcile with the GoM MTEF, although the staffing rates and salary rates are the same. Their total is US$112m for 2007, therefore additional allowances or higher salaries for head teachers etc may be included there. This analysis provides a basis for comparison of the scale of increase for basic salaries only.

## Alternative Teacher Projection Scenarios for Sierra Leone

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|---|
| **Current Outcomes** | | | | | | | | | |
| Enrolment | 1,025,793 | 998,991 | 982,517 | 955,059 | 990,601 | 1,015,834 | 1,052,701 | 1,078,472 | 1,116,707 |
| Total teachers (start year) | 18,038 | 19,503 | 20,916 | 22,280 | 23,596 | 23,901 | 24,196 | 24,480 | 24,754 |
| PTR (start of the year) | 56.9 | 51.2 | 47.0 | 42.9 | 42.0 | 42.5 | 43.5 | 44.1 | 45.1 |
| Attrition (3.5% per year) | -631 | -683 | -732 | -780 | -826 | -837 | -847 | -857 | -866 |
| Newly trained – pre service | 1131 | 1131 | 1131 | 1131 | 1131 | 1131 | 1131 | 1131 | 1131 |
| Distance training | 965 | 965 | 965 | 965 | | | | | |
| Total teachers (end year) | 19,503 | 20,916 | 22,280 | 23,596 | 23,901 | 24,196 | 24,480 | 24,754 | 25,019 |

| **Planning for 40:1** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Target PTR (start of the year) | 56.9 | 51 | 47 | 42 | 41 | 40 | 40 | 40 | 40 |
| Total teachers (start of the year) | 18,038 | 19588.1 | 21129.4 | 22739.5 | 24161.0 | 25395.8 | 26317.5 | 26961.8 | 27917.7 |
| Attrition (3.5% per year) | -631 | -686 | -740 | -796 | -846 | -889 | -921 | -944 | -977 |
| Newly trained – pre service | 1131 | 1131 | 1131 | 1131 | 1131 | 1131 | 1131 | 1131 | 1131 |
| Planned expansion of training | 965 | 965 | 965 | 965 | | | | | |
| Additional teachers required | 85.4 | 130.9 | 253.6 | 121.4 | 949.5 | 679.5 | 434.4 | 768.6 | 823.2 |
| Total teachers (end year) | 19,588 | 21,129 | 22,740 | 24,161 | 25,396 | 26,318 | 26,962 | 27,918 | 28,895 |

| | 2007/8 | 2008/9 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | |
|---|---|---|---|---|---|---|---|---|---|
| Average monthly wage | 216,538 | 227,970 | 236,086 | 247,767 | 256,715 | 261,883 | 271,121 | 276,366 | |
| Inflationary wage increase | | 5% | 4% | 5% | 4% | 2% | 4% | 2% | |
| Total wage bill current scenario (MK m) | 51,776 | 58,586 | 64,747 | 72,076 | 76,575 | 79,092 | 82,857 | 85,419 | |
| Total wage bill 40:1 scenario (MK m) | 51,942 | 59,093 | 65,900 | 73,737 | 80,539 | 85,473 | 90,941 | 95,705 | |

Note that this average wage rate does not reconcile exactly with the wage bill in the budget as the latter allows for additional allowances and the salaries of head teachers etc.

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