**HOW WELL PAID ARE PRIMARY SCHOOL TEACHERS IN**

**SUB-SAHARAN AFRICA?**

**A REVIEW OF RECENT EVIDENCE**

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1. **Introduction**

Teacher pay in Sub-Saharan Africa (SSA) and South Asia has been a highly contentious area of education policy since the early 2000s. This has largely arisen in response to the findings of research and other policy analysis that argues that teachers at government schools in many countries are ‘overpaid’ and that, where this is the case, salaries should be adjusted downwards over time. Justin Sandefur, a Senior Fellow at the Centre for Global Development forcefully reiterated this view in a 2018 blog posting. He argues that ‘relative to context, teachers in poor countries are relatively rich’ and that ‘teacher salaries bear little relation to the level of a countries wealth’. The main reason for this is that ‘public school teachers in many developing countries earn civil service salaries that are far higher than market wages’. He specifically cites his own research (conducted with other colleagues) in Kenya where teacher ‘wage premia’ are exceptionally high.

As with so many other education policy areas in SSA, World Bank staff, consultants and associated researchers were the principal instigators of this debate. In particular, from the early 2000s, the education economist Alain Mingat, (working as consultant for the World Bank), postulated a fairly tight, statistically significant negative correlation between the level of teacher pay, as measured by GDP per capita, and primary school gross enrolment and completion rates in SSA; thus, where this ratio is relatively high, primary school enrolment and completion rates tend to be lower than in countries where the opposite is the case. Based on this analysis, he proposed that the optimal (mean) pay for primary school teachers in SSA and other low income developing countries should be the equivalent of 3.5 times GDP per capita (PCGDP).

The findings and recommendations of this research were subsequently taken up by the World Bank and the wider donor community. Accordingly, when the Education for All Fast track Initiative (EFA-FTI), which was intended to be the main multi-donor funding window for primary education, was initiated in 2004, the 3.5 PCGDP teacher pay ratio was included as one of the six ‘benchmark’ indicators for countries wishing to obtain EFA-FTI funding. Although the pay benchmark was only meant to be ‘indicative’, it nonetheless quickly became widely accepted as the key teacher pay norm in SSA among other multilateral agencies (including the IMF) as well as bilateral donors.

Many countries in SSA were, in fact, already well below this benchmark, but the Bank focused instead on those countries (particularly in Francophone Africa) where this ratio was significantly higher than 3.5. The clear implication was that in those countries which had ‘opted’ to pay government teachers ‘relatively high’ salaries, this was crowding out the resources needed to expand enrolments and thus attain universal primary education (UPE), if at all possible by the internationally agreed deadline of 2015. The ‘earnings premia’ of teachers needed, therefore, to be reduced in particular by switching recruitment to lower- cost contractual (para) teachers and also by relying more on less well qualified teachers.

The almost universal response of teachers and their trade unions in SSA was that the Bank’s analysis and conclusions regarding teacher pay were at odds with the reality on the ground with teachers in most countries struggling to meet even their most basic survival needs. This ‘attack’ on the professional status and integrity was, therefore, met with strong resistance which, in some countries, contributed to a noticeable deterioration in industrial relations with frequent and protracted strikes.

*1.1 Review objectives*

The lack of good quality, up-to-date information and independent research has hampered any robust investigation of the key teacher pay issues in SSA including the policy analysis and recommendations of the World Bank and others. Despite its importance, only one study, undertaken over 30 years ago by Zymelman and DeStefano, has provided anything approaching a comprehensive and systematic review of teacher pay across the continent.

The main objective of this article is to evaluate the robustness of the arguments that have been forwarded to support the contention that teachers are overpaid in SSA. This will be done in two main ways. Firstly, by identifying shortcomings in the theoretical and conceptual frameworks that have been adopted and, in particular, the heavy reliance on the PCGDP pay ratio as the key income indicator. And secondly, by assessing the quality of the data that is used to substantiate these claims.

For the first time, this review brings together recent teacher salary data from most mainland countries in SSA. It also assesses all three key dimensions of teacher pay, namely the overall economic context/level of economic development (as proxied by the PCGDP pay ratio), income differentials between teachers and other equivalent/comparable occupations (which are also referred to as ‘wage premia’), and the basic livelihood needs of families. To date, nearly all research has focused either on the ‘economic context’ or, more recently, teacher wage premia.

*1.2 Article organisation*

The article is organised as follows. Section 2 describes the review methodology. Sections 3, 4, and 5 analyse, in turn, the three above-mentioned dimensions of teacher pay. In the light of this analysis, section 6 reviews the current views of the World Bank on teacher pay in SSA. The conclusion includes recommendations for future research in this area.

**2. Review process**

*2.1 Overall approach*

Each of the three dimensions of teacher pay are reviewed firstly by evaluating the available evidence from previous studies and then presenting the relevant information concerning current levels of teacher pay. The focus is on the pay of primary teachers in SSA although reference is made to secondary school teacher pay[[1]](#footnote-1) where appropriate.

Surprisingly few comprehensive, multi-country reviews of teacher pay in SSA have been undertaken during the last two decades. There are three key reports on PCGDP teacher pay ratios (Mingat 2001, Bruns, Mingat and Rakotamalala 2003, and Majgaard and Mingat 2011) and just one paper on occupational pay differentials (Evans, Yuan and Filmer 2020). All four publications were written by World Bank staff and consultants. Very little independent academic research has been undertaken on this topic, even at the country level. Research by Barton, Bold and Sandefur on ‘teacher premia’ in Kenya is a notable exception.

Any robust, detailed analysis of occupational pay is complex and demanding, both theoretically and empirically. Teachers are no exception. Ideally, pay surveys should be based on large samples of tightly-defined occupational groups with information on the key personal and employment-related characteristics of each individual surveyed. Unfortunately, these surveys are not available in SSA. For the purposes of this preliminary assessment, there is no alternative, therefore, but to rely on aggregated, secondary data in order to derive mean teacher incomes for government primary school teachers in as many countries as possible. No attempt has been made to collect pay data for other comparable occupations.

*2.2 Data collection and reporting*

Information on pay and staffing for primary school teachers was successfully obtained from 36 out of the 42 mainland countries in SSA included in this review[[2]](#footnote-2). For all but five of these countries[[3]](#footnote-3), this information covers the period 2016-2020. Mean annual salaries could be calculated with a reasonable degree of accuracy in those countries where Education Sector Analysis and Education Public Expenditure reports are available[[4]](#footnote-4). For the 14 countries[[5]](#footnote-5) where this information could not be obtained, mean incomes were estimated by taking the mid-points of current or recent salary scales for teachers which are usually based on qualification-based salary grade levels (unqualified, certificate, diploma and degree) and combining this with staffing information on the numbers of teachers employed in each of these salary grades. The two main shortcomings of this estimation process are (i) mean salaries in each salary grade can be considerably lower than salary scale midpoints (due mainly to the relatively young age profiles of teacher workforces and various constraints on salary progression within each scale); and (ii) it does not include additional allowances most notably for transport, housing, shortage subjects and remote locations. The relative importance of these allowances varies considerably from as high as one-third of basic salary (in, for example, Kenya) to virtually nothing (especially where salary reforms have led to the consolidation of precious allowances into the basic salary). Given these data limitations, it is important to stress that the findings presented in this review should be regarded as only preliminary estimates of the mean incomes of primary school teachers in SSA.

In accordance with standard reporting practices, all incomes are expressed in constant 2020 purchasing power parity (PPP) prices in order that teacher pay can be meaningfully compared between countries and over time.

**3. The economic context: The GDP per capita teacher pay ratio**

As noted earlier, from the early 2000s, the key pay indicator was the ratio of mean teacher pay to PCGDP. Thus, teacher pay has been assessed very broadly in relation to the overall economic development context of groups of countries. The critical underlying assumption is that ‘dividing (pay) by per capita GDP is a rough and ready way to put salaries in context’ (Sandefur 2018: np)

Earlier reviews of teacher pay in SSA and other developing countries during the 1980s and 1990s also computed PCGDP teacher pay ratios (see Zyleman and DeStefano 1989 and Farrell 1993). However, it was not until the early 2000s when Mingat first postulated a close link between the level of teacher pay as measured by PCGDP and gross enrolment and completion rates in SSA that this indicator become widely used.

In 2003, the World Report published a high profile report entitled ‘Achieving Universal Primary Education by 2015’. It authors, Bruns, Mingat and Rakotomalala (BMR), adopted a target PCGDP teacher pay ratio of 3.5 as part of their costing simulations for the attainment of UPE in 2015. Their rationale for this target ratio is that ‘it is close to the observed average in the highest-completion countries’ (p.74). They based their analysis on the categorisation of four groups of countries according to various enrolment, completion and funding criteria. One of these groups which comprised mainly of countries in Francophone West Africa had particularly high salary PCGDP ratios. Although never explicitly stated, a clear link was made between the size of salary-PCGDP ratios and the absolute level of teacher pay. Accordingly, they assumed in their simulations that for the roughly one-third of countries where this ratio was less than 3.5, the ‘funding gap’ that needed to be filled in order to increase salaries to the target ratio should be met (at least in the short term) by international donors. By contrast, in the remaining countries where the ratio was higher than 3.5, it was recommended that ‘a new cadre of teachers is recruited at the pace of new classroom construction and paid at the target level of 3.5 times the per capita GDP’ (p.75).

The BMR report was highly influential. So much so, that the key expenditure and funding parameters which formed the basis of their UPE costing simulations were adopted by the multi-donor funded FTI as the core benchmarks in assessing country applications for FTI funding. More widely, the 3.5 PCGDP teacher pay ratio was accepted and used by the World Bank itself in both its project appraisals and policy analysis (including education public expenditure reviews) and, at the macroeconomic level, by the International Monetary Fund. It is noticeable that no other occupational group was singled out in this manner which testified to the superordinate concern with the ‘containment’ of overall teacher payroll costs.

*3.1 Key shortcomings*

Three main shortcomings of this reliance on PCGDP teacher pay ratios can be identified. Firstly, the correlation between these pay ratios and primary school completion rates for the 30 countries in SSA which were included in the BMR simulation modelling exercise was not statistically significant with an R-squared value of just 0.03. Furthermore, the correlation between PCGDP teacher pay ratios and absolute teacher pay was also weak. In a subsequent report by Majgaard and Mingat in 2011, more sophisticated multivariate analysis concluded that average teacher pay relative to PCGDP ‘only explains 25% of the variability in the GER (gross enrolment ratio) across countries’ (p.109). Thus, primary school teachers in countries with high PCGDP salary ratios could have low absolute pay as was the case in Burundi and Ethiopia.

Secondly, the PCGDP benchmark pay ratio was not consistently applied across all countries mainly because the primary concern was to reduce mean teacher pay particularly in Francophone West Africa. Countries with very low PCGDP pay ratios where teacher pay needed to increase appreciably were largely ignored[[6]](#footnote-6).

And thirdly, almost total reliance was placed on this ‘rough number’ ratio which meant that other key pay policy issues, most notably the size of income differentials between teachers and other equivalent occupation groups and the adequacy of teacher pay in relation to minimum standards of living (including poverty datum lines), were not included in the analysis. The latter area was the primary concern of teachers and teacher unions. This sole reliance on average incomes also failed to take into account the heterogeneity of the primary school teaching force with respect to formal education and professional qualifications, experience, employment status, and school ownership.

Despite these shortcomings, the PCGDP pay ratio continues to be referred to by leading education economists. For example, Mbiti, Romero and Schipper in an NBER working paper published in 2018 state that ‘teacher salaries (in Tanzania) are currently relatively high at roughly 4.5 times GDP per capita’ (p.6). Similarly, Barton, Bold and Sandefur conclude that, in Kenya, ‘teachers working for the civil service earn almost twice annual GDP/capita, a higher ratio than in developed countries’ (2017:11).

At a global level, Sandefur also highlights the large differences between PCGDP teacher pay ratios between developing and developed countries as clear evidence that teachers in poor countries are ‘relatively rich’ and that ‘the common denominator of the most celebrated innovations in global education today is cutting reliance on well-paid, public employees’(2018:np).

*3.2 The demise of the PCGDP pay ratio*

It is noticeable that, since the mid-2010s, the PCGDP 3.5 teacher pay benchmark ratio has been rarely mentioned in World Bank education policy reports and recommendations. Nor is it used any longer as a benchmark indicator by the Global Partnership for Education which replaced the EFA-FTI in 2014.

There are a number of possible reasons why the attachment of the World Bank and other key organisations such as the IMF to the PCGDP teacher pay indicator has declined so appreciably in recent years. Firstly, the adoption of a universal benchmark teacher pay indicator across a continent of over 40 countries, let alone the developing world as a whole, was criticised as being too crude and simplistic. More widely, it was viewed, particularly by teacher trade unions, as part of the Bank’s generally negative attitudes to teachers.

More recently, the Bank has adopted a more sophisticated analytical approach to teacher pay and other teacher policy issues which is reflected in its key flagship publications on education. For example, its 2018 policy review of basic education in SSA entitled ‘Facing Forward: Schooling for Learning in Africa’ states that ‘teacher compensation issues are complex, in part because they require intricate negotiations typically involving teacher unions, and multiple parties in government, including ministries of education and of finance’(Bashir et al. 2018: 253). In a similar vein, Evans et al. highlight the ‘danger of adopting a single narrative about compensation for teachers or other public sector workers’ since ‘teacher pay differentials and the structure of teacher pay vary so much from one country, even on the same continent’ (2020: 16). As will be discussed below, this more nuanced approach has led to noticeable shift in the Bank’s recommendations and statements concerning teacher pay.

Secondly, the PCGDP pay ratio for primary school teachers has declined very appreciably in many countries in SSA. In the early 2000s, this ratio was above 3.5 in two-thirds of countries and over 5.0 in almost 30% of countries. By the late 2010s, these proportions had almost reversed with only slightly more than one-third of countries with ratios above 3.5 and barely 10% above 5.0 (see figure 1). The average PCGDP pay ratio for the continent as a whole in 2020 was almost exactly half what it had been in 1985.

As elsewhere, PCGDP teacher pay ratios in SSA have declined as GDP per capita has increased (see figure 2). There is, however, still a fairly strong positive correlation between absolute levels of pay and GDP per capita (see figure 3),

which suggests that teacher pay has increased but at a slower rate than GDP per capita. It is particularly noticeable that pay levels of primary school teachers are strongly clustered in countries with GDP per capita of less than $4000 (in constant 2020 PPP). In short, while the poorest countries typically have the highest teacher PCGDP pay ratios, the absolute pay of these teachers is generally lower than teachers in the higher income countries in SSA. Regardless of GDP per capita, the pay of primary school teachers in SSA is heavily clustered in the range of US$2,000-8,000 per annum. Given that this level of income does not meet even the basic livelihood needs of these teachers and their families (see section 5) coupled with the fact that most teachers in Western Europe and North America earn between $40-60,000 per annum (in 2020 PPP) (see OECD, 2021), Sandefur’s contention that these teachers are ‘relatively rich’ is difficult to sustain.

The other major reason that teacher pay GDP ratios have declined is due to the ‘salary adjustment’ policies which were adopted mainly in Francophone countries in Central and West Africa from the mid-late 1990 onwards. In particular, governments began to recruit large numbers of ‘contract’ teachers who were typically paid at least half of permanent civil servant (‘fonctionnaire’) teachers. There was also a growing reliance on largely untrained ‘voluntary’, teacher-parent (maitre-parent) teachers most of whom were paid by parents and the local community and who were heavily concentrated in hard-to-staff schools in rural areas where the most disadvantaged children reside (see below).

With over 90% of government primary school teachers in countries in SSA with PCGDP pay ratios of less than 3.5, the continued reliance on this indicator would mean that most of these teachers would now have to be classified as being relatively ‘low paid’. The reluctance of the World Bank and other major multilateral and bilateral donors to endorse sizeable teacher pay increases at a time of acute post-Covid fiscal stringency is hardly surprising.

***4. Pay comparisons***

More recently, the focus of attention has shifted away from the PCGDP teacher pay ratio to analysing income differentials between teachers and equivalent occupational groups and also among teachers themselves. The following section reviews the evidence presented for each of these types of income comparisons by the two most important publications in this area.

*4.1 Occupational income differentials*

A 2020 World Bank policy research working paper by Evans, Yuan and Filmer assesses income differentials between teachers and other ‘comparable wage workers’ in 15 ‘representative’ countries in SSA by utilising data from labour force and household surveys all but one of which were conducted between 2010 and 2014. This enables average median rather than mean teacher salaries to be calculated.

The report presents the following three sets of descriptive statistics which clearly indicate that teachers in the 15 countries in the SSA sample are relatively well paid compared to ‘others workers’. (i) Teachers’ monthly median earnings are higher than waged workers with ‘similar educational backgrounds’ in ten countries. There are only two countries (Liberia and Niger) where teachers earn less than 10% of other workers; (ii) ‘Among wage workers with post-secondary education, there are just four (occupational) groups that earn more than teachers: managers, professionals, technicians and skilled agricultural workers’ (p.13); and (iii) the hourly earnings of teachers are higher than other comparable occupations in all but two of the 14 countries where this can be computed.

*Key shortcomings*

This paper is an impressive effort to analyse large national surveys across a relatively large number of countries. However, it has a number of shortcomings with respect to both the data and analysis. Firstly, the median earnings data presented in the report shares many of the same limitations as the PCGDP mean pay ratio and it is also quite dated. In fact, the level of aggregation is even higher since it also includes teachers by schooling level (primary and secondary), employment status (permanent, contract, ‘volunteer’, expatriate) and ownership (government, private not-for profit and for-profit). The reported very high ranges in inter-quartile median earnings within countries and the large differences in median earnings between countries is indicative of the heterogeneity of the sampled teachers. For example, countries such as Cote d’Ivoire where over half of primary school teachers have university education are likely to have markedly different levels and patterns of inter-occupational income differentials compared to countries such as Malawi and Nigeria where relatively very few university graduates teach in primary schools. Similarly, the education and qualification profiles of primary and secondary school teachers are markedly different in most countries with the result that the mean earnings of secondary teachers are typically more than 25-50% higher than primary teachers in most countries. The varying proportions of these two groups of teachers across countries further compounds this problem. The mean pay of private school teachers is also significantly lower than government teachers in many countries.

The paper does not present separate descriptive statistics for primary school teachers, but where their salaries are appreciably lower and also where relatively large numbers of secondary teachers are employed, this is likely to change significantly the overall size and pattern of income differentials between sampled teachers and other comparable workers. The report itself presents the results of OLS multivariate analysis which shows that in seven out of 11 countries where a statistically robust relationship exists, primary school teacher earnings are appreciably lower than other comparable wage workers[[7]](#footnote-7).

An overriding problem is that the sample sizes of teachers and other occupations are too small in most of the 15 countries[[8]](#footnote-8) to be able to undertake statistically robust analysis of income differentials between these groups. At the very least, sample sizes have to be large enough for primary and secondary teacher income to be separately analysed according to school ownership (public and private) and qualification level (no professional qualification, certificate, diploma and university degree). Without this level of disaggregation, only very approximate inter-occupation and cross-country comparisons can be made.

Secondly, regardless of the level of disaggregation, more analysis is needed of the overall percentile distribution of earnings among teachers and other occupational groups which is a core feature of standard pay and salary surveys. As noted earlier, this is especially important in order to establish what proportions of teachers are paid below poverty datum lines and other living standard measures (minimum wage, ‘family living wage’).

Thirdly, both the descriptive and multivariate analysis in the report is based on the reported total *earnings* of each respondent. This includes both wage income from their main job and income from other activities (both part-time jobs and self-employment). As the report indicates, this secondary income is particularly important for teachers which means that, unless it is excluded from the analysis, the reported income differentials between teachers and other workers are likely to be strongly biased upwards.

Fourthly, just because teacher pay is higher than ‘equivalent’ occupations (based mainly on educational level), this does not necessarily signify that they benefit from any ‘wage premia’ as is suggested by the report. This is because each occupation has its own distinct labour market with very specific sets of demand and supply factors, the complex interplay of which determine pay levels at any one time. Wage premia only arise when a well-defined occupational group, for example, secondary school teachers with professional (university level) qualifications, earn appreciably higher salaries in the public than the private sector (i.e. at government schools than private schools). Even when like-for-like comparisons of this kind are attempted, major theoretical and empirical challenges have to be resolved in order to be able to reach robust conclusions (see below).

Fifthly, the analysis of both educational and occupation income differentials between teachers and other workers is problematic. The overriding issue is which groups should be included as ‘comparable wage workers’? With regard to education comparability, the paper compares teachers with all ‘other wage workers’ who have some secondary education and who are in work. However, the education and qualification profile of teachers, even in those countries with high proportions of unqualified teachers, are much higher and thus hardly comparable. Typically, between 50% and 80% of teachers in SSA have post-secondary education compared with less than 10-20% of the population as a whole who have some secondary education.

Similarly, the report’s conclusion that teacher earnings are generally higher than other comparable occupation groups is not substantiated by the empirical data presented in the report itself. The main numerically predominant, occupational groups with whom teacher incomes are usually compared are managers and professionals and, to a lesser extent, technicians and clerks. In only one country (Cote d’Ivoire) are the median teacher incomes higher for both managers and professionals and the median income differential is well over 50% in most countries (see table 1). For technicians, median teacher salaries are only appreciably higher (more than 10%) in four countries (Burkina Faso, Cote d’Ivoire, Namibia and Zambia) and, for clerks, seven countries. The number of surveyed post-secondary educated ‘craft workers’ is likely to be tiny but, even for this ‘low-middle’ level occupational group, teachers are paid less in seven out of 15 countries. In DRC, Nigeria, Tanzania and Uganda, which between them account for 75% of the combined population of these 15 countries, nearly all of the nine occupational groups delineated in the report have higher pay than teachers.

Sixthly, the use of earnings per hour as the basis for assessing the size of income differentials between salaried employees is highly questionable. The self-reported ‘hours worked weekly’ for teachers are, as expected, the normal working hours of civil service workers in SSA and elsewhere. By contrast, the hours worked weekly for ‘other workers’ are between 25-40% higher. On the basis of this information, the average earnings per hour for teachers is higher than ‘other workers’ in all but two of the 15 countries. However, the only legitimate comparison is with the total contractual incomes of occupations which, in the formal sector and certainly in the public sector, are based on a 35-40 hour week. The paper provides no explanation why other occupational respondents report working so many more hours than teachers. One possible reason is they include relatively large numbers of secondary school educated wage workers in both the formal and informal sectors who are obliged to work longer hours in order to earn survival incomes.

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| Table 1: Income differentials between the median monthly earnings of teachers and managers, professionals, technicians and clerks in selected countries in SSA | | | | | |  |
| Country | Managers | Professionals | Technicians | Clerks |  |  |
| Burkina Faso | 0 | -29 | 23 | -40 |  |  |
| Cote d'Ivoire | 49 | 28 | 13 | 14 |  |  |
| DR Congo | -4 | 5 | 5 | -6 |  |  |
| The Gambia | -57 | -4 | -7 | 7 |  |  |
| Ghana | -100 | -40 | -32 | -20 |  |  |
| Liberia | -108 | -14 | -35 | -48 |  |  |
| Malawi | -111 | 6 | Na | 2 |  |  |
| Namibia | -6 | 13 | 30 | 50 |  |  |
| Niger | -163 | 21 | -162 | -61 |  |  |
| Nigeria | -75 | -13 | -10 | -60 |  |  |
| Senegal | -50 | 0 | -7 | 6 |  |  |
| Sierra Leone | 26 | -18 | -6 | -7 |  |  |
| Tanzania | 0 | Na | -5 | 17 |  |  |
| Uganda | -157 | -110 | -161 | 58 |  |  |
| Zambia | 33 | -2 | 33 | 56 |  |  |
| Average | -16 | 1 | -3 | 21 |  |  |
| Source: Computed from Evans et al, 2020 | | | |  |  |  |

Finally, other evidence presented in the paper is inconsistent with its conclusion that teachers in SSA have relatively high incomes. In particular, the reported incidence of secondary employment among teachers is much higher than ‘other workers’(especially in countries such as DRC and Uganda where teacher pay is particularly low in absolute terms) which suggests that teachers maybe relatively less well paid than other equivalent occupations. More generally, the paper does not acknowledge other survey evidence which indicate low levels of job satisfaction among sizeable proportions of teachers, with teaching being widely regarded as ‘employment of the last resort’ (see, for example, Author). High levels of dissatisfaction are also reflected in frequent and often protracted teacher strikes, in particular in Francophone West Africa where teachers are widely regarded as being relatively well paid. The high levels of industrial strife between teachers and governments in many countries is a major, although largely unrecognised, contributory factor to the learning crisis facing the continent.

*4.2 Teacher wage premia*

The 2017 article by Barton, Bold and Sandefur analyses income differentials among newly recruited teachers to government primary schools in Kenya between 2010 and 2012. This is done by comparing the incomes of successful applicants who, on the basis of a number of criteria, were ranked above the recruitment cut-off point and unsuccessful applicants who were just below this cut-point. The basic proposition is that ‘comparing people just above and below the hiring cut-off point in a given year gives us a clean measure of the salary jump from (sic) public employment’. They conclude that, in Kenya, the civil service wage premium for identical teachers is up to 100%.

There are three main problems with this analysis. Firstly, the salary for newly appointed teachers was set at K.Sh.10,000 per month which was fixed for the duration of the two year fixed probationary contract of each teacher. It is therefore on the basis of this salary that the incomes of appointed teachers and unsuccessful applicants should be compared. The reason why the government chose this income is not explained but it is probably no coincidence that it is virtually the same as the national minimum wage at that time. Any pay differentials between these two groups is, therefore, not so much the result of wage premia being paid to government teachers but rather the differential adherence to the national minimum wage by government and private sector employers.

Secondly, the income reported by all respondent includes both wage employment from their main job along with secondary income from other employment activities. Since the salary of newly recruited teachers was fixed at K.Sh.10,000 anything above this is likely to be secondary income. Unless this is taken into account, any wage premia will be over-estimated. Descriptive statistic presented in the report show that the average monthly income of teachers just under one year from when teachers started to be hired was around K.Sh. 14,000 per month compared to that of K.Sh.10,000 per month among those who were not hired. The percentile income distribution of both hired teachers and the other unsuccessful applicants is not presented but the report does state that the income of the 90th income percentile among teachers was K.Sh.21,000, which is over double the starting pay for teachers. Both sets of figures strongly suggest, therefore, that the reported income differentials are due not to wage premia but additional secondary earned by teachers.

Thirdly, nearly one-third of the sampled teachers were not recruited. The mean income of $10,000 among these non-appointed teachers is likely to be significantly under-estimated because half of this group indicated that they were unemployed at the time of the survey. Since their income was in probability considerably lower than those who were employed, the monthly income of this latter group is likely to be considerably higher than $10,000 in which case the reported teacher wage premia may not only be over-inflated but could be eliminated altogether[[9]](#footnote-9).

***5. Teacher standard of living***

*5.1 Pay levels*

As noted earlier, to date, the absolute level of teacher pay in SSA has received very little attention from academic researchers. Table 2 shows that over 80% of primary school teachers in SSA earn, on average, less than $7,500 per annum

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| --- | --- | --- | --- | --- | --- |
| Table 2: Mean pay of primary school teachers in SSA by annual income groups (rounded ‘000, PPP $,2020) | | | | | |
| <5 | 5.0-7.5 | 7.5-10.0 | 10.0-15.0 | 15-20 | 20.0> |
| CAR | Burundi | Burkina Faso | Benin | Cote d'Ivoire | Botswana |
| DR Congo | Ethiopia | Chad | Cameroon | Lesotho | Namibia |
| The Gambia | Ghana | Guinea | Kenya | Swaziland | South Africa |
| Guinea Bissau | Liberia |  | Mali |  |  |
| Madagascar | Mozambique |  | Senegal |  |  |
| Malawi | Nigeria |  | Togo |  |  |
| Niger | Sierra Leone |  | Zambia |  |  |
| Rwanda | Tanzania |  |  |  |  |
| Somalia |  |  |  |  |  |
| South Sudan |  |  |  |  |  |
| Uganda |  |  |  |  |  |
| Zimbabwe |  |  |  |  |  |

(PPP $,2020). With the exception of Kenya and South Africa, the remaining countries have relative small populations and are concentrated in Francophone West Africa and Southern Africa. There is a relatively large group of 12 countries (including Nigeria and Uganda) where pay is exceptionally low at less than $5,000 per annum. Not surprisingly, it is among this group where teacher pay is most inadequate in relation to basic livelihood needs (see below).

Again, these mean income estimates mask the high degree of salary dispersion among primary school teachers in most countries. Contract and community teachers account for sizeable proportions of teachers on government payrolls particularly in Francophone West Africa (see table 3). Typically, contract teachers are paid less than half of permanent (‘fonctionnaire’) teachers. Many countries also employ relatively large numbers of ‘volunteer’ or community

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| --- | --- | --- | --- |
| Table 3: Percentage of contract and PTA/community teachers | | | |
| in government primary schools in selected countries in SSA (% rounded) | | | |
| Country | LYA | Contract | PTA/Community |
| Benin | 2015 | 4 | 24 |
| Burkina Faso | 2010 | 55 | 0 |
| Burundi | 2020 | 0 | 1 |
| Cameroon | 2010 | 22 | 37 |
| CAR | 2020 | 56 | 34 |
| Chad | 2015 | 51 | 28 |
| Cote d'Ivoire | 2015 | 4 | 13 |
| DRC | 2010 | na | 50 |
| Congo | 2010 | 2 | 47 |
| Gambia | 2010 | 29 | 0 |
| Guinea | 2015 | 3 | 21 |
| Guinea Bissau | 2015 | 25 | 3 |
| Kenya | 2015 | 0 | 19 |
| Madagascar | 2010 | 0 | 50 |
| Malawi | 2010 | 1 | 5 |
| Mali | 2010 | 45 | 34 |
| Mozambique | 2010 | 59 | na |
| Niger | 2015 | 80 | 20 |
| Sierra Leone | 2020 | 0 | 46 |
| Togo | 2020 | 0 | 27 |
| Uganda | 2010 | 30 | 0 |
| Zambia | 2015 | na | 10 |

teachers[[10]](#footnote-10) most of whom are not on the government payroll and are, therefore, wholly reliant on contributions (often in kind) from parents and other community members. In some countries such as Sierra Leone, nearly half of all primary school teachers are not paid by government. In the mid-late 2000s, in Francophone Central and West Africa, community teachers earned at least three-five times less than government teachers. More recent data is patchy, but it would appear that little has changed during the last 10-15 years.

*5.2 Pay trends*

From the early 1980s to the late 1990s, the real incomes of teachers fell appreciably in many countries in SSA mainly as a result of deep-seated fiscal crisis, high inflation and structural adjustment programmes. It is interesting to note, therefore, that concerns about the ‘relatively high pay’ of teachers first started to be voiced towards the end of this long period of salary decline. Since the mid-2000s, there has been a reversal of this downward trend in real incomes in the majority of countries in SSA although with some important exceptions including Kenya and Nigeria (see Figure 4).

*5.3 Basic livelihood needs*

The adequacy of teacher pay in SSA in relation to basic livelihood needs has never been systematically investigated. A rapid review of teacher pay in 2004 concluded that ‘in contrast to the findings of World Bank research, there is a broad consensus that teacher’s remuneration in the majority of low income countries is seriously inadequate. This is because total pay does not cover basic household survival needs, let alone enable teachers to enjoy a ‘reasonable standard of living…The minimum household survival incomes for teachers are typically two-three times higher than the basic government salary (including allowances and frequently more than this’ (Author). .

*Family living wage*

The Family Living Wage (FLW) is based on the concept that work should provide an adequate income to cover the minimum necessary living costs of a family. It is the approximate income needed to meet a family’s basic needs including food, transport, health, education, tax deductions and other necessities. In low-income countries, food items typically account for over two-thirds of total family expenditure. The FLW is based on a ‘healthy diet’ (as recommended by the WHO and World Bank) amounting to 2,100 calories per day for each family member. An NGO, WageIndicator, uses prices from national cost of living surveys to calculate individual and family living wages in more than 70 countries.

WageIndicator living wage estimates for countries in SSA have been used in order to assess the extent to which primary school teacher pay is sufficient to meet the basic needs of a ‘standard’ family of two adults and two children with an average of 1.6 adults working per family[[11]](#footnote-11). Figure 5 presents the scatter plots of primary school teacher gross pay expressed as a percentage of the FLW and GDP per capita (in PPP, $,2020). Mean teacher pay in the eight countries in Cluster A is less than 40% of the FLW, between minus 25% and plus 25% in the 17 countries in Cluster B and over 50% in seven countries in Cluster C.

More detailed country level analysis is needed in order to establish what proportions of teachers, both those who are on the government payroll and those who are not, are paid below the FLW. For example, Figure 6 shows that the starting salaries of government primary school teachers in half of the countries for which data is available was less than 75% of the FLW. These countries include Ethiopia, Nigeria, Kenya, Uganda and Tanzania which, between them, account for nearly half of all teachers in SSA[[12]](#footnote-12). It is not surprising, therefore, that teaching is such an unpopular career option among school leavers.

Despite the paucity of information, it is clear that the ‘contributions’ received by volunteer/community teachers do not cover even their most basic livelihood needs. The incomes of the large majority of teachers employed by private primary schools are also widely reported to be between 50-25% less than for teachers in government schools which, again, indicates that their pay covers less than half of the FWL.

***6. The World Bank and teacher pay in SSA***

As discussed earlier, the World Bank played a leading role during the early-mid 2000s in highlighting the adverse impacts on primary school enrolment and completion rates in countries where teacher pay was adjudged to be relatively high. With teacher pay accounting for over 80% of total recurrent expenditure in most countries, the Bank’s priority was to contain salary costs mainly by placing increasing reliance on contract and less qualified teachers and, along with the IMF, strongly resisting teacher demands for higher pay. Along with much increased donor funding, this enabled a rapid expansion in teacher recruitment and thus enrolments. However, these ‘salary adjustment’ policies and practices also had quite serious negative consequences most notably on the overall quality of teaching and the morale and thus motivation of the teaching force.

Twenty years on, there are signs that the Bank is increasingly recognising the pivotal importance of both competent and committed teachers, especially given the persistent ‘learning crisis’ throughout the continent. This change in approach to teacher pay is reflected in the two highest profile Bank publications on education in recent years, namely the 2018 World Development Report (WDR) entitled ‘Learning to Realize Education’s Promise’ and the sector review ‘Facing Forward: Schooling for Learning in Africa’.

The WDR’s commentary on teachers is noticeably different from earlier Bank education reviews. The report does not explicitly state that teachers are either underpaid or overpaid nor is country or regional data of any kind presented on teacher pay. However, for the first time in a review of this kind, there is a clear recognition that that ‘over the last few decades, the status of the teaching profession has declined across the world in terms of pay, respect, and working conditions’ and that ‘in many systems, teachers have few incentives (financial or professional) for good performance beyond their intrinsic motivation’ (p.132). The report also goes on to note that ‘across many countries, average teacher pay has fallen relative to that of other professions’. Along with the ‘narrow pay structure’ and often exceptionally challenging working conditions (with ‘long working hours’ and ‘outside responsibilities’), it is hardly surprising that ‘in many countries and economies, the youth who plan to go into teaching are not among the brightest academic performers’ (p.136). The report has few suggestions about how this crisis in teaching profession should be tackled other than to ‘focus on specific financial and non-financial incentives as one possible mechanism for teacher motivation’. However, given that pay levels as a whole are so inadequate in the majority of countries, it is unlikely that ‘specific incentives’ can have much impact on teacher livelihoods and motivation especially if they are confined to a relatively limited of teachers.

The Facing Forward report’s discussion of teachers in Africa is more ambivalent and less explicit about the shortcomings of teacher pay than the WDR. In fact, it is noticeable that the report reiterates the main findings of the Evans et al. working paper that ‘the hourly pay of teachers in both primary and secondary schools generally exceeds that of peers in nonteaching jobs’ (p.248) thereby implying that teachers in SSA are relatively well paid. And yet, the report also acknowledges that ‘if wholesale increases in teacher salaries are not feasible, a narrower focus on selected increases my still help to relieve debilitating bottlenecks (for example, by staffing hard-to-fill positions, as in remote schools’ (p. 253-255).

***7. Conclusion***

The overall conclusion of this review is that primary school teachers are not ‘relatively well paid’ in most counties in SSA. This is true with respect to each of the three key pay dimensions, namely PCGDP ratios, educational and occupational pay comparisons, and living standards. However, it is important to reiterate that, given the limitations of the available evidence, these findings are preliminary and, therefore, tentative.

This review also highlights the analytical shortcomings of the key publications on teacher pay in SSA. In particular, econometric (particularly those based on randomised control trials) and other statistical analysis must be grounded in an in-depth contextual understanding of the teacher and other occupational labour markets under investigation. Primary school teachers are a highly heterogeneous group which makes intra and inter-country occupational pay comparisons very challenging.

*Future research priorities*

The education Sustainable Development Goals will not be attained by 2030 unless teachers in SSA and elsewhere are adequately paid and motivated. This calls, therefore, for a concerted research effort that covers all the key issues and concerns concerning teacher remuneration and general well-being in SSA. In particular, large-scale, in-depth national salary surveys should be undertaken in every country as soon as possible and basic information on teacher pay should be submitted annually to the UNESCO Institute of Statistics.

As elsewhere, statistical and econometric analysis should also be supplemented by high-quality qualitative research which provides the necessary in-depth contextual understanding of teacher material and psychological well-being in SSA. High quality ethnographic studies are particularly important.

**References**

Barton, N., Bold, T., Sandefur, J. 2017. Measuring Rents from Public Employment: Regression Discontinuity Evidence from Kenya. Working Paper 457, June. Washington D.C., Center for Global Development.

Bashir, S., Lockheed, M., Ninan, E., Tan, J-P. 2018. Facing Forward: Schooling for Learning in Sub-Saharan Africa. Washington D.C., World Bank.

Bruns, B. Mingat, A. Rakotamalala, R. 2003. Achieving Universal Primary Education: A Chance for Every Child. Washington D.C., World Bank.

Evans, D., Yuan, F., Filmer, D. 2020. Teacher Pay in Africa: Evidence from 15 countries. Policy Research Working Paper 9385. Washington D.C., World Bank.

Farrell, J.P. 1993. Teachers in Developing Countries: Improving effectiveness and Managing Costs. EDI Seminar Series. Washington D.C., Economic Development Institute.

Majgaard, K., Mingat, A. 2011. Education in Sub-Saharan Africa: A Comparative Analysis. Washington D.C., World Bank.

Mbiti, I., Romero, M., Schipper, Y. 2019. Designing effective teacher performance pay programs: Experimental evidence from Tanzania. NBER Working Paper Series no. 25903. Cambridge, NBER.

Mingat, A. 2001. Teacher Salary Issues in African Countries. World Bank Region, Human Development Analysis and Policy Development Support Tea. Washington D.C., World Bank.

OECD. 2021. Education at a Glance. Paris, OECD.

Sandefur, J. 2018. Chart of the Week: Teacher Pay around the World: Beyond “Disruption” and “De-skilling”. February 20 blog February. Washington D.C., Centre for Global Development.

World Bank. 2018. World Development Report: Learning to Realize Education’s Promise. Washington D.C., World Bank.

Zyleman, M., DeStefano, J. 1989. Primary School Teachers’ Salaries in Sub-Saharan Africa. World Bank Discussion Paper 45. Washington D.C., World Bank.

1. A separate paper on the pay of secondary school teachers in SSA is forthcoming. [↑](#footnote-ref-1)
2. Recent information of any kind could not be obtained for Angola, Republic of Congo, Equatorial Guinea, Eritrea, Gabon and Somaliland. Djibouti, Sudan and Mauritania are not included in SSA. The five small island states of Cap Verde, Comoros, Mauritius, Sao Tome Principe and Seychelles were excluded. Concerted efforts were made to obtain basic information from the relevant government institutions (mainly Ministries of Education and Teacher Service Commissions) and teacher trade unions but response rates were negligible. [↑](#footnote-ref-2)
3. These countries are Guinea Bissau (2010), Mozambique (2015), Namibia (2012), Rwanda (2012), Senegal (2014). [↑](#footnote-ref-3)
4. ESA reports are mainly produced by the UNESCO IIEP Pole de Dakar team based in Senegal and have a common format. EPERs are undertaken by the World Bank. [↑](#footnote-ref-4)
5. All but three of these countries are in Anglophone Africa. [↑](#footnote-ref-5)
6. There were a few exceptions including Madagascar where some FTI funding was used to supplement the salaries of community-based teachers. [↑](#footnote-ref-6)
7. It is also worth noting that, in 2020, primary school teachers were paid less than other ‘similarly educated workers’ in all but one of the 19 OECD countries for which data are available. They were paid 20% or less in 10 of these countries (see OECD, 2021) [↑](#footnote-ref-7)
8. Sample sizes range from less than 200 in Liberia, Niger and Uganda to over 1,100 in DRC. The media sample size is 343. [↑](#footnote-ref-8)
9. These concerns were shared with the authors but no response was forthcoming. [↑](#footnote-ref-9)
10. Also often known as PTA teachers or maitre-parent. [↑](#footnote-ref-10)
11. For the 11 countries with no recent WageIndicator data, the FWL from neighbouring countries has been used. [↑](#footnote-ref-11)
12. The figure for DCR is only for teacher working in rural schools. With much higher costs of living in urban areas, the inclusion of urban teachers would that the mean starting salary for the country as a whole would also be well under 75% of the aggregated rural and urban FWL. [↑](#footnote-ref-12)