

# U4 Expert Answer



## Salary top-ups and their impact on corruption

### Query

**What are the advantages and risks of salary top-ups? What is the potential impact of salary top-ups on corruption and anti-corruption? What aspects have to be considered related to integrity management and compliance?**

### Purpose

As an agency providing technical assistance, we would like to know if this approach should be followed and, if yes, under which preconditions.

### Content

1. Wages and corruption
2. Benefits and challenges of salary top-ups
3. Mitigating the corruption risks
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### Summary

Salary top-ups are a way to increase civil servant salaries. They can be used by governments to compensate for hardship jobs or increased workloads. Top-ups are also used by donors to retain local staff, that is, to keep staff committed to projects when other projects or the private sector might offer incentives to move on. The extent to which salary top-ups can be used as an anti-corruption strategy must be seen in the context of how salaries can reduce or increase incentives for corruption. Evidence in this regard

remains largely inconclusive. There is, however, an emerging consensus that increasing salary may not be sufficient for reducing corruption, in the absence of effective controls and management of staff and resources.

Some studies show that salary top-ups are likely to be effective in low-income countries. Salary top-ups can also curb the misuse of per diems. Nevertheless, there are also a number of challenges posed by salary top-ups, including that they might prevent necessary civil service reform, can generate warranted and unwarranted perceptions of corruption due to differences in payment, and could undermine accountability and management.

If donors are inclined to use salary top-ups, steps can be taken to address these risks, including: harmonising donor practice, adapting to local conditions, strengthening transparency and information-sharing, creating robust management and accountability systems, offering in-kind/non-monetary benefits, and ensuring sustainability of the intervention.

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## 1 Wages and corruption

The topic of salary top-ups must be understood in the broader context of the impact that wages may have on corruption and to what extent wage policies – and increased salaries – are an effective anti-corruption tool.

### Do low salaries create incentives for corruption?

Over the past decades, public sector wages have been declining at a rapid pace in many developing countries. The 2008-2009 economic crisis has had a devastating impact on the global labour market. According to the International Labour Organisation's 2010/2011 *Global Wage Report*, global growth in real absolute average wages was reduced by half in 2008 and 2009, compared to earlier years.

There is a broad consensus that low salaries for civil servants in developing countries can create incentives for corruption. Scholars point to the negative relationship between the level of civil service salaries and incidences of corruption, contending that poorly paid civil servants are more vulnerable to illicit rent-seeking (Van Rijckeghem and Weder 2001).

### *Corruption as a coping strategy*

One of the main arguments on the link between low salaries and corruption is that for civil servants with low salaries, corruption becomes a coping strategy to compensate for economic hardship. These “need-based” arguments focus on the situation in which an underpaid official accepts bribes for basic necessities (Pilapitiya 2004), as opposed to greed-based corruption, which is more apparent in cases of well-paid officials in higher level positions (Wraith and Simpkins 1963).

### *Reducing the moral costs of corruption*

The perception of failure to receive adequate remuneration may also reduce the moral costs of corruption (Abbink 2009). In other words, public officials might find it less unacceptable – thus more tolerable – to accept bribes if they are poorly paid. Similarly, it has been argued that there is greater public tolerance for corrupt practices when civil servants are underpaid.

### *Expectations for service*

When salaries are low but expectations for service remain high, government officials may demand more

compensation from informal or even illegal channels than what is officially sanctioned, hence, corruption arises.

### *Private vs public sector salaries*

Due to perceptions of unfair payment, lower compensation level in the public sector as compared to that of the private one is reckoned as a key factor in the spread of corruption (Mahmood 2005). There is also the risk that higher pay in the private sector may lead to a brain drain in the public sector as staff are drawn towards better-paying positions.

It has also been argued that low salaries in the public service attract only incompetent or even dishonest applicants, which results in an inefficient and non-transparent corrupt administration (Abbink 2009).

### The impact of higher salaries on corruption

Against this background, it has been assumed that an increase in the salary of civil servants is likely to reduce their incentive to be corrupt.

### *Higher salaries as a way to reduce opportunities for corruption*

Other than alleviating the ‘need’ for corruption, a main argument in favour of raising salaries to reduce corruption is the so-called “efficiency wage” argument, which maintains that higher salaries raise the stakes of engaging in corruption (Van Rijckeghem and Weder 2001). In other words, higher salaries make it more costly to engage in corruption due to the fear of losing a well-paid job. Similarly, the “fair wage model” contends that officials engage in corruption only when they see themselves as not receiving a “fair” income, a perception that could be eliminated through higher salaries (Mahmood 2005).

An analysis by Bond (2006) on corruption among court officials argues that not only does the practice of raising salaries increase the cost of corruption – and thus reduce the incentive for corruption – it also reduces the corruptibility of the labour pool. He argues that by paying court officials above the market-clearing rate, it increases the number of honest individuals who are attracted to the position by more than it increases the number of dishonest individuals.

### *Questioning the anti-corruption impact*

While there is a growing range of studies on the link between wages and corruption, findings on whether higher salaries can reduce opportunities for corruption are mixed. The empirical evidence on the magnitude of the impact that wage policies can have on corruption remains largely inconclusive.

Some studies conclude that anti-corruption policies designed to increase wages and net income of potentially corrupt agents may be ineffective. Moreover, La Porta et al. (1999) even found that higher government wages are correlated with more corruption. Higher pay may worsen corruption by crowding out other funding necessary for the provision of public services, thereby undermining the efficiency and productivity of public service delivery, while not addressing some of the contributing factors that provide opportunities for corruption.

### **Necessary conditions for higher salaries to have an effect**

Based on the above evidence, there is an emerging consensus that higher wages alone are unlikely to lead to a reduction in corruption. It is assumed that other factors than underpayment are either more important or necessary for underpaid officials to resort to corruption. Moreover, most studies agree that increasing salaries without establishing effective control and monitoring systems as well as enforcement of appropriate sanctions is unlikely to have an effect on corruption.

### *Oversight and control*

A study on the dramatic increases in civil service pay in China, Gong and Wu (2012) find a limited impact of higher remuneration on controlling corruption in public personnel management. The authors argue that when the demand for social services is high, legal institutions are weak, and the oversight system remains powerless, pay increases have little impact on curbing corruption.

### *Detection and punishment*

One study by Schargrodsky et al. (in Di Tella and Savedoff 2001) on the level of corruption at 33 hospitals in Buenos Aires revealed that a premium paid to purchasing managers did not have an impact on corrupt activities. Instead, the authors conclude that the explanatory factor for corruption was the lack of detection and punishment. They argue that impunity undermines any impact that rewards might have on corruption.

### *Human resource management*

Di Tella and Schargrodsky (2003) explain that the impact of salary raises on corruption is contingent on other necessary conditions in human resource management, on both the micro-level and the macro-level. This includes integrity enhancement in personnel recruitment, training, appraisal and promotion, as well as strengthening accountability, transparency and equal opportunities in public personnel management.

### *Income levels*

Scholars find that one of the methodological challenges in measuring the link between higher salaries and corruption is the lack of reliable data (Treisman 2007). A recent study by Le et al. (2013) attempts to overcome this challenge by using a novel dataset based on household micro-surveys covering a large number of developing countries for which data on government wages at the macro-level are often not available. The study revealed that the impact of government wages on corruption is dependent on the level of per capita income. When income per capita is relatively low, higher government wages can reduce corruption. In other words, higher government wages only reduce corruption in low-income countries.

## **2 Benefits and challenges of salary top-ups**

### **What are salary top-ups?**

Salary top-ups can be used to increase public sector salaries. They refer to official cash payments or transfers that a civil servant receives above what other colleagues in the same grade and pay scale receive. Mukherjee and Manning (2002) explain that civil service salary top-ups can take three forms: position-based allowances (attached to high-risk jobs or jobs in hardship locations), task-based allowances (when a civil servant is doing more than one can reasonably be expected to do), and donor-funded allowances. The latter is the main focus of this U4 Expert Answer as it is of particular relevance for this query.

Salary top-ups are primarily used by donors to obtain and retain staff, particularly when they are not paid enough by their governments. It also broadens the potential labour pool available to them by attracting and retaining skilled labour in the public service (Mukherjee and Manning 2002).

## The potential benefits of top-ups

There are a number of expected benefits of using salary top-ups:

### *Suitability in low-income countries*

The abovementioned analysis of Le et al (2013), suggests that when income per capita is relatively low, higher government wages reduce corruption. Whether a similar correlation exists for salary top-ups in particular has not been studied, yet.

### *Curbing the misuse of per diems*

Studies have shown that per diems can distort incentives and their misuse is one of the most popular coping strategies for compensating for low public sector wages. Per diems refer to non-salary daily subsistence allowances and are paid by donors to cover their employees' expenses incurred by work-related activities. While these allowances are meant to be compensatory, they tend to become a form of additional salary payment in countries where salary levels are generally low (Soreide et al. 2012).

Per diems and allowances can be manipulated as indirect salary top-ups. They also provide many opportunities for fraud and abuse. A 2012 study by Soreide et al. detail the abuses of per diems in Ethiopia, Malawi and Tanzania. For example, in the period 1994-2006 the government of Norway financed the management of a natural resource programme in Tanzania at a cost of approximately USD 5 million per year. A review of this project estimated that a about USD 60 million had been spent on workshops including per diems and travel expenses. The review also found that more than 30 per cent of the expenses could not be accounted for.

Salary top-ups can be expected to reduce the motivation to abuse per diems as an indirect salary top-up. This has been argued by Vian and Sabin (2012) who wrote that moving part of the per diem system to salary support could reduce pressure to commit fraud in the per diem system.

### *Other advantages*

As noted above, one of the justifications of salary top-ups by the employer is to retain staff. A study on the practice of the Japan International Cooperation Agency (JICA) has shown that the donor's prohibition of salary top-ups has threatened the sustainability of its projects, as counterparts are discouraged from committing themselves (Maeda 2007). The loss of trained

personnel to other organisations not only negatively impacted on the efficiency and effectiveness of the project activities but also threatened sustainability in the post-project era.

### **The case of Malawi**

An often-cited example on salary top-ups is that of the investments by the Global Fund, DFID, and UNAIDS in human resources for health (HRH) in Malawi from 2004 onward (Bowser et al. 2013; Dieleman et al. 2011; Palmer 2006; Mtonya et al. 2006; USAID 2006). While most recipient countries of the Global Fund – the largest external donor for HRH, disbursing USD 1.3 billion between 2002-2010 for HRH in low- and middle-income countries – rejected salary support due to concerns about sustainability, Malawi, however, chose to accept these funds on an emergency basis. Due to extreme health workforce shortages and an impending collapse of the health sector, a 52 per cent salary top-up was used for all professional cadre health workers.

Palmer (2006) explains that the financing of salary top-ups reflected an explicit decision by donors to consider a measure that would normally be dismissed as unsustainable, due to the scale of the crisis. The decision was taken on the basis of the assumed continued aid flows and an agreement was reached with the Malawian government on a fixed proportion of national budget expenditure on health over the next six years. While no explicit mention of its anti-corruption impact, the literature consulted on the outcome of these investments reveals a positive impact on staffing levels (Palmer 2006) and on simulating investments by other sources (Bowser et al. 2013).

## The risks associated with salary top-ups

### *Corruption challenges associated with salary top-ups*

#### **Creating distortions**

One of the main arguments found in the literature on salary top-ups is that the practice creates distortions in the labour market, the public sector, the pay/skill balance and may create inflationary pressures, thus affecting the macro-economic situation. Soreide et al. (2012) argue that these distortions can then encourage opportunistic behaviour.

A report by the OECD from 2009 on integrity in state-building explains that in post-war countries, donors are

under enormous pressure to disburse large amounts of funds in a context of low absorptive capacity of local actors. Efforts to overcome this capacity gap (in the form of salary top-ups) can themselves reinforce incentives for corruption by, for example, creating room for rent-seeking with those left out of the process.

### **Risks of nepotism**

A 2011 report by the Overseas Development Institute asserts that donors should either pay top-ups to all staff at the same level in a ministry or not at all. It is reasonable to assume that paying top-ups in a seemingly arbitrary way, at different levels, may create the risk of nepotism as top-ups find their way to those individuals with the right connections. In addition, one of the arguments found in the literature is that people feel deprived when they perceive a failure to obtain the same outcomes as others – in this case, the same salaries - which may foster behaviour conducive to corruption (Kulik, Fallon and Salimath 2008).

### **Creating accountability and management challenges**

A study by the World Bank from 2003 assessed the subnational administration in Afghanistan and provides recommendations for development strategies. It advises against uncoordinated top-ups, arguing that when staff receive incentive payments that are far larger than their public sector salaries, it can create serious management difficulties. Top-ups can undermine management within the sectors as staff feel less inclined to respond to managerial requests than requests from the sponsoring donor.

A similar study by DFID (2012) in Zimbabwe revealed that as the Global Fund was the main conduit of funding of the top-ups, the overall structure of accountability became too complex, which was found to undermine both effectiveness and value for money.

### *Other challenges associated with salary top-ups*

Although it is reasonable to assume that top-ups can reduce the incentive for need-based corruption, there are also a number of case studies that reveal that salary top-ups may not in fact have a clear anti-corruption impact and may have negative side effects.

### **Preventing civil service reform**

Civil service reform can help improve governance and anti-corruption measures, however an evaluation of the salary top-up scheme by DFID in Sierra Leone from

2002-2007 concluded that the “excessive use of salary enhancement schemes [...] has held back reforms and may have actually decreased capacity within the wider civil service” (DFID 2008: xi). Although acknowledging that salary support was the right decision given the circumstances, the evaluation finds that the topping up of salaries in the absence of a clear and wider civil service reform only reinforced the aid dependency of the government of Sierra Leone.

### **Draining civil service of vital staff**

Salary top-ups by donors may give the impression that donor-funded projects are more financially worthwhile than non-donor funded projects. There is thus the concern that salary top-ups can have a negative impact on the labour market and result in donors drawing away staff from vital positions in civil service to their own projects. Mukherjee and Manning (2002) argue that this may undermine government capacity. In turn, this could hinder efforts at capacitating initiatives for good governance and anti-corruption.

### **Generating (unwarranted) perceptions of corruption**

In Indonesia (Mukherjee and Manning 2002), task-based allowances form a significant proportion of civil service salary and are mainly funded from the development budget. The extreme variation of salary within the pay grade may have considerable impact on the perception of corruption in the civil service in Indonesia. In other words, the variation in pay caused by salary top-ups may in fact cause increased perception of corruption even if that may not be the case. Mukherjee and Manning (2002) also argue that this entails reputational risks for donors.

Similarly, in the case of Malawi, a taxed salary top-up was provided to health workers. However, as the government did not clearly communicate to staff the details of this top-up scheme, many staff members developed unrealistic expectations about the salary supplement. Once the top-up scheme came into place and they received their payments, they suspected that the government was holding back donor funds that were rightfully theirs and led to accusations of corruption (Palmer 2006). If donors and governments are not open about the details of a salary top-up scheme, it can still lead to perceptions of corruption and undermine the system itself.

### Limited sustainability: The case of Zimbabwe

A 2012 study by DFID analyses the status of the DFID and Global Fund-funded Zimbabwe Health Worker Retention Scheme, launched in 2009, which also has a salary top-up component. The Global Fund and the government of Zimbabwe agreed to phase out this scheme by the end of 2013. Corresponding increases in salaries paid by the government will make up for this shortfall. There is, however, uncertainty about the sustainability of the scheme considering the budgetary constraints of the government. The salary increases have led to wages taking over a considerable proportion of the budget over non-wage expenditures. In addition, the value of the top-up incentive in a climate of increasing inflation is in doubt. The study finds that additional donor funding will be required.

## 3 Addressing the challenges

If donors are inclined towards the use of salary top-ups, there are a number of steps that could be taken to address the above-mentioned challenges, such as: harmonising donor practice, safeguarding transparency and clear communication, adapting to local conditions, ensuring continuity, creating robust management and accountability systems, and offering in-kind/non-monetary benefits as an alternative.

### Harmonising donor practices

The 2012 strategy paper by the German Federal Ministry of Economic and Development Cooperation highlights that “particularly in the case of anti-corruption, it is important that donors speak with a single voice in partner countries [...] it also involves maintaining a uniform approach in day-to-day project work when dealing with [...] the payment of salary-top ups in the public sector” (BMZ 2012, p. 14).

A lack of coordination amongst donors on their practices can lead to harmful donor competition amongst potential staff. Coordination and harmonisation of donor practices in terms of salary top-ups and per diem regimes are important to address the abuse of donor funded monetary incentives regimes. For details on how to improve and streamline donor policy on per diem regimes, please consult the *Per diem policy analysis toolkit* (Vian and Sabin 2012).

A key recommendation for donors is to share all of the information regarding their approaches, a practice that

has been found as lacking with some donors (Soreide et al. 2012).

### Strengthening transparency and information-sharing about top-ups

Linked to the abovementioned point on sharing donor practices, donors would be well-advised to be explicit about the details of their salary top-up schemes to governments and beneficiaries.

The 2009 OECD report explains that non-transparent salary supplements can feed perceptions of corruption. In Afghanistan, for example, high salary differentials alone are considered by the local population as adding up to corruption, whether or not there is corrupt activity taking place.

In the case of corruption perceptions of the top-up scheme in Malawi, it is clear that communication is essential to ensure that staff expectations are realistic and can be met (Palmer 2006).

The 2013 study on the Global Fund’s investments in human resources for health from 2002-2010 found a major deficit in terms of availability of data on the details of the country programmes and types of salary support. The authors conclude that this implies a deficit in transparency and accountability at the national level, which can be detrimental to the success of the programme.

It is important for donors to be transparent about who receives top-ups. The 2011 ODI report also suggests that top-ups be paid either to all staff at the same level, or none at all, in order to avoid perceptions and risks of nepotism.

There is agreement in the literature on salary top-ups on the necessity of close coordination between the donor and the government to ensure that the top-ups do not affect local conditions in a negative way.

### Creating robust management and accountability systems

Salary top-ups entail a direct involvement in a country’s budget and labour market. This makes robust management and accountability systems essential. A study by Dieleman et al. (2011) argues that governance seems to be a neglected issue in the field of human resources for health. Their case studies, such as on projects in China and India, revealed that accountability

mechanisms for human resources for health financing were clearly lacking, creating informal management systems that resulted in corruption and nepotism.

One of the suggestions for improvement found in the literature is to create clear and well-communicated lines of reporting and accountability to minimise duplication (DFID 2012). Similarly, it is suggested to have only one employer (either the donor or the government).

Another suggestion is to create a strong detection and enforcement system with a complaint mechanism and auditing (Vian and Sabin 2012). When corrupt activities remain unpunished and unsanctioned, it can lead to the normalisation and increase of malpractice as staff are not sufficiently discouraged from committing corrupt acts (Soreide et al. 2012).

## Offering in-kind/non-monetary benefits

Development partners can contribute to reducing risks and problems by offering benefits in-kind instead of salary payments.

In-kind benefits have several advantages. For example, they can curb the manipulation of travel days. Soreide et al (2012) explain how the Ethiopian government allowed an informal practice of civil servants manipulating the number of days spent on travel (and thus, per diems) to secure adequate compensation for staff. This contributes to creating a culture of tolerance of malpractice and corruption and it allows managers to build patronage networks. In order to combat this, organisations such as the Norwegian CSO Norwegian People's Aid (NPA) offer workshops with a total package of in-kind services, i.e. accommodation and meals paid for without cash payments to participants.

Incentives for staff can also include rent-free accommodation, in particular for rural or remote areas, access to free health care, the chance to move from fixed-term contracts to permanent employment, faster promotion, or access to scholarships (World Bank 2003).

## Ensuring continuity and sustainability

One of the key arguments made against salary top-ups is that of unsustainability. Examples from Malawi and Zimbabwe underline the importance of developing an exit strategy that takes into account future aid flows and

the government's budgetary capacity. In the case of human resource financing in Malawi (Palmer 2006), donors took several measures to ensure the sustainability of their investments. In addition to reaching an agreement with the government to maintain or increase national budget expenditure on health over the next six years, DFID committed to give two financial years' notice of the withdrawal of the salary component of its aid.

The DFID 2012 evaluation on Zimbabwe also included an agreement that corresponding increases in salaries paid by the government will make up for this shortfall. However, the evaluation concludes that the withdrawal of support from donors is likely to lead to significant deterioration in service provision, because the proposed public sector remuneration increases are likely to prove unaffordable for the government. The study recommends the extension by 2-3 years of the programme as the phasing-out is happening too soon.

## 4 References

- Abbink, K. 2002. "Fair Salaries and the moral costs of corruption." <http://www.nottingham.ac.uk/cedex/documents/papers/2002-05.pdf>
- Bond, P. 2006. "Persistent court corruption." *Economic Journal* 118, 1333-1353. <http://finance.wharton.upenn.edu/~pbond/research/ms2004460r.pdf>
- Bowser, D., Powers Sparkes, S., Mitchell, A., Bossert, T.J., Bärninghausen, T., Gedik, G., and Atun, R. 2013. "Global Fund investments in human resources for health: innovation and missed opportunities for health systems strengthening." *Health Policy and Planning*. 1-12.
- Chêne, M. 2009. "Low salaries, the culture of per diems and corruption", U4 Expert Answer. <http://www.u4.no/publications/low-salaries-the-culture-of-per-diems-and-corruption/>
- Department for International Development (DFID). 2008. *Evaluation of DFID Country Programmes: Sierra Leone*. <http://www.oecd.org/countries/sierraleone/42238496.pdf>
- Department for International Development (DFID). 2012. *Impact assessment of the Zimbabwe Health Worker Retention Scheme*. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/213900/Impact-assess-zimb-health-workers-retention-schemeFinal\\_20Report\\_20.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213900/Impact-assess-zimb-health-workers-retention-schemeFinal_20Report_20.pdf)

Di Tella, R. and Savedoff, W.D., eds. 2001. *Diagnosis corruption: Fraud in Latin America's public hospitals*. Inter American Development Bank: Washington, DC.  
[http://www.iadb.org/en/research-and-data/publication-details,3169.html?pub\\_id=b-133](http://www.iadb.org/en/research-and-data/publication-details,3169.html?pub_id=b-133)

Di Tella, R., Schargrodsky, E. 2003. "The role of wages and auditing during a crackdown on corruption in the city of Buenos Aires." *Journal of Law & Economics* 46, 269-292.  
<http://www.lacea.org/meeting2000/RafaelDiTella2.PDF>

Dieleman, M., Shaw, D.M.P., Zwanikken, P. 2011. "Improving the implementation of health workforce policies through governance: a review of case studies." *Human Resources for Health*, 9:10. <http://www.human-resources-health.com/content/9/1/10>

Federal Ministry for Economic Cooperation and Development (BMZ). 2012. *Anti-corruption and integrity in German development policy: A strategy*.  
[http://www.bmz.de/en/publications/type\\_of\\_publication/strategies/Strategiepapier323\\_04\\_2012.pdf](http://www.bmz.de/en/publications/type_of_publication/strategies/Strategiepapier323_04_2012.pdf)

Gong, T. and Wu, A.M. 2012. "Does Increased Civil Service pay deter corruption? Evidence from China." *Review of Public Personnel Administration* 32, no. 2: 192-204.  
[http://mpa.ub.uni-muenchen.de/41815/1/MPRA\\_paper\\_41815.pdf](http://mpa.ub.uni-muenchen.de/41815/1/MPRA_paper_41815.pdf)

International Labour Organisation (ILO). *Global Wage Report. 2010/2011: Wage policies in times of crisis*. Geneva: International Labour Office.  
[http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS\\_145265/lang-en/index.htm](http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_145265/lang-en/index.htm)

Kulik, B.W., O'Fallon, M.J. and Salimath, M.S. 2008. "Do competitive environments lead to the rise and spread of unethical behavior? Parallels from Enron." *Journal of Business Ethics* (83): 713.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A., Vishny, R., 1999. "The quality of government." *Journal of Law Economics & Organization* 15, 222-279.  
<http://www.nber.org/papers/w6727>

Le, V., de Haan, J. and Dietzenbacher, E. 2013. "Do higher government wages reduce corruption? Evidence based on a novel dataset." *CESIFO Working Paper No. 4254*.  
[http://www.cesifo-group.de/portal/page/portal/DocBase\\_Content/WP/WP-CESifo\\_Working\\_Papers/wp-cesifo-2013/wp-cesifo-2013-05/cesifo1\\_wp4254.pdf](http://www.cesifo-group.de/portal/page/portal/DocBase_Content/WP/WP-CESifo_Working_Papers/wp-cesifo-2013/wp-cesifo-2013-05/cesifo1_wp4254.pdf)

Maeda, M. 2007. "Best practice in education and training: Hype or hope?". Norrag.  
<http://www.norrag.org/es/publications/boletin-norrag/online-version/best-practice-in-education-and-training-hype-or>

[hope/detail/an-analysis-of-jicas-salary-supplementation-regulations-on-best-practice.html](http://www.u4.no/publications/hope/detail/an-analysis-of-jicas-salary-supplementation-regulations-on-best-practice.html)

Mahmood, M. 2005. "Corruption in civil administration: Causes and cures." *Humanomics* no 21 (3/4): 62-84.

Mtonya, B. Chizimbi, S. 2006. "Systemwide effects of the Global Fund in Malawi: Final report." Bethesda, MD: The Partners for Health Reform *plus* Project, Abt Associates Inc.

Mukherjee, R. and Manning, N. (2002), "Salary top-ups, administration and civil service reform." Washington: World Bank.  
<http://www.gsdrc.org/go/display?type=Document&id=1236>

Organisation for Economic Cooperation and Development (OECD). 2009. *Integrity in statebuilding: Anti-corruption with a statebuilding lens*. <http://www.oecd.org/dac/governance-development/45019804.pdf>

Overseas Development Institute (ODI). 2011. *Briefing Paper: Getting better results from assistance to fragile states*.  
<http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7297.pdf>

Palmer, D. 2006. "Tackling Malawi's human resource crisis." *Reproductive Health Matters*. 14(27): 27-39.  
<http://www.who.int/healthsystems/gf17.pdf>

Pilapitiya, T. 2004. "The Impact of corruption on the human rights based approach to development."  
[http://www.albacharia.ma/xmlui/bitstream/handle/123456789/30538/0284The\\_Impact\\_of\\_Corruption\\_on\\_the\\_Human\\_Rights\\_Based\\_Approach\\_to\\_Development\(2005\)r.pdf?sequence=1](http://www.albacharia.ma/xmlui/bitstream/handle/123456789/30538/0284The_Impact_of_Corruption_on_the_Human_Rights_Based_Approach_to_Development(2005)r.pdf?sequence=1)

Savedoff, W. D. 2008. "Pay for honesty? Lessons on wages and corruption from public hospitals". U4 Brief  
<http://www.u4.no/publications/pay-for-honesty-lessons-on-wages-and-corruption-from-public-hospitals/>

Soreide, T., Tostensen, A., Skage, I.A. 2012. *Hunting for per diem: The uses and abuses of travel compensation in three developing countries*.  
<http://www.cmi.no/publications/file/4436-hunting-for-per-diem.pdf>

Treisman, D. 2007. "What have we learned about the causes of corruption from ten years of cross-national empirical research?" *Annual Review of Political Science* 10, 211-244.

USAID. 2006. *Systemwide Effects of the Global Fund in Malawi: Final Report*.  
[http://www.healthsystems2020.org/files/1399\\_file\\_Tech114\\_fin.pdf](http://www.healthsystems2020.org/files/1399_file_Tech114_fin.pdf)

Van Rijckeghem, C., Weder, B. 2001. "Bureaucratic corruption and the rate of temptation: Do wages in the civil

service affect corruption, and by how much?" *Journal of Development Economics* 65, 307-331.  
<http://www.sciencedirect.com/science/article/B6VBV-4384R2T-5/2/7cf1f9a26d8c910dda8478d078c39c83>

Vian, T. and Sabin, L. 2012. Per diem policy analysis toolkit.  
<http://www.u4.no/publications/per-diem-policy-analysis-toolkit/>

Wraith, Ronald and Edgar Simpkins. 1963. *Corruption in developing countries*. London: Allen & Unwin.

World Bank. 2003. Assessing subnational administration in Afghanistan: Early observations and recommendations for action.  
<http://reliefweb.int/sites/reliefweb.int/files/resources/6D87B84B0D288F8AC1256D2700442C6A-areu-afg-13mar.pdf>