

**MERIT RECRUITMENT, TENURE PROTECTIONS AND PUBLIC SERVICE
MOTIVATION: EVIDENCE FROM A CONJOINT EXPERIMENT WITH 7,300 PUBLIC
SERVANTS IN LATIN AMERICA, AFRICA AND EASTERN EUROPE**

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ABSTRACT

How can governments manage civil servants to enhance public service motivation (PSM)? Despite the centrality of PSM in public administration research, the effects of management practices on PSM remain understudied. We address this gap through a conjoint experiment with 7,300 public servants in five countries in Africa, Latin America and Eastern Europe. Our experiment assesses two practices: merit-based competitions for recruitment versus discretionary appointments; and permanent tenure versus temporary job contracts. We find that merit competitions are associated with greater PSM by respondents in four countries, yet have no significant effect in a fifth. Permanent contracts are associated with greater PSM (two countries), lower PSM (one country) and have no significant effect (two countries). The effects of personnel management practices thus appear to vary across contexts. A common practice in public administration research – generalizations about the effects of management practices from single-country studies or cross-country averages – requires rethinking.

ACKNOWLEDGEMENTS

The authors are rotating authorship order across articles; they contributed equally to this article. The authors would like to thank government counterparts in Chile, Kosovo, Malawi, Uganda, and Ghana for enabling this research; the British Academy-UK Department for International Development (DFID) Anti-Corruption Evidence Programme for funding for this research; Adam Harris (University College London), Rachel Sigman (Postgraduate Naval School), Brigitte Seim (University of North Carolina) and Hamit Qeriqi for leading the field research underlying this article in Uganda, Ghana, Malawi and Kosovo; the dozens of research assistants and collaborators in Chile, Kosovo, Ghana, Malawi and Uganda who contributed to this project; and Nicolas Soto for his excellent research assistance in the conjoint data analysis.

INTRODUCTION

Public service motivation (PSM) – a 'general, altruistic motivation to serve the interests of a community of people, a state, a nation or humankind' (Rainey & Steinbauer, 1999: 20) – is a central concept in public administration. Since its initial conceptualization by Perry and Wise (1990), research on public service motivation (PSM) has grown to more than three hundred studies (Ritz, Brewer, & Neumann, 2016). This research interest is in large part motivated by the positive outcomes PSM is associated with. Over one hundred studies link PSM to, for instance, greater job performance, work motivation, job satisfaction, and organizational commitment (Ritz, et al., 2016).

This puts a premium on understanding how organizations can promote PSM. Yet, in PSM research, 'management practices have received limited direct empirical investigation.' (Christensen, Paarlberg, & Perry, 2017: 530). What is arguably most actionable to governments – which management practices enhance PSM – is thus among the least studied topics in PSM research.

Several recent studies are the exception (see Christensen et al., 2017, for a summary). They have looked at the effects on PSM of, among others: red tape (e.g. Moynihan & Pandey, 2007); job design (in particular opportunities to serve the public) (e.g. Gould-Williams, 2016); leadership and leader-follower relations (e.g. Paarlberg & Lavigna, 2010); and hierarchical authority and centralized command (e.g. Jacobsen, Hvitved, & Andersen, 2014).

One management area which remains particularly understudied is civil service management.¹ As Perry (2015: 228) puts it, 'empirical research to date does not permit strong inferences about the ...influence of civil service systems ...on PSM'. This is an important omission. Governments are arguably keen to know how their recruitment, pay, career and performance management practices affect the PSM of their staff. This holds all the more in light of New Public Management (NPM)-inspired reform attempts of Weberian civil services over the last three decades, which have caused concerns about a crowding out of PSM in public sectors (e.g. Bellé & Ongaro, 2014; Brewer & Kellough, 2016; Moynihan, 2010). As a result, integrating PSM and human resource management research is 'of foremost importance.' (Ritz et al. 2016: 422)

Our paper advances this integration. It assesses the effect on PSM of two personnel management practices which are central to both Weberian civil service systems and managerial reforms – merit competitions for public sector recruitment (versus discretionary appointments); and permanent job contracts (tenure) (versus temporary contracts). Drawing on social identity theory to make the case

¹ In this paper, we understand civil service management narrowly as 'functions for the day-to-day operations of managing people in [public] organizations,' including human resource management functions such as recruitment, selection, remuneration, performance appraisal, employment protection and dismissals (but excluding other people management-related functions such leadership) (cf. Berman 2015: 114).

for Weberian civil service systems and person-environment fit theory to argue for managerial reform, we develop competing predictions relating merit recruitment and tenure to PSM.

We test our hypotheses using a conjoint experiment with public servants, in which we ask public servants to compare the PSM of hypothetical profiles of colleagues with varying characteristics, including their recruitment and contract type. To foster external validity, we conducted this survey experiment with 7,300 public servants in five countries in three continents (Africa, Latin America and Eastern Europe), which remain understudied in PSM research (Ritz et al., 2016). To our knowledge, this is the largest cross-country survey experiment ever conducted with public servants.

We find that civil service management practices have different conjoint effects on PSM in different countries. Merit-based recruitment through competitions for public sector positions – rather than discretionary appointments – are associated with greater PSM in four of five countries. In a fifth country, we observe no significant effect. This suggests that Weber's (1978: 959) hypothesis about merit recruitment applies in many – but not all – countries. At the same time, permanent contracts are associated with greater PSM in two countries, lower PSM in one country, yet no significant conjoint effect in two further countries. Contrary to notions of classical Weberian bureaucracy, effects of permanent contracts thus vary.

More generally, our findings underscore the fragility of generalizing about management practices from single-country studies or average cross-country effects – the basis for most inferences about management practices in public administration research to-date. Vice versa, our findings underscore the importance of replication studies and research programs which assess, with the same experimental research designs, the effects of the same management practices in different countries to understand which management practices tend to have positive effects across countries, and which have context-specific effects.

MERIT, TENURE, AND PUBLIC SERVICE MOTIVATION

Research linking HRM and PSM is in short supply, with only few existing studies (Gianque et al. 2013; 2015; Gould-Williams et al., 2013; Mostafa et al., 2015; Schott & Pronk, 2014; Homberg and Vogel 2016). Most of this literature has focused on either High Performance Human Resource Practices (HPHRP) or extrinsic versus intrinsic HRM practices. They have typically associated HPHRP (e.g. training and job autonomy) and intrinsic HRM practices (e.g. job enrichment) with greater PSM. By contrast, extrinsic motivators – in particular performance pay – have been argued to crowd out PSM by changing the frame of reference of public servants towards other values, such as efficiency (e.g. Battaglio & French, 2016; Bellé & Ongaro, 2014; Brewer & Kellough, 2016; Moynihan, 2010).

We contribute to this literature by assessing the effects of two management practices which are central to debates around Weberian versus managerial civil service practices, but have remained largely unstudied: job stability (tenure protections) (versus temporary contracts) and merit competitions for recruitment (merit) (versus delegated personnel authority to grant managers discretion over recruitment) (Brewer & Kellough, 2016).²

That these two management practices have not seen significant research is surprising. Numerous studies have argued that organizations should select employees with high PSM (Christensen et al.,

² Performance pay – which is equally central to Weberian bureaucracy vs. NPM debates – has, by contrast, been studied in numerous papers, and we thus do not investigate it further here.

2017). Yet, to our knowledge, none tests which selection methods are effective at selecting high PSM applicants.³

Moreover, practitioners appear to be split about the merits of merit recruitment and tenure. Across and within countries, government institutions sharply vary in the extent to which they hire through merit competitions and grant permanent contracts (Meyer-Sahling, Schuster and Mikkelsen, 2018). Shedding light on their effects on PSM is thus policy relevant. Lastly, our two management practices are of theoretical interest: competing hypotheses can be derived for both. Drawing on social identity theory, Weberian practices can be hypothesized to enhance PSM. Drawing on person-organization fit, by contrast, managerial approaches can be hypothesized to enhance PSM.

The argument for Weberian practices starts with Weber himself. Weber's vision was one of a bureaucrat serving state and society, with core values such as impartiality and subordination to the public interest (Weber, 1978: 958). PSM is commonly equated with these values: 'what has historically been called public service ethic ...is defined more formally ...as public service motivation' (Perry & Wise, 1990: 370). Weber (1978: 959) argued that certain civil service practices – including tenure protections and merit recruitment through competitive exams – encourage a public service ethic.

Social identity theory provides a modern mechanism for Weber's proposition. Social identity theory posits that individuals perceive social differences with others and, thus, categorize into in- and out-groups (see, among many Akerlof and Kranton, 2000). Individuals who categorize themselves as members of a group – i.e. develop an identification with this group – are more likely

³ Schott and Pronk (2014, p. 54) are, to our knowledge, the only exception. They assess whether employee perceptions of having a "very rigorous" selection process affects PSM. They find a null effect, which, however may well be due to a small survey sample (n = 251).

to internalize their group's norms and be motivated to achieve group objectives. Extrapolating from Weber (1978: 959), merit recruitment and tenure protections may strengthen identification of public employees with *public service*. They may thus be more motivated to achieve public service goals – i.e. have higher PSM.

The argument for merit competitions rests on the link between selection and social identities. Merit competitions for public sector positions safeguard selection from partisan and nepotist influence (Weber, 1978: 959). As such, they may select *out* candidates with stronger partisan or personal network – rather than public service – identities. In line with this reasoning, studies link merit recruitment to lower corruption and clientelism (cf. Meyer-Sahling & Mikkelsen, 2016; Oliveros & Schuster, 2018). Merit recruitment may thus foster identification with public service and PSM.

The argument for tenure protections rests on a link between organizational socialization – the process by which a member “learns the value systems, the norms, and the required behavior” in an organization (Schein, 1968, p. 2) – and public service identities. Weber (1978: 958) himself had argued that the expectation of lifelong public sector careers through tenure protections enables socialization of public servants into a vocation of public service and self-sacrifice – and thus identification with public service and PSM (see also Rauch & Evans, 2000). This socialization is fostered through social exchange: tenure protections signal a long-run commitment of organizations to public servants. In exchange, public servants reciprocate with greater commitment to their organization and its public service objectives – and thus socialize into greater identification with public service. In line with this reasoning, studies of High Performance Human Resource

Practices (HPHRP) have found a positive association between job security and PSM (Gianque et al., 2013; Mostafa et al., 2015).⁴ We thus hypothesize:

Hypothesis 1 (H1): Public servants recruited through merit competitions have higher levels of PSM than public servants recruited through discretionary appointments.

Hypothesis 2 (H2): Public servants on permanent contracts have higher levels of PSM than public servants recruited through temporary contracts.

Drawing on person-environment fit (PE-fit) – and, specifically, person-organization fit (PO-fit) – theory, however, competing predictions can be derived. We thereby follow several prior HPHRP studies which have drawn on PO-fit to explain linkages between HPHRP and PSM (Gianque et al., 2015; Park and Kim, 2016; Kim 2012; Gould-Williams et al., 2013; Gould-Williams, 2016;). This literature argues that public-spirited employees need to live their motivation to sustain it, and that the fit between organization and employee matters in this regard (Gianque et al., 2015; Park and Kim, 2016; Neumann, 2016). We draw on this insight to assess the effects of recruitment and tenure protections on PSM.

The core advantage of managerial practices from a PE-fit perspective is managerial discretion. Managerial reforms delegate authority and discretion over personnel management decisions to managers (Brewer & Kellough, 2016). Managers can use discretion to gauge PE-fit in recruitment and selection, and use it for HRM decisions further along in the employee life cycle (Werbel and Johnson, 2001). The potential gains in terms of commitment, performance, and retention are

⁴ As a caveat, socialization into public service identities need not be successful. Some studies associate greater work tenure with less PSM, possibly due to increasing frustration with goal displacement from public service to rule observance (e.g. Battaglio & French, 2016; Moynihan & Pandey, 2007; see also Kjeldsen, 2014).

substantial (for a meta-analysis see Kristof-Brown et al., 2005). By contrast, managers lack similar levels of discretion in Weberian civil service systems, with their formalized recruitment processes and employment protections (Feeney and Rainey, 2010; Peng et al. 2016).

Hence, managerial reforms may increase PE-fit as managers have discretion to hire high PSM applicants and dismiss public servants with low PSM. Discretionary appointments in public organizations may thus help select employees with higher levels of PSM. Temporary contracts in turn may help dismiss (or not renew) "misfits" with low PSM and PE-fit. We thus hypothesize H3 and H4:

Hypothesis 3 (H3): Public servants recruited through discretionary appointments have higher levels of PSM than public servants recruited through merit competitions.

Hypothesis 4 (H4): Public servants on temporary contracts have higher levels of PSM than public servants on permanent contracts.

In sum, competing predictions for both merit recruitment and tenure protections can be derived. From a social identity perspective, we expect Weberian merit recruitment procedures and tenure protections to increase PSM. From a PE-fit perspective, we expect managerial discretion over recruitment and dismissal to increase PSM.

RESEARCH DESIGN AND DATA

To test our hypotheses, we rely on a conjoint experiment. Inferences in prior public administration studies are based on partial correlations between HRM practices as experienced or perceived by

employees and PSM.⁵ Yet, HRM practices are not exogenous to employee attitudes and behaviors, including PSM. Whether an organization introduces temporary contracts, for instance, plausibly both affects PSM and is itself affected by prior levels of work motivation and PSM. Concerns with omitted variable and reverse causality biases in prior studies thus loom large. Moreover, inferences are based on single-country samples. Yet, as we demonstrate below, effects vary across countries. This puts a premium on cross-country designs to understand which HRM practices have positive or negative effects across countries and which practices have varying effects. Our cross-country conjoint experiment allows us to address these limitations.

Conjoint experiments compare the effects of multiple characteristics in a single experiment by asking respondents to choose between profiles characterized by attributes with randomly assigned values (Hainmueller, Hopkins, & Yamamoto, 2014). In our application, we follow Oliveros and Schuster (2018) and let respondents choose between pairs of hypothetical colleagues in their organization. We randomly assign values to the attributes of the colleagues' profile – including how they were hired and what type of job contract they have – and ask respondents which of the two colleagues would have greater PSM. To illustrate our experiment, figure 1 visualizes a typical profile comparison from one of our case countries (Ghana).

Figure 1: Example Profile Comparison (Ghana)

<FIGURE 1 ABOUT HERE>

⁵ Two studies in economics are the exception. Dal Bo, Finan, and Rossi (2013) randomize salaries in Mexico and find that higher wages attract candidates with higher PSM to the public sector. Similarly, Ashraf, Bandiera, and Jack (2014) find that randomly enhancing extrinsic rewards in the recruitment of health workers in Zambia attracts workers who are more pro-socially motivated.

Our conjoint approach offers several methodological advantages. Relative to observational studies, random assignment of attribute values in conjoint addresses concerns with reverse causality and omitted variable biases. Conjoint also lower social desirability bias. Respondents need not explicitly state which attributes matter for their choice, need not reveal if their reasons for preferring one profile to another is socially undesirable and need not assess absolute levels of PSM. Prior studies provide evidence for social desirability in PSM levels: respondents who self-assess PSM over-report their PSM levels (Kim and Kim, 2016). Relative to other survey experiment techniques (such as vignettes), conjoint also assess the effects of different attributes simultaneously – in our case: education, years of experience, rank, form of recruitment, job contract, and pay – on PSM. As such, they offer greater realism than a direct elicitation of preferences on one dimension, as they involve trade-offs between preferences for different characteristics (Hainmueller et al., 2014). Perhaps unsurprisingly then, studies suggest conjoint outperform other survey experiments in their external validity (Hainmueller, Hangartner, & Yamamoto, 2015).

Relying on conjoint, however, also comes with downsides. Our respondents draw inferences from profiles of hypothetical colleagues. Perceptions of PSM of profiled public servants need not equate with actual PSM – though many studies argue for the utility of perception-based approaches (e.g. Anderson & Tverdova, 2003). In our instance, however, there are plausible reasons to assume that respondents *can* draw valid inferences. As detailed in the case selection, our respondents engage with colleagues with the attributes we are asking them to assess on a daily basis (e.g. by interacting with colleagues on different job contracts). Our respondents may thus base their responses on first-hand knowledge.

Case selection

To assess our hypotheses, we sought cases in which meaningful conjoint inferences about merit and tenure are feasible. This is given where: first, job contracts and recruitment modalities vary within institutions; hypothetical colleagues on, for instance, different contracts in a conjoint thus have realistic real-world referents for our respondents to make their assessment. In addition, merit and tenure cannot be perfectly co-linear; else, their independent conjoint effects cannot be assessed. Lastly, designs of job contracts and merit competitions need to be sufficiently comparable across cases for meaningful cross-country comparisons of effects. In addition to these criteria, we sought cases which vary in culture, socio-economic development, governance and political system to assess whether findings about the effects of management practices travel to diverse cultural, political and socio-economic contexts.

This case selection rationale yielded five countries in Latin America, Africa and Eastern Europe: Chile, Malawi, Uganda, Ghana, and Kosovo. The five countries are located on three continents – with different cultural heritages – and range from a high-income OECD country (Chile) to a low-income country (Malawi), from a free democracy (Chile) to a partially autocratic system (Uganda), and from a country in the top quintile in terms of corruption control (Chile) to a country in the bottom quintile (Uganda) (Appendix A1). As such, the five countries arguably allow us to assess whether civil service management practices have the same – or diverging – effects across highly heterogeneous contexts.

Our five countries are also marked by significant within-country variation in merit and tenure, without perfect collinearity between them. For instance, the share of public servants in our survey who indicates having been recruited through examinations stands between 17% (Ghana) and 63%

(Uganda) (Appendix A3). Our conjoint attributes may thus realistically reflect variation in attributes of actual colleagues with which our respondents interact in their jobs.

Lastly, the designs of merit competitions and temporary contracts are sufficiently comparable to assess whether similar practices have the same or diverging effects across countries. Across the five countries, merit competitions combine requirements for job advertisements – variably in newspapers, online portals or government gazettes – selection commissions, and oral and/or written examinations. This comparability in the basic design of merit competitions enables meaningful comparisons of effects. At the same time, public servants can be hired into both permanent job contracts with tenure protections (typically denominated 'civil service' positions) and temporary (fixed term) contracts.

As a collateral benefit, our case selection enables us to explore the antecedents of PSM in regions which PSM studies – and public administration research more generally – neglect: less than 6% of PSM studies focus on Africa or Latin America according to a review article (Ritz et al., 2016). We return to implications of this for the generalizability of our findings in the conclusion.

Survey sample

We surveyed comparable populations across countries: central government employees across ranks with administrative tasks in the broadest sense (excluding, e.g., teachers, police or doctors).⁶

While we focused on a comparable survey population across countries, we had to employ different survey modes inside and outside Africa. In Chile and Kosovo, we surveyed public servants online,

⁶ In Kosovo, our sample also included public servants from local governments.

based on email lists of survey populations of either the entire civil service in central and local government (Kosovo) or all employees in 11 central government institutions (Chile).⁷ In total, 5,742 (Chile) and 2,470 (Kosovo) public servants responded to our survey, yielding response rates of 37% (Chile) and 14% (Kosovo) respectively. Our conjoint experiment was embedded within a larger survey on civil service management. 4,192 (Chile) and 817 (Kosovo) of our survey respondents answered the conjoint (Appendix A3).

In Africa, the absence of email registers or lists of central government employees precluded online population surveys. Enumerators instead conducted face-to-face interviews, based on informal quota sampling. In each country, we contacted individual government institutions, sampling public servants across a range of institutions, ranks in hierarchy, contract types, job functions, ages and education levels. Interviews took place in 2017. In total, we interviewed between 1,211 (Malawi) and 1,601 (Ghana) respondents. Between 463 (Uganda) and 1,076 (Ghana) of our respondents were randomly assigned to respond to two iterations of the conjoint (Appendix A3).

As Appendix A3 illustrates, this sampling strategy yielded a diverse set of bureaucrats in each surveyed country. In the two countries for which we have data to assess representativeness – Ghana and Chile – our samples roughly approximate our survey populations in gender and education (Appendix A2).

⁷ In Chile, the eleven surveyed institutions comprise the Treasury, Economic Development Agency, Civil Service Agency, Attorney General, Social Security Administration, Planning Directorate in the Ministry of Public Works, Solidarity and Social Investment Fund, Directorate for Libraries, Archives and Museums, Legal Medical Service, National Fishery Service and National Health Fund.

Choice experiment

Our experiment asked respondents to choose who among two hypothetical public servants in their institution would have greater PSM. We randomized values of six attributes of these two public servants: education, year of appointment into the public sector, position, contract, recruitment into public sector and salary relative to colleagues with similar responsibilities.⁸

Table 1 lists the values for each attribute and country. As detailed below, we phrased attribute values to ensure both realism in country contexts and comparability across countries. To exclude implausible combinations to respondents, we imposed restrictions on randomization.⁹

⁸ We randomized attribute order to avoid primacy effects.

⁹ In Chile and Kosovo, the combination high school education and technical-professional rank was excluded because university education is required for technical-professional ranks. In Chile, the combination appointment and permanent contract was, additionally, excluded since permanent staff is always recruited through merit competitions.

Table 1: Attributes and their Values in the Conjoint Experiment, by Country

Attributes	Chile	Ghana	Kosovo	Malawi	Uganda
Education	- Secondary School - University Degree	- Secondary School - University Degree (Bachelor, Master or PhD)	- Secondary School - University Degree	- Secondary School - University Degree (Bachelor, Master or PhD)	- Secondary School - University Degree (Bachelor, Master or PhD)
Position	- Administrative - Technical-professional	- Administrative Support - Technical-Professional	- Technical-administrative level - Professional level	- Administrative Support - Technical-Professional	- Administrative Support - Technical-Professional
Year of appointment into the public sector	- 2005 - 2010 - 2015	- 2005 - 2010 - 2015	- 2005 - 2008 - 2010	- 2005 - 2010 - 2015	- 2005 - 2015
Recruitment into the public sector	- Direct appointment - Public competition	- Recruited through Competitive Exam Process - Recruited through Competitive Interview Process - Appointed without Competition	- Appointment based on previous connections of the candidate - Personal interview - Written examination and personal interview	- Recruited through Competitive Exam Process - Recruited through Competitive Interview Process - Appointed without Competition	- Recruited through an examination - Recruited through direct appointment
Contract	- Permanent - Contract (temporary) - Consultancy (temporary)	- Permanent - Temporary	- Career civil servants (permanent contract) - Non-career civil servants (temporary contract)	- Permanent - Temporary	- Permanent - Temporary
Salary relative to colleagues with similar responsibilities	- Inferior - Comparable - Superior	- Inferior - Comparable - Superior	- Inferior - Comparable - Superior	- Inferior - Comparable - Superior	- Inferior - Comparable - Superior

As illustrated in figure 1 above, respondents were asked to "look carefully at the two profiles" and then assess: "Which public servant would be more willing to make a personal sacrifice for the good of society?"¹⁰ This is a literal measure of one PSM dimension – self-sacrifice – adapted from Perry (1996)'s original PSM scale and its revision by Kim et al. (2013).¹¹ To foster comparable understandings across countries, we pre-tested the measure in local-language cognitive interviews with ten public servants in each country. Our cognitive interviews suggest that our measure had a similar PSM-oriented meaning for respondents across countries. While we cannot statistically assess measurement invariance in a single-item conjoint design, this duty of care curtails this risk.

We relied on self-sacrifice as our PSM outcome measure as several recent studies find it to be the most impactful PSM dimension, associated – to name a few – with a preference for public sector employment (Clerkin & Cogburn, 2012) and, in a meta-analysis (together with commitment to public interest), job satisfaction (Homberg, McCarthy, & Tabvuma, 2015). There is also evidence that self-sacrifice is the most stable PSM dimension, even in extreme circumstances (Brænder & Andersen, 2013).

Relying on a single dimension of PSM to measure the multi-dimensional PSM concept is, nevertheless, a limitation. It leaves us unable to assess whether merit and contract type have differential effects on different PSM dimensions. It also implies that our PSM inferences require an additional assumption: that self-sacrifice is closely associated with a multi-dimensional PSM measure in our context. We return to this limitation in the conclusion.

¹⁰ Our experiment contained several other, non-PSM-related outcome questions. To minimize priming effects, the order of these questions was randomized for each respondent.

¹¹ Perry (1996)'s corresponding measure is 'I am prepared to make enormous sacrifices for the good of society'; Kim et al. (2013)'s measure reads 'I am prepared to make sacrifices for the good of society'.

Our core explanatory variables of interest in the conjoint are ‘Contract’ and ‘Recruitment into the public sector’. To assess **H1** and **H3**, values for the ‘Recruitment into the public sector’ attribute randomly vary between “merit competitions” and “appointments.” To assess **H2** and **H4**, our ‘Contract’ attribute randomly takes on one of two values: permanent or temporary contracts. To foster measurement validity, the phrasing of these values was adapted to country contexts.¹² Our cognitive interviews suggest that these attribute values retain a comparable meaning across countries. Moreover, in Ghana, Malawi and Kosovo, we differentiated between competitive interview and exam processes to disentangle the effect of merit-based recruitment (competition for public sector jobs) from merit-based selection (through interviews or written exams).

In addition to our core attributes, our conjoint includes four of the most frequently identified correlates of PSM (cf. Ritz et al., 2016): education, rank, pay and years of experience in the public sector. This leaves us with six attributes in total; to ease the cognitive load for conjoint respondents, we did not include further core attributes or correlates of PSM (cf. Lines & Denstadli, 2004).

In these additional attributes, we randomly vary whether our hypothetical public servants are university or high school-educated; whether they are at an administrative support rank or professional rank; whether they have superior, inferior or comparable salaries to colleagues with similar responsibilities; and whether they joined the public sector in 2005, 2010 or 2015.¹³

¹² For contracts, we adapted the wording of values in Chile and Kosovo to local terminology. In Chile, this required us to differentiate two types of temporary contracts. Discretionary appointments were termed ‘Direct appointments’ in Chile and Uganda, ‘Appointed without Competition’ in Ghana and Malawi, and ‘Appointed based on previous connections’ in Kosovo. Merit competitions are officially termed ‘Public Competitions’ in Chile. In Ghana and Malawi, they are delineated descriptively as ‘competitive exam or interview processes’, in Uganda as ‘examinations’ and in Kosovo as ‘written examinations and personal interviews’

¹³ As with the other attribute values, we allowed for minor variation in wording to foster local understanding while safeguarding comparability.

Adding these additional attributes enhances the realism of the presented profiles. In addition, their inclusion addresses concerns with ‘confounding’ respondent associations in survey experiments (cf. Dafoe, Zhang, & Caughey, 2018). For instance, if respondents associate temporary contracts with a lower rank, and, at the same time, a lower rank with less PSM, they *might* select profiles with temporary contracts as featuring low PSM not because of temporary contracts, but because of their association of such contracts with lower ranks. Specifying ranks of public servants in the experiment (alongside other potential confounders, such as education, years of service and pay) blocks such confounding.

RESULTS

We estimated linear probability models relating PSM to varying values of our six attributes (see Hainmueller et al., 2014, for more detail on the statistical analysis of conjoints).¹⁴ Table 2 details our regression results. Estimates in the table represent average marginal component effects (AMCE) of each attribute value over baseline values. AMCEs are the difference in probability that a respondent would find a public servant with a certain attribute more or less willing to make a personal sacrifice for the good of society, relative to a public servant with a baseline value.

In Ghana, for instance, respondents are more likely to find public servants with university (relative to the baseline value of high school) education and public servants hired through competitive exams or interviews (relative to appointments without competition) to be significantly *more* willing to make sacrifices for the good of society; public servants on temporary contracts (relative to permanent contracts) and with inferior salaries (relative to colleagues with average salaries) are

¹⁴ In Africa, where respondents were presented with two profile comparisons, we clustered standard errors by respondent.

found to be *less* willing to make personal sacrifices for the good of society; year of appointment, rank and superior salaries, by contrast, have no significant effects.

To ease interpretation, figures 2 and 3 compare the conjoint effects of contract types and recruitment practices across countries.

Consider, first, the conjoint effects of permanent vs. temporary contracts (figure 3). Consistent with **H2**, temporary contracts are, relative to permanent contracts, associated with *lower* PSM in Ghana and Kosovo. Consistent with **H4**, however, temporary contracts are associated with significantly *higher* PSM in Uganda. In Malawi and Chile, by contrast, they have no significant effects. Our results thus suggest that the effects of tenure protections are context specific.

Figure 2: Temporary Contracts and Public Service Motivation

<FIGURE 2 ABOUT HERE>

The conjoint effects of merit competitions suggest that Weber's (1978: 959) hypothesis about merit recruitment applies in many – but not all – countries (figure 3). In line with **H1**, we find that competitions for public sector positions are, compared to recruitment through discretionary appointments, positively associated with greater PSM in four countries. Competitive recruitment rather than the precise selection method used appears to be at cause. Both competitive interview processes and competitive written examinations have positive effects and their sizes are statistically indistinguishable in Malawi and Ghana.¹⁵

¹⁵ In Kosovo, the AMCE of exams *and* interviews is statistically significantly larger than the effect of interviews only. This may be because exams are more effective than interviews, or because multiple assessments are more effective than single assessments.

Figure 3: Merit Competitions for Recruitment and Public Service Motivation

<FIGURE 3>

In Chile, by contrast, we observe a null effect (despite the much larger sample size and statistical power in Chile). Conjoint effects of merit competitions thus vary. They are often associated with higher PSM, though need not be so. At the same time, we do not find any evidence for **H3**: that discretionary appointments are, relative to merit competitions, associated with higher levels of PSM.

The findings for other attributes – education, position, pay and year of appointment – enhance confidence in the plausibility of our merit and tenure estimates: estimates for other attributes are congruent with most prior studies (table 2). University (relative to high school) education is significantly associated with greater PSM in Ghana, Kosovo and Uganda (with insignificant effects in Chile and Malawi). Similarly, in Ritz's et al. (2016) literature review, most studies found either positive or insignificant effects of higher education levels. The year of appointment was not a significant predictor in any of the surveyed countries; prior studies find mixed or insignificant effects for years of public sector experience (Ritz et al., 2016). Similarly, pay is an insignificant predictor in the majority of surveyed countries, with superior (inferior) pay significantly associated with greater (lower) PSM in only one country each. Though the results in the literature are mixed, null-effects of pay are quite common (Ritz et al. 2016). Lastly, higher ranks (professional rather than administrative support) were insignificant in four of five countries. Prior studies are mixed, but tending to find positive effects (Ritz et al., 2016).

In short, the effects we observe for other PSM antecedents in our conjoint experiment are plausible in light of prior studies, but equally vary across countries. This lends further credence to our core finding: that merit and, in particular, tenure have differential associations with PSM across countries.

Table 2: Conjoint Results by Country

Attribute	Level	Kosovo		Chile		Malawi		Uganda		Ghana	
		Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Contract	Temporary contract	-0.075***	0.018	-0.030 (Shorter-term)	0.020	0.002	0.017	0.072***	0.025	-0.110***	0.016
				-0.011 (Annual contracts)	0.020						
Education	University Degree	0.158 ***	0.024	-0.003	0.013	-0.013	0.017	0.098***	0.024	0.083***	0.015
Position	Tech.-Prof.. level	-0.036	0.023	-0.004	0.014	-0.018	0.018	0.030	0.024	0.017	0.015
Recruitment into the public sector	Merit Competition	0.181 *** (Personal interview)	0.022	-0.001 (Public Competition)	0.015	0.087*** (Competitive interview process)	0.022	0.162*** (Examination)	0.023	0.216*** (Competitive interview process)	0.017
		0.255 *** (Written exam & personal interview)	0.022			0.081*** (Competitive exam process)	0.021			0.212*** (Competitive exam process)	0.018
Salary relative to colleagues with similar responsibilities	Inferior	-0.003	0.021	-0.019	0.014	-0.006	0.021	-0.050	0.028	-0.149***	0.0180
Salary relative to colleagues with similar responsibilities	Superior	-0.040	0.021	-0.001	0.013	0.058**	0.021	-0.044	0.028	0.014	0.018
Year appointment into public sector	2010	-0.018 (2008)	0.021	0.023	0.014	0.017	0.021	-0.009 (2015)	0.024	-0.020	0.017
Year appointment into public sector	2015	-0.005 (2010)	0.021	0.023	0.013	-0.026	0.021			0.027	0.018
# of Conjoint Observations		3,130		8,384		3,192		1,820		4,228	

Notes: Signif. codes: '***' 0.001 '**' 0.01 '*' 0.05

ROBUSTNESS CHECKS

Several robustness checks enhance confidence in the validity of our finding (see Appendices A4 and A5).

First, we assessed whether respondents systematically evaluate public servants similar to themselves more positively – and found this not to be the case. In most countries, respondents on temporary vs. permanent contracts do not evaluate the effects of temporary contracts differently; high school graduates do not provide statistically significantly different effects for the effect of university education than university graduates; and respondents at different ranks in the hierarchy do not assess the effects of professional vs. administrative support ranks differently.

Second, we assessed whether respondents engage in motivated reasoning in favor of management practices preferred by the incumbent government. If this were the case, respondents closer to government should provide different estimates. We measure proximity to government with ideological alignment: whether respondents place themselves, on a 0-10 left-right ideological scale, on the same point where they place government.¹⁶ For most estimates, we do not find statistically significant differences between respondents who are ideologically aligned with government and those that are unaligned.

¹⁶ To enhance the realism of our ideological alignment questions, we adapted them slightly to local contexts. In Chile, we measured proximity to the President – rather than ‘government’ more generally. In Africa, we adapted the 0-10 scale from a general left-right scale to an issue-specific left-right scale which our cognitive interviews suggested would be more easily understood (where 0 denotes complete agreement with the statement ‘Government ownership of business and industry should be increased’ and 10 denotes complete agreement with ‘Private ownership of business and industry should be increased’). Similarly, in Kosovo, respondents were asked to assess on a 0-10 scale whether they – and the government – are in favour of minimising state ownership of business and industry.

Third, our results suggest that cross-country differences in conjoint phrasings and data collection are not threatening our core inferences about diverging effects of management practices. For tenure, we find diverging effects of temporary and permanent contracts even when restricting the sample to our three African countries with exactly the same wording for this attribute, and the same data collection approach (in-person quota samples). For merit competitions, we similarly observe variation in effects across countries (Chile and Kosovo) with the same data collection approach (online population surveys). Moreover, we find that within-country variation in the type of merit recruitment procedures – oral and written exams – does not alter their positive association with PSM. Cross-country differences in conjoint phrasings of merit competitions are, in comparison, arguably more minute, rendering it unlikely that they drive cross-country-differences in effects.

DISCUSSION AND CONCLUSIONS

What effects do civil service management practices have on the PSM of civil servants? This paper assessed two practices which are central to Weberian bureaucracy and a frequent managerial reform target: merit competitions for recruitment (versus discretionary appointments) and permanent tenure (versus temporary job contracts). Theoretically, drawing on social identity theory and person-organization fit, we argued that each of these management practices can foster or hinder PSM. The results of our five-country conjoint experiments suggest that these diverging theoretical expectations have empirical merit.

Merit competitions are associated with greater PSM in four countries, yet not a fifth. This suggests Weber's (1978: 959) merit hypothesis holds in many – but not all – countries. At the same time, temporary contracts are associated with greater PSM in some contexts, yet lower or no significantly different PSM in others. Contrary to notions of Weberian bureaucracy, our results suggest that

effects of permanent contracts vary – and, more generally, that civil service management practices have different effects in different country contexts.

This finding has several important implications. First, for practitioners, our findings suggest that expanding merit recruitment procedures can foster PSM in most settings. Particularly in developing countries, such procedures remain in short supply and should thus be prioritized (Meyer-Sahling, Schuster and Mikkelsen, 2018). Expanding merit recruitment is not a universal panacea for PSM, however, as the null effect in Chile underscored. At the same time, governments should tread with caution when considering tenure reforms. Tenure protections can boost PSM or backfire, depending on context. Governments thus need to evaluate locally, within their country contexts, how tenure reforms would affect the PSM of public servants.

From a scholarly perspective, our findings add, most immediately, to the literature on organizational antecedents of PSM. Our paper provides further evidence that PSM can be molded by organizations (cf. Kjeldsen, 2014). Contrary to prior studies of civil service management practices and PSM, we thereby drew our inferences from an experimental design which allowed us to exogenously manipulate personnel management practices (albeit of hypothetical public servants). This allowed us to address concerns about omitted variable and reverse causality biases in the partial-correlation-based existing literature.

Importantly, going beyond prior studies of organizational antecedents of PSM, we also show that the same organizational antecedents have contrasting (perceived) effects in different countries. For scholars debating the merits of Weberian versus managerial approaches to civil service management, the implication is clear: neither side is right. Managerial civil service practices need *not* crowd out PSM, and Weberian civil service practices need *not* be superior in fostering a public

service ethic – though, as a caveat, Weber appears to have been right about merit recruitment in most countries.

Cross-country heterogeneity in effects challenges a common practice in public administration research: drawing inferences about the effects of management practices from single countries or cross-country averages (e.g. Hammerschmid et al., 2018). Most prior studies have drawn inferences from a single country (cf. Ritz et al., 2016) or average cross-country effects (e.g. Esteve et al. 2017). Our results suggest that such inferences are likely to face serious external validity limitations. Instead, they suggest that management practices have different effects in different countries.

This finding has important ramifications for the nature of knowledge in public administration: macro-level theories about the effects of organizational practices cannot be assumed to be generalizable across national contexts. Instead, these contexts shape the effects of management practices. Knowledge production in public administration research should thus focus on middle-range theories which identify the contexts under which management practices have positive or negative effects. While the importance of middle-range theories about management practices in public administration research has long been recognized (see, classically, Behn, 1987), our study is, to our knowledge, the first to provide systematic cross-country experimental evidence for the validity of this claim.

In doing so, our study also underscores the importance of replications in public administration (cf. Walker, James, & Brewer, 2017). Scholarly incentives are often tilted against replications or, as in our case, time- and funding-intensive multi-country experiments. Journals often value novel theories and procedures, with positive results – rather than replications or repeat procedures which fail to reject null hypotheses in at least some contexts (Witteloostuijn, 2016). Compounded by the heavy reliance on micro-level data in public administration research, this enhances the risk that

false positives and findings with limited external validity are disproportionately reported. Our study underscores that this risk is real, and that the lack of cross-country replication undermines knowledge accumulation in public administration. Helpfully, recent public administration studies have started assessing heterogeneous effects across countries with similar research designs (e.g. Lee, Moon, & Kim, 2017). However, none have assessed experimentally whether the same organizational practices have different effects in different countries. Our study underscores the importance of doing so.

With that, we hope to encourage more scholars to implement cross-country experiments with governments and public servants. Our study suggests that conjoint experiments with public servants are one fruitful method for cross-country experimental research. Our design – a profile comparison of hypothetical public servants – can be extended to assess the effects of other management practices, for instance, by having public servants choose between leaders with randomly varying leadership practices or by assessing the effects of performance pay.

These contributions notwithstanding, our study is not without limitations. These point to several avenues for future research. First, methodologically, we relied on a conjoint survey experiment rather than a field experiment. Our conjoint experiment enabled us to exogenously manipulate the values of civil service management practices in a profile comparison. As a flipside, however, it implicated that inferences about management practices are based on perceptions of respondents about the PSM of public servants with certain attributes. While our respondents interact with colleagues with such attributes on a daily basis – and are thus arguably well-placed to provide valid responses – it remains for future studies to assess whether our inferences hold in field experiments and with behavioral measures. Related, a field experiment with the same treatment across countries could go further in *ensuring* cross-country comparability of management practices. While our

careful case selection allows us to assess the conjoint effects of *similar* management practices, we cannot rule out cross-country differences in, for instance, the detail of merit recruitment procedures.

Second, we drew inferences about the effects on PSM based on an outcome measure focused on a single PSM dimension: self-sacrifice. We thus rely on the assumption that observed effects on self-sacrifice are generalizable to PSM. This assumption appears plausible for at least two reasons. In a range of prior studies, self-sacrifice has been found to be the most impactful PSM dimension (see, e.g. Clerkin & Cogburn, 2012). Moreover, cross-country studies find significant correlations between distinct PSM dimensions (Kim et al., 2013). Whether this assumption holds empirically, however, remains for future research to explore.

Third, our data comes from five countries in three developing regions. We thus shed light on management practices in regions neglected by public administration research (Ritz et al., 2016). Future experimental research would do well to assess whether the effects of civil service management practices similarly vary in countries of the global north.

Lastly, our research design does not enable us to causally identify *why* we observe different effects in different countries. Instead, it points to the importance of combining micro-level data with middle-range theorizing in future studies to understand why similar management practices in replicated survey or field experiments have diverging effects across countries. Our ambition in this paper was more modest: to provide theoretical arguments for the possibility of varying effects and provide suggestive empirical evidence that such variation in effects exists.

The very diversity in cultural, political and socio-economic contexts we sought in our case selection, of course, implies that many factors might explain cross-country differences in effects. With that said, our findings lend themselves to *some* suggestive theorizing to explain *part* of the

cross-country variation we observe. Most notably, merit competitions are associated with greater PSM in four developing countries – yet not the OECD country in our sample (Chile). In Chile, we also observed a null effect for tenure protections – despite a much larger sample. As one plausible explanation, in OECD countries with greater public sector integrity, public managers may be less prone to abuse discretion over recruitment and dismissals to favor less public service-motivated employees. As a result, discretionary appointments (rather than merit competitions) and temporary (rather than permanent) contracts are not associated with lower PSM. Civil service management practices might thus have diverging effects in developing and OECD countries.

It remains for future studies to more systematically theorize – and test through cross-country experiments – such context-specific diverging effects of management practices. Similarly, it remains for future studies to take our cross-country experimental research approach to management practices beyond recruitment and job protections to assess which management practices have heterogeneous – and which homogenous – effects. We thus conclude with a call for more cross-country experimental research and theorizing in public administration to understand which management practices work in which country and institutional contexts.

REFERENCES

- Anderson, C. J., and Tverdova, Y. V. 2003. Corruption, political allegiances, and attitudes toward government in contemporary democracies. *American Journal of Political Science* 47(1): 91.
- Ashraf, N., Bandiera, O., and Jack, B. K. 2014. No margin, no mission? a field experiment on incentives for public service delivery. *Journal of Public Economics* 120: 1-17.
- Battaglio, R. Paul, and French, P. E. 2016. Public service motivation, public management reform, and organizational socialization. *Public Personnel Management* 45(2): 123-147.
- Behn, R. D. 1987. The nature of knowledge about public management: Lessons for research and teaching from our knowledge about chess and warfare. *Journal of Policy Analysis and Management* 7(1): 200.
- Bellé, N., and Ongaro, E. 2014. NPM, administrative reforms and public service motivation: Improving the dialogue between research agendas. *International Review of Administrative sciences* 80(2): 382-400.
- Berman, E. M. 2015. HRM in development: Lessons and frontiers. *Public Administration and Development* 35(2): 113-127.
- Brænder, M., and Andersen, L.B. 2013. Does deployment to war affect public service motivation? a panel study of soldiers before and after their service in Afghanistan. *Public Administration Review* 73(3): 466-477.
- Brewer, G. A., and Kellough, J.E. 2016. Administrative values and public personnel management. *Public Personnel Management* 45(2): 171-189.
- Christensen, R.K., Paarlberg, L. and Perry, J.L. 2017. Public service motivation research: Lessons for practice. *Public Administration Review* 77(4): 529-542.
- Clerkin, R., and Cogburn, J. D. 2012. The Dimensions of public service motivation and sector work preferences. *Review of Public Personnel Administration* 32(3): 209-235.
- Dafoe, A., Zhang, B., and Caughey, D. 2018. Information equivalence in survey experiments. *Political analysis* 26(4): 399-416.
- Dal Bo, E., Finan, F., and Rossi, M. 2013. Strengthening state capabilities: The role of financial incentives in the call to public service. *Quarterly Journal of Economics* 128(3): 1169-1218.
- Esteve, M., Schuster, C., Albareda, A., and Losada, C. 2017. The effects of doing more with less in the public sector: Evidence from a large-scale survey. *Public Administration Review* 77(4): 544-553.
- Feeney, M., and Rainey, H. 2010. Personnel Flexibility in Public and Nonprofit Organizations: Distinctions Due to Institutional and Political Accountability. *Journal of Public Administration Research and Theory* 20(4): 801-26.

Giauque, D., Anderfuhren-Biget, S. and Varone, F. 2013. HRM practices, intrinsic motivators, and organizational performance in the public sector. *Public Personnel Management* 42(2): 123-150.

Giauque, D., Anderfuhren-Biget, S. and Varone, F. 2015. HRM practices sustaining PSM: when values congruency matters. *International Journal of Public Sector Performance Management* 2(3): 202.

Gould-Williams, J.S., Bottomley, P., Redman, T., Snape, E., Bishop, D., Limpanitgul, T., and Mostafa, A.M.S. 2013. Civic duty and employee outcomes: Do high commitment human resource practices and work overload matter? *Public Administration* 92(4): 937-953.

Gould-Williams, J. S. 2016. Managers' motives for investing in HR practices and their implications for public service motivation. *International Journal of Manpower* 37(5): 764-776.

Hainmueller, J., Hangartner, D., and Yamamoto, T. 2015. Validating vignette and conjoint survey experiments against real-world behavior. *Proceedings of the National Academy of Sciences of the United States of America* 112(8): 2395-400.

Hainmueller, J., Hopkins, D.J. and Yamamoto, T. 2014. Causal inference in conjoint analysis: Understanding multidimensional choices via stated preference experiments. *Political Analysis* 22(1): 1-30.

Hammerschmid, G., Van de Walle, S., Andrews, R. and Sayed Mostafa, A.M. 2018. New Public Management reforms in Europe and their effects: findings from a 20-country top executive survey. *International Review of Administrative Sciences*, early view: 1-20

Homberg, F., McCarthy, D., and Tabvuma, V. 2015. A meta-analysis of the relationship between public service motivation and job satisfaction. *Public Administration Review* 75(5): 711-722.

Homberg, F., & Vogel, R. (2016). Human resource management (HRM) and public service motivation (PSM). *International Journal of Manpower*, 37(5): 746-763

Jacobsen, C.B., Hvitved, J. and Andersen, L.B. 2014. Command and motivation: How the perception of external interventions relates to intrinsic motivation and public service motivation. *Public Administration* 92(4): 790-806.

Kim, S. (2012). Does person-organization fit matter in the public-sector? Testing the mediating effect of person-organization fit in the relationship between public service motivation and work attitudes. *Public Administration Review*, 72(6): 830-840.

Kim, S., Vandenabeele, W., Wright, B.E., Andersen, L.B., Cerase, F.P., Christensen, R.K., Desmarais, C., Koumenta, M., Leisink, P., Liu, B., Palidauskaite, J., Pedersen, L.H., Perry, J.L., Ritz, A., Taylor, J., and De Vivo, P. 2013. Investigating the structure and meaning of public service motivation across populations: Developing an international instrument and addressing issues of measurement invariance. *Journal of Public Administration Research and Theory* 23(1): 79-102.

Kim, S. and Kim, S. 2016. National Culture and Social Desirability Bias in Measuring Public Service Motivation. *Administration & Society*, 48(4), 444-476

- Kjeldsen, A.M. 2014. Dynamics of public service motivation: Attraction-selection and socialization in the production and regulation of social services. *Public Administration Review* 74(1): 101-112.
- Kristof-Brown, A.L., Zimmerman, R.D., & Johnson, E.C. (2005). Consequences of Individuals'fit At Work: A Meta-Analysis of Person–Job, Person–Organization, Person–Group, And Person–Supervisor Fit. *Personnel Psychology*, 58(2), 281-342.
- Lee, M.J., Moon, M.J., and Kim, J. 2017. Insights from experiments with duopoly games: Rational incremental decision-making. *Public Management Review* 19(9): 1328-1351.
- Lines, R., and Denstadli, J.M. 2004. Information overload in conjoint experiments. *International Journal of Market Research* 46(3): 297-310.
- Meyer-Sahling, J.-H., and Mikkelsen, K.S. 2016. Civil service laws, merit, politicization, and corruption: The perspective of public officials from five east european countries. *Public Administration* 94(4): 1105-1123.
- Meyer-Sahling, J.H., Schuster, C. and Mikkelsen, K.S. 2018. Civil Service Management in Developing Countries: What Works? Evidence from a Survey with 23,000 Public Servants in Africa, Asia, Eastern Europe and Latin America. London: Report for the *UK Department for International Development*
- Meyer, R.E., Egger-Peitler, I., Ilerer, M.A., and Hammerschmid, G. 2014. Of bureaucrats and passionate public managers: Institutional logics, executive identities, and public service motivation. *Public Administration* 92(4): 861-885.
- Mostafa, A.M.S., Gould-Williams, J.S., and Bottomley, P. 2015. High-Performance human resource practices and employee outcomes: The mediating role of public service motivation. *Public Administration Review* 75(5): 747-757.
- Moynihan, D.P. 2010. A workforce of cynics? the effects of contemporary reforms on public service motivation. *International Public Management Journal* 13(1): 24-34.
- Moynihan, D.P., and Pandey, S.K. 2007. The role of organizations in fostering public service motivation. *Public Administration Review* 67(1): 40-53.
- Neumann, O. 2016. Does misfit loom larger than fit? experimental evidence on motivational person-job fit, public service motivation, and prospect theory. F. Homberg and R. Vogel (eds.). *International Journal of Manpower* 37(5): 822-839.
- Oliveros, V., and Schuster, C. 2018. Merit, tenure, and bureaucratic behavior: Evidence from a conjoint experiment in the Dominican Republic. *Comparative Political Studies* 51(6): 759-792.
- Paarlberg, L.E., and Lavigna, B. 2010. Transformational leadership and public service motivation: Driving individual and organizational performance. *Public Administration Review* 70(5): 710-718.
- Park, S. M., and Kim, M. Y. 2016. Antecedents and outcomes of non-profit public service motivation in Korean NPOs. *International Journal of Manpower* 37(5): 777-803.

- Peng, S., Pandey, S., & Pandey, S.K. (2015). Is there a nonprofit advantage? Examining the impact of institutional context on individual–organizational value congruence. *Public Administration Review*, 75(4), 585-596.
- Perry, J.L. 2015. Civil service systems and public service motivation. In F. Van der Meer, M. Raadschelders, and J. Toonen (eds.) *Comparative civil service systems in the 21st century*, 223-236. London: Palgrave
- . 1996. Measuring public service motivation: An assessment of construct reliability and validity. *Journal of Public Administration Research and Theory*: 6: 5-22.
- Perry, J.L., and Wise, L.R. 1990. The motivational bases of public service. *Public Administration Review* 50(3): 367.
- Rainey, H.G., and Steinbauer, P. 1999. Galloping elephants: Developing elements of a theory of effective government organizations. *Journal of Public Administration Research and Theory*, 9(1): 1–32
- Rauch, J.E., and Evans, P.B. 2000. Bureaucratic structure and bureaucratic performance in less developed countries. *Journal of Public Economics* 75(1): 49-71.
- Ritz, A., Brewer, G.A., and Neumann, O. 2016. Public service motivation: A systematic literature review and outlook. *Public Administration Review* 76(3): 414-426.
- Schein, E.H. (1968). Organizational socialization and the profession of management. *Industrial Management Review*, 9: 1–16.
- Schott, C., and Pronk, J.L.J. 2014. Investigating and explaining organizational antecedents of PSM. *Evidence-based HRM: A Global Forum for Empirical Scholarship* 2(1): 28-56.
- Walker, R.M., James, O., and Brewer, G. A. 2017. Replication, experiments and knowledge in public management research. *Public Management Review* 19(9): 1221-1234.
- Weber, M. 1978. *Economy and society: an outline of interpretive sociology*. Berkeley: University of California Press.
- Werbelt, J.D., & Johnson, D. J. (2001). The use of person–group fit for employment selection: A missing link in person–environment fit. *Human Resource Management* 40(3), 227-240.
- Van Witteloostuijn, A. 2016. What happened to popperian falsification? publishing neutral and negative findings. *Cross Cultural & Strategic Management* 23(3): 481-508.

APPENDIX

Table A1: Country Characteristics

	Income (World Bank Classification)	Democracy (Freedom House Classification)	Corruption Perception Rank (Transparency International)
Chile	High income	Free (94/100)	1st Quintile Rank (Score: 67/100)
Ghana	Lower middle income	Free (83/100)	3rd Quintile Rank (Score: 40/100)
Malawi	Low income	Partly Free (63/100)	4th Quintile Rank (Score: 31/100)
Uganda	Lower middle income	Partly Free (37/100)	5th Quintile Rank (Score: 26/100)
Kosovo	Lower middle income	Partly Free (52/100)	3rd Quintile Rank (Score: 39/100)

Table A2: Survey Representativeness in Chile and Ghana

	Survey sample (conjoint respondents)	Survey population (all central government)	Survey sample (conjoint respondents, excl. administrative assistants)	Survey population (excl. administrative assistants)
Percentage female	56.1%	58%	46.8%	45%
Percentage university educated	49.6%	50%	80.4%	74%
Mean age	39 ^a	n/a	35	42

Notes: (a) banded age variable recoded using midpoints.

Sources: Direccion de Presupuestos del Ministerio de Hacienda (2017); Rasul, Rogger and Williams (2015)

Table A3: Survey Sample Demographics by Country

	Chile	Ghana	Malawi	Uganda	Kosovo	All
Survey mode	Online	In-person	In-person	In-person	Online	-
Number of respondents	5,742	1,601	1,232	1,422	2,470	12,467
Number of conjoint respondents	4,192	1,067	800	463	817	7,339
Number of conjoint iterations	One	Two	Two	Two	Two	-
Percentage female	56.1%	46.8%	21.4%	43.4%	42.7%	42.0%
Percentage university graduated	49.6%	80.4%	98.6%	87.6%	95.4%	82.3%
Percentage managers	23.1%	11.6%	13.5%	12.2%	29.5%	17.9%
Percentage technical-professional	53.6%	39.6%	26.0%	43.5%	61.0%	44.7%
Percentage administrative support	23.3%	47.4%	58.9%	43.8%	7.9%	36.3%
Mean age (in years)	39 ^a	33	27	31	34	33
Mean years of service (in years)	16	14	11	11	13	13
Percentage recruited through exams	39.9%	16.9%	38.2%	61.9%	49.6%	41.3%
Percentage on permanent contracts	40.3%	93.1%	99.2%	79.1%	96.2%	81.6%
Percentage indicating that their pay is tied to work performance	40.9%	31.5%	43.3%	17.3%	38.9%	37.7%

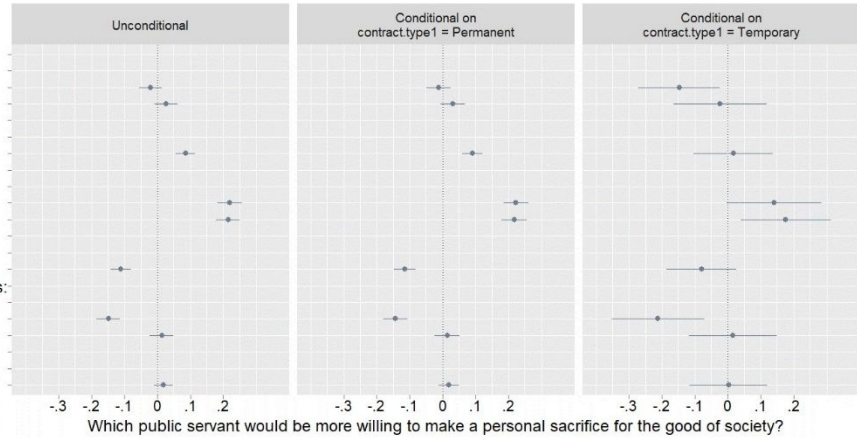
Notes: Values for full sample and complete cases. (a) banded age variable recoded using midpoints.

Figure A4. Robustness Checks: Bias due to Respondents Favoring Public Servants who Share Their Characteristics

Figure A4.1 AMCEs by Contract Type of Respondent

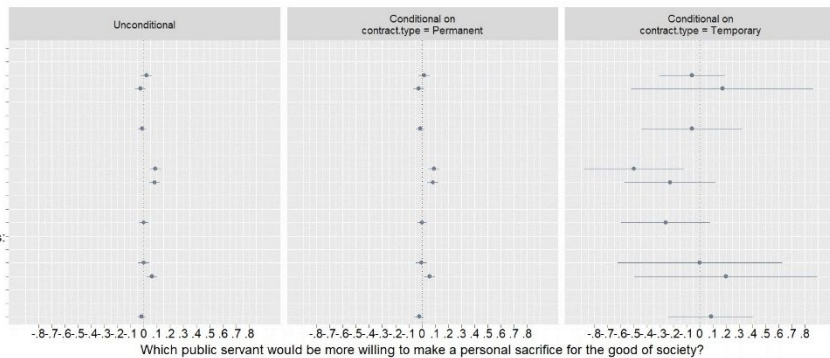
Ghana

- Year of appointment into the public sector:
- 2005
- 2010
- 2015
- Education:
- Secondary School
- University Degree (Bachelor, Master or PhD)
- Recruitment into the public sector:
- Appointed without Competition
- Recruited through Competitive Interview Process
- Recruited through Competitive Exam Process
- Contract:
- Permanent
- Temporary
- Salary relative to colleagues with similar responsibilities:
- Comparable
- Inferior
- Superior
- Position:
- Administrative Support
- Technical-Professional



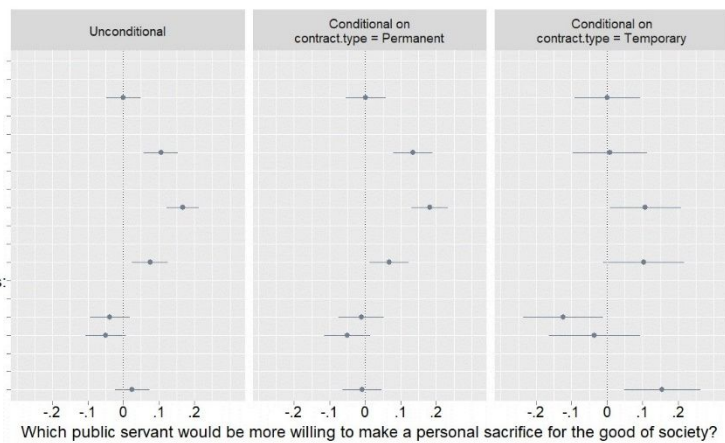
Malawi

- Year of appointment into the public sector:
- 2005
- 2010
- 2015
- Education:
- Secondary School
- University Degree (Bachelor, Master or PhD)
- Recruitment into the public sector:
- Appointed without Competition
- Recruited through Competitive Interview Process
- Recruited through Competitive Exam Process
- Contract:
- Permanent
- Temporary
- Salary (incl. allowances) relative to colleagues with similar responsibilities:
- Comparable
- Inferior
- Superior
- Position:
- Administrative Support
- Technical-Professional



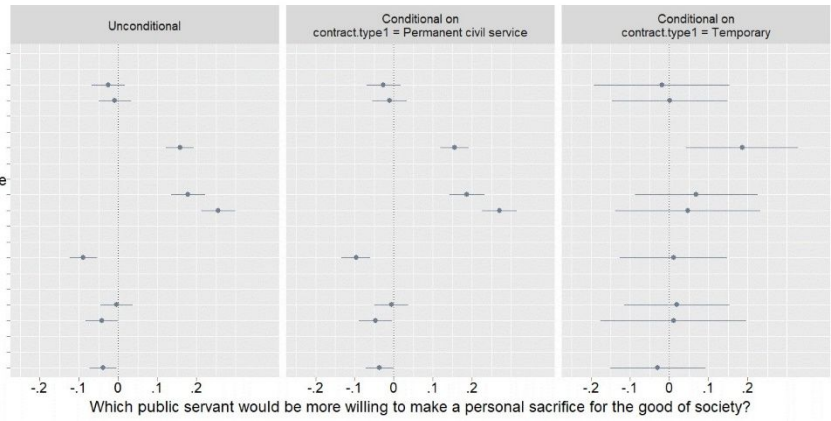
Uganda

- Year of appointment into the public sector:
- 2005
- 2015
- Education:
- Secondary School
- University Degree (Bachelor, Master or PhD)
- Recruitment into the public sector:
- Recruited through direct appointment
- Recruited through an examination
- Contract:
- Permanent
- Temporary
- Salary (incl. allowances) relative to colleagues with similar responsibilities:
- Comparable
- Inferior
- Superior
- Position:
- Administrative Support
- Technical-Professional



Kosovo

- Year of appointment into the public sector:
- 2005
- 2008
- 2010
- Education:
- Secondary School
- University Degree
- Recruitment into the public sector:
- Appointment based on previous connections of the candidate
- Personal interview
- Written examination and personal interview
- Contract:
- Career civil servant (Indefinite or permanent contract)
- Non-career civil servant (Temporary contract)
- Salary relative to colleagues with similar responsibilities:
- Comparable
- Inferior
- Superior
- Position:
- Professional level
- Technical-administrative level



Chile

- Año de ingreso al sector público:
- 2005
- 2010
- 2015
- Educación:
- Educación Media
- Título Universitario
- Modo de ingreso al sector público:
- Concurso Publico
- Contratacion Directa
- Relacion contractual:
- Contrata
- Honorario
- Planta Permanente
- Remuneracion relativa:
- Comparable a colegas en funciones similares
- Inferior a colegas en funciones similares
- Superior a colegas en funciones similares
- Estamento:
- Administrativo
- Tecnico-Profesional

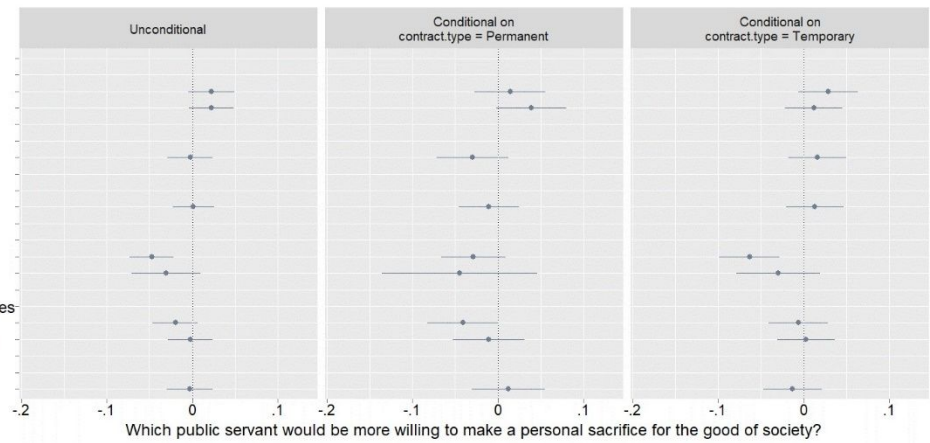
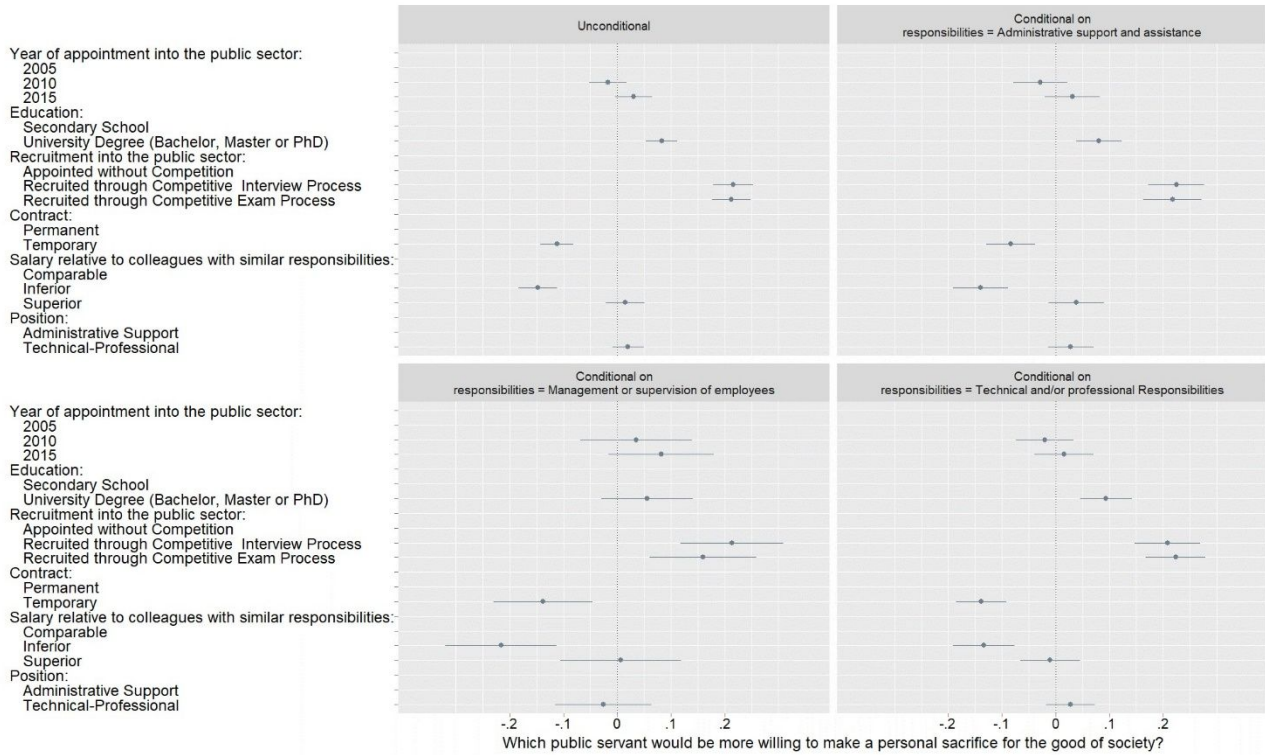
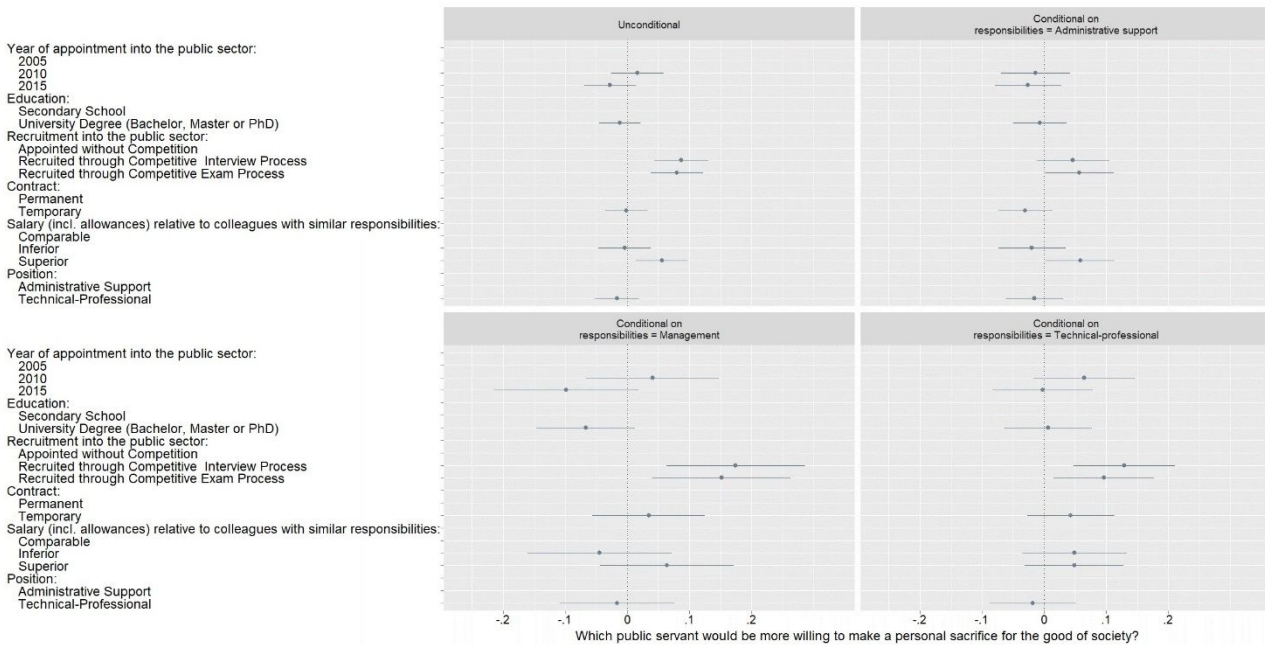


Figure A4.2 AMCEs by Rank of Respondent

Ghana



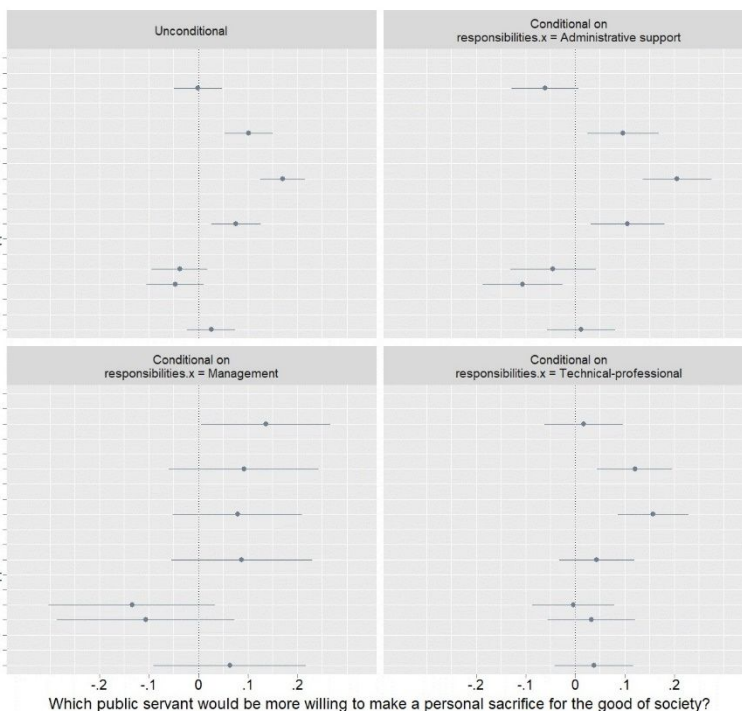
Malawi



Uganda

Year of appointment into the public sector:
 2005
 2015
 Education:
 Secondary School
 University Degree (Bachelor, Master or PhD)
 Recruitment into the public sector:
 Recruited through direct appointment
 Recruited through an examination
 Contract:
 Permanent
 Temporary
 Salary (incl. allowances) relative to colleagues with similar responsibilities:
 Comparable
 Inferior
 Superior
 Position:
 Administrative Support
 Technical-Professional

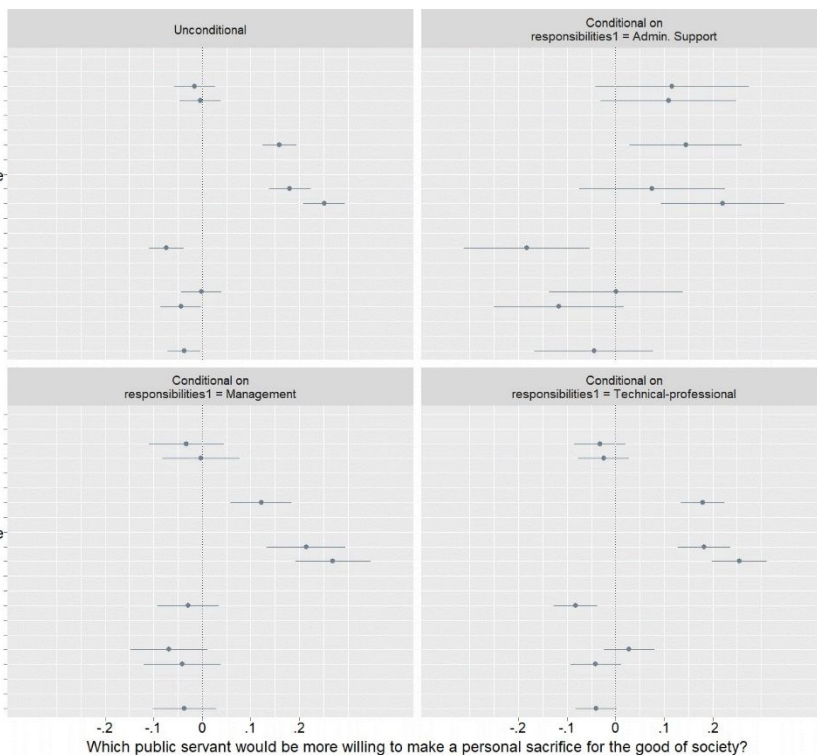
Year of appointment into the public sector:
 2005
 2015
 Education:
 Secondary School
 University Degree (Bachelor, Master or PhD)
 Recruitment into the public sector:
 Recruited through direct appointment
 Recruited through an examination
 Contract:
 Permanent
 Temporary
 Salary (incl. allowances) relative to colleagues with similar responsibilities:
 Comparable
 Inferior
 Superior
 Position:
 Administrative Support
 Technical-Professional



Kosovo

Year of appointment into the public sector:
 2005
 2008
 2010
 Education:
 Secondary School
 University Degree
 Recruitment into the public sector:
 Appointment based on previous connections of the candidate
 Personal interview
 Written examination and personal interview
 Contract:
 Career civil servant (Indefinite or permanent contract)
 Non-career civil servant (Temporary contract)
 Salary relative to colleagues with similar responsibilities:
 Comparable
 Inferior
 Superior
 Position:
 Professional level
 Technical-administrative level

Year of appointment into the public sector:
 2005
 2008
 2010
 Education:
 Secondary School
 University Degree
 Recruitment into the public sector:
 Appointment based on previous connections of the candidate
 Personal interview
 Written examination and personal interview
 Contract:
 Career civil servant (Indefinite or permanent contract)
 Non-career civil servant (Temporary contract)
 Salary relative to colleagues with similar responsibilities:
 Comparable
 Inferior
 Superior
 Position:
 Professional level
 Technical-administrative level



Chile

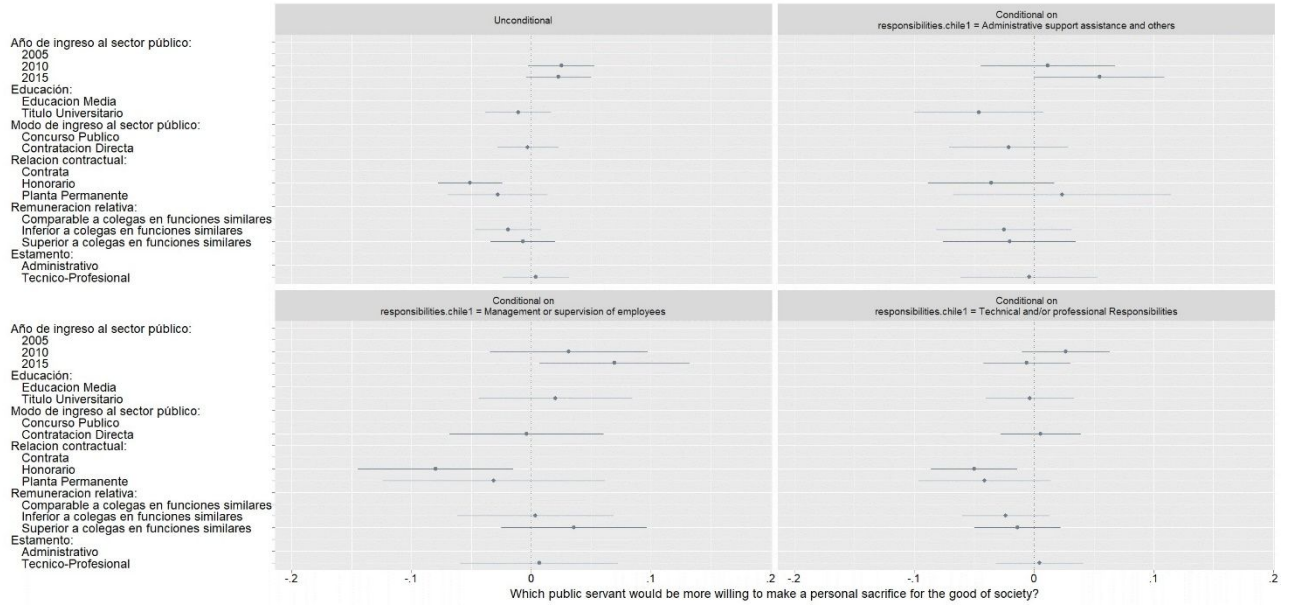
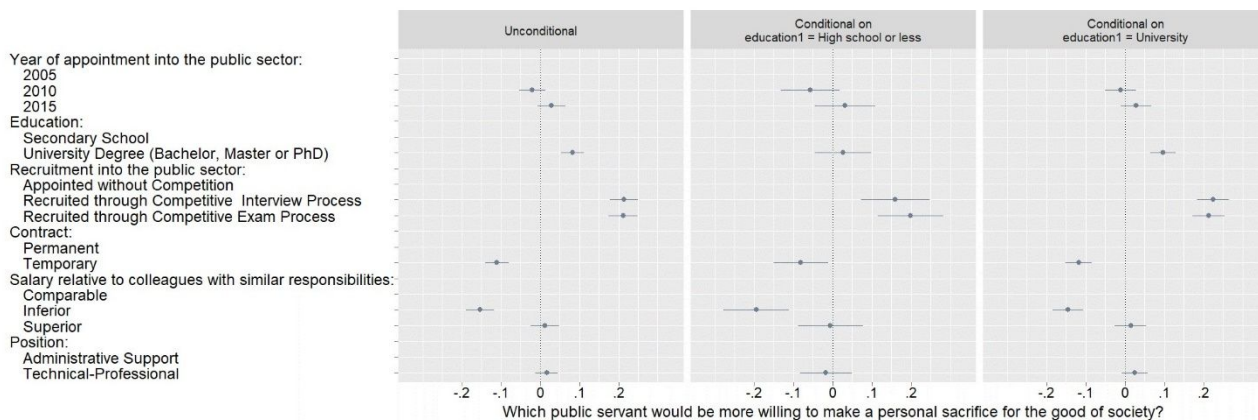
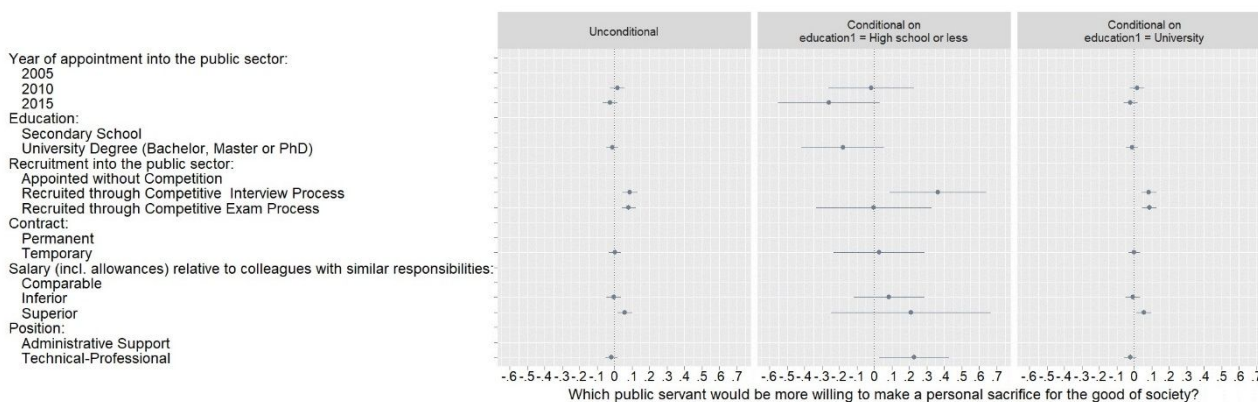


Figure A4.3. AMCEs by Education of Respondent

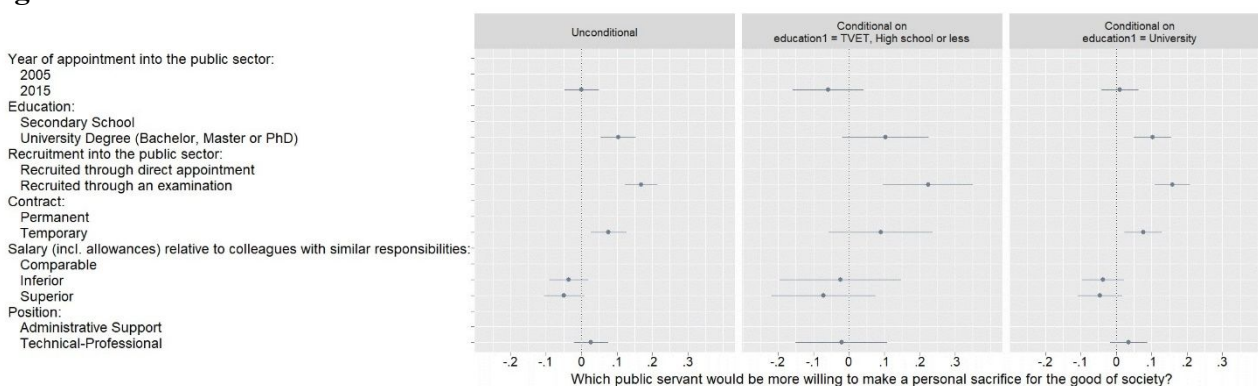
Ghana



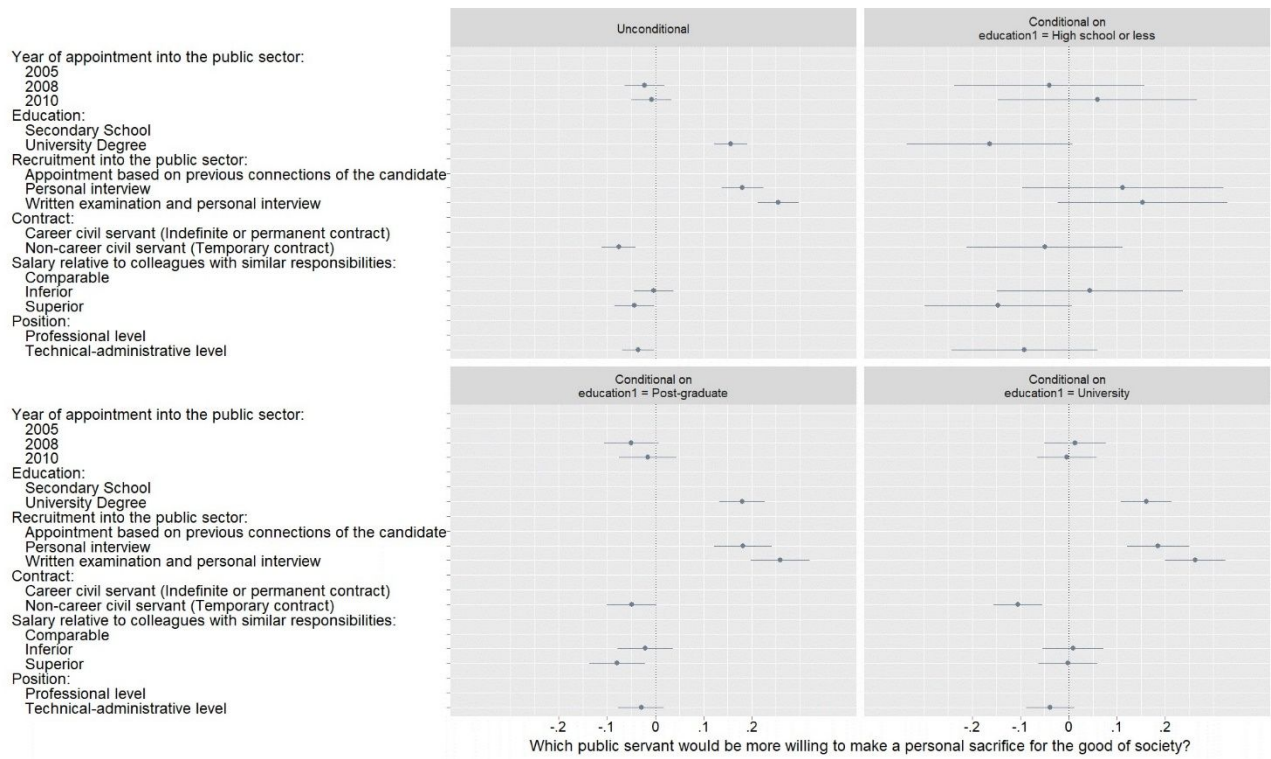
Malawi



Uganda



Kosovo



Chile

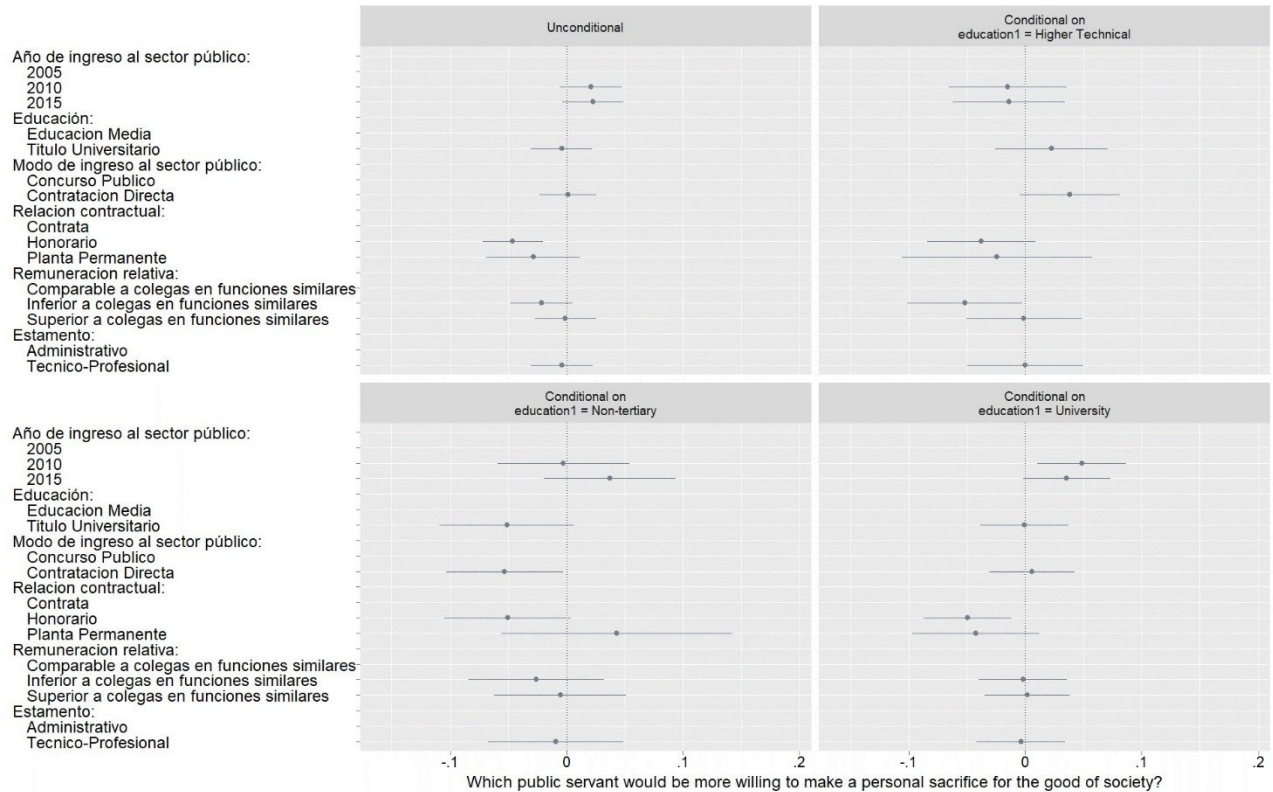
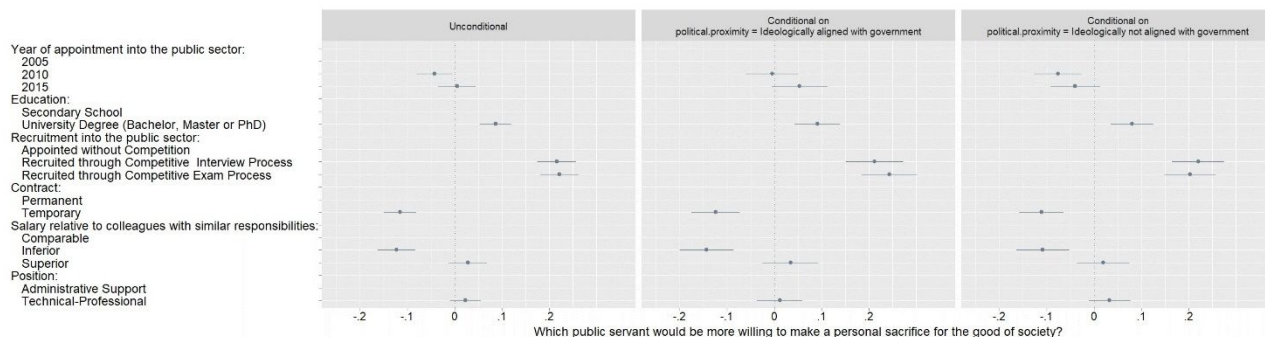
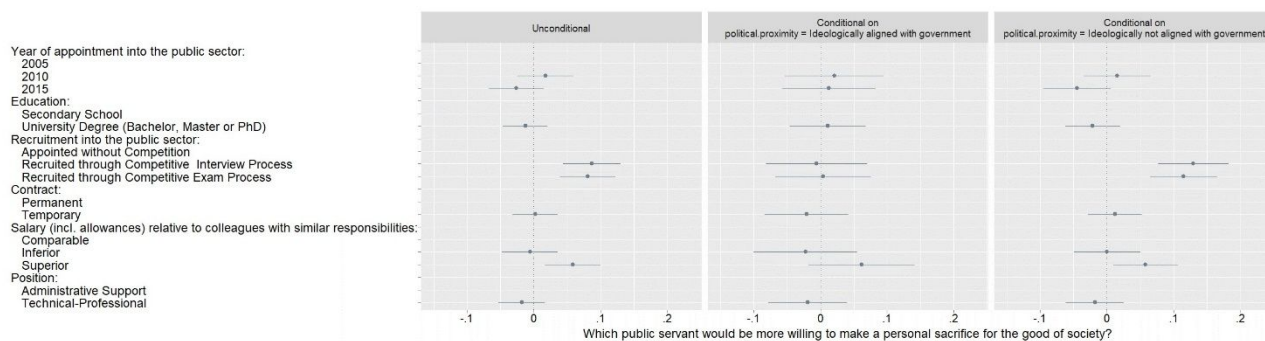


Figure A5. Robustness Check: Strategic Bias to Favor Government

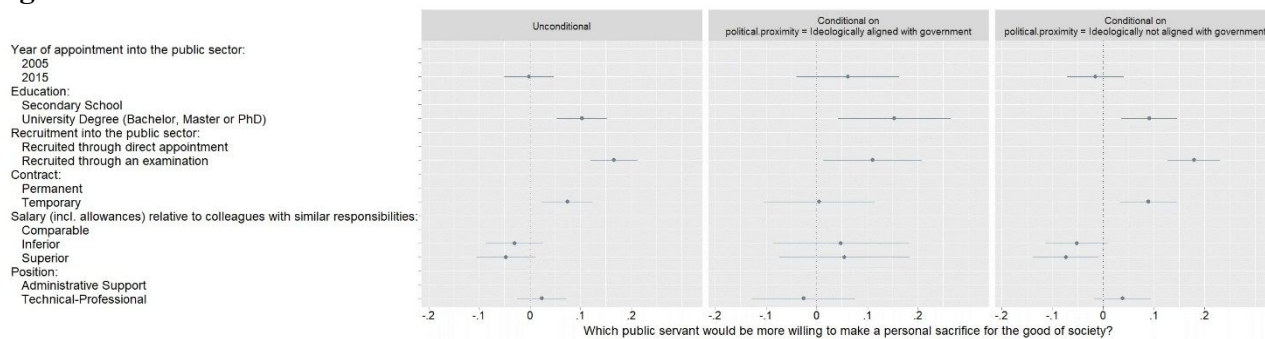
Ghana



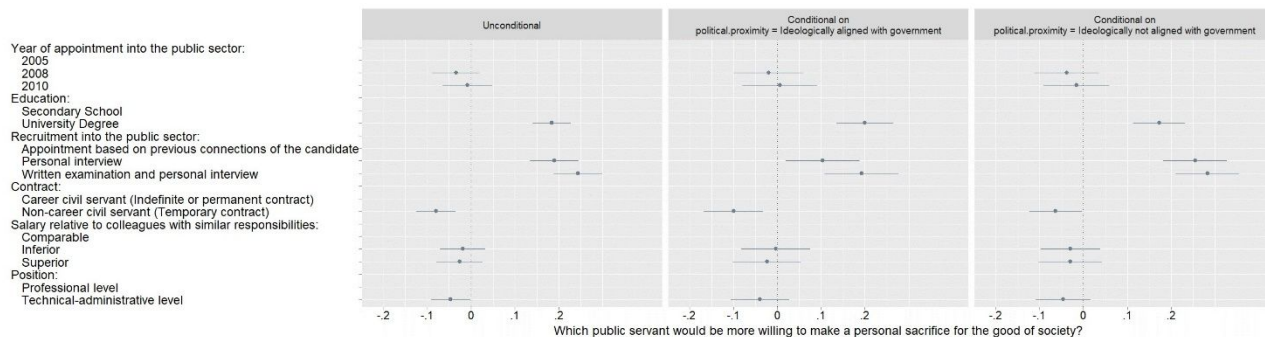
Malawi



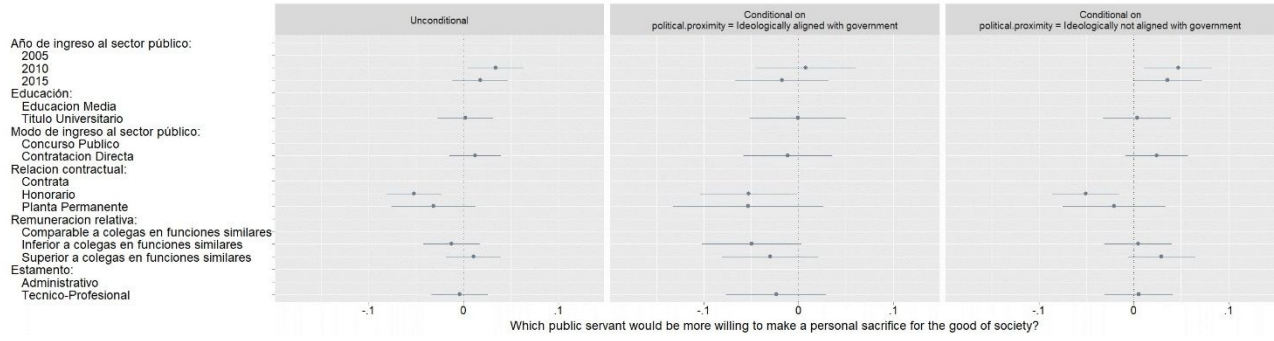
Uganda



Kosovo



Chile



Next, I will present you with a comparison of two profiles of hypothetical public servants in your institution, and would like to ask you to assess them. Please look carefully at the two profiles and then answer the questions below based on your experience in your institution.

First comparison (of two):

	Public servant 1	Public servant 2
Education	University Degree (Bachelor, Master or PhD)	Secondary School
Year of appointment into the public sector	2015	2015
Position	Administrative Support	Technical-Professional
Recruitment into the public sector	Recruited through Competitive Interview Process	Appointed without Competition
Salary (incl. allowances) relative to colleagues with similar responsibilities	Comparable	Superior
Contract	Permanent	Temporary

Which public servant would be more willing to make a personal sacrifice for the good of society?

Public servant 1



Public servant 2



Figure 1: Example Profile Comparison (Ghana)

226x152mm (96 x 96 DPI)

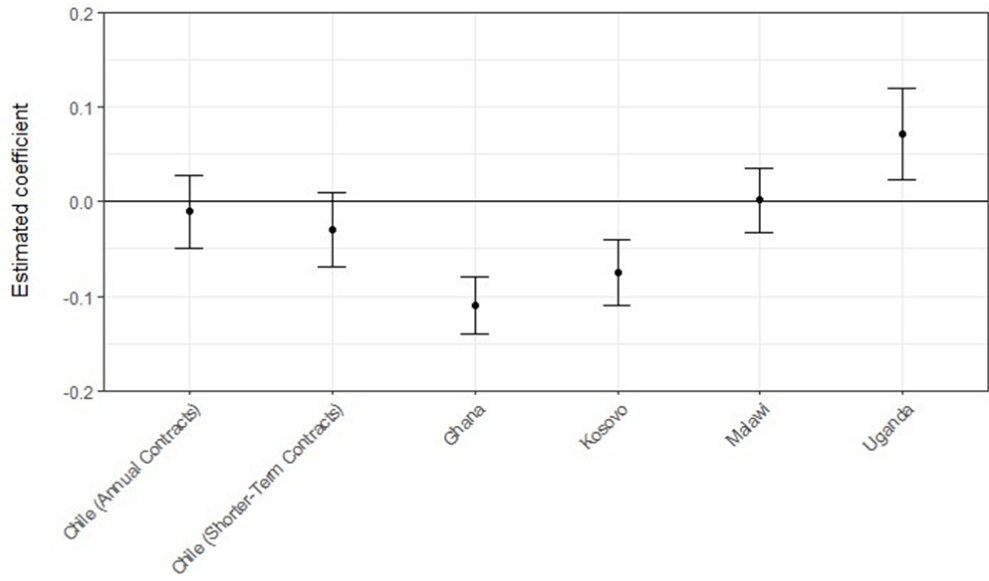


Figure 2: Temporary Contracts and Public Service Motivation

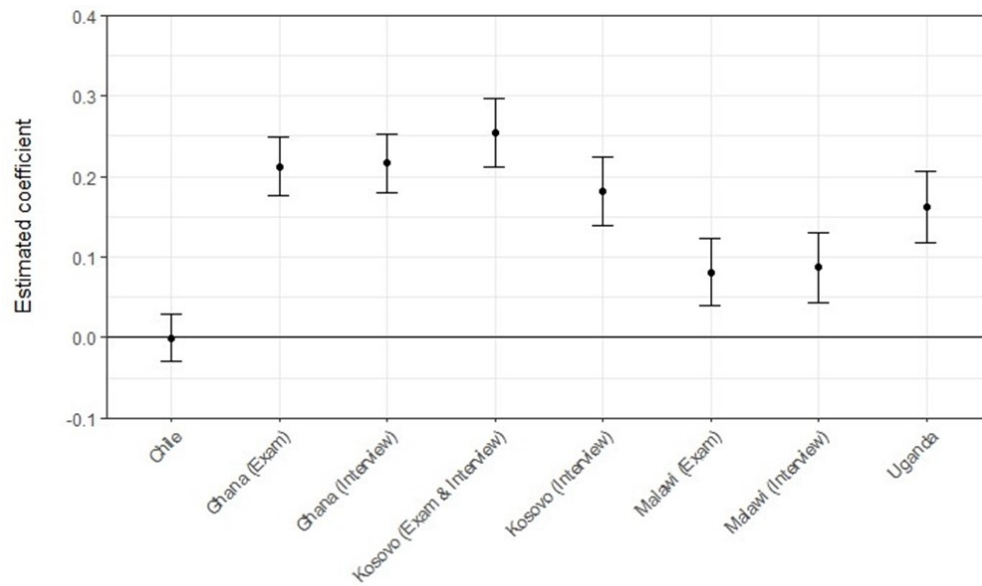


Figure 3: Merit Competitions for Recruitment and Public Service Motivation

170x104mm (150 x 150 DPI)