A Comparison of Wage Levels and Wage Inequality in the Public and Private Sectors, 1995 and 2000

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Abstract

This paper sets out to investigate relative wages and wage dispersion for formal sector workers in the private and public sectors. The paper explicitly measures the size of the public sector wage premium and offers some reasons for its existence. It also attempts to document the changing pattern of wage differentials between public and private sector employees between 1995 and 2000.

Three sources of differences in the public and private sector wage distributions are considered. These are: differences in the distributions of worker characteristics in the two sectors; differences in the returns to various worker characteristics in the two sectors; and differences in the distributions of unexplained wage residuals across sectors (Juhn, Murphy and Pierce, 1993).

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1. Introduction

The public service is the largest single employer in South Africa, employing almost 1,1 million people in 2001. With one in six formal sector workers employed by the State, this in itself makes this sector so large as to merit attention. Moreover, while the public service has much in common with other formal employers, it differs in its size, its skills profile and the state's special role in society. The government is required by the Constitution to lead by example and thus public sector employment should be scrutinised in terms of equity and efficiency objectives.

Since the transition to democratic rule, there have been substantial changes in public sector employment. The number of people employed by national and provincial government has declined[2], pay scales have been simplified and the State has made great strides in improving representations. At the same time, the number of managers has been increasing (Thompson and Woolard, 2002) and wage increases at all levels have out-performed inflation, resulting in better pay for most government employees.

This paper sets out to investigate relative wages and wage dispersion for formal sector workers in the private and public sectors. The paper explicitly measures the size of the public sector wage premium and offers some reasons for its existence. It also attempts to document the changing pattern of wage differentials between public and private sector employees between 1995 and 2000.

There are three sources of differences in the public and private sector wage distributions, namely differences in the distributions of worker characteristics in the two sectors; differences in the returns to various worker characteristics in the two sectors; and differences in the distributions of unexplained wage residuals across sectors (Juhn, Murphy and Pierce, 1993). Each of these elements is considered.

In the first part of the study, regression analysis is used to compare public and private sector wages so as to control factors such as age, education levels, location, race, and occupation. Both least squares and quantile regression estimates of the public sector premium are presented.

In the second part of the paper, very simple inequality measures are employed to investigate whether the public sector exhibits less or more wage inequality than the private sector.

Throughout the paper, only full-time formal-sector employees are considered. The primary source of data is the raw data from the February 2000 Labour Force Survey (LFS) conducted by Statistics South Africa. This is a particularly useful survey for the purposes of this paper because it explicitly distinguishes between public and private employment. However, a comparison over time was also required. For this reason the 1995 October Household Survey (OHS) was also analysed. The 1995 OHS provides detailed information about occupation and economic sector, but does not specify whether the worker's employer is the State or a private sector firm. Consequently, a public/private proxy was created, based on occupation, economic sector and (in a few difficult cases) working conditions.[3] This is an imperfect variable and inferior to the "clean"

[2] In 1995 there were 1 267 763 public sector employees. By 2001 this number had shrunk to 1 053 569 (Public Service payroll information (PERSAL)).

[3] My thanks to Keith Thompson (Department of Economics, University of Port Elizabeth) for doing this.

split that is available for the 2000 LFS, but nevertheless the best available for the purposes of a comparison across time.

The 2000 LFS and 1995 OHS data are also not directly comparable because the 1995 survey asked about net wages, while the 2000 survey asked about gross wages. Consequently, the wage cannot be compared. Neither can the degree of wage dispersion be directly compared, since net wages will always be less dispersed than gross wages (as a result of the progressive nature of the personal income tax system). The purpose of the comparison is simply to see whether there has been a shift in the *differences* between public and private sector wages and their dispersion.

2. The LFS Data

The LFS is a newly introduced, twice-yearly rotating panel household survey, specifically designed to measure the dynamics of employment and unemployment in the country. The pilot round of LFS fieldwork took place in February 2000, based on a probability sample of 10 000 dwelling units. This round was considered to be a pilot, because it represented the start of the rotating panel survey in South Africa and it had a relatively small sample size (Statistics South Africa, 2001: 2). Both the sampling methodology and the questionnaire design have changed, when compared with the previous measurements of labour market issues in the October household surveys (OHS).

For the purpose at hand, the great merit of the LFS lies in the detailed information provided about the type of employer, which makes it possible to distinguish public sector employees. (In fact, it is possible to dissect this further into levels of government, but this is not done here.)

The LFS questionnaire asked respondents to state their "total salary", including overtime and bonuses, and before the deduction of tax. Questions about income are always problematic, with the biggest problem being under-reporting. While under-reporting is sometimes deliberate, it is often simply the case that respondents do not have a clear understanding of the meaning of terms such as "gross" or do not know what their "total package" is. Table 1 shows the distribution of wages reported by those who said they were employed by central or provincial government and compares this to the distribution derived from the payroll (PERSAL) data provided by the Department of Public Service Administration. (For the purposes of this comparison, those employed by local government are excluded since they are not paid via PERSAL). The annual PERSAL salaries were divided by 13 (not 12), since public servants receive a 13th cheque which respondents were likely to ignore.

Table 2.1 Monthly Wages, by Percentile for Provincial and Central Government Employees

Percentile	LFS February 2000	PERSAL
10th	R800	R2100
25th	R1600	R2500
50th (median)	R3000	R4100
75th	R4500	R5400
90th	R5300	R6800

This is a clear indication of consistent under-reporting. In particular, the lowest salary notch for a full-time (permanently appointed) public servant in 2000 was R24036 p.a., which equates to R1849 p.m., yet 29% of government employees in the LFS reported earning less than this! This strongly suggests that many respondents were reporting their take-home pay (after deductions such as tax, pension and even medical-aid) instead of gross earnings.

There is no way of correcting for this under-reporting. There is, however, no reason to believe that the level or pattern of under-reporting was different among public as opposed to private sector employees. Consequently, while recognising the deficiencies of the data, this paper makes the assumption that a comparison between public and private sector employees remains valid, even if the *wage-levels* are biased.

3. Profile of the public sector

Table 3.1 shows the breakdown of major occupational groups in the public sector.

Table 3.1 Employment and Average Salary in Major Occupational Groups in the Public Sector, 1999

Occupation	Number	% of public sector	Average salary (Rand p.a.)
Educator	369 000	34%	R63 000
Police, Correctional Services, Defence	200 000	18%	R50 600
Administration	125 000	5%	R40 900
Elementary occupations	212 000	19%	R25 400
Nurses	75 000	7%	R50 600
Skilled production workers	59 000	5%	R34 600
Nursing assistants	29 000	3%	R34 600
Professionals & high-level professionals (other than health and legal professionals)	21 000	2%	R72 000
Medical doctors	13 000	1%	R78 300
Health professionals other than doctors and nurses	9 000	1%	R63 000
Legal personnel	5 000	<1%	R94 000
Senior management	4 000	<1%	R220 000
Total public service	1 101 000	100	R40 900

Source: Adapted from Seidman-Makgetla, 2000:20

There are 30 departments at national level and more than 200 in the provinces. Some 80% of public servants work for SAPS, the SANDF, Correctional Services or the provincial health and education departments (Seidman-Makgetla, 2000:19). The average provincial education department has 43 000 employees and the average health department 25 000. SAPS and the SANDF have around 100 000 employees each. At the other end of the spectrum, administrative and economic services departments are much smaller, with most having less than 500 employees.

Table 3.2 shows the change in average remuneration per worker in the private and public sectors for the period 1995-2000. Real wages have been increasing in both sectors, although not as rapidly in the public service as in the private sector. Table 3.2 shows that there was a

substantial increase in public service salaries in 1995, but in subsequent years private sector increases outstripped those in the public sector.

This table needs to be interpreted with caution. Public sector employment dropped dramatically over this period and many of the jobs that were shed were low-skill (and thus low-paid) ones (Bhorat, 2001:6 and Seidman-Makgetla, 2000:20). The loss of low-income jobs will in itself push up average remuneration levels without there, necessarily being an increase in the individual salaries of those that remain.

Table 3.2 Percentage change in Remuneration per worker, Public and Private Sectors, 1995 - 2000

	Percentage change in remuneration per worker			
	At current prices		At constant prices*	
Year	Public sector	Private sector	Public sector	Private sector
1995	14.3	11.0	4.0	0.9
1996	10.2	11.0	0.9	1.7
1997	11.7	10.4	3.5	2.3
1998	10.2	16.5	3.6	9.4
1999	4.6	9.2	-1.3	3.0
2000	9.6	9.1	2.7	2.2
1995-2000	77.7	88.8	14.1	20.9

Source: South African Reserve Bank Quarterly Bulletins, various years.
* Deflated using the non-agricultural GDP deflator

In order to show actual changes in wages for public servants who have retained their jobs and not changed salary scale, Table A1 in the Appendix shows the increase in salary levels by a notch between 1996 and 1999. The nominal increases range from 48% at the very bottom end to 32% at the top-end. While these increases are small in real terms, the larger increases at the lower-end of the salary spectrum, implies a narrowing of the wage-gap in the public service over this period.

4. Wage differences in public versus private sector employment in South Africa

The mean public sector wage in the February 2000 LFS was R45 034 per annum. In comparison, the February 2000 LFS finds that the average (formal) private sector wage was only R28 300 per annum.

As a first exploratory step, Table 1 compares private and public sector wages in relation to a number of variables considered singly. For the purposes of this exercise, medians are reported so as to compare the wages of *average workers*, rather than *average wages*, which might be skewed by large outliers.

Beginning with education level, it is clear that the private sector heavily penalises those with little education, while the public sector pays roughly the same for all those with less than Grade 12. On the other hand, someone with a degree, especially a postgraduate one, is more highly rewarded in the private sector. It is thus immediately apparent that there is less wage dispersion in the public sector: the average graduate (without a postgraduate qualification) in the private sector

is earning 10 times that of the average worker with no education, while in the public sector this ratio is only 3.5.

Moving on to occupational classes, it is evident that it is only professionals that *on average* do worse in the public sector. All other occupational classes seem to experience a small premium if they work for the state. Not surprisingly, this premium is especially large for those in (low-paid) elementary occupations where minimum wages play an important role in determining wage levels.

The last part of Table 1 shows what the average, formal sector worker person of a given race and gender is earning in the public and private sectors. It is apparent that the average African or Coloured person in the public sector is earning more than the average person (of the same race and gender) in the private sector.

Table 1 Comparison of Median Monthly Wages in Public and Private Sectors

	Median monthly gross wages	
	Private Sector	**Public Sector**
Educational attainment		
No schooling	600	1505
Some primary schooling	800	1500
Completed primary	1100	1500
Some secondary	1290	2000
Completed secondary	2380	3000
Diploma (without grade 12)	3000	4000
Diploma (with grade 12)	4000	4000
First degree	6000	5250
Postgraduate qualification	9000	5250
Occupational class		
Legislators, senior officials and managers	5250	8000
Professionals	6000	5250
Technicians	3000	4000
Clerks	2000	3000
Service workers, shop and market sales workers	1300	3000
Skilled agricultural and fishery workers	800	1300
Craft & related trade workers (incl. mining)	1500	2000
Plant and machine operators and assemblers	1500	2000
Elementary occupations	700	1500
Race and gender		
African male	1250	2000
African female	800	2500
Coloured male	1400	2500
Coloured female	1250	3000
Indian male	2400	4000
Indian female	2000	--
White male	5250	5250
White female	3500	4000

Source: author's calculations using LFS February 2000, Statistics South Africa

It must be noted that these univariate comparisons may be completely misleading. It is only once we place all these variables in a multivariate context and allow them to compete, that we will be able to say whether, for example, a White female in the public sector is earning more than her private sector counterpart after controlling for education, experience, occupation, sector and location. This is done in the next section.

5. Multivariate comparisons of earnings in the public and private sectors

A wage equation (or earnings function) was used to estimate the premium associated with public sector employment. The wage equation employed, relates the logarithm of monthly earnings to a set of individual characteristics and an indicator variable ("public") for working in national, provincial or local government.

The following basic earnings function was employed:

$$\ln(Earnings) = b_0 + b_1(Edu) + b_2(Exp) + b_3(Exp^2) + b_4(Race) + b_5(Gender) + b_6(Region) + b_7(occupation) + b_8(Public)$$

where:

- *Edu* represents educational attainment. Following Kingdon and Knight (2001:22), Edu was included as a set of categorical variables, rather than simply as years of schooling.
- *Exp* is proxied using the standard technique, which is to take age less years of schooling less six.[4]
- *Race* represents a set of dummy variables describing the four official South African racial groups.
- *Gender* is a dummy variable.
- *Region* is a set of dummy variables that describe the nine different South African provinces and urban and rural locations.
- *Occupation* is a set of dummies for the (one digit) major occupation groupings.
- *Public* is a dummy variable for the type of employer (private/public).

Education was allowed to affect wages through a set of seven categorical variables, with "no education" as the omitted category. The wage equation includes linear and quadratic powers of experience. (Following Poterba and Rueben (1994), cubic and quartic powers of experience were also tested but were not significant.) A set of control variables for nine broad occupational

[4] This proxy for experience has been criticized on the grounds that individuals do not have continuous work histories outside of schooling. Such a critique is particularly relevant in a country with an unemployment rate as high as South Africa's, but the proxy is nevertheless used here in the absence of a better alternative.

classifications, were also included, with "elementary workers" as the omitted category. The wage equation was estimated separately, for various groups so as to tease out whether the premium differs across groups.

In addition, the wage equation was estimated separately for public and private sector employees, respectively. This serves two purposes. Firstly, it allows us to see whether the effects of (or returns on) different individual characteristics differ across the two sectors. Secondly, it allows us to predict average wages in each sector for hypothetical workers with fixed characteristics.

Ordinary Least Squares (OLS) and quantile regressions were estimated. The results of the OLS are shown in Tables 2 and 3. In order to keep the paper of manageable length, the results of the quantile regressions are not presented in full, and the results are discussed only in the section on public sector premia.

Table 5.1: OLS Regression of ln (monthly gross wages) for Formal Sector Employees

	All	Private sector	Public sector	African	White
Public sector	**0.164**			**0.277**	0.035
Female	**-0.291**	**-0.305**	**-0.267**	**-0.275**	**-0.388**
Coloured	**0.139**	**0.203**	0.142		
Indian	**0.348**	**0.396**	**0.294**		
White	**0.686**	**0.815**	**0.435**		
Experience	**0.013**	**0.012**	**0.012**	**0.008**	**0.015**
Experience^2	**-0.000**	**-0.000**	-0.000	**0.000**	**-0.000**
Some primary	**0.291**	**-0.281**	0.165	**0.231**	
Completed primary	**0.481**	**0.507**	**0.095**	**0.376**	0.540
Some secondary	**0.621**	**0.595**	**0.470**	**0.449**	0.200
Completed secondary	**0.986**	**0.953**	**0.786**	**0.801**	0.467
Diploma	**1.218**	**1.144**	**1.080**	**1.129**	0.522
Degree	**1.435**	**1.438**	**1.198**	**1.375**	0.843
Trade union member	**0.292**	**0.317**	**0.197**	**0.367**	0.076
Occupation					
Manager	**0.839**	**0.816**	**0.804**	**0.752**	**0.820**
Professional	**0.644**	**0.731**	**0.504**	**0.694**	**0.600**
Technician	**0.484**	**0.510**	**0.311**	**0.403**	**0.509**
Clerk	**0.390**	**0.403**	**0.252**	**0.426**	0.299
Operator	**0.285**	**0.326**	0.039	**0.327**	0.184
Service worker	**0.255**	**0.241**	0.199	**0.208**	0.240
Skilled agricultural	0.101	0.093	-0.065	-0.062	**0.741**
Craft worker	**0.268**	**0.320**	-0.061	**0.216**	0.304
Location					
Western Cape	-0.061	**-0.127**	0.097	-0.075	-0.101
Eastern Cape	**-0.302**	**-0.452**	-0.019	**-0.326**	**-0.230**
Northern Cape	**-0.212**	**-0.326**	0.096	**-0.309**	-0.128
Free State	**-0.306**	**-0.415**	0.049	**-0.434**	-0.084
KZN	**-0.141**	**-0.118**	**-0.187**	**-0.211**	-0.034
North-West	**-0.155**	**-0.201**	-0.048	**-0.204**	**-0.245**
Mpumalanga	**-0.180**	**-0.211**	-0.095	**-0.258**	-0.076
Northern Province	**-0.163**	**-0.324**	0.013	**-0.255**	-0.162
Rural	**-0.215**	**-0.208**	**-0.170**	**-0.190**	-0.071
Constant	**6.089**	**6.111**	**6.571**	**6.297**	**7.387**
Number of observations	5918	4415	1503	3547	1139
Adjusted R^2	0.51	0.55	0.35	0.44	0.26

Source: author's calculations using LFS February 2000, Statistics South Africa

Notes: Omitted categories are: African, male, no education, elementary worker, agricultural sector, Gauteng

Bold coefficients are significant at the 5% level.

Table 5.2: OLS Regression of ln (monthly gross wages) for Formal Sector Employees

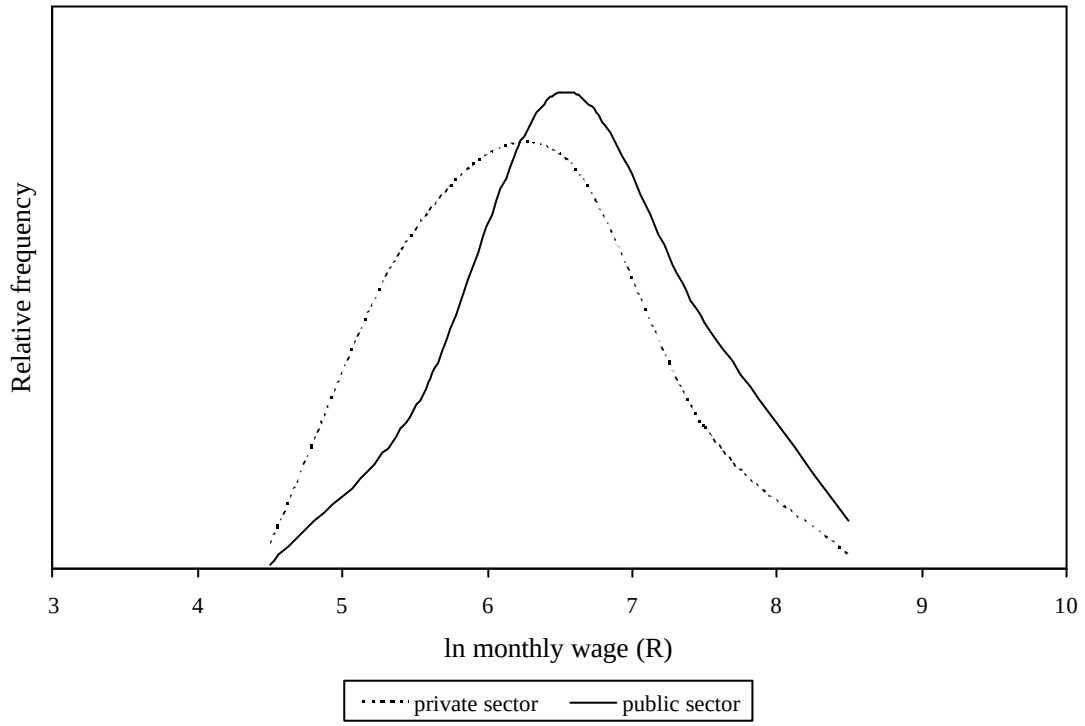
	Male	Female	African male	African female
Public sector	**0.135**	**0.194**	**0.253**	**0.308**
Coloured	0.071	**0.219**		
Indian	**0.329**	**0.365**		
White	**0.759**	**0.560**		
Experience	**0.014**	**0.011**	**0.009**	**0.008**
Experience^2	**-0.000**	**-0.000**	**0.000**	**0.000**
Some primary	**0.267**	**0.425**	**0.190**	**0.420**
Completed primary	**0.480**	**0.561**	**0.369**	**0.445**
Some secondary	**0.614**	**0.661**	**0.424**	**0.560**
Completed secondary	**1.002**	**0.958**	**0.837**	**0.792**
Diploma	**1.255**	**1.145**	**1.128**	**1.141**
Degree	**1.528**	**1.301**	**1.410**	**1.335**
Trade union member	**0.302**	**0.274**	**0.388**	**0.332**
Occupation				
Manager	**0.762**	**1.004**	**0.718**	**0.879**
Professional	**0.554**	**0.835**	**0.632**	**0.847**
Technician	**0.432**	**0.615**	**0.366**	**0.501**
Clerk	**0.341**	**0.509**	**0.375**	**0.518**
Operator	**0.298**	**0.236**	**0.341**	**0.226**
Service worker	**0.268**	**0.269**	**0.202**	**0.226**
Skilled agricultural	0.104	0.050	-0.064	0.030
Craft worker	**0.280**	0.131	**0.240**	0.093
Location				
Western Cape	-0.011	**-0.175**	-0.096	-0.010
Eastern Cape	**-0.290**	**-0.326**	**-0.316**	**-0.332**
Northern Cape	-0.131	**-0.344**	-0.233	**-0.452**
Free State	**-0.256**	**-0.399**	**-0.393**	**-0.495**
KZN	-0.068	**-0.257**	**-0.160**	**-0.279**
North-West	-0.094	**-0.281**	**-0.158**	**-0.284**
Mpumalanga	-0.111	**-0.313**	**-0.203**	**-0.355**
Northern Province	**-0.164**	**-0.156**	**-0.254**	**-0.240**
Rural	**-0.234**	**-0.199**	**-0.223**	**-0.146**
Constant	**6.036**	**5.854**	**6.285**	**5.969**
Number of observations	3692	2225	2325	1222
Adjusted R^2	0.53	0.50	0.43	0.44

Source: author's calculations using LFS February 2000, Statistics South Africa

Notes: Omitted categories are: African, male, no education, elementary worker, agricultural sector, Gauteng
Bold coefficients are significant at the 5% level.

By using the coefficients from the "private sector" equation in Table 5.1, it is possible to predict the wage distribution of all employees as if they were employed in the private sector. In this way, it is possible to explore the differences in the distribution of worker attributes in the two sectors. Figure 5.2 shows that the predicted monthly wages in the public sector is right-shifted, relative to the analogous private sector wage distribution. This indicates that there are proportionately more workers with high human capital in the public than private sectors.

Figure 5.2 Predicted Private Sector earnings of Public and Private Sector Employees



5.1 The Effects of Gender, Race, Education, Occupation and Location

A few general points will be made about the regressions, before turning to the primary issue of analysing the public sector premium.

Women earn less than their male counterparts (after controlling for other factors) and this effect is almost as large in the public sector as in the private sector.

Whites and Indians earn more than Africans (after controlling for other factors) in both the public and private sectors, but the difference is much larger in the private sector. Interestingly, in the pubic service there is no positive wage discrimination for Coloureds (unlike in the private sector) and the racial premium for Indians and Whites is much smaller than in the private sector, although still significant. The much smaller racial effects in the public sector relative to the private sector should be pleasing to government.

The education variables bear some scrutiny, as the univariate cross-tabulations above indicated that education made less of a difference to wages in the public sector than in the private sector. The omitted education variable is completed secondary education and thus all the educational coefficients need to be seen in relation to this. Public sector employees with no education are

not as heavily penalised as those in the private sector. This is probably related to the higher minimum wages in the public sector relative to the private sector. Surprisingly, however, those with completed primary education do relatively worse than their private sector peers[5] and the effect of completed secondary education is approximately the same as no schooling. A diploma in the public sector is worth relatively more than in the private sector, but this is possibly an artifact of the different types of diplomas that have been lumped together. Most diplomates in the public sector are teachers, while those in the private sector may have less valuable skills. In contrast, a degree is worth more in the private sector than in the public sector.

Trade union membership slightly enhances earnings in both the public and private sectors and by about the same amount. It should be noted that the indicator variable for trade union membership may be imperfect: the February 2000 LFS finds that 69% of public servants belong to trade unions, while Seidman-Makgetla (2000: 20) claims that "between 80% and 90%" of public servants are unionised.

Pay levels for government workers do not appear to depend on occupational class or location (although residents of KwaZulu-Natal earn less than similar government workers in other parts of the country). This powerfully demonstrates the uniformity of public sector pay scales across occupation and region.

5.2 Public Sector Wage Premium

Of greatest interest to us is that the regressions show that, after controlling for education, age, location and occupation, public sector employees earn more than their private-sector counterparts. The first equation in Table 5.1 ("All") indicates that being employed in the public sector multiplies your earnings by $e^{0.164}$, which equates to a premium of about 18%.

The regressions for "African" and "White" show that this public sector premium is quite substantial for Africans, but insignificant for White employees. The average African public servant is earning 32% more than his equally experienced, equally qualified counterpart in the private sector.

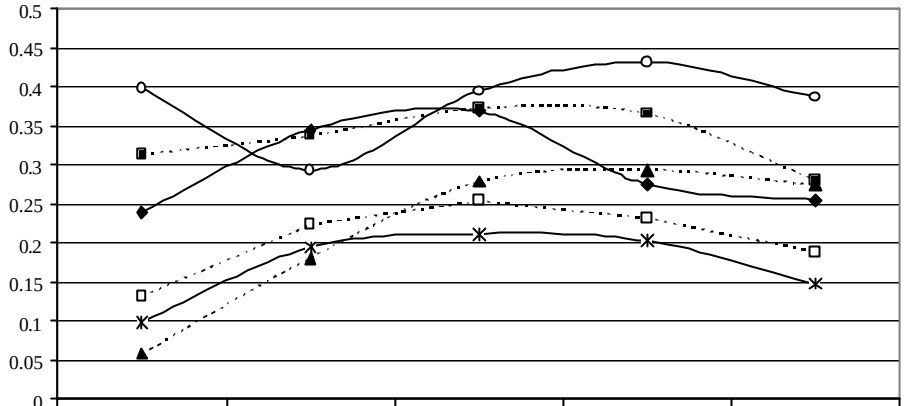
Table 5.2 indicates that the premium for women (especially African women) is much larger than for men. On average, women in the public sector earn 21% more than they would in the private sector, with the public sector premium for African women standing at 36%.

Estimating the public wage premium is complicated by the presence of different variances in the wage distribution of the public and private sectors.[6] Consequently, quantile regressions (using the same model specifications as above) were run at 0.10, 0.25, 0.50, 0.75 and 0.9. Bootstrapped errors were calculated but are not shown here. All reported results are significant at the 1% level. Results for Whites are not given, as the public sector premium was not significant at any quantile. The results are summarised in the figure below.

[5] This is relative to those with completed secondary. In *absolute* terms, public sector employees with completed primary earn more than those with completed secondary in the private sector.

[6] Consider, for example, the case where the mean and the median wages in the two sectors, conditional on worker attributes, are the same, but the private sector has greater wage dispersion. While comparisons of the mean or median conditional wage will show no public sector premium, comparisons of higher quantiles will show a public sector penalty, while lower quantiles will show a public sector premium (Poterba and Rueben, 1994).

Quantile estimates of the public sector wage premium

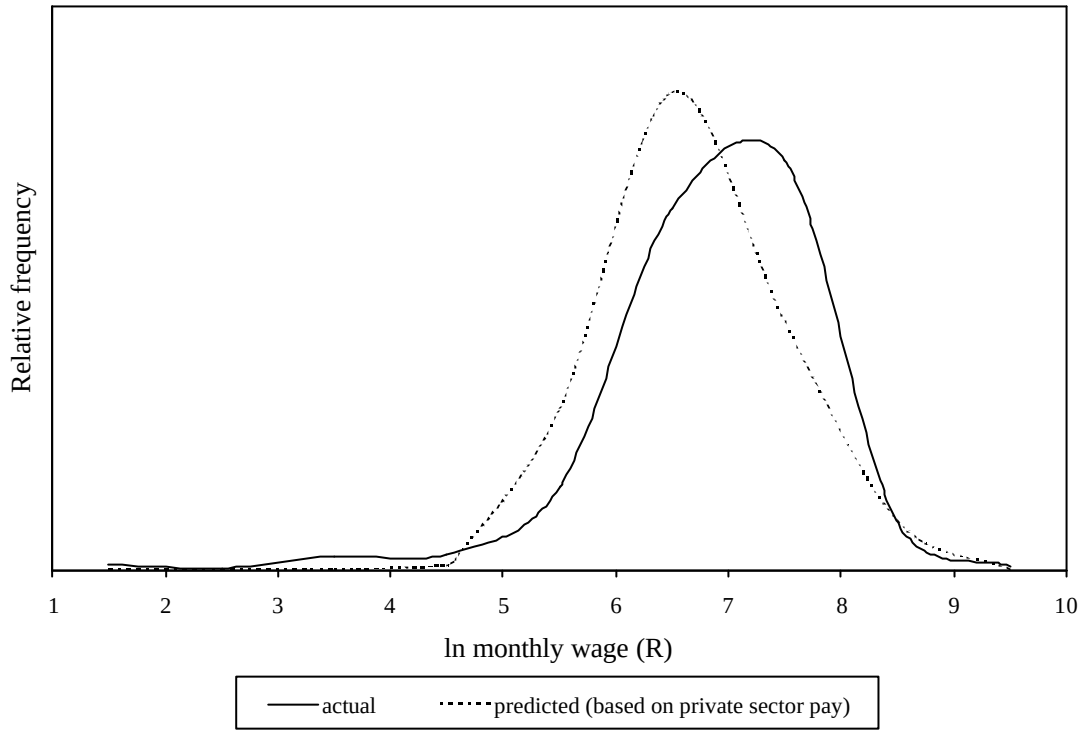


	Quantile=0.1	Quantile=0.25	Quantile=0.5	Quantile=0.75	Quantile=0.9
All	0.132	0.224	0.254	0.232	0.189
African	0.314	0.338	0.373	0.366	0.281
Male	0.099	0.195	0.212	0.203	0.148
Female	0.059	0.181	0.279	0.294	0.275
African male	0.24	0.345	0.369	0.275	0.255
African female	0.398	0.294	0.395	0.432	0.387

The quantile regression results suggest that the size of the public sector premium is sensitive to the choice of quantile. The premium is largest in the middle of the distribution for all groups other than African females. The median regression (for "all") finds a public sector premium, which is about 10% higher than the OLS estimate.

Another way of depicting the existence of a public sector premium is to compare the actual public sector earnings distribution with the distribution of predicted earnings for the same group of people, but based on the private-sector regression. In other words, we are comparing actual earnings with what people would have earned had they been employed in the private sector. The graph is simply a graphical device for showing what we already know: predicted earnings are left-shifted relative to actual earnings indicating the existence of a wage premium in the public sector.

Figure 5.3 Actual and Predicted (private-sector based) Earnings of Public Servants



6. Comparison of findings for 1995 and 2000

Table 6.1 compares the "overall" earnings function from Table 5.1 to the same regression run on the 1995 OHS data.

Table 6.1 Comparison of Earnings Functions, 1995 and 2000

	1995	2000
Public sector	**-0.079**	**0.165**
Female	**-0.322**	**-0.318**
Coloured	**0.195**	**0.197**
Indian	**0.350**	**0.397**
White	**0.688**	**0.744**
Experience	**0.074**	**0.015**
Experience^2	**-0.001**	**0.000**
No schooling	**-0.750**	**-0.900**
Some primary	**-0.657**	**-0.699**
Completed primary	**-0.541**	**-0.550**
Some secondary	**-0.354**	**-0.411**
Diploma	**0.182**	**0.274**
Degree	**0.530**	**0.566**
Trade union member	**0.193**	**0.239**
Occupation		
Professional	**0.252**	**0.172**
Technician	**0.418**	**0.105**
Clerk	**0.126**	0.008
Operator	**0.083**	-0.041
Service worker	**0.063**	**-0.079**
Skilled agricultural	**0.243**	0.093
Craft worker	**0.153**	**-0.084**
Location		
Western Cape	**-0.187**	-0.060
Eastern Cape	**-0.267**	**-0.266**
Northern Cape	**-0.363**	**-0.176**
Free State	**-0.393**	**-0.265**
KZN	**-0.088**	**-0.148**
North-West	**-0.156**	**-0.170**
Mpumalanga	**-0.100**	**-0.149**
Northern province	-0.008	**-0.171**
Rural	**-0.122**	**-0.133**
Constant	**5.730**	**6.627**
Number of observations	26709	5918
Adjusted R^2	0.65	0.51

Table 6.1 shows the identically specified earnings function on 1995 OHS and 2000 LFS data. The 1995 data has been inflated to 2000 price levels using the overall Consumer Price Index for the period. The OHS 1995 regression results for all the groups reported in Tables 5.1 and 5.2 can be found in Appendix A2.

As discussed in Section 2, the two data-sets are not entirely comparable as the 1995 survey collected net wages while the 2000 data recorded gross earnings. Consequently, it is unsurprising that the constant for the 2000 regression is quite a bit higher than that for 1995.

The 1995 regression shows that there was a small wage *penalty* to working in the public sector while in 2000 there was an advantage. This is hard to explain. It is possible that this is partly the result of an imperfect proxy for public and private sector employment in the 1995 data. As such, it would be a mistake to make too much of this result. There has, however, been considerable restructuring in the public sector since the transition to democratic rule. The South African government has actively sought to make public sector employment more attractive and to pay employees salaries, which are market-related. This realignment could conceivably have made sufficient impact to swing the coefficient on the public sector dummy variable from negative to positive.

7. Wage dispersion

Table 7.1 employs the Gini coefficient as a measure of wage dispersion and compares it for the private and public sectors.

Table 7.1 Gini Coefficients, Public and Private Wages, 1995 and 2000

	1995			2000		
	Private	Public	All	Private	Public	All
Gini coefficient of wages	0.51	0.34	0.49	0.57	0.41	0.54

Source: author's calculations using OHS 1995 and LFS February 2000, Statistics South Africa

These results should be interpreted with caution: the values for the two years are not comparable, because the 1995 data is for net wages, while the 2000 data is for gross wages. It is to be expected that the progressive nature of the South African personal income tax system "compresses" the wage distribution, and thus inequality of net wages should always be less than inequality of gross wages.

Results for both years are shown simply to demonstrate that both surveys found that wage inequality in the public sector is much lower than in the private sector. (The two surveys also suggest a very similar picture in terms of the size of the difference between the private and public sector Gini coefficients.) The divergence in measured wage dispersion is considerable, with a Gini coefficient in the private sector of 0.57 (0.51) compared with only 0.41 (0.34) in the public sector in 2000 (1995).

Table 6 shows the distribution of wages in the private and public sectors. (Again, the caveats about the data raised in Section 2 should be borne in mind.) It is immediately evident that the lower wage dispersion in the public sector is the result of public sector wages having a much higher "floor" and a slightly lower "ceiling". The ratio of wages at the 90th percentile to wages at the 10th percentile is 15 in the public sector, but only 7 in the public sector.

Table 6 Distribution of Wages in the Public and Private Sectors, 2000

	Private	Public	All
Wage at the 10th percentile	400	1000	450
Wage at the 25th percentile	775	1800	900
Median wage	1500	3000	1900
Wage at the 75th percentile	3000	5000	3800
Wage at the 90th percentile	6000	7000	6500
Wage at the 95th percentile	9500	9000	9500

Source: author's calculations using LFS February 2000, Statistics South Africa

8. Conclusion

The South African Government is a major employer in South Africa. In recent years it has strived to restructure the public service in the interests of enhancing both equity and efficiency. This has seen the realignment of pay scales and a concerted effort to attract quality staff. While the size of the public service has been trimmed, the number of managers has increased and overall wages have been rising.

This paper has demonstrated that average wages in the public sector are much higher than in the private sector, but this is the result of more than one factor. Firstly, there is considerable human capital in the public service. Teachers alone, account for more than 15% of all South Africans with a tertiary degree (Seidman-Makgeta, 2000: 20). Therefore, part of the higher salaries is accounted for simply by the fact that the State employs people who, because of their individual attributes, would ordinarily earn more than average.

Secondly, this paper aims to demonstrate that a small wage premium exists to working in the public sector. On average, public servants earn 18% more than they would in the private sector. The State is intent on being a model employer and sets national norms and standards for the employment relationship. As such, working conditions in the public sector are often considerably better than in the private sector. Hand-in-hand with this goes the commitment to pay a living wage. As a result, the lowest paid government employees are earning considerably more than many of their private-sector counterparts.

This paper has also demonstrated that public sector wages are far less dispersed than private sector wages, largely as a result of much higher wages at the lower end of the salary scales.

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Appendix

Table A1 Wage Increases by Notch

LEVEL	96 / 97	97 / 98	98 / 99	99 / 02						Percentage Increase 96 - 99	
				Non-edu			Educators			Non-Edu	Edu
				99/00	00/01	01/02	99/00	00/01	01/02		
1	17100 - 19002	19002 - 20997	20997 - 22464	22464	24036	25238				47.6	
	17697 - 19290	19290 - 21288	21288 - 22776	22776	24369	25587				44.6	
	18294 - 19941	19941 - 21573	21573 - 23082	23082	24696	25931				41.7	
	18891 - 20592	20592 - 22254	22254 - 23811	23811	24476	25700				36.0	
	19488 - 21243	21243									
2	20079 - 21888	21888 - 23739	23739 - 25398	25398	27174	28533				42.1	
	20943 - 22842	22842 - 24387	24387 - 26094	26094	27918	29314				40.0	
	21807 - 23784	23784 - 25392	25392 - 27168	27168	29067	30520				40.0	
	22671 - 24726	24726 - 25902	25902 - 27714	27714	29652	31135				37.3	
3	23526 - 25659	25659 - 27444	27444 - 29172	29172	31212	32773	29355	31407	32977	39.3	40.2
	24615 - 26832	26832 - 28647	28647 - 30450	30450	32580	34209	30642	32784	34423	39.0	39.8
	25704 - 28020	28020 - 29913	29913 - 31979	31979	34020	35721	31995	34233	35945	39.0	39.8
	26793 - 29205	29205 - 30594	30594 - 32797	32797	34794	36534	32724	35013	36764	36.4	37.2
4	27882 - 30396	30396 - 32511	32511 - 34557	34557	36801	38641	34776	37035	38887	38.6	39.5
	28905 - 31509	31509 - 33639	33639 - 35757	35757	38079	39983	35982	38319	40235	38.3	39.2
	29928 - 32625	32625 - 34830	34830 - 37023	37023	39429	41400	37257	39678	41662	38.3	39.2
	30951 - 33738	33738 - 35310	35310 - 7533	37533	39972	41971	37770	40224	42235	35.6	36.5
	31974 - 34854	34854 - 36477	36477 - 38775	38775	41295	43360	39018	41553	43631	35.6	36.5

LEVEL	96 / 97	97 / 98	98 / 99	99 / 02						Percentage Increase 96 - 99	
				Non-edu			Educators			Non-Edu	Edu
				99/00	00/01	01/02	99/00	00/01	01/02		
5	32988 - 35958	35958 - 38460	38460 - 40881	40881	43536	45713	41139	43812	46003	38.6	39.5
	34296 - 37386	37386 - 39912	39912 - 42426	42426	45183	47442	42693	45468	47741	38.3	39.2
	35604 - 38814	38814 - 41439	41439 - 44049	44049	46911	49257	44325	47205	49565	38.3	39.2
	36912 - 40236	40236 - 42111	42111 - 44763	44763	47670	50054	45045	47970	50369	35.6	36.5
	38220 - 41664	41664 - 43605	43605 - 46350	46350	49362	51830	46644	49674	52158	35.6	36.5
	39528 - 43089	43089 - 45096	45096 - 47937	47937	51051	53604	48237	51372	53941	35.6	36.5
6	40836 - 44514	44514 - 47613	47613 - 50610	50610	53989	56688	50931	54240	56952	38.8	39.5
	4334 - 47247	47247 - 50442	50442 - 53619	3619	57102	59957	53955	57462	60335	38.3	39.2
	45852 - 49983	49983 - 53361	53361 - 56721	56721	60405	63425	57078	60786	63825	38.3	39.2
	48360 - 52719	52719 - 55176	55176 - 58650	58650	62460	65583	59019	62853	65996	35.6	36.5
7	50868 - 55449	55449 - 59307	59307 - 63042	63042	67137	70494	63438	67560	70938	38.6	39.5
	53487 - 58302	58302 - 62244	62244 - 66163	66165	70464	73987	66582	70908	74453	38.3	39.2
	56106 - 61155	61155 - 65289	65289 - 69402	69402	73911	77607	69837	74376	78095	38.3	39.2
	58725 - 63699	63699 - 66666	66666 - 70863	70863	75468	79241	71310	75945	79742	34.9	35.8
	61344 - 66540	66540 - 69642	69642 - 74028	74028	78837	82779	74496	79338	83305	34.9	35.8
8	63963 - 69381	69381 - 74211	74211 - 78291	78291	83379	87548	78789	83910	88106	36.9	37.7
	67509 - 73248	73248 - 78201	78201 - 82500	82500	87861	92254	83025	88419	92840	36.7	37.5
	71055 - 77094	77094 - 82305	82305 - 86829	86829	92472	97096	87381	93080	97734	36.6	37.5
	74601 - 80943	80943 - 84714	84714 - 89373	89373	95181	99940	89940	95784	100573	34.0	34.8
9	78141 - 84423	84423 - 89454	89454 - 93924	93924	99558	104536	94524	100194	105204	33.8	34.6
	81045 - 87561	87561 - 92781	92781 - 97419	97419	103263	108426	98040	103920	109116	33.8	34.6
	83949 - 90696	90696 - 96102	96102 - 100905	100905	106959	112307	101550	107643	113025	33.8	34.6
	86853 - 93837	93837 - 99429	99429 - 104400	104400	110664	116197	105066	111369	116937	33.8	34.6
	89757 - 96972	96972 - 102753	102753 - 107889	107889	114360	120078	108578	115092	120847	33.8	34.6
	92661 - 100110	100110 - 104775	104775 - 110013	110013	116613	122444	110175	117357	123225	32.1	33.0
	95565 - 103248	103248 - 108060	108060 - 113463	113463	120270	126284	114186	121035	127087	32.1	33.0

LEVEL	96 / 97	97 / 98	98 / 99	99 / 02						Percentage Increase 96 - 99	
				Non-edu			Educators			Non-Edu	Edu
				99/00	00/01	01/02	99/00	00/01	01/02		
10	98463 - 106377	106377 - 111654	111654 - 117234	117234	124270	130484	117984	125061	131314	32.5	33.4
	102702 - 110958	110958 - 116463	116463 - 122286	122286	129621	136102	123066	130449	136971	32.5	33.4
	106941 - 115339	115339 - 121269	121269 - 127332	127332	134970	141719	128142	135828	142619	32.5	33.4
	111180 - 120117	120117 - 125715	125715 - 132000	132000	139920	146916	132843	140811	147852	32.1	33.0
11	115413 - 124692	124692 - 130878	130878 - 136767	136767	144972	152221	137643	145899	153194	31.9	32.7
	123468 - 133392	133392 - 140007	140007 - 146307	146307	155085	162839	174243	156075	163879	31.9	32.7
	131523 - 142098	142098 - 149145	149145 - 155856	155856	163207	173467	158885	166266	174579	31.9	32.7
12	139578 - 150798	150798 - 158277	158277 - 164607	164607	174483	183207	165666	175605	184385	31.3	32.1
	147474 - 159273	159273 - 167172	167172 - 173836	173836	184287	193501	174978	185475	194749	31.2	32.1
	153370 - 167799	167799 - 176121	176121 - 183165	183165	194154	203862	174978	195402	205172	31.2	32.1
13	171426	171426 - 179917	179917 - 187113	187113	198339	208256	188319	199617	209598		
	178893	178893 - 187407	187407 - 194901	194901	206595	216925	196158	207927	218323		
	186363	186363 - 195234	195234 - 203043	203043	215223	225984	204351	216612	227443		
	190137	190137									
14	197466	197466 - 207249	207249 - 215538	215538	228468	239891					
	208119	208119 - 218025	218025 - 238353	226746	240348	252365					
	218775	218775 - 218775	218775 - 226746	238353	252652	265285					
	222744	222744 - 229188	229188 - 238353								
15	233079	233079 - 233079	233079 - 233079	233079	449472						
	244833	244833 - 244833	244833 - 244833	244833	463056						
	256587	256587 - 256587	256587 - 256587	256587	477051						
	268341	268341 - 268341	268341 - 268341	268341							
16	303591	303591 - 303591	303591 - 303591	303591	578910						
	317898	317898 - 317898	317898 - 317898	317898	596403						
	332205	332205 - 332205	332205 - 332205	332205	614427						

Source: PERSAL, Public Service Administration (special request)

Table A2 OLS Regression of ln (monthly net wages) for Formal Sector Employees, OHS 1995

	All	Private Sector	Public Sector	African	White	Male	Female	African Male	African Female
Public sector	-0.079			-0.133	-0.176	-0.118	-0.069	-0.181	-0.111
Female	-0.322	-0.350	-0.178	-0.244	-0.445				
Coloured	0.195	0.204	0.219			0.193	0.158		
Indian	0.350	0.370	0.269			0.403	0.227		
White	0.688	0.755	0.331			0.836	0.403		
Experience	0.074	0.075	0.064	0.052	0.107	0.082	0.057	0.055	0.046
Experience^2	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.000
No Schooling	-0.750	-0.730	-0.610	-0.611	(dropped)	-0.727	-0.748	-0.602	-0.663
Some primary	-0.657	-0.635	-0.595	-0.526	-1.061	-0.651	-0.585	-0.534	-0.510
Completed primary	-0.541	-0.514	-0.574	-0.422	-1.217	-0.545	-0.442	-0.436	-0.376
Some secondary	-0.354	-0.345	-0.294	-0.299	-0.271	-0.370	-0.277	-0.317	-0.250
Diploma	0.182	0.139	0.207	0.220	0.062	0.169	0.183	0.191	0.257
Degree	0.530	0.556	0.472	0.692	0.328	0.569	0.410	0.750	0.633
Trade union member	0.193	0.189	0.162	0.207	0.119	0.181	0.206	0.204	0.209
Professional	0.252	0.234	0.447	0.305	-0.043	0.174	0.504	0.230	0.415
Technician	0.418	0.378	0.509	0.549	-0.027	0.344	0.578	0.479	0.621
Clerk	0.126	0.123	0.269	0.302	-0.335	0.095	0.288	0.267	0.343
Machinist	0.083	0.078	0.237	0.193	-0.422	0.094	0.053	0.197	0.113
Service worker	0.063	0.054	0.127	0.161	-0.431	0.069	0.100	0.177	0.138
Skilled Agricultural	0.243	0.222	-0.826	0.096	-0.301	0.222	0.116	0.108	0.017
Craft worker	0.133	0.137	0.107	0.223	-0.282	0.152	-0.032	0.246	0.022
W Cape	-0.187	-0.189	-0.222	-0.073	-0.215	-0.159	-0.221	-0.069	-0.077
E Cape	-0.267	-0.296	-0.189	-0.237	-0.323	-0.240	-0.331	-0.207	-0.291
N Cape	-0.363	-0.372	-0.330	-0.232	-0.344	-0.321	-0.437	-0.213	-0.284
Free State	-0.393	-0.414	-0.228	-0.396	-0.214	-0.365	-0.431	-0.355	-0.503
KZN	-0.088	-0.072	-0.174	-0.030	-0.170	-0.054	-0.161	-0.016	-0.109
North - West	-0.136	-0.155	-0.178	-0.127	-0.130	-0.134	-0.202	-0.101	-0.180
Mpumalanga	-0.100	-0.090	-0.175	-0.084	-0.124	-0.082	-0.130	-0.077	-0.070
N Province	-0.008	-0.021	-0.007	0.009	-0.157	0.021	-0.064	0.046	-0.032
Rural	-0.122	-0.147	-0.024	-0.126	-0.057	-0.121	-0.130	-0.125	-0.133
Constant	5.730	5.724	6.236	5.949	6.660	5.516	5.808	5.889	5.838
Number of observations	**26709**	**22765**	**3944**	**15309**	**5313**	**17235**	**9474**	**10405**	**4904**
Adjusted R^2	**0.65**	**0.65**	**0.52**	**0.58**	**0.48**	**0.67**	**0.61**	**0.56**	**0.61**