



## Evidence-based Employment Scenarios

# Employment Scenarios for the Public Service in South Africa

E-K. Hassen and M. Altman

August 2007

# **EMPLOYMENT SCENARIOS for the PUBLIC SERVICE in SOUTH AFRICA**

**Ebrahim-Khalil HASSEN**

Research Associate

**Miriam ALTMAN**

Executive Director

EGDI

HSRC

*August 2007*

## **Human Sciences Research Council**

**August 2007**

### ***Acknowledgement***

*This paper forms part of the Employment Growth and Development Initiative at the HSRC's Employment Scenarios Project. Thanks to participants in the reference group that has met to review the findings of the project.*

**Produced by:** Ebrahim-Khalil Hassen  
**Contact:** Dr Miriam Altman  
Executive Director, EGDI  
**E-mail:** maltman@hsrc.ac.za  
**Tel:** +27 12 302 2402

## Table of Contents

<b>Executive Summary</b> .....	<b>5</b>
<b>1 Introduction</b> .....	<b>11</b>
<b>2 Trends in public service employment</b> .....	<b>12</b>
2.1 Defining the public service.....	12
2.2 Employment Trends.....	13
2.3 Budget Trends .....	23
2.4 Bargaining trends.....	30
2.5 Race and gender .....	33
2.6 Changes in policy .....	34
<b>3 Public service in its labour absorbing role</b> .....	<b>36</b>
3.1 Public service and the broader labour market .....	36
3.2 Poverty rates, inequality and provincial employment.....	37
3.3 Youth and Graduate Unemployment .....	38
3.4 Economic growth and job creation.....	39
<b>4 Scenarios for public employment</b> .....	<b>41</b>
4.1 Funding for additional public service employment (“the budget envelope”) 41	
4.2 Scenarios if the skills composition changed.....	42
<b>5 Approaches to intensifying employment creation in the public service at lower grades</b> .....	<b>44</b>
5.1 Transitional jobs programme .....	44
5.2 Entry level salaries.....	46
5.3 Integrating ECD and HCBC care .....	49
<b>6 Conclusion</b> .....	<b>50</b>
<b>References</b> .....	<b>52</b>

## Tables

Table 1: Changes in public service employment across three periods.....	15
Table 2: Public service workers by skills level (Sep 1995 and Dec 2005).....	15
Table 3: Vacancies by skill level required by government sector.....	18
Table 4: Changes in provincial and national employment (1995 and 2006) .....	18
Table 5: Employment increases in provincial and national government (2001 to 2007) .....	19
Table 6: Percentage change in provincial employment .....	20
Table 7: Teachers, nurses and police (2004 to 2006).....	20

Table 8: Consolidated personnel spending 1995 to 2010 .....	25
Table 9: Percentage change in employment by race and gender (2000-2006) .....	34
Table 10: Public service as a percentage of the labour force and formal employment (1995 –2006).....	36
Table 11: Unemployed graduates by field of study.....	39
Table 12: Employment scenarios to 2014 .....	40
Table 13: Total expenditure and public service personnel expenditure – baseline scenario .....	42
Table 14: Changes in average salary under different skills options .....	43
Table 15: Number of new public service jobs created between 2008 and 2014 under different skills scenarios .....	43
Table 16: Scenarios for transitional jobs.....	46
Table 17: Quarter million low-entry jobs, estimated costs .....	48
Table 18: Comparison of ECD and HCBC salaries with public service salaries .....	50

## **Figures**

Figure 1 -Distribution of employees by government sector, 2006 (%) .....	13
Figure 2: Number of public service workers (1995-2006) .....	14
Figure 3 Changes in the public service skills profile (1995 & 2005) .....	16
Figure 4: Changes in provincial employment by skills level by number of jobs (2000-2006) .....	19
Figure 5 - Enrolments in professional nursing colleges: four year comprehensive course (1996 - 2004).....	22
Figure 6 - Change in total government expenditure and public service employment (%) .....	24
Figure 7 - Personnel as a percentage of provincial spending (2002/3 to 2008/9) .....	26
Figure 8 - Change in total expenditure and in personnel expenditure, 1997 - 2007 (%) .....	28
Figure 9 - Change in average salaries and employment in the public service (%) .....	30
Figure 10 - Public service employment and poverty by province .....	38
Figure 11 - Possible entry-level salaries.....	47

## Executive Summary

The public service is a significant source of employment in South Africa, accounting for about 13% to 14% of formal employment. Until recently, it played a diminishing role, dampening employment growth in the economy. What should its role be in employment creation, if any? This is a particularly important question in the context of high structural unemployment, with a labour market that is characterised by serious racial bias.

The uppermost question that must be answered is what role an expanding public service might play in promoting growth and service delivery.

The second question relates to a specific labour market role often associated with public employment. The state can be an important source of jobs for marginalised people, whether due to race, region, age, networks or experience.

This paper reviews these two questions and then considers possible scenarios for public service employment to 2014.

## Trends in public service employment

The *public sector* includes personnel in national, provincial and local government, as well as the parastatals. The *public service* refers to those employed in national and provincial government only. This paper focuses on this section of the public sector to formulate scenarios simply because data availability is stronger. The public service accounts for 80% of employment in the broader public sector, which employs about 1.5 million overall. Since 1995, employment in the public service shrunk by 9,2%. However, decreases have not been uniform across time, with periods of significant decline, followed by stability, and then expansion. The three trends in public service employment are:

- Downsizing (1995-1999) – Decline of 120 000 jobs
- Stabilising (2000-2003) – Decrease of 6 000 jobs
- Increasing (2004-2006) – Increase of 120 000 jobs

## Changing skills profile

There has been a significant changes in the skills profile of the public service, as lower skilled jobs have been shed in the public service. There has been a significant shift towards a higher skilled public service. The move towards a more highly skilled public service has thus been driven through the cutting of low-skilled jobs, stabilisation of high skilled production jobs, and increases at management levels. The changes in profile suggest that the idea of ‘high skilled and smaller public service’ has emerged.

The reduction in employment has not been uniform across skills levels. Lower skilled jobs (i.e. salary level 5 and below) shrank by 217 525 jobs between 1995 and 2005, or a decrease of 34%. The number in middle management and senior management layers increased by 390% and 111% respectively. This is broadly in line with government's commitment to move towards a more highly skilled public service. The core of the public service is the high skilled production categories (i.e. nurses, teachers and police) accounting for 50% of total employment, has shown a slight decrease between 1995 and 2006 of 4%. The trends by skills levels indicate that head office staffs have received priority over staff employed at frontline delivery institutions.

However, there are significant challenges:

- Government has not employed lower skilled workers (e.g. porters, messengers), which has resulted in professionals in undertaking routine tasks, which has diminished capacity in hospitals.
- The increased levels in supervisory positions have occurred at the expense of high skilled professionals, like nurses and teachers.
- Outsourcing is a significant reason for the decline of public service numbers.
- Government has reported that over one million jobs are needed to meet the skills need in the public service.

## **Provincial employment**

Provincial employment has decreased by 7,3% between 1995 and 2006. Provincial government has expanded employment between 2001 and 2006. However, national government increased employment by 20.6%, whilst provinces have increased employment by a modest 8%.

Key occupations in provincial employment are nurses and teachers. These professions face significant challenges due to:

- Low levels of enrolment in institutions offering qualifications
- Mobility out of the profession.

The net result is that in these professions South Africa is likely to face supply shortages. Shortages are even more severe given the need to have skilled staff to respond to HIV/Aids. Moreover, improving maths and science marks will require increases in the number of teacher specialists in these areas.

## **Budget Trends**

In South Africa there is a direct relationship between budgets and employment. As budgets increase, personnel increases will follow. Due to the administrative steps in appointing staff, there is however a slight lag in this relationship. Personnel increases and decreases take a year or two to respond to changes in the budget. Key features of this relationship include:

- Personnel as a percentage of total consolidated spending have decreased from 40.8 (1995/6) to 31.8 (2006/7).
- Overall government expenditure has grown much more quickly than personnel expenditure between 2000 and 2005.
- From 2004, there has been an increase in both unit cost of labour and employment, indicating that budgets have grown fast enough to both increase employment and provide wage increases.

## **Bargaining trends**

The bargaining process in the public service has been complex. Key areas of changes include:

- Salary agreements were linked to government budgets only since 2000
- Managers are now rewarded through the introduction of flexible pay packages
- Government managers having the prerogative to undertake restructuring
- Significant attempts to retain and reward professionals.
- 'Clean wage bill' with a simplified set of benefits that have been extended to lower ranked workers, and delinked from medical and housing price inflation.

Changes are however expected, the continuities since 1994 are more surprising:

- Weak performance systems
- Strong alignment between wage increases and changes in inflation
- Teachers jobs have not had a substantial upgrade since 1994



## Changes in policy

There have been significant changes in policy since 1994. These changes are summarised below:

<b>Categories</b>	<b>Downsizing</b>	<b>Stabilising</b>	<b>Increasing</b>
Impact on employment	Decrease in employment of 15%	Slight decrease of 0.6%, but public service employment stabilises.	Significant increases in public service employment, which increases by 10% during this period.
Policy objectives	Contradictory policy objectives of reducing the wage bill, will reducing wage gap	Stronger alignment of fiscal and public service reform agenda. Strong focus on management	Need to improve management capacity in the public service. Lately, a stronger focus on improving capacity of frontline institutions.
Fiscal Environment	Restrictive across the board	Stabilising budgets for personnel, but a strong increase on grants	Moderately expansionary stance
Government Union Relationships	Coalition for change between unions and government, but fiscal policy under GEAR is more powerful	Government implements unilaterally, unions suffer defeat	Growing confidence and radicalisation of public service workers. Service departments, like education and health become more forceful players. Significant changes in approach from DPSA and Treasury as budgets increase.

## Government's labour absorbing role

### Public service in the broader labour market

The public service has experienced a decline in the share of public service employment as a percentage of the labour force and of formal employment. The decline of the public service relative to the broader labour market has potentially closed opportunities for young workers, especially those without skills.

### Poverty rates, inequality and provincial employment

A comparison between percentage share of overall poverty by province, and of public service employment indicates that poorer provinces are likely to have fewer public

service workers. In fact, provinces with higher poverty rates have experienced significant decreases in public employment levels. The Eastern Cape and Free State, which have the highest poverty shares, have also experienced the sharpest decline in the number of public service workers

### **Youth and graduate unemployment**

The phenomenon of graduate unemployment has received extensive attention, indicating that despite skills shortages, African graduates find it extremely difficult to find employment. There is a strong alignment between the qualifications of these unemployed graduates and the functions of the public service.

### **Economic growth and job creation**

The scenarios for low, moderate and high economic growth indicate that market based job creation would not be sufficient in itself to reach the target of halving unemployment. The public service would thus need to play a role in terms of job creation, together with public works programmes to reach the employment targets. This is more of a complementary decision than it may appear. A large portion of expanded public works programme (EPWP) opportunities are likely to be in activities that overlap with public service type functions, especially in the social services.

## **Employment scenarios for the public service**

The potential contribution of public service employment depends on the growth in public spending, how that growth is distributed between personnel and non-personnel spending, and then what proportion of personnel spending accrues to salaries of existing personnel as opposed to new hires. The final choice is related to the occupational distribution of new hires, whether leaning to lower or higher grades.

The scenarios prepared in this paper make the following assumptions: that spending on the public service will be proportionate to GDP growth; and that 50% of the expansion in public service spending will accrue to new hires and the other 50% to increasing rates of pay for existing employees. The scenarios are then based on MTEF projections to 2009, and then GDP growth rates of 3%, 4.5% and 6% pa between 2010 and 2014. The scenarios look at alternative occupational distributions: with a greater proportion of hires in higher grades versus a greater proportion in lower grades. Since a fixed budget envelope has been assumed there is naturally a clear wage/employment trade-off.

### **Number of new public service jobs created between 2008 and 2014 under different skills scenarios**

<b>GDP growth pa</b>	<b>3.0%</b>	<b>4.5%</b>	<b>6.0%</b>
Increasing entry level and lower skilled jobs	405,186	443,707	503,419
Maintaining the current path	303,890	332,780	377,564
Increasing jobs in management and high skilled production levels	243,112	266,224	302,052

Based on these assumptions, we identify a potential increase in public service employment ranging from 250,000 to 500,000 depending on the rate of GDP growth and the occupational distribution.

We conclude with some thoughts about approaches to expanding lower level hiring in the public service. In particular, some attention is devoted to a consideration of introducing “transitional jobs” and a new “entry level” grade aimed at labour market entrants.

## **1 Introduction**

Can the public service play its developmental role to break structural poverty and improve the quality of economic growth? A positive answer to this question is contingent on the quality of economic growth and on the details of a public service reform programme. South African policy makers are acutely aware that the quality of economic growth is as important as the rate of economic growth. This is expressed through the intention of reaching an economic growth target of 6%, together with the halving of poverty and unemployment by 2014. The details of a public service reform programme are, however, embryonic, and this constitutes the most significant gap in improving services and quality of economic growth.

The objective of this paper is to ask what role the public service might play in employment creation. The paper looks at this role with a focus first on improving service delivery, and then looks at other roles that government might play in the labour market. The paper proposes that the public service plays a labour absorbing role, so as to provide employment opportunities for groups marginalised from benefits of economic growth, and to create opportunities for the poor through improving the quality of public sector delivery.

To this end, the paper first locates the public service in the broader development strategy. Next, it undertakes a review of public service employment since 1994. The paper then motivates the need for an expanded public employment programme. Finally, it outlines a set of scenarios focussed on increasing public service employment.

## **2 Trends in public service employment**

This section first defines the public service, and then looks at overall changes in employment. It then discusses skills changes, followed by provincial employment patterns.

### **2.1 Defining the public service**

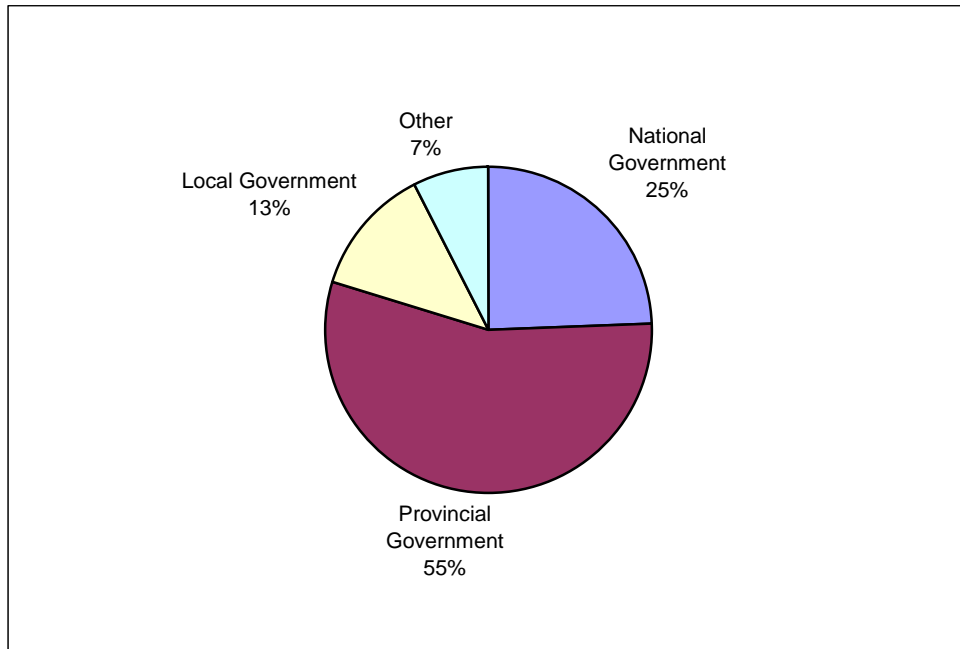
The terms public service and public sector are sometimes used interchangeably. In fact they are not synonyms and have separate, albeit related, meanings as defined in the Constitution and other legislation. Precisely defining the boundaries of our discussion in this paper will be important to reducing possible confusion.

The public sector includes:

- The public service, defined as national and provincial departments
- State-owned enterprises, such as Transnet and Eskom
- Local government
- Other institutions including universities and institutions created in Chapter Nine of the Constitution (Adler, 2002)

This paper focuses on the public service (i.e. national and provincial government). The term public service is used in this way, whilst public sector refers to a wider category. The public service however represents the largest segment of the public sector, as shown in Figure 1. The public service accounts for 80 % of government personnel. Of this figure 55% are employed in provinces, and 25% in national government. Local government accounts for 13% of employment, and other public sector institutions account for 5%. The public service accounts for 63% of all employees in the community, social and personnel services category of the national accounts (i.e. once non-government and community services that are not run by government are included)

**Figure 1 -Distribution of employees by government sector, 2006 (%)**



Source: Statistics South Africa, 2007 (Excludes State Owned Enterprises)

## 2.2 Employment Trends

### 2.2.1 Changes in employment

This section explores changes in public service employment since 1994, through the following periodisation

- Downsizing (1995-1999)
- Stabilising (2000-2003)
- Increasing (2004-2006)

This section starts with a discussion on trends in terms of employment, focussing on changes in numbers of public service workers, skills, and provincial employment and in key occupations. The importance of fiscal policy and collective bargaining to explaining these trends are then discussed in the following sections.

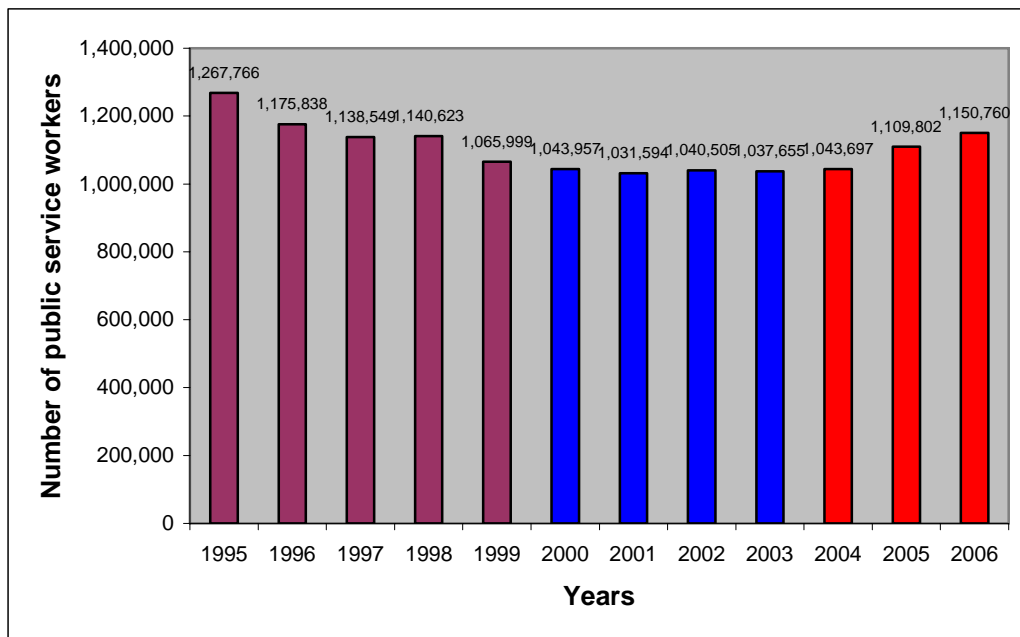
The size of the public service has always been a contentious issue. The *Reconstruction and Development Programme: A Policy Framework* (RDP) was non-committal on the size of the public sector, state ownership of enterprises and fiscal policy. In each of these instances, the RDP suggested a case-by-case approach, which would reflect on the capacities of the state and other strategic issues. The *Growth, Employment and*

*Redistribution: A Macroeconomic Strategy* (GEAR) itself was contradictory on the appropriate size of the public service. On the one hand, it argued that the public service wage bill would need to be reduced. On the other hand, the strategy indicated that public service employment would grow from 10 000 additional jobs per annum (pa) in 1996 to 30 000 jobs pa in 2000. (Department of Finance, 1996)<sup>1</sup>. It did not resolve how competing aims of managing the public service wage bill, and increasing public service employment would occur.

Between 1995 and 2006, public service employment decreased by 9,2%, which resulted in a loss of 117 006 jobs.

**Figure 2** however shows that the decreases have not been uniform across time, with periods of significant decline, followed by stability, and then expansion.

**Figure 2: Number of public service workers (1995-2006)**



Source: Department of Public Service and Administration, PERSAL, 2007

Table 1 shows that trends in employment are divided into three periods, namely downsizing (1995-1999), stabilisation (2000-2003) and increasing (2004-2006).

<sup>1</sup> See Appendix 15 of the GEAR Strategy

**Table 1: Changes in public service employment across three periods**

	<b>Downsizing</b>	<b>Stabilisation</b>	<b>Increasing</b>
Years	1995-1999	2000-2003	2004-2006
Difference in numbers	- 201 767	- 6 302	107 063
% Change for each period	-15.9	-0.6	10.3

Source: Authors calculations from PERSAL data

### 2.2.2 Skills profile

Across the three periods discussed there was a strong focus on creating a highly skilled public service. Since 1999, this has been an expressed position of government reflected in a commitment to improving management in the public service. Table 2 shows that this intent has been realised. Senior management and high skilled supervision categories increased between 1995 and 2005 by 111% and 390% respectively. These increases, particularly for senior management, come off a low base. However, high skilled supervision (e.g. assistant director, deputy director) increased by 82 488 jobs. This is very significant given the overall decline in the public service. Semi-skilled and skilled categories (i.e. level five and below) has seen the loss of 217 525 jobs, which represents a 34% decrease. High skilled production (e.g. teachers, nurses, police) has seen a modest decrease in numbers.

**Table 2: Public service workers by skills level (Sep 1995 and Dec 2005)**

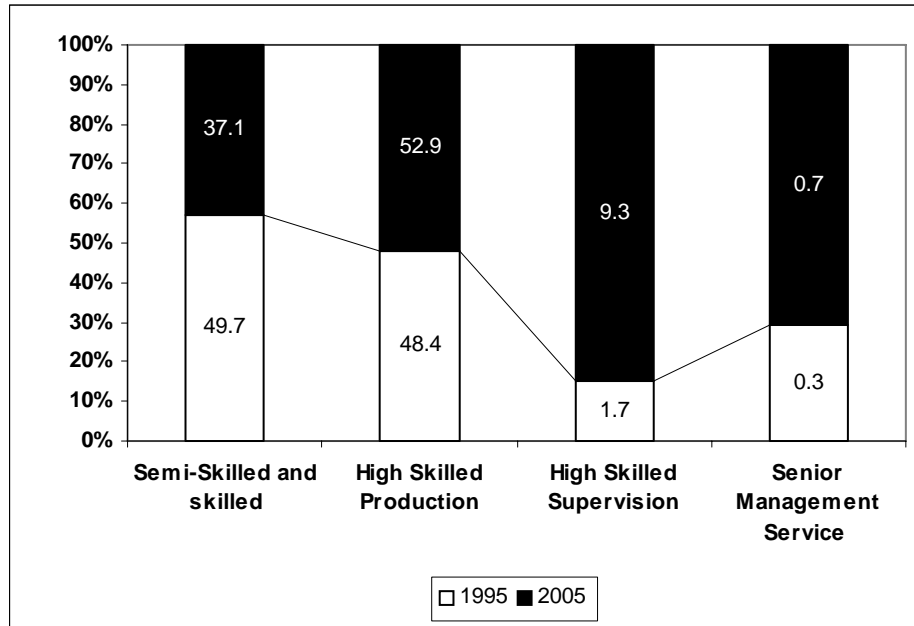
<b>Grades</b>	<b>Grades</b>	<b>Sep-95</b>	<b>Dec-05</b>	<b>Difference</b>	<b>% Change</b>
Semi-Skilled and skilled	Five and below	629,493	411,968	-217,525	-34.6 %
High Skilled Production	6 -8	613,675	586,909	-26,766	-4.4 %
Senior Management Service	13-16	3,449	7,288	3,839	111.3 %
High Skilled Supervision	9-13	21,149	103,637	82,488	390.0 %
Total	All	1,267,766	1,109,802	-157,964	-12.5 %

Source: PERSAL and Public Service Commission

Figure 3 shows the changes in the skills profile across these skills categories between 1995 and 2005.



Figure 3 Changes in the public service skills profile (1995 & 2005)



Sources: Authors calculations based on PERSAL, 2007

The move towards a more highly skilled public service has thus been driven through the cutting of low-skilled jobs, stabilisation of high skilled production jobs, and increases at management levels. The changes in profile suggest that the idea of a 'highly skilled and smaller public service' has emerged in practice.

This has had some unintended consequences for service delivery. The changing skills profile has meant that hospitals have not employed messengers, porters and general assistants in the lower skills positions. Analysis of hospital performance indicates that this is a key challenge in effective utilisation of nursing and medical staff (NALEDI, 2006). Professionals have had to multi-task, spending a high proportion of time on administrative and routine tasks that could be performed by lower ranked workers. This has diminished capacity in South African hospitals.

At the same time, inequalities between schools in previously white and black areas have not been equalised. Teacher assistants, accounting clerks, and cleaning staff are a norm in white schools. However, as government has closed down posts in lower skill levels, traditionally black schools have been unable to hire additional staff to perform administrative functions.

Head offices have, however, benefited significantly even in an environment that sought to reduce wage costs. Increased employment in management levels was guided by a need to improve management capacity, a key tenet of New Public Management

approaches that have guided government since 1999. As a consequence, hiring at head office levels occurred at the expense of frontline service delivery.

The decline of low skilled jobs can in part be explained by increases in outsourcing. The results of a study by Tregenna (2007) indicate that significant outsourcing has occurred in government, particularly in occupations such as cleaners, security guards, business professionals, gardeners, and office clerks. This has displaced jobs from the public to the private sector. Tregenna, decomposes changes in employment from 1995 to 1999, and then from 2000 to 2005 and shows that jobs such as cleaners, security guards and gardeners have been outsourced, increasing employment in other sectors of the economy.

Sector studies support this conclusion. Box 1 provides an indicative list of outsourcing of functions in policing, education and health.

**Box 1: Outsourcing in education, policing and health**

Education	Policing	Health
<ul style="list-style-type: none"> <li>▪ In-service teacher training;</li> <li>▪ Development of curriculum and learning materials;</li> <li>▪ Training school managers and governors;</li> <li>▪ Facilitating school improvement and institutional rationalisation processes;</li> <li>▪ Assisting the development of assessment instruments;</li> <li>▪ Project management;</li> <li>▪ Conducting adult education classes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Guarding of government buildings</li> <li>▪ Building maintenance</li> <li>▪ Vehicle fleet management</li> <li>▪ Vehicle pounds</li> <li>▪ Information technology services</li> <li>▪ Gardening, catering, laundry</li> <li>▪ Providing prisoner meals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fleet and transport</li> <li>▪ Health Care Risk Waste</li> <li>▪ Laundry</li> </ul>

*Sources: Minaar and Mistry (2004), Pampalis (2004), Hall, du Plessis and McCoy(2002), Hall, Radebe and Roberts (2006), Department of Environment (2004)*

There are two explanations – often complimentary – to explain government’s move to outsourcing. First, minimum salaries for unskilled jobs in the public service are higher than for comparable jobs in the private sector (DPSA, 1999; Woolard, 2002). The implication for policy in departments is that the private sector provides a cost effective route. Second, “outsourcing is meant to assist in the practicalities of development” (Quoted in Pampalis, 2004). In other words, outsourcing allows government departments to focus on core functions. The separation of functions

between core and non-core is a mainstay of New Public Management, and is evident as a policy intent in government policy.

However, government ministers continuously indicate that staff shortages are a key hindrance to improved service delivery. Government has conducted a review of skills needed in the public service through its most recent *Personnel Expenditure Review (2006)*. Whilst the document is not yet publicly available, the Public Service Commission has reported *on* additional skills needed by sector, using data from the *Personnel Expenditure Review (2006)*

**Table 3: Vacancies by skill level required by government sector**

Sector	Highly Skilled	Skilled	Semi and unskilled	Total
Public Administration and defence	108,400	30,200	95,300	505,700
Education	54,100	150,700	47,600	252,400
Health and social services	4,900	18,800	6,000	29,700
Other service activities	37,000	107,300	83,000	227,300
Total	204,400	578,800	231,900	1,015,100

Sources: Public Service Commission (2007), quoting the *Personnel Expenditure Review (2006)*

If these estimates are correct, the public service faces a significant skills shortage, with additional skills required across all sectors, and skills levels. A surprising feature is that health and social services does not feature more prominently as a sector requiring additional skills.

### 2.2.3 Provincial employment

Provinces employ the majority of public service workers. Table 4 shows the changes in employment from 1995 to 2006.

**Table 4: Changes in provincial and national employment (1995 and 2006)**

	1995	2006	Change	% Change
Provincial	855,121	792,296	-62,825	-7.3 %
National	414,020	358,464	-55,556	-13.4 %
Total	1,269,141	1,150,760	-118,381	-9.3 %

Source: PERSAL, 2007

More recently, over the period from 2001 and 2006, employment increased by more than 70,000, growing about equally in national government and in provincial government. However, this expansion has had more impact on national government

since it operates at a smaller scale. Employment in national government has increased by 20.6%, whilst the provinces increased employment by a modest 8%. This raises the question whether there is a match between increased employment and increased capacity for service delivery.

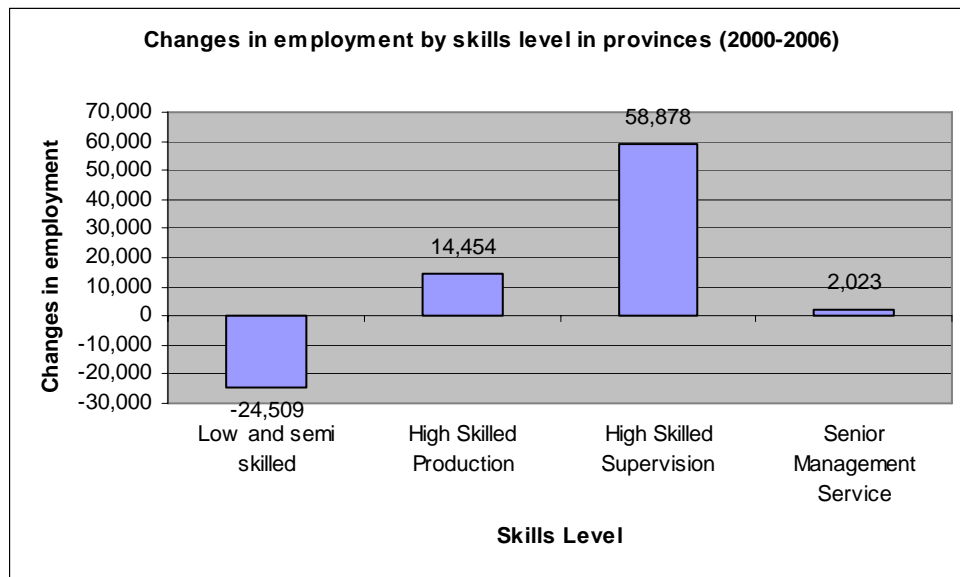
**Table 5: Employment increases in provincial and national government (2001 to 2007)**

	Increase in Jobs (2001-2007)	Percentage Increase
Provinces	71,598	8.0
National	70,156	20.6

Source: Authors calculations from PERSAL Data

This concern is reinforced given that within provinces high skilled supervision has seen the biggest increase as indicated in Figure 4.

**Figure 4: Changes in provincial employment by skills level by number of jobs (2000-2006)**



Source: PERSAL, 2007

The changes by province show an uneven picture of decline and growth across provinces. Overall provincial employment declined by 5.9% between 1995 and 2007 as shown in Table 6.

**Table 6: Percentage change in provincial employment**

	1995-1999	2000-2004	2004-2007	1995-2007
Eastern Cape	-10	-5	-2.3	-18.8
Free State	-15	-8	1.8	-18.4
Gauteng Province	2	-2	8.0	12.8
KwaZulu/Natal	-13	5	7.2	1.4
Limpopo Province	-5	-8	-1.5	-7.0
Mpumalanga	13	3	39.5	-11.3
North West	-3	-3	5.0	-2.0
Northern Cape	180 <sup>2</sup>	3	20.6	267.1
Western Cape	-48	-7	2.1	-42.0
Total	-11.2	-2.5	11.6	-5.9

Source: Calculated from PERSAL Data

#### 2.2.4 Nursing, teaching and police

In provinces, nurses, teaching and police constitute the bulk of employees.

The focus on ‘rightsizing’ stands in sharp contrast to the major supply problems in the high skilled production category. The effective running of schools, clinics and police stations is a core competence that needs to be developed in South Africa. These sectors are labour intensive, and thus there needs to be a significant focus on ensuring adequate staffing levels, performance systems and measurement of outputs. Table 7 shows the changes in staffing levels for nurses, teachers and police between 2004 and 2006.

**Table 7: Teachers, nurses and police (2004 to 2006)**

Occupations	2004	2005	2006	Total Increase	% Increase
Teachers	365,860	368,734	375,329	9,469	2.6 %
Nurses	58,345	59,724	61,941	3,596	6.2 %
SAPS	139,427	149,038	155,623	16,196	11.6 %
Total (nurses, teachers and SAPS)	563,632	577,496	592,893	29,261	5.2 %
Total Public Service	1,043,697	1,109,802	1,150,760	107,063	10.3 %
% of total	54.0%	52.0 %	51.5 %	27.3 %	

<sup>2</sup> The Northern Cape with a small population started from a very low base explaining the large increase in employment numbers.

Overall these frontline positions have seen a total increase of 27.33% between 2004 and 2006. The three occupations focussed on are the biggest professional categories in the public service. Once again, the moderate increase in numbers of nurses, teachers and police stands in stark contrast to overall increases in the public service.

Government has recognised medical and education skills shortages. For instance, the Department of Home Affairs has identified 1000 teaching jobs for recruitment internationally, specifically in maths and science (Department of Home Affairs, 2007). In the health sector, the Department of Health has begun reopening nursing colleges to increase the number of people training to become nurses (Department of Health, 2006).

Despite this and the slight increase in the number of teachers, there are significant issues facing the health and education sectors. The key challenge is the availability of skilled personnel in both areas over time. Human resource planning on education indicates likely shortfalls in the supply of teachers in the future. Projections on labour supply and demand – taking into account HIV/Aids – indicates that gaps in the provision of teachers could be as high as 10,000 per year between 2011-2014 (Crouch and Perry, 2003). Other estimates suggests this to be higher at around 14,000.

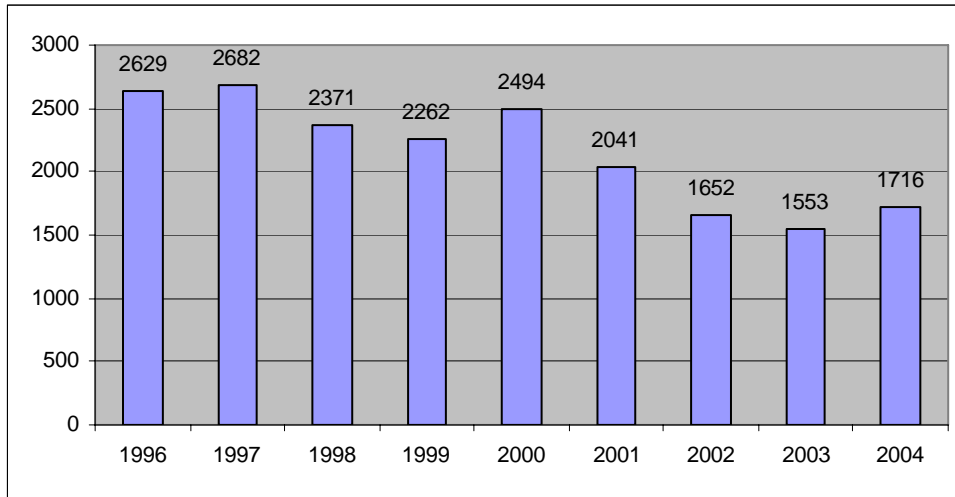
There are some common problems facing nursing and teaching, including HIV/Aids. We focus here on two major questions for the supply of labour in these professions; the low level of enrolments by graduates, and mobility out of the professions.

***Low levels of enrolment by graduates:*** in both the teaching and nursing careers there are concerns about attracting young people into the profession. Figure 5 shows the changes in enrolment in the four-year comprehensive course in nursing colleges and universities. The closure of nursing colleges and teacher colleges – especially in rural areas – has been a contributing factor. Government has recognised this in the health sector, with a strategy to reopen nursing colleges. However, this faces a bottleneck as skilled instructors to staff these colleges are in short supply.

Patterns of student enrolment in tertiary education for teaching also show a significant decrease in overall student numbers. Similarly, enrolments of student teachers in pre-service programmes has decreased significantly from 70,731 (1994) to 1,053 (2000).

Government has undertaken a range of activities to boost enrolment numbers, including reopening colleges, providing bursaries and designating certain areas as scarce skills for immigration purposes. These are important interventions, as the number of teachers required to meet new and replacement demand between 2001-2006 is estimated at 73,070. For nurses it is 35,461 (Woolard I, Kneebone P and Lee D; 2003).

**Figure 5 - Enrolments in professional nursing colleges: four year comprehensive course (1996 - 2004)**



Source?

**Mobility out of the profession and sector:** A noteworthy feature of nursing and teaching is that a significant percentage of those with training do not practice in these professions. Subedar (2005) for instance indicates for professional nurses:

*The statistics indicate that a large number of new professional nurses (34 264) were produced between 1996 and 2004. However, the growth in the number of professional nurses on the SANC register for the same period was 10 707, representing 31.5% of the professional nurses produced during this period. Conversely, 27 133 (68.5%) of the professional nurses produced were lost from the system without monitoring as to why and where they have gone. Given the need for nurses in the SA health system, these losses represent an unsustainable situation and will significantly affect the implementation of Primary Health Care, which is dependent on the professional nurse.*

We can surmise that these trained nurses entered other employment or, alternatively, are not practising. Teaching, however, provides a clearer picture. Perry and Crouch (2005) find that in 2001, 191,421 persons trained as educators were not working as educators. Teachers and nurses working in other sectors is an under-researched area. From a policy perspective it is an area that we must understand, especially since these are occupations that require significant replacement capacity to meet future demands.

## **2.3 Budget Trends**

### *2.3.1 Fiscal Policy and Public Service Reform*

In 1999 government adopted the *Personnel Expenditure Review (1999)* which aligned the objectives of fiscal policy of containing wages to the public service reform programme. The review suggested a set of policy instruments to contain wages and increase salaries for senior managers, who had received small or no increases since 1996. The alignment between fiscal policy and public service reform to contain wages cemented a trend of reducing personnel as a percentage of government spending that started with the adoption of GEAR.

The year 1996 was notable not only for the adoption of GEAR, but also the adoption of the first ‘three year agreement’ between unions and the democratic government. The agreement streamlined public service jobs into 16 grades, provided for annual salary increases, restructured pension benefits and raised transformation issues related to the size of the public service. Its outstanding achievement was to provide near complete common service conditions across public service structures by raising salaries to those enjoyed by white public service workers under apartheid on the principle of equal pay for work of equal value.<sup>3</sup>

At the time it is understandable that cohesion in the public service was very important to stabilising democracy, and extending services. However, the agreement was surprising as government departments had already indicated the need to reduce personnel spending as a share of total expenditure. The financing logic behind the deal was that as Voluntary Severance Packages (VSPs) were taken, recurrent costs to the state would be reduced, and these reductions would fund, in part, the salary increases. The choice was for either smaller wage increases and increased numbers on the one hand, or larger wage increases and smaller employment on the other. It is widely argued that the parties to the three-year agreement effectively made choice for smaller employment with higher levels of remuneration (Adler, 2000).

In the 2000/01 financial year, government adopted a moderately expansionary stance reflected in higher year-on-year percentage increases in the total personnel expenditure bill. The MTEF projections from the 2007/08 financial year show a continuation of this expansionary stance. However, a key reason for the salary dispute in the 2007 wage negotiations was that significant portions of the budgeted amounts were to finance agreements reached earlier between unions and government, including increased posts for nurses and teachers. Consequently, even though increases in the current MTEF are large, they reflect commitments already reached.

### *2.3.2 Employment and budget relationship*

This periodisation indicates a direct relationship between changes in public service employment and changes in fiscal policy. Figure 6 compares annual percentage

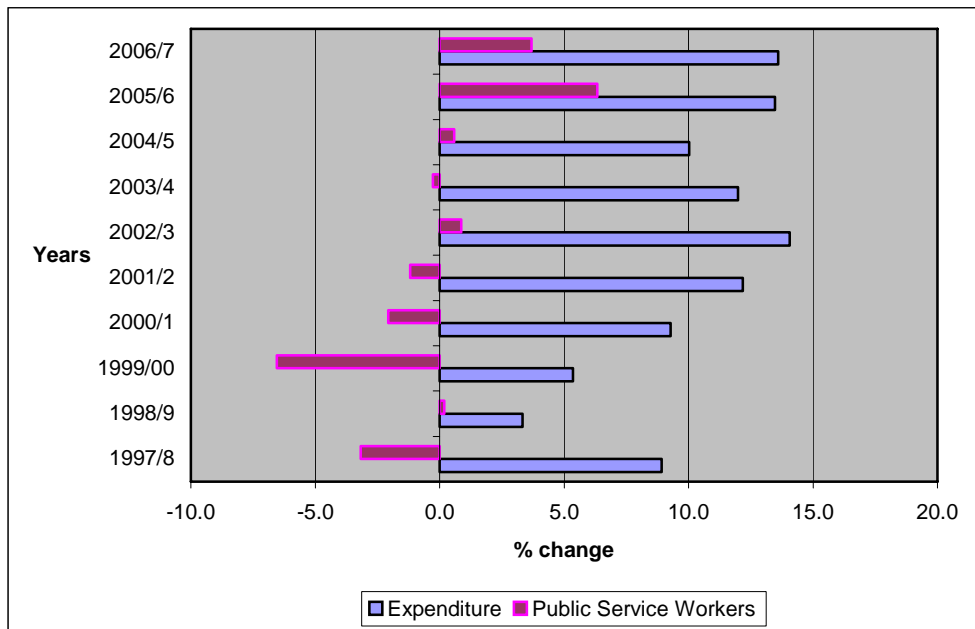
---

<sup>3</sup> In other sectors, notably child support grants, government reduced grant values to provide for more people, and to extend access to child support.



changes in total government expenditure and public service employment numbers. There is a direct relationship between budgets and personnel. As budgets increase, personnel increases follow with a slight lag due to the administrative steps in appointing staff. Personnel increases and decreases take a year or two to respond to changes in the budget.

**Figure 6 - Change in total government expenditure and public service employment (%)**



Sources: Budget Review (various years) and PERSAL

### 2.3.3 Outcomes of budgets on personnel

A key feature of government's strategy has been reducing the percentage spend on personnel. Table 8 indicates that government has been successful in reducing personnel as a share of total expenditure.

**Table 8: Consolidated personnel spending 1995 to 2010**

Year	% of total personnel spending	Amount (Billions)	% increase in personnel spending
1995/96	37.4	57,891	-
1996/97	40.8	76,625	32.4
1997/98	38.4	78,486	2.4
1998/99	38.9	82,136	4.7
1999/00	39.2	87,300	6.3
2000/01	38.3	93,170	6.7
2001/02	36.7	100,240	7.6
2002/03	35.3	109,941	9.6
2003/04	34.4	119,885	9.0
2004/05	33.8	129,543	8.1
2005/06	32.5	141,425	9.2
2006/07	31.8	157,348	11.3
2007/08	31.8	177,369	12.7
2008/09	31.2	193,232	8.9
2009/10	31.1	210,367	8.9

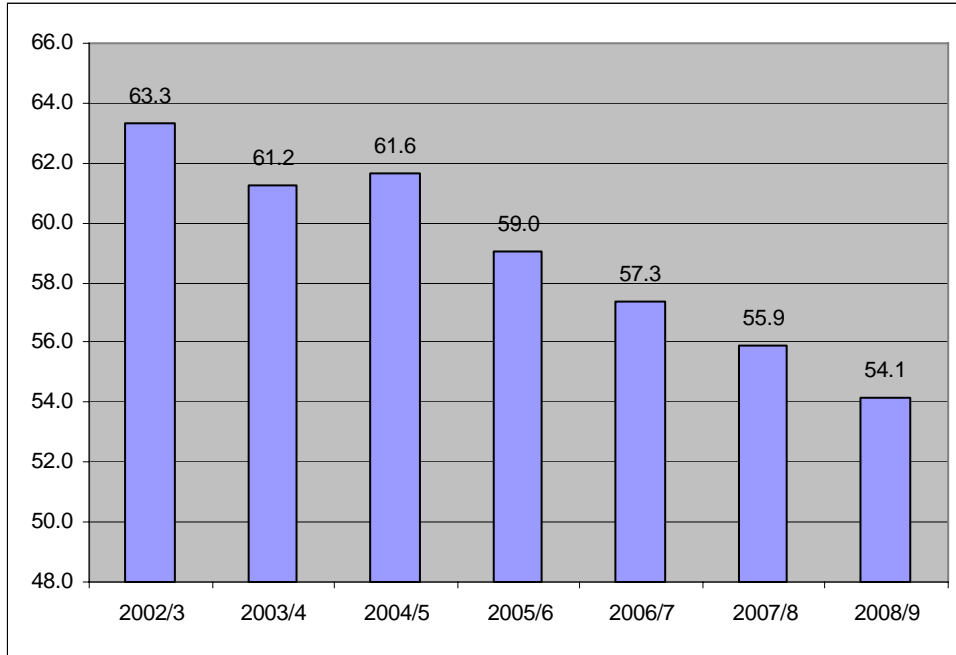
Sources: Baskin, 2000 for 1995/96, all other years Budget Reviews

Personnel as a percentage of total expenditure (including interest spending) has decreased from a high of 40% in 1996/97 to a low of 31.8%. This is consistent with government's focus on reducing personnel spending as a percentage of total spending with an implicit rule that personnel spending should approach 30% of total spending. Improvements in revenue collection have however allowed for significant increases in personnel spending, and even greater increases in other areas of spending. In the context of significant improvements in revenue collection, the trade-off between reducing personnel as a percentage of spending on the one hand, and providing at least inflation linked increases to workers on the other hand, has been largely ameliorated.

Figure 7 shows that at provincial level – where the majority of public service workers are employed – a similar trend in expenditure on personnel is observable.

Achieving these budget outcomes in the GEAR years was focussed on closing down posts, and not on funding the staffing requirements of government departments. For instance, in 1998 the Department of Justice required funding for approximately 1900 posts, which were not funded (National Treasury, 1998). Similarly, analysis indicated that in 1996 the public service would require approximately 3,000 additional nurses in professional and primary health care and the estimated gap for nurses in 2000/01 was forecast to be as high as 12 000. (McIntyre D, Govender V and Makan B: 1997). In most of these instances, new posts were not created, or the number of new posts created was much lower than human resource planners in departments suggested.

**Figure 7 - Personnel as a percentage of provincial spending (2002/3 to 2008/9)**



Source: National Treasury (2006) Provincial Expenditure Review

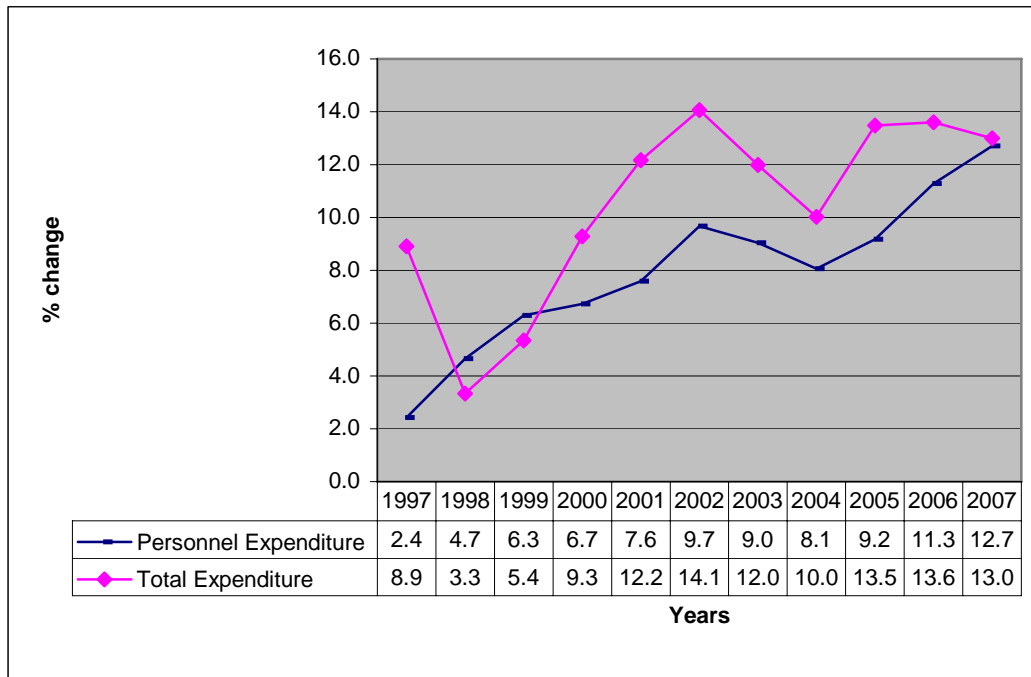
In many respects, this approach was common across countries that experienced Structural Adjustment Programmes, with governments always presenting their fiscal stance in terms of the wider social good. The 2001 Budget Review for instance argues that:

*The stabilisation of personnel expenditure will also enable additional spending on key inputs, which have been under substantial pressure in recent years. This is especially true for provincial services where spending on textbooks and other learner support materials in education, and on medicines and related inputs in health, is set to grow strongly over the next three years. This will facilitate the effectiveness of these sectors.*

The intent is seen in practice:

Figure 8 shows that overall government expenditure has grown much more quickly than personnel expenditure between 2000 and 2005. The increases financed significant expansion of social security, infrastructure spending on the built environment and in the criminal justice sector. At the same time, government institutions were attempting to do more with less staff, while management level posts increased.

Figure 8 - Change in total expenditure and in personnel expenditure, 1997 - 2007 (%)



However, wage containment can come at a significant cost. Ian Lienart (1998) from the International Monetary Fund, argues that:

*Although cutting costs by squeezing real wages contributes to macroeconomic stability, beyond a certain point it becomes counterproductive.*

Lienart, in this path-finding study, identifies the costs associated with ‘squeezing real wages’ as demoralisation of the public service, absenteeism, moonlighting and increases in corruption. The South African experience suggests that reduced levels of performance have flowed from inadequate human resource budgets.

#### 2.3.4 Average salary costs and employment

From a fiscal perspective it is the average cost of employment that matters, as this aggregation indicates the overall pattern in employment costs.

Figure 9 shows the changes in average salary costs, and compares that to changes in employment. It indicates a more complex picture than a simple salary/employment trade-off. Once again, three distinct periods are observable. In the first period (1995-1999) there is a trade-off between employment and wages. In the period between 2000 and 2004 employment stabilises, followed by an increase in both employment and wages from 2004.

**Figure 9 - Change in average salaries and employment in the public service (%)**



Sources: Author's calculations based on budget review and PERSAL data

## 2.4 Bargaining trends

Government and unions have entered into several salary and restructuring agreements since collective bargaining was recognised in the South African public service in 1993. In 1999, government unilaterally implemented salaries after a long and protracted dispute. The agreements reached are complex, with each agreement covering the following areas:

- Pay increases
- Benefits
- Restructuring of the public service
- Performance

Across these periods of negotiations, there have been areas of both significant shifts and continuities over the last twelve years. The major shifts have been:

- **Linking salary agreements to budgets:** since 2000, government has managed to reach multi-year agreements that provide for it to budget for salary increases over the Medium-Term Expenditure Framework. This is an important shift from previous agreements, which, whilst linked to inflation, were not explicitly linked to the budgeting cycle. In the 2007 settlement this alignment is challenged due to a shorter period in which salary adjustments are

agreed to, as well as negotiations towards determining occupational specific dispensations for major professions. However, there still seems to be an overall alignment.

- **Rewarding managers:** the first multi-year agreement reached aimed to reduce the wage gap in the public service, which was a policy commitment in the *White Paper on Transformation of the Public Service (1995)*. This agreement increased wages on a sliding scale, with lowest ranked workers receiving high increases, and froze salary increases for higher ranked workers. In subsequent years parties agreed to across the board increases, which represented a shift from reducing the wage gap. Government then introduced the Senior Management Service (SMS), which removed senior managers from the Public Service Coordinating Bargaining Council. Today, senior managers and middle managers have an inclusive and flexible salary structure. These changes saw the wage gap drop dramatically between 1996 and 2000, and then rise after 2001.
- **Rightsizing as a managerial prerogative:** unions and government reached an agreement to conduct a skills audit jointly. This effectively meant that rightsizing the public service would be a mutual concern of parties to the bargaining council. After the Public Service Jobs Summit in 2001 unions and government reached an agreement that effectively allowed government to determine the size of public service independently at departmental level. They agreed to continue voluntary retrenchment, but, in addition, introduced employer initiated retrenchments. (Box 2 indicates various rightsizing initiatives.)
- **Rewarding and retaining professionals:** the agreements reached in 2007 mark a major shift in public pay reform. The introduction of the Occupational Specific Dispensation (OSD) provides the first prioritisation of the major professions in the public service (e.g. nurses, teachers, and police). The agreement provides for a process of regrading occupations, and for career progression. This focus on these professions marks a significant departure from governments focus on management since 2000.
- **'Clean wage bill':** the democratic public service had to manage a large number of different benefits due to the different administrations that existed under apartheid. During negotiations, there has been a move towards simplification of benefits and allowances, through introducing government run schemes for medical insurance, and delinking the costs of benefits from changes to market prices. The most significant development is the creation of the Government Employee Medical Scheme (GEMS). This gives government the power of a bulk buyer, and hence the ability to negotiate with, and periodically switch, service providers. Government has included medical aid and housing in salary negotiations, but has pegged these at rand amounts, thus mitigating risks associated with rising interest and medical aid inflation. The change has been remarkable extending benefits to lower ranked workers, whilst reducing the costs of providing benefits.



## Box 2: Right-sizing and exit management in the South African public service

Since 1994, there have been several attempts to determine the 'rightsize' in the public service. Rightsizing is often described as a euphemism for downsizing. Under the rubric of New Public Management, government spoke of exit management strategies in the public service. Propelling all these initiatives is a doubtful premise that the public service is bloated, or that some jobs serve no purpose and need to be closed down. As the statistics indicate, the public service is smaller than it was in 1995.

An important feature of the bargaining agreements has been a strong focus on determining a 'rightsize' for the public service. The relevant clauses in the 'Three-Year Agreement' read as follows:

*A concerted effort to determine on a programme by programme basis the minimum number of staff that would be adequate to deliver a particular programme, having regard to declared policy and priorities.*

Whilst the definition of the 'rightsize' can mean opposing things, there has been a strong focus on government to reach an optimal size for the public service.

Key rightsizing initiatives in the public service include:

- **Three-year agreement:** The first agreement signed between government and unions, introduced Voluntary Severance Packages (VSPs). The implementation of VSPs saw 81 187 people leaving the public service. Of these 24 202 were teachers, just under 30% (Baskin, 2002)
- **Skills audit:** Government and unions agreed to a joint process to conduct a skills audit in the public service. The process agreed to never materialised due to fears of employer-initiated retrenchments, and the ascendancy of managerialism in the public service.
- **Jobs summit and restructuring agreement:** The Public Service Jobs Summit and the subsequent collective restructuring agreement reached aimed to speed up rationalisation of the public service, with the unions conceding to employer initiated retrenchments, to a watered down social plan and to making the restructuring process a consultation issue (i.e. not a matter of mutual interest) (Resolution 7 of 2002). The problem with the agreement was that it provided a long and cumbersome process for government and, surprisingly from a government perspective, increased the costs of retrenchments. The Minister of Public Service and Administration reported that this process revealed that there were 28,377 excess employees. Of these 2,507 took voluntary severance, there were 746 resignations, 23 took early retirement and 2,311 were transferred to other departments. It remains unclear what has happened to the remainder of staff declared in excess.
- **Cabinet skills audit process:** In 2007 Cabinet took a decision to implement a common system across the public service and local government to determine skills priorities and gaps.

*Sources: Baskin (2000), PSCBC resolutions and Department of Public Service and Administration*

Despite a tumultuous bargaining process, there have been remarkable continuities in the bargaining process.

- **Linking salary adjustments to inflation:** the first ‘three-year agreement’ in its first year provided for a rapid increase in salaries, but in the remaining two years increases were linked closely, if implicitly, to inflation (Baskin, 2000). From 2000 onwards there have been explicit linkages between inflation and salary adjustments. The 2007 agreement, with a 7,5% salary increase, continues this trend as CPI-X is likely to be at the top of, or above, the inflation targeting band. For the 2008/9 financial year salary increases are once again pegged to projected CPI-X.
- **Weak performance systems:** despite important attempts to introduce performance systems in the public service that are able to distinguish poor performance from good performance, the agreements reached have unintentionally continued a system of virtually automatic rewards. The introduction of ‘rank-and-leg promotions’ were meant to be linked to performance assessments, but were scrapped. Government tried to introduce performance management through changes to the Public Service Regulations, and through agreements with labour. However, these systems require four assessments per employee per year, resulting in over 4 million assessments per year. The sheer numbers are daunting, but not insurmountable given adequate management capacity at institutions. This area requires significant intervention in the public service, and more work than the intent of this paper provides for.

## 2.5 Race and gender

The public service at the start of democracy had more blacks in total than whites. This was due to the whites not choosing the public service despite job reservation, the inability to attract large numbers of skilled white people, and significant employment of blacks in ‘homeland’ governments (Naidoo V, 2005; Mc Lenan A, 1997). Yet, the skills profile, ethos and approach of the apartheid bureaucracy were not developmental. One of the first moves by the democratic government was the employment of 1,000 public servants, partly to inject a new layer of cadres into the public service, but also to ensure representivity.

Figure 9 shows how the distribution of employees by race and gender has changed in the public service. The most substantial shift has been away from white employees towards African females. This is seen in the percentage changes in race and gender between 2000 and 2006.

**Table 9: Percentage change in employment by race and gender (2000-2006)**

Race	Gender	Percentage change
African	Female	16.2
African	Male	1.6
Asian	Female	16.0
Asian	Male	1.7
Coloured	Female	2.4
Coloured	Male	-0.5
White	Female	-10.6
White	Male	-17.7

There has been a substantial transformation of the public service in terms of race and gender overall. An important area requiring attention is the under-representation of women at senior management level in the public service.

A feature of the public service in terms of gender representation is that males dominate national departments, while provincial government departments have a higher proportion of females. This suggests that policy development is still the preserve of males, while females have a greater share of production jobs at provincial level, particularly in the caring professions of nursing and teaching.

## 2.6 Changes in policy

The review of employment trends in the public service suggests a dynamic policy environment with significant changes across time. Box 2 provides a summary of the changes observed from a policy perspective.

**Box 3: Summary of main policy changes and influences in public service employment**

Categories	Downsizing (1995-1999)	Stabilising (2000-2003)	Increasing (2004 – 2006)
Employment	Decrease in employment of 15%	Slight decrease of 0.6%, but public service employment stabilises.	Significant increases in public service employment, which increases by 10% during this period.
Policy objectives	Contradictory policy objectives of reducing the wage bill, while simultaneously reducing the wage gap	Stronger alignment of fiscal and public service reform agenda. Strong focus on management	Need to improve management capacity in the public service. Lately, a stronger focus on improving the capacity of frontline institutions.
Fiscal Environment	Restrictive across the board	Stabilising budgets for personnel, but a strong increase on grants	Moderately expansionary stance
Government-Union Relationships	Coalition for change between unions and government, but fiscal policy under GEAR is more powerful	Government implements unilaterally, unions suffer defeat	Growing confidence and radicalisation of public service workers. Service departments, like education and health become more forceful players. Significant changes in approach from DPSA and Treasury as budgets increase.

*Sources: Makgetla (2000), Hassen (2004). See also backgrounder on collective bargaining developed for this project.*

### 3 Public service in its labour absorbing role

This section investigates the possibilities and rationale for the public service to play a labour absorbing role. The section first reviews the broader labour market, with reference to changes in the public service. Next, it reviews relationships between poverty and employment, with reference to provincial public service employment. A review of youth and graduate unemployment follows, together with scenarios for employment covering the broader sectors. The section concludes by summarising the case for a labour absorbing role for the public service.

#### 3.1 Public service and the broader labour market

The declining share of public service employment is significant, given that public service jobs provide good quality formal sector work (i.e. salaries, pension, housing and medical benefits). Moreover, the declines have occurred in the context of government policy aspirations for the delivery of basic services over the next decade. Table 10 shows the changes in public service employment relative to the overall labour market.

**Table 10: Public service as a percentage of the labour force and formal employment (1995 –2006)**

Year	1995	2000	2001	2002	2003	2004	2005	2006
Public Service	1,267	1,044	1,032	1,041	1,038	1,044	1,110	1,151
Total Labour Force	9,515	12,238	11,181	11,296	11,394	11,643	12,301	12,800
Total	13.3	8.5	9.2	9.2	9.1	9.0	9.0	9.0
Formal Sector (excluding agriculture)			7,027	7,181	7,373	7,692	7,987	8,384
% of formal employment			14.7	14.5	14.1	13.6	13.9	13.7

Sources: OHS and LFS and PERSAL

Note: the public service includes national and provincial personnel only. It excludes local government personnel and parastatals.

Table 10 shows that the public service shrank until recently and therefore dampened overall employment growth at a time when the labour force was expanding rapidly. The private sector has been responsible for any inroads made into unemployment, and all employment growth since the mid-1990s can be attributed to formal and informal private activity. In fact, the public sector has reduced the economy's ability to generate employment.

The decline in public service employment has had a differential impact by race, as 70% of all black graduates find their first job in the public service. This is a discussion we take up later when discussing youth unemployment.

### **3.2 Poverty rates, inequality and provincial employment**

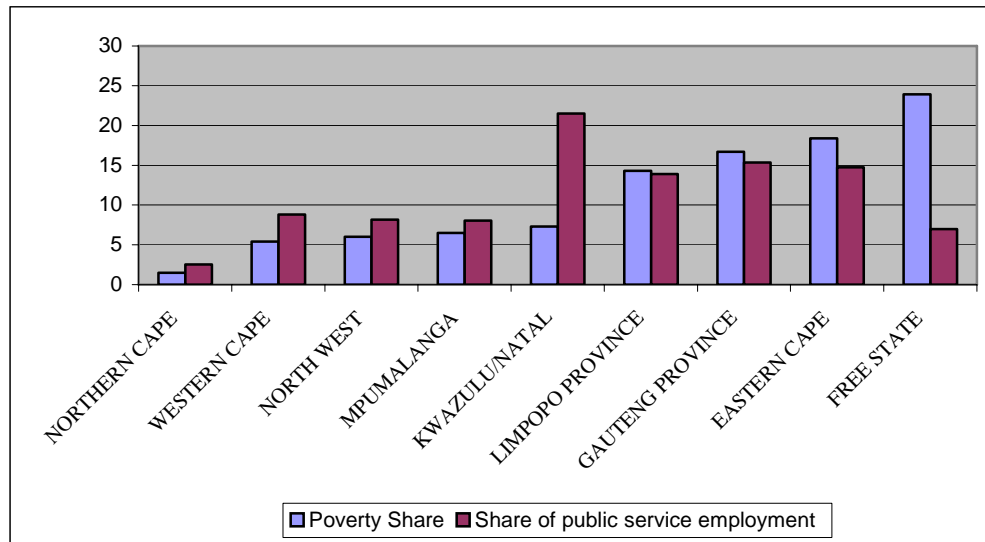
The public service plays an instrumental role in reducing poverty, and inequality. In South Africa the structural nature of poverty and inequality is embedded in our history. While inequality between racial groups has declined, inequality within racial groups has increased. In 1993, 61% of inequality was between race groups, but by 2006 this had declined to 40%. This suggests that inequality in South Africa is now more class-based than race-based. This is unsurprising, given that the black middle class is growing at an estimated 20–35% a year. At the same time, incomes of wealthy households have grown far more than those of poorer households. While the middle and upper classes have become less defined by race, the poor remain overwhelmingly black. The overriding picture is that democratisation has not yet provided the majority of the poor with ways out of poverty.

It may be counter-intuitive that there is global evidence of a strong correlation between high levels of inequality and the growth in the public sector – measured by government expenditure or by the size of the public service. The literature has a complex set of models and nuances between these elements, however the stylised approach is to argue that politicians favour public sector employment over more explicit forms of redistribution through the tax system. The reason being that increasing public service employment is less likely to provoke strong opposition. An alternative explanation is that economies with high rates of inequality rely more heavily on the public service for the purposes of redistribution. The relationship is observable across developed and developing countries. For instance, cities in the United States of America with higher income inequality and ethnic fragmentation have significantly higher numbers of people employed in the public sector. Similarly, the poorer southern part of Italy has a much higher proportion of public sector employees. Moreover, several studies of Eastern European transition economies suggest that recent increases in public sector employment are directly linked to social conditions experienced there (see Alesina, Baqir, and Easterly, 2000 for a review of these studies).

The South African picture is different, as high and growing levels of inequality have been associated with a decrease in public service employment. A comparison between the percentage poverty share by province, and public service employment indicates that poorer provinces are likely to have fewer public service workers. See Figure 10.

Provinces with higher poverty rates have experienced significant decreases in public employment levels. The Eastern Cape and Free State, which have the highest poverty shares, have experienced the sharpest decline in the number of public service workers.

**Figure 10 - Public service employment and poverty by province**



Source: Poverty rates from Woolard and Liebrandt (2006), using IES (2000) data. Provincial share of employment calculated from PERSAL

Note: The poverty rate for provinces is calculated using a poverty line of R 429.00 per capita, per month using 2000 prices. The National Treasury has proposed a rate of R 430.00 as part of its discussion on poverty lines. The poverty rate is calculated using the Income and Expenditure Survey (2000).

### 3.3 Youth and Graduate Unemployment

Amongst the slew of development indicators, youth unemployment must rank as the most worrying of all. It carries with it the strong prospects of inter-generational poverty being perpetuated and deepened. It is thus not an exaggeration to argue that the future of South Africa depends on resolving this problem.

Recent research by the Centre for Development and Enterprise and the Centre for Applied Microeconomic Research on youth unemployment provides evidence that young adults face significant obstacles to entering the labour market. In fact, Bernstein (2007) calls this a ‘continuing structure of disadvantage’ particularly for young Africans. This is especially true since 76% of all unemployed people who have never worked are between 15 and 30 years (Pollin et.al, 2006).

The phenomenon of graduate unemployment has received extensive attention, indicating that, despite a skills shortages, African graduates find it extremely difficult to find employment. One of the central determinants is the quality of education received, with graduates holding diplomas less likely to enter employment than those holding degrees. Table 11 shows the distribution across qualification areas. The problem often associated with an oversubscription to humanities education does not seem to hold: for example, the largest group of unemployed graduates studied business, commerce and management studies.

**Table 11: Unemployed graduates by field of study**

Field of study for degree, diploma or certificate	Number	Per cent
Education, training and development	21	10.6
Management, engineering and technology	31	15.7
Health sciences and social services	17	8.6
Business, commerce and management studies	62	31.3
Physical, maths, computer and life sciences	29	14.6
Other	38	19.2
Total	198	100

Source: LFS, 2006 (2)

Significantly, there is strong alignment between areas of public service and qualifications of unemployed graduates. This means that growth in the public service would present a significant opportunity for these graduates. Qualifications in several categories are similar to both work being undertaken in the public service, and areas identified as having skills shortages. However, there are significant obstacles to entry. These include that most unemployed graduates hold certificates or diplomas, as opposed to degrees (Pauw K, Oosthuizen M and van der Westhuizen, 2006). Furthermore, that a key barrier to entry relates to ‘soft skills’ and work experience.

The impact of public service reform on graduate unemployment is even more important than this alignment. Moleke (2005) has shown African graduates are more likely to be employed in the public service, with around 70% of black graduates finding their first jobs in the public sector. The reduction in overall public service employment since 1995, coupled with increases in management levels since 2000, has closed opportunities for black graduates looking for entry-level positions. This is further reinforced by middle management positions requiring a degree, rather than a diploma, for entry.

### 3.4 Economic growth and job creation

Altman (2007) presents scenarios for low, moderate and high economic growth and indicates that market based job creation might not be sufficient in itself to reach the target of halving unemployment. This requires the creation of about 5 million net new jobs between 2004 and 2014, so that about 16.6 million people would be working by then. Table 12 presents an overview of these scenarios. She estimates employment growth in all market based opportunities based on the rate of GDP growth and the possible translation of that growth into employment.



As part of this scenario building, she makes some assumptions about the rate of growth in the public sector, including national, provincial, local and parastatal employment. Expenditure on the public sector grows by the rate of GDP growth, plus 30% assuming that more money becomes available for social spending as interest payments fall and revenue collection improves. Then it is assumed that half that spending is allocated to salary improvements and the other half to employment. For example: if GDP grows by an average of 4.5% pa, spending on personnel is seen to rise by  $4.5\% \times 1.3 = 5.85\%$  pa. Half that is allocated to increases in employment, which would be 2.9%. We assume that the skills distribution remains the same.

Since government has committed itself to halving unemployment, the remaining employment is created through public works type programmes. Table 12 shows EPWP as this residual amount.

There are numerous actions that can be taken to deepen employment absorption in the market. However, employment creation in the public domain is more certain. If we see the sum of the public service and EPWP as the “residual” then the policy question would instead ask what the appropriate distribution of employment between this range of options would be.

**Table 12: Employment scenarios to 2014**

	2004	2014		
	Actual	worst scenario	middle scenario	best scenario
Average GDP growth rate 2004 - 2014		3.0%	4.5%	6.0%
Market based jobs	9,788,000	11,899,441	13,121,354	13,805,444
Public sector	1,500,000	1,828,492	1,996,388	2,199,109
EPWP	172,000	2,857,000	1,468,485	579,503
Total	11,628,000	16,588,152		

Source: Altman (2007)

Notes: The employment in the public sector includes national, provincial, local and parastatal employment.

## 4 Scenarios for public employment

What role might the public service play in future employment creation? Public service employment is fundamentally an administrative choice. Market-based employment creation is always uncertain because it depends on a range of private behaviours. In contrast, government decides how it wants to spend on public service employment and can then go ahead and implement.

Therefore, the role of public service employment will depend firstly on the extent to which spending on the public service expands. That expenditure is then split between salary increases and employment expansion. The allocation to salaries partly depends on the skills composition of the public service, as well as the commitment to raising salaries of key personnel such as teachers or nurses.

### 4.1 Funding for additional public service employment (“the budget envelope”)

The most obvious first step in preparing scenarios for public service employment is to identify the potential “budget envelope”: this is very simply the amount of money government might apply to spending on the public service over time. For this purpose, we have made the following assumptions:

- **Budget growth:** The budget will grow at the rate of inflation, plus the rate of GDP growth. Thus if inflation was 6%, and economic growth 3% the budget would grow by 9%.<sup>4</sup>
- **Personnel budget:** The personnel budget would grow at the rate of economic growth, plus 4%. Thus if economic growth is 3%, then personnel expenditure would increase by 7%.
- **MTEF projections:** From 2007/08 to 2009/10 the Treasury projections are used, as indicated in the 2007 budget review. We then base our growth projections as itemised in the previous two bullets from 2010/11.

Table 13 shows how the public service personnel budget would grow if the economy grew by 3%, 4,5% or 6%. The results of this modelling indicate that:

- All three scenarios result in a falling share of personnel spending as a share of the budget. This differential between personnel spending and overall budget

---

<sup>4</sup> Note that all calculations in the tables that follow assume constant Rand. The reader should imagine that these are the amounts that would be spent in the current year if the programme were operating at the 2014 scale.

spending is needed to ensure that government has sufficient funds available for meeting delivery needs and maintaining growth of spending on social services.

- Despite a reduced share for personnel expenditure, significant resources are released for funding salary increases and employment. By 2013/14, between R 21.4 bn and R 30.6 bn is available annually, in addition to current personnel spending.<sup>5</sup> These increases in spending provide the policy space to make decisions between wages and employment on the one hand, and between occupations identified for increased employment on the other.

**Table 13: Total expenditure and public service personnel expenditure – baseline scenario**

Categories	Low	Medium	High
<b>GDP Growth</b>	3.0 %	4.5 %	6.0 %
<b>Personnel Expenditure Growth</b>	7.5 %	8.5 %	10.0 %
<b>Personnel Expenditure (Rand bn)</b>			
2007/08	193,818	193,818	193,818
2013/14	306,601	318,170	336,133
<b>Budget Growth</b>	10 %	11 %	12 %
<b>Budget Growth (Rand bn)</b>			
2007/08	597,133	597,133.	597,133
2013/14	1,048,182	1,086,821	1,126,518
<b>Personnel as a % of Budget</b>			
2007/08	32.5 %	32.5 %	32.5 %
2013/14	29.3 %	29.3 %	29.8 %
<b>Additional spending on public service ( Rand bn)</b>			
2013/14	21,390	24,925	30,557

Notes: The growth in the budget and in personnel expenditure is assumed to be according to the Medium Term Expenditure Framework (MTEF). The rate of growth identified in the table is calculated from 2010/11.

## 4.2 Scenarios if the skills composition changed

We have just established that the public service scenarios will be calculated on the basis of the availability of an additional budget envelope of R 21.4 bn, R 24.9 bn or R

<sup>5</sup> Of course, some proportion of this is locked in each year, and are made incrementally as the funding becomes available. That is, the choice on how R 21 bn to R 30 bn are spent is mostly made in previous years.

30.6 bn depending on the rate of GDP growth. This is above and beyond current spending which that grows by the rate of inflation.

The public service scenarios are then predicated on different skill distributions. For simplicity sake, we use average salaries as a proxy. The higher the average salary, the more public service employment leans toward higher skill occupations.

Table 14 shows average salaries under three skills trajectories, as they could be in 2008 and in 2014. The baseline cost for 2008 is calculated using average salaries as they were in 2006, and making adjustments based on the recent salary agreement in the public service.

**Table 14: Changes in average salary under different skills options**

Scenarios	Continuation as Is	Average salary falls by 25%	Average salary rises by 25%
<b>Policy Intent</b>	<b>Maintaining the current path</b>	<b>Increasing entry level and lower skilled jobs</b>	<b>Increasing jobs in management and high skilled production levels</b>
2008	R 156,543	R 117,407	R 195,679
2014	R 234,929	R 176,197	R 293,661

It is then assumed that 50% of the increase in personnel expenditure is made available for new hires, with the remainder being allocated to increases on salaries and benefits. The results are shown in Table 15.

**Table 15: Number of new public service jobs created between 2008 and 2014 under different skills scenarios**

GDP growth pa	3.0%	4.5%	6.0%
Increasing entry level and lower skilled jobs	405,186	443,707	503,419
Maintaining the current path	303,890	332,780	377,564
Increasing jobs in management and high skilled production levels	243,112	266,224	302,052

Table 15 shows the impact that a changing skills distribution might have on the numbers of people employed in the public service. If a bias were created toward employment at lower grades, potentially 400,000 to 500,000 net new jobs might be created depending on the rate of economic growth. This is substantially more than the 250,000 to 300,000 new jobs that would be created if the bias leaned towards the higher grade occupations.

## 5 Approaches to intensifying employment creation in the public service at lower grades

The public service scenarios show how a bias towards lower level occupations in future hiring would intensify employment creation per Rand spent. Below we offer some thoughts on how a lower layer in the public service could be generated for more marginalised and entry level work-seekers.

Public employment programmes occur in a variety of different forms.

- **Public works programmes:** are responses to widespread and large-scale unemployment in a country, or a geographic region, aimed at putting the jobless to work. The overarching goals are to reduce unemployment, provide a salary to workers and their families, and to provide a cushion in times of hardship. The public works programmes developed as a response to the depression in the United States of America are an example of these sorts of interventions. Less familiar are responses to the oil crises in the 1970s that used public sector employment as a response. Alternatively, the rural job guarantee scheme in India is meant to address structural poverty, where the problem is not a crisis or a cyclical downturn, but instead a structural problem where the economy is simply not generating enough market based opportunities.
- **Targeted public sector employment programmes:** are much more narrowly focussed, designed to deal with unique problems facing groups who fare much worse than other workers. These workers are less likely to be employed when the economy is strong. The key rationale for these programmes is to provide short-term employment and income for hard to employ groups. They are also meant to provide skills, experience and entry into the labour market, which would enhance future employment prospects.

Government can implement both public works schemes and targeted employment programmes. The choice is a matter of where to place policy emphasis. As Altman (2007) shows, there will be a substantial role for government in generating work opportunities so that the objective of halving unemployment by 2014 is reached, even under the best scenario. The question is what sort of opportunity, and will the job be inside government or procured by government. Below, we discuss possible ways of intensifying labour absorption within the public service, with a particular emphasis on the introduction of entry level and transitional jobs schemes. Some overlap is likely to arise in respect of social sector public works programmes, since the boundaries between public service and extremely low paid community services may become blurred.

### 5.1 Transitional jobs programme

The provision of transitional jobs can be defined as programmes that use public funds to provide temporary jobs to help individuals prepare for unsubsidised employment

(Richer and Savner 2001). Internationally, recent public employment programmes are targeted at the young, unemployed and the excluded; as society responds to less absorption of young people into the economy. Countries with strong apprenticeship systems are better able to deal with youth unemployment. It is in countries with weaker links between schooling and the labour market that transitional jobs programmes have emerged strongly.

Youth unemployment in South Africa represents the most challenging social problem that we face. The vast majority of unemployed youth (79% between 15 and 30 in 2005) have never worked before, and they are ineligible for social assistance. The poverty trap requires little explanation: low levels of skills, labour market discrimination, exclusion from networks and a capital-intensive growth path all play a part. There is little disagreement that developing a response to youth unemployment requires deliberate and detailed developmental plans. Instead, government's combined programme to address youth unemployment is not only inadequate, but is poorly conceived, and fails to grasp the extreme challenge that youth unemployment poses in South Africa. The key challenges include:

- **Dedicated budgets:** A transitional jobs programme needs to allocate money from government to support direct employment. The establishment of the National Youth Service is an important step in the right direction, as it provides an institutional voice in government. However, the National Youth Service Unit (NYSU) has an operating budget, but not a budget to establish projects. In some respects the analogy of a lobby group in government seems appropriate. The NYSU attempts to get government departments to allocate resources for programmes that support youth employment. Most developed and developing countries that run transitional jobs programmes have dedicated budgets to support direct employment.
- **Policy prioritisation and scale:** Governments accept that youth unemployment is structural, but interventions are modest and inadequate. The creation of a system to match unemployed graduates to work opportunities assumes that there are informational asymmetries between work seekers and employers. However, a closer look at graduates that are unemployed indicates that they are overwhelmingly African, hold diplomas as opposed to degrees, and have skills that are transferable into the public service. This last factor provides an opportunity in that unemployed graduates have training in areas that are closely aligned to the public service. Dealing with the structural unemployment of young people requires moving to scale. The combined commitment of learnerships, internships and projects by the NYSP could create a maximum of 50,000 opportunities if these programmes reach their maximum potential, as against more than three million unemployed by the strict definition.
- **Social security gap:** There are at best limited social security interventions targeted at unemployed youths. Current reform programmes are targeted at employed persons, or children and the elderly. There is reluctance to extend social security benefits on a universal basis, for a variety of reasons. Jobs are the alternative proposed – a first best alternative. Given the structural nature of youth unemployment there is a danger that this grouping will fall through the cracks between social security reform, and an economic growth strategy. A transitional jobs programme could ensure that young adults are provided with opportunities.

A transitional jobs programme could provide a policy response that provides employment opportunities and potentially sustainable employment once the programme is completed. A targeted public service employment programme (TPSEP) provides a policy alternative. The programme would have three key focus areas, as identified by the National Youth Service Programme:

- Social benefit: The programme should benefit the wider community
- Experiential Learning: Providing on-the-job experience linked to structured learning and development
- Exit opportunities: Once training has been undertaken young people exit into further learning, employment or self-employment.

A transitional job, whilst not permanent, provides a longer period of employment than the public works programme, and should provide training for skills development (See Altman and Hemson, 2007).

Table 16 provides scenarios for transitional jobs, and their costs. The scenarios show that starting from a base of 10 000 jobs in 2008, such a programme might reach up to 60,000 young people per annum. By 2014, this would cost between R 38m to R171m per annum in current Rand. The cost of the programme would depend completely on its scale. Because this would be a transitional programme, it is worth noting that between 70 000 and 200 000 young people might be reached over this period. The impact is dependent on the ability of government to roll out the programme, entailing more than fiscal considerations. The importance of a transitional jobs programme is that, if well implemented, it provides successful exit opportunities into employment. A more expansive transitional jobs programme is conceivable, provided that administrative capacity exists.

**Table 16: Scenarios for transitional jobs**

<b>Jobs</b>	<b>Low</b>	<b>Medium (increase of 10%)</b>	<b>High (Increase of 35% per year)</b>
Total number of transitional jobs in place by 2014	10,000	17,716	60,534
Cost per job in 2014	R 2,010	R 2,010	R 2,010
Cost of a transitional jobs programme in 2014 (assumes 50:50 split between programme and labour costs)	R38.2 mn	R 61.6 mn	R 171.6 mn

## 5.2 Entry level salaries

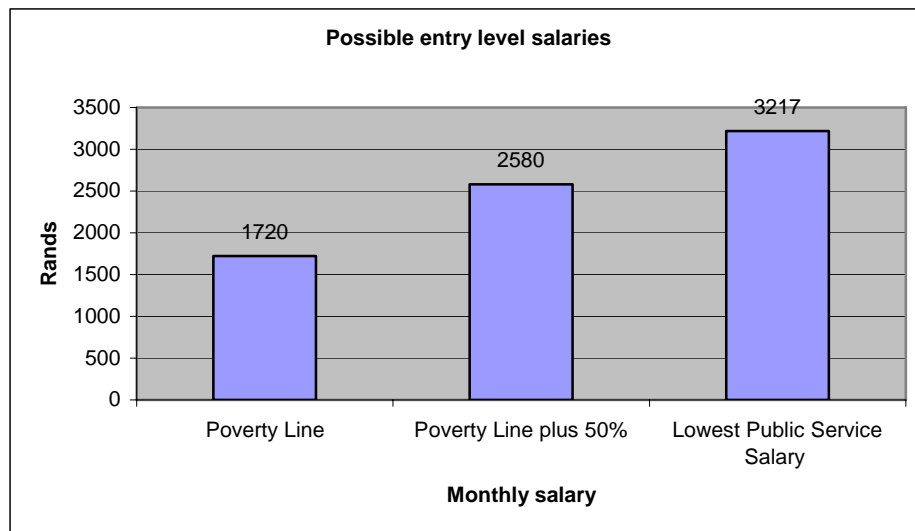
There is a large gap between entry level salaries in the public service, and similar opportunities in the market or in para-professional opportunities created in social sector EPWP-type opportunities such as early childhood development or home community based care. There may be value in considering special entry level grades

that enable intermediate points. This might be difficult to achieve in the current collective bargaining arrangement. This is a difficult policy choice for trade unions which will need to weigh up agreements on new entry level posts and the risks that entails, with the benefits of a growing bargaining unit and centralised bargaining. The choices for government are equally stark, as even if a new entry-level position were created it would need to factor in the administrative costs of employing to scale.

The discussion on outsourcing earlier in the paper draws attention to another motivation for introducing a new entry-level salary. The success of outsourcing government activities has had a significant impact on employment in unskilled and lower skilled levels, which has seen the largest decline in employment by skills levels from 1995. Part of the reason for outsourcing is that it is a cheaper and flexible way to provide services. However, another motivation is the so-called 'hassle factor' of having to manage employees, particularly those that provide routine services.

The creation of a new entry-level position could offer a significant avenue for government to employ largely unskilled and semi-skilled workers to provide public services. Given the spatial dimensions of poverty, creating these jobs provides (perhaps) secure income, thus stabilising household income. The setting of salaries would need to be sufficiently above the poverty line to provide an opportunity for saving. Figure 11 uses the poverty line developed by the National Treasury (which is about \$ 2-00 per day) or R 430-00 per person, per month. It then sets this for a four-person household; bringing the total to R 1720-00. The next possibility is increasing the estimated poverty line for a household of four by 50%.

**Figure 11 - Possible entry-level salaries**



There are legitimate arguments against adopting such a perspective to developing a new entry-level position. Most powerfully, that a slight upward adjustment, adding R75-00 to the poverty line might mean that the lowest ranked public service worker is earning below the poverty line. This ethically challenging question must however be seen in the context of 60% of employed people earning under R 2500-00 per month.



In other words, low skilled workers would not be able to earn higher salaries in the private sector, and would probably work in a non-unionised environment.

The quid-pro-quo from government would however need to be substantial job creation for the proposal to have significant impacts on livelihoods of the poor. Substantial job creation would entail somewhere in the region of 250 000 additional jobs between 2007 and 2014. Table 17 shows the impacts of such a strategy using a R 2580-00 per month salary (R 30 960-00 per year). A cost of living adjustment of 5% is added for each year. Estimates of costs by year and cumulative costs are provided. This results in an estimated total cost of R 34 billion. Assuming that each job would support four people and move them above the poverty line this would translate into a reduction of poverty by just over one million people.

**Table 17: Quarter million low-entry jobs, estimated costs**

Year	2008	2014
Number of additional jobs	35,000	255,000
Salary Per Year	R 30,960	R 41,489
Total Per Year (billions)	R 1,084	R 1,660
Cumulative Cost (billions)	R 1,084	R 9,229

The developmental logic of the proposal is as follows:

- The provision of these public service jobs would act as an implicit system of redistribution. The transfer of these resources would however not be an unrequited transfer of resources, but these workers would provide public services in the form of ECD, HCBC and other public services.
- The transfer of resources would provide a hedge against external risk associated with currency, oil, and prices of other commodities. These jobs would provide a cushion against these risks for the poor.
- The targeting of these jobs would be the least likely to be employed, thus offering a mechanism to break the generational transfer of poverty, that development thinkers call a poverty cycle.
- These jobs would be over and above (a) anticipated increases in public service jobs and (b) transitional jobs.
- Household livelihood strategies would be comprised of the public service jobs, plus some form of social grant or grants. Thus the provision of these jobs would work in tandem with other poverty reduction strategies by government.

There are three specific dangers with this proposal:

- **Displacement of private sector activity:** targeting persons who would not otherwise be employed in the private sector mitigates the danger of displacing private sector activity. However, the economy wide impacts of this proposal would need to be investigated.

- **Macroeconomic imbalances:** The increase in spending on personnel costs is modest given the size of the wage bill. The impacts on fiscal policy are modelled in the section on scenarios.
- **Policy capture:** A key assumption in the proposal is that the economically marginalised would be able to access these job opportunities, yet this section of society is least likely to have information and resources.

### **5.3 Integrating ECD and HCBC care**

There has been growing commitment by government to expanding community based social services, often called “social sector Expanded Public Works Programmes”. Two areas of expansion are very significant, including home community based care (HCBC) and early childhood development (ECD).

ECD is important given the long-run focus on improving skills through school readiness. The Department of Education has an ambitious plan to make reception year (Grade R) mandatory. There is further effort to expand services to children under age five. The HSRC estimates that this could be an extremely important source of job creation, mainly because it represents a large service delivery gap. Government aims to reach four million poor children by 2009/10. Altman estimates that up to 340,000 net new opportunities could be created in the delivery of these services alone. The EPWP employment and training targets are well below this level, partly in recognition of weak capacity in the sector.

The programmes that are running provide an indication of what can be achieved. For instance, the programmes provide 12–18 months of training for HCBC providers, and stipends for caregivers. Despite significant progress in these projects, the provision of social services like ECD and HCBC needs to be continuous. Providing EPWP money to these projects is an important catalyst, but strategies need to be developed to sustain them.

There is a challenge particularly associated with the social sector EPWP. The wages earned in social sector EPWP-type jobs are a fraction of those earned by public personnel. For example, the average payment to a social sector EPWP participant was about R 30 to R 50 per day in 2006/7. If a participant worked for 230 days in the year, this would translate into about R 6,900 to R 11,500 per annum. The lowest grade in the public service pays about R 38,000 per annum as from 2007/8, as seen in Table 18. The challenge therefore is to determine whether the EPWP is meant to provide short term opportunities for the most marginalised work-seekers, or if it is meant to offer a career path into para-professional work. The latter approach would enable professionalisation and would be more developmental; However it would also substantially raise the cost of job creation potentially reaching fewer people.

**Table 18: Comparison of ECD and HCBC salaries with public service salaries**

Period	ECD and HCBC (2006/7)	Lowest Public Service Salary (2007/8)
Annual	Depends on length of opportunity	R 38,000
Monthly	R 500 – R 1000	R 3,167

Source: DPSA, Altman & Hemson, 2007

## 6 Conclusion

What role should the public service play in expanding employment in South Africa? Government's commitment to halving unemployment by 2014 will require it to step in more forcefully, whether as a direct employer or through indirect routes such as public works schemes.

First and foremost, any discussion on public service employment must focus on service delivery. There is a clear indication that the public service is stretched and understaffed. Some part of this problem has been caused by the shrinking component of lower level personnel that support the skilled activities (for eg porters and nurses).

Simmonds and Naidoo (2007) argue persuasively that:

*There are many things wrong with the public service. Most of the problems in the public service do not relate to remuneration. They relate to management, structure, incentives, rewards for good performance, penalties for poor performance, the relationship between political head and civil servant etc. If we want the state to be an active participant in development and we want to address the capability gaps amongst the poor, then we need a better performing civil service.*

The challenge of performance in the public service is vitally important to address in the context of a growing public service. The proposals presented in this paper argue that the labour absorbing role is vital to address challenges of performance. The increase in lower skilled jobs could add vital skills to improve the functioning of institutions. However, this is only part of the solution. South Africans must demand that increasing expenditure on personnel should result in significant improvements in public services.

A secondary question relates to the public service's labour market role. The public service can play an important part in creating jobs in poorer regions, in enabling a first employment experience for labour market entrants, or in hiring hard-to-employ work-seekers.

The potential growth of public service employment will depend on the growth in public spending, how that growth is distributed between personnel and non-personnel spending, and then what proportion of personnel spending accrues to salaries of existing personnel as opposed to new hires. The final choice is related to the occupational distribution of new hires, whether leaning to lower or higher grades. In the current collective bargaining environment, these will not be easy choices. The trade-offs and choices have very important implications for the state, public servants and work-seekers.

## References

- Adler G. (2000) The neglected role of labour relation in the South African public service in G.Adler (ed) **Public service labour relations in a democratic South Africa** WITS University Press: Johannesburg
- African National Congress. (1994) *The Reconstruction and Development Programme: A Policy Framework*. Johannesburg: Umanyano Media.
- Alesina A, Baqir R, and Easterly W. 2000. Redistributive public employment. **Journal of Urban Economics**. Vol 48, Part 2, 219-241
- Altman (2007) *Employment scenarios to 2014 and 2024*, paper prepared for the Employment Scenarios Reference Group roundtable, August, Pretoria
- Altman, M. & Hemson, D. (2007) *The role of public works in halving unemployment to 2014*, paper prepared for the Employment Scenarios Reference Group roundtable, August, Pretoria.
- Baskin J. 2000. Public service bargaining in G.Adler (ed) **Public service labour relations in a democratic South Africa** WITS University Press: Johannesburg
- Crouch L. and Perry H. 2003. Human Resources Development Review 2003 Education, employment and skills in South Africa HSRC Press: Pretoria
- Du Toit R. 2005. Employment creation through the provision of social development services: exploring the options *Development Southern Africa* Vol.22, No.5
- Department of Finance. (1996) *Growth, Employment and Redistribution: A Macroeconomic Strategy*. Pretoria: Department of Finance.
- Department of Public Service and Administration. (1997) *White Paper on Transformation of the Public Service*. Pretoria.
- Department of Public Service and Administration. (1999) *Personnel Expenditure Review*
- Ellwood D.T.,and Welty E.D. 1999. *Public Service Employment and Mandatory Work: A Policy Whose Time Has Come and Gone and Come Again?* Joint Centre for Poverty Research, Working Paper 81
- Mbeki T. 2006. State of Nation Address 3 February 2006.
- McLenan, A. (1995) "Into the Future: Restructuring of the Public Service." In Fitzgerald, P., McLenan, A. & Munslow, B. (eds) *Managing Sustainable Development in South Africa*. Second edition. Cape Town: Oxford University Press.
- National Treasury. various years. Budget Review. Government Printers: Pretoria

Pauw K, Oosthuizen M and van der Westhuizen, 2006 Graduate Unemployment in the face of skills shortages: A labour market paradox presented at Forum 2006, hosted by the DPRU and TIPS

Richer E, Savner S and Greenberg M. 2003. Boom Times a Bust: Declining Employment among Less-Educated Young Men Center for Law and Social Policy: Washington DC

Woolard I, Kneebone P & Lee D. 2003 Forecasting the demand for scarce skills, 2001-2006 in Human Resources Development Review 2003 Education, employment and skills in South Africa HSRC Press: Pretoria