

Women in the South African Labour Market 1995-2005

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Abstract

Recent research has found that changing policies and attitudes and improved economic performance have impacted on the labour market dynamics for women and the increased feminisation of the South African labour force since the mid-1990s has been well documented. While employment has increased more rapidly for women than for men over the period, it has been suggested that women are overrepresented in low-income, less secure employment. In addition, insufficient jobs were created to absorb the additional entrants to the labour market and as a result women are also overrepresented amongst the unemployed.

The objective of this report is to provide an overview of the changes in the status of women in the South African labour market between 1995 and 2005. The report finds that the feminisation of the South African labour force between 1995 and 2005 has been driven specifically by greater numbers of African women entering the labour force. Women benefited more from the increased demand for labour over the period than men, accounting for more than half of the increase in employment, with the bulk accruing to African women. In line with previous research it is found that the majority of women find jobs as unskilled and low-paid Elementary Workers. Female unemployment rates increased for all covariates, but African women and young women in particular struggled to find employment.

When returns to employment are considered, it is clear that discrimination by gender and race remains. When real mean monthly earnings in 2001 and 2005 are compared it is found that women of all race groups earned less than men in both years, with the exception of Coloureds in 2005. African women, specifically, are undoubtedly the most vulnerable participants in the labour force, particularly if they are young and poorly educated. Even those African women who did find employment continue to earn considerably less than their White counterparts, with very large differences especially at the lower skills levels.

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1. Introduction

Internationally and historically, women have found themselves subject to various kinds of discriminatory behaviour, attitudes and policies, whether intended or unintended, which have hampered their full integration into the labour market. South Africa is no exception and, hence, various policies and campaigns have been implemented to ensure equal and fair access to the labour market for women. Such interventions are not only necessary from a constitutional point of view, but also because of the fact that so many households are totally or partially dependent on female members' incomes.

Recent research has found that changing policies and attitudes and improved economic performance have impacted on the labour market dynamics for women. For example, the increased feminisation of the South African labour force since the mid-1990s, the result of increased labour force participation rates across all race groups, has been well documented (see for example Casale, 2004; Casale & Posel, 2002). Similarly, employment amongst women has increased more rapidly, in both absolute and relative terms, than that of men over the past decade.

Despite the country's improved economic growth performance, insufficient jobs were created to absorb the additional entrants to the labour market. As a result, women are overrepresented amongst the unemployed, with more than half unemployed according to both the narrow and expanded definitions of unemployment. It has also been suggested that women continue to be disadvantaged relative to men within the labour market, the former being overrepresented in low-income, less secure employment. In addition, a significant portion of the new jobs attributed to women may simply be a reflection of better data collection since 1995 – specifically recording self-employment in the informal sector (Casale, 2004; Casale, Muller & Posel, 2004; Muller, 2003).

The objective of this report is to provide an overview of the changes in the status of women in the South African labour market between 1995 and 2005.¹ Section 2 provides an overview of changes in the South African labour force in the decade since 1995 for both men and women. Section 3 examines the characteristics of the employed, differentiating between the occupations and industries where women and men found employment over the period. In Section 4, male and female unemployment rates for 1995 and 2005 are contrasted according to a range of covariates. Section 5 provides a detailed descriptive overview of the returns to employment by gender. The final section presents a multivariate analysis of labour force

1 The two main data sources used in this analysis were the 1995 OHS and the September 2005 LFS, both of which are nationally representative household surveys. The October Household Survey (OHS) was conducted annually between 1994 and 1999. The Labour Force Survey (LFS) is a biannual survey introduced in 2000 to replace the OHS, with its first useable round conducted in September 2000. In the section focusing on informal sector employment, data from the LFSs from 2000 and 2005 will be utilised. Both these surveys have been weighted using the 2001 Census. The 1995 OHS has been weighted using the 1996 Census weights.

participation, employment and earnings, drawing on the variables used in the descriptive analysis.

2. Overview of the Labour Force

2.1 Aggregate Trends

This section provides an overview of the aggregate trends in the labour market between 1995 and 2005, before moving on to a more in-depth discussion of labour force trends for men and women in Section 2.2.

The working age population refers to people between the ages of 15 and 65 years. The working age population in South Africa increased by 5,5 million between 1995 and 2005 (Table 1). The labour force² refers to those individuals of working age who are either working or willing and able to work. Over the decade, the broad (expanded) labour force increased by 6,3 million (46 per cent) between 1995 and 2005, while the narrow labour force increased by 5,2 million (45 per cent).

Table 1: Overview of Changes in the South African Labour Market, 1995 - 2005

	1995		2005		Change		
	Male 000s	Female 000s	Male 000s	Female 000s	Male 000s	Female 000s	Total 000s
Number of 15-65 year olds	11,545	12,686	14,297	15,379	2,752	2,693	5,466
Narrow Labour Force	6,723	4,823	9,112	7,669	2,389	2,846	5,241
Broad Labour Force	7,598	6,155	10,281	9,810	2,683	3,655	6,346
Share of Narrow Labour Force	58.2%	41.8%	54.3%	45.7%			
Share of Broad Labour Force	55.2%	44.8%	51.1%	48.8%			

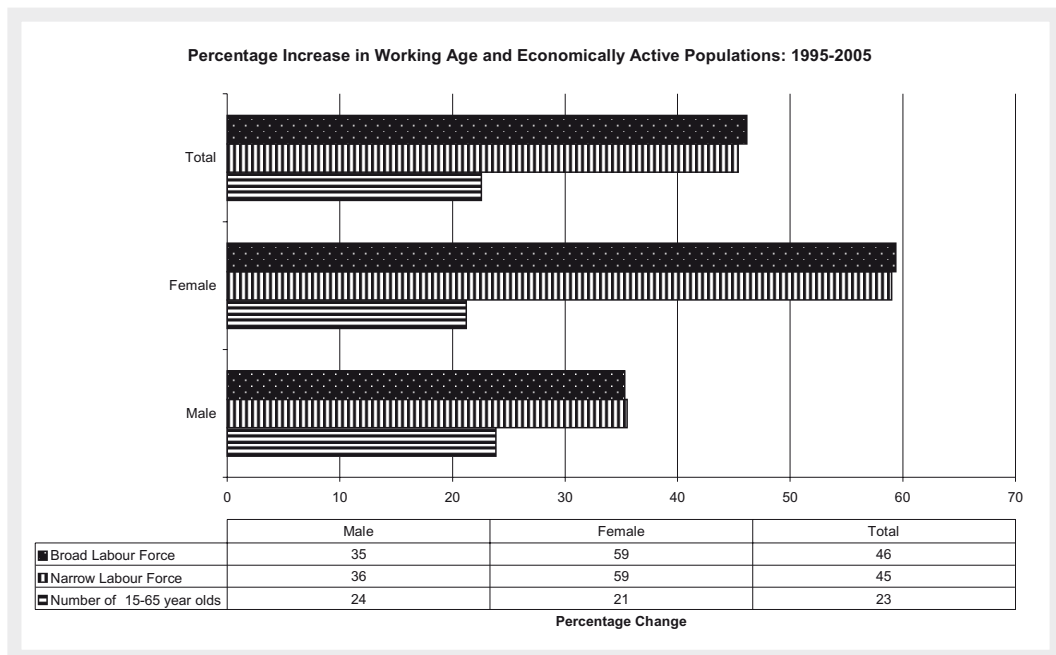
Source: OHS 1995, LFS 2005:2 (Statistics SA); Own Calculations

Notes: All changes are significant at the 5 per cent level.

As illustrated in Figure 1, the increases in both the narrow and broad labour force were almost double the increase in the working age population. Although the increases in the working age population of males and females were very similar, there was a much greater percentage increase in female labour force participation, both narrow and broad, over the period.

2 The two standard definitions of unemployment are used in this paper. The narrow definition of unemployment is used by Statistics SA as its official definition of unemployment and defines the unemployed as "those people within the economically active population who: (a) did not work during the seven days prior to the interview, (b) want to work and are available to start work within a week (1995) or two weeks (2005) of the interview, and (c) have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview". The expanded or broad definition of unemployment excludes criterion (c) (Statistics SA, 2003: xiv) and thus captures the all-important category of the "discouraged work-seekers. Note that the reference period mentioned in (b) increased from one week to two weeks from mid-2004 (Statistics SA, 2005: 2).

Figure 1: Percentage Change in Working Age Population and Labour Force between 1995 and 2005



Source: OHS 1995, LFS 2005:2 (Statistics SA); Own Calculations

The broad labour force for males increased by 35 per cent, while the broad labour force for women increased by 59 per cent. As can be seen in Table 1, this has resulted in an increase in women's share in the broad labour force from 41,8 per cent to 48,8 per cent, while the male share in the broad labour force decreased from 55,2 per cent to 51,1 per cent. Over the same period, the narrow labour force for males increased by 36 per cent and the narrow labour force for women increased by 59 per cent, resulting in an increase in women's share in the narrow labour force from 41,8 per cent to 45,7 per cent, while the male share in the narrow labour force decreased from 58,2 per cent to 54,3 per cent.

The increase in labour force participation in the South African economy has not been matched by an increase in job creation over the period. About 2,8 million net new jobs were created between 1995 and 2005 (Table 2). In comparison, the broad labour force increased by 6,3 million, while the narrow labour force increased by 5,2 million (see Table 1). As a result both narrow and broad unemployment increased, by 2,5 million and 3,6 million, respectively.

Table 2: Overview of Changes in Employment and Unemployment, 1995 and 2005

	1995		2005		Change		
	Male	Female	Male	Female	Male	Female	Total
	<i>000s</i>	<i>000s</i>	<i>000s</i>	<i>000s</i>	<i>000s</i>	<i>000s</i>	<i>000s</i>
Employed	5,798	3,717	7,055	5,242	1,257	1,525	2,786
	<i>60.9%</i>	<i>39.1%</i>	<i>57.4%</i>	<i>42.6%</i>			
Narrow Unemployed	925	1,107	2,057	2,428	1,132	1,321	2,455
	<i>45.5%</i>	<i>54.5%</i>	<i>45.8%</i>	<i>54.1%</i>			
Broad Unemployed	1,800	2,439	3,226	4,568	1,426	2,129	3,561
	<i>42.5%</i>	<i>57.5%</i>	<i>41.4%</i>	<i>58.6%</i>			

Source: OHS 1995, LFS 2005:2 (Statistics SA); Own Calculations

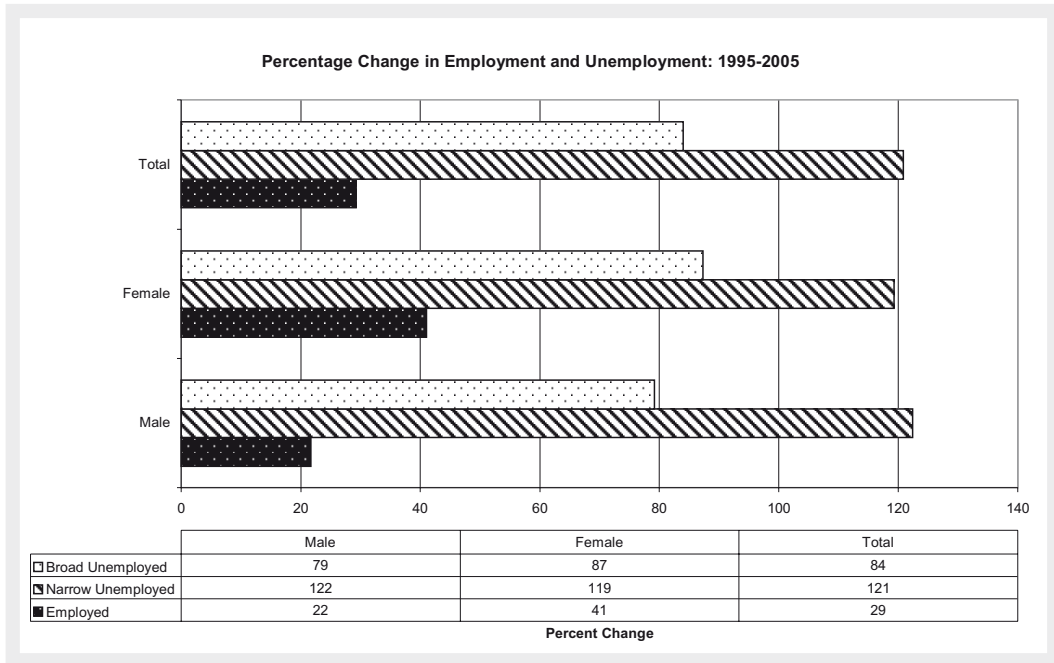
Notes: All changes are significant at the 5 per cent level.

Percentages in italics refer to share by gender in total employment, narrow unemployment and broad unemployment

The difference between narrow and broad unemployment implies that the number of discouraged jobseekers increased by more than a million. Discouraged workseekers are those individuals who no longer actively seek employment, but who would accept and be able to start employment immediately (Oosthuizen, 2006: 3).

Figure 2 shows that the percentage increase in the number of unemployed, by the narrow definition, was almost similar for males (122 per cent) and females (119 per cent), while the percentage increase in broad unemployment was higher for females (87 per cent) than for males (79 per cent), reflecting a greater increase in the number of female discouraged jobseekers.

Figure 2: Percentage Change in Employment and Unemployment between 1995 and 2005

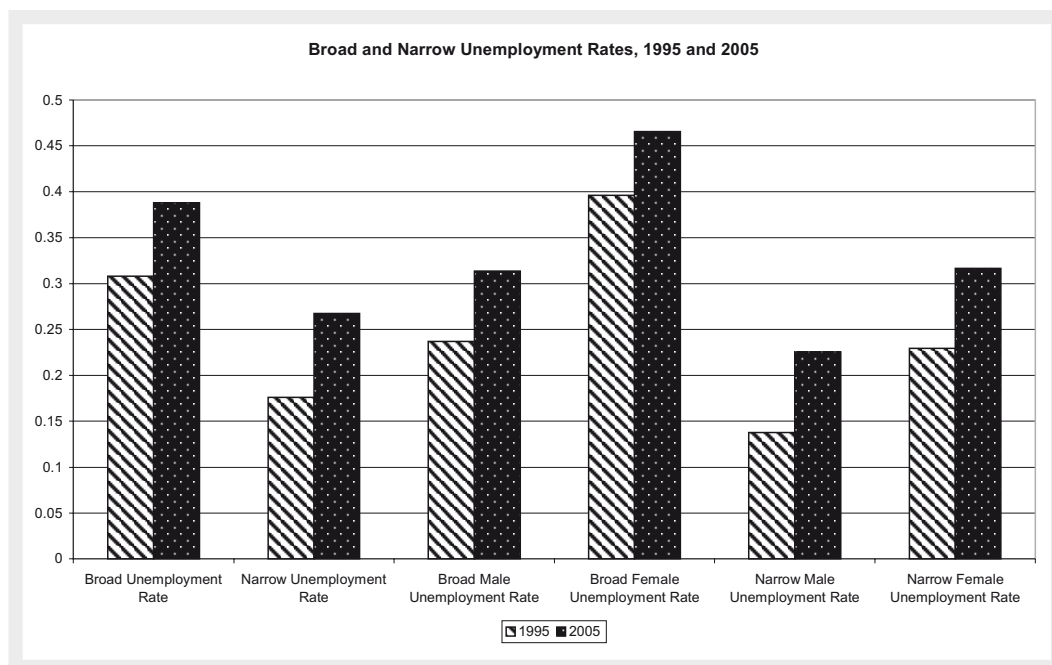


Source: OHS 1995, LFS 2005:2 (Statistics SA); Own Calculations

Women benefited more from the net new jobs created over the period. Female employment increased by 41 per cent, almost double the increase of 22 per cent in male employment.

Between 1995 and 2005 the increased labour force participation resulted in higher rates of broad and narrow unemployment for both men and women (Figure 3). The aggregate narrow unemployment rate increased by nine percentage points to 28 per cent in 2005, while the broad unemployment rate increased by eight percentage points to 38 per cent in 2005. While both the broad and narrow female unemployment rates increased by slightly less than the male unemployment rates, at 47 per cent (broad) and 32 per cent (narrow), the female rates were still substantially higher in 2005 than the male unemployment rates of 31 per cent (broad) and 27 per cent (narrow).

Figure 3: Broad and Narrow Unemployment Rates: 1995 and 2005



Source: OHS 1995, LFS 2005:2 (Statistics SA); Own Calculations

2.2 Characteristics of the Broad Labour Force

The results discussed in Section 2.1 above presented clear evidence of the increased feminisation of the South African labour force between 1995 and 2005. While both the number of men and women who are working or willing to work increased over the period, the increase in the female labour force was greater. Females accounted for almost 58 per cent of the growth in the labour force, while males accounted for 42,3 per cent of the change.

Table 3 provides a breakdown of the broad labour force by race, age, education and location. The total average annual growth of 3,9 per cent in the broad labour force was driven mainly by an average annual growth rate of 4,6 per cent in the African labour force, which in turn was mainly driven by an average annual growth rate of 5,5 per cent in the African female labour force. In fact, the increased labour force participation by African females accounted for almost 50 per cent of total labour force growth over the period. While men continued to account for a greater share of the labour force than women within each race group in 2005, African females increased their share of the African labour force to almost half by 2005.

Looking at the education levels of the broad labour force, one sees the highest average annual growth rates for female labour force participants with a Degree (8,3 per cent), followed by those who have completed Matric (7,6 per cent) and those who have completed their General

Education and Training (6,7 per cent) (“Completed GET” refers to individuals who have completed either Grade 9, 10 or 11). However, the number of female labour force participants with a degree remains small at just 372 000.

The labour force generally became better educated over the period. This is confirmed by the relatively larger growth rate for all individuals who have either completed their GET or obtained Matric or a tertiary qualification. Together these three categories accounted for more than 80 per cent of the increase in the broad labour force. It is specifically female labour force participants that improved their levels of education, with relatively higher growth rates in these categories.

When considering the ages of new labour force participants, average annual growth rates were highest for those in the 15 to 24 year age group and 55 to 65 year age group. For all age groups, the average annual labour force growth rates over the period were greater for women than men, with the largest difference in the 45 to 54 year age group. The largest increases in female labour force participation occurred in the two oldest age groups. This may be due to females choosing to remain in the labour force for longer than before or alternatively having no choice but to stay in the labour force and continue to work or look for work as they become older. The actual number of females in the 55-65 age group still remains relatively small. Females in the 25 to 34 year old age groups accounted for the biggest share in total labour force growth (19.5 per cent).

As the LFSs no longer publish information according to the rural/urban classification, it is impossible to compare changes in the rural and urban labour force over the period. Instead, changes in the broad labour force by province will be examined. The broad labour force increased in all provinces, with the highest growth rates in Limpopo, Mpumalanga, and the Eastern Cape. In all provinces, the female labour force increased at a relatively faster rate, with females in Limpopo displaying the highest average annual growth rate of 7,9 per cent. Increases in the number of male labour force participants were only statistically significant in three provinces, namely the Eastern Cape, Northern Cape and Limpopo. Comparing male and female contributions to the total labour force change, in all provinces except Gauteng, females accounted for a greater share of national broad labour force growth than males.

Table 3: Characteristics of the Broad Labour Force by Gender, 1995 and 2005

	1995			2005			Average Annual Growth Rates			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
	000s	000s	000s	000s	000s	000s	%	%	%	
TOTAL	7,598	6,155	13,754	10,281	9,810	20,100	3.7	5.5	4.6	
By Race	African	5,374	4,501	9,875	7,734	7,670	15,410	3.7	5.5	4.6
		54.4	45.6	100.0	50.2	49.8	100.0			
	Coloured	804	682	1,485	999	928	1,927	2.2 *	3.1	2.6
		54.1	45.9	100.0	51.8	48.1	100.0			
	Asian	269	148	417	335	223	559	2.2 *	4.2 *	3.0 *
		64.5	35.5	100.0	60.0	40.0	100.0			
	White	1,152	825	1,976	1,189	972	2,164	0.3 *	1.7 *	0.9 *
		58.3	41.8	100.0	55.0	44.9	100.0			
By Education	None	629	553	1,182	492	562	1,054	-2.4	0.2 *	-1.1 *
		53.2	46.8	100.0	46.7	53.3	100.0			
	Incomplete GET	2,667	2,100	4,768	3,065	2,652	5,717	1.4	2.4	1.8
		55.9	44.0	100.0	53.6	46.4	100.0			
	Complete GET	1,800	1,464	3,264	2,765	2,789	5,556	4.4	6.7	5.5
		55.1	44.9	100.0	49.8	50.2	100.0			
	Matric	1,596	1,278	2,873	2,733	2,647	5,385	5.5	7.6	6.5
		55.6	44.5	100.0	50.8	49.2	100.0			
	Diploma/Cert. with Matric	492	475	966	599	648	1,247	2.0 *	3.1	2.6
		50.9	49.2	100.0	48.0	52.0	100.0			
	Degree	296	168	464	447	372	820	4.2	8.3	5.9
		63.8	36.2	100.0	54.5	45.4	100.0			
By Age	15-24 years	1,227	1,176	2,403	2,027	2,038	4,069	5.1	5.7	5.4
		51.1	48.9	100.0	49.8	50.1	100.0			
	25-34 years	2,679	2,298	4,977	3,633	3,537	7,171	3.1	4.4	3.7
		53.8	46.2	100.0	50.7	49.3	100.0			
	35-44 years	2,064	1,606	3,670	2,310	2,235	4,547	1.1 *	3.4	2.2
		56.2	43.8	100.0	50.8	49.1	100.0			
	45-54 years	1,147	794	1,941	1,533	1,488	3,022	2.9	6.5	4.5
		59.1	40.9	100.0	50.7	49.2	100.0			
	55-65 years	481	282	762	779	513	1,291	4.9	6.2	5.4
		63.1	37.0	100.0	60.3	39.7	100.0			
By Province	Western Cape	941	753	1,694	1,207	1,109	2,317	2.5 *	4.0	3.2 *
		55.5	44.5	100.0	52.1	47.9	100.0			
	Eastern Cape	810	791	1,600	1,144	1,241	2,387	3.5	4.6	4.1
		50.6	49.4	100.0	47.9	52.0	100.0			
	Northern Cape	175	129	303	202	182	383	1.4	3.5	2.4
		57.8	42.6	100.0	52.6	47.3	100.0			
	Free State	578	452	1,030	653	624	1,278	1.2 *	3.3	2.2*
		56.1	43.9	100.0	51.1	48.8	100.0			
	KwaZulu Natal	1,419	1,194	2,613	1,952	1,895	3,849	3.2 *	4.7	3.9
		54.3	45.7	100.0	50.7	49.2	100.0			
	North-West	669	465	1,134	847	788	1,636	2.4 *	5.4	3.7
		59.0	41.0	100.0	51.8	48.2	100.0			
	Gauteng	1,979	1,497	3,476	2,807	2,242	5,049	3.6 *	4.1	3.8
		56.9	43.1	100.0	55.6	44.4	100.0			
Mpumalanga	520	376	896	658	669	1,330	2.4 *	5.9	4.0	
	58.0	42.0	100.0	49.5	50.3	100.0				
Limpopo	509	498	1,007	812	1,060	1,872	4.8	7.9	6.4	
	50.5	49.5	100.0	43.4	56.6	100.0				

Source: OHS 1995, LFS 2005:2 (Statistics SA)

Notes: Other and Unspecified categories have been omitted from the table

* Not significant at the five per cent level.

Evidence presented above suggests that the labour force has been growing at a faster rate than the working age population. This means that the probability that an individual is part of the labour force has been increasing between 1995 and 2005. This probability is measured by the labour force participation rate (LFPR) and is defined as the proportion of labour force members within the total number of individuals between the ages of 15 and 65 years (Oosthuizen, 2006: 20).

Both broad and narrow labour force participation rates increased over the period, with the broad LFPR increasing by 11 percentage points and the narrow labour force participation rate by 8,9 percentage points, again reflecting the increase in the number of discouraged workers (as discussed above). While the male LFPR increased by 6,1 percentage points, the female LFPR increased by more than twice that (15,3 percentage points). This again illustrates how the increase in labour force participation over the period has been driven by increased female labour force participation. The participation rate for males in 2005, however, remained higher than that of females (72 per cent compared to 64 per cent), although the gap between the participation rates by gender has been decreasing.

Table 4: Labour Force Participation Rates: 1995 and 2005

	1995	2005	Change
Total Broad LFPR	56.8%	67.7%	10.9%
Total Narrow LFPR	47.7%	56.5%	8.9%
Male	65.8%	71.9%	6.1%
Female	48.5%	63.8%	15.3%
African Male	62.5%	70.1%	7.6%
African Female	47.0%	64.1%	17.1%
Coloured Male	73.9%	77.9%	4.0%
Coloured Female	57.6%	66.3%	8.8%
Asian Male	77.9%	79.1%	1.2% *
Asian Female	40.2%	54.4%	14.3%
White Male	76.3%	78.0%	1.7% *
White Female	53.2%	62.0%	8.9%
Male 15-24 years	30.9%	42.5%	11.6%
Female 15-24 years	27.9%	43.0%	15.1%
Male 25-34 years	87.0%	93.6%	6.6%
Female 25-34 years	68.6%	86.4%	17.8%
Male 35-44 years	91.6%	92.2%	0.6% *
Female 35-44 years	67.3%	81.1%	13.7%
Male 45-54 years	85.9%	84.8%	-1.1% *
Female 45-54 years	55.0%	69.5%	14.5%
Male 55-65 years	52.7%	58.2%	5.5%
Female 55-65 years	21.8%	31.1%	9.3%

Source: OHS 1995, LFS 2005:2 (Statistics SA)

Notes: Other and Unspecified categories have been omitted from the table

* Not significant at the five per cent level

Looking at male and female participation rates by race, we find the largest increase for African females (17,1 percentage points), with the African male participation rate increasing by 7,6 percentage points. The relatively larger increase in the participation rate for African females has meant that the gap between African male and female participation rates has decreased. In fact, this decline in the gap between male and female participation rates is replicated across all race groups. For all other races, female participation rates increased more than male participation rates with Asian females experiencing a 14,3 percentage point increase, although starting from the lowest base. The changes in White and Asian male participation rates are not statistically significant.

Examining male and female participation rates by age categories, we find that the LFPRs for females increased significantly across all the age groups, with only the 55-65 year age group experiencing an increase of less than 10 percentage points. The 15 to 24 year age group was the only male category that experienced an increase of more than 10 percentage points, with comparatively small increases in the participation rates for men between the ages of 25 and 34 and in the oldest age group. With the exception of the 15-24 year age group, where participation rates by gender were almost the same, male participation rates remains higher across all age categories in 2005. Again, the big gap between the participation rates in the 55-65 year group is a reflection of the relatively younger retirement age of women.

Evidence presented above have again confirmed the already documented (see Casale, 2005; Casale & Posel, 2002) feminisation of the South African labour force since the mid-1990s. Both the narrow and broad female labour force increased by about 60 per cent over the period, in contrast to the male labour force with increase at around 35 per cent. Increased female labour force participation was driven by African females entering the labour market in greater numbers than before, with African women accounting for almost 50 per cent of the increase in the labour force between 1995 and 2005. Women of all races between 24 and 35 years accounted for almost 20 per cent of the total increase in the labour force, while females with either a Matric or a Complete GET contributed about 40 per cent to the increase in the labour force.

While the data analysed above does not go very far in providing reasons for the increase in labour force participation by women, it has been suggested that the relatively higher increase in labour force participation by females may be driven by the decline in female access to male income as a result of increased unemployment amongst males, the consequences of the HIV epidemic and an increase in the number of households headed by females due to changes in household structure (Kingdon & Knight, 2005: 5). Other possible explanations include the abolition of apartheid laws that have previously restricted movement and access to employment. Women of all races have experienced an increase in the possibilities available to them, coupled with increased aspirations. Legislation such as the Employment Equity Act (1998), the Skills Development Act (1998) and the Broad Based Black Economic Empowerment Act (2003) (Clarke, et.al. 2005: 70, 71) has contributed to increasing opportunities for women in the labour market. In addition, cost of living increases may have pushed women into the labour force.

It has also been shown that both men and women did experience an increase in their employment numbers, with female employment growing at a slightly faster rate. Section 3 below will first provide a brief overview of the characteristics of both the male and female employed before moving on to determining in which sectors and occupation groups the demand for labour increased over the period.

3. Employment

3.1 Characteristics of the Employed

As shown in Section 2.1, total employment increased by 22 per cent between 1995 and 2005, with females accounting for 55 per cent of the growth in total employment, substantially in excess of their share of employment in 1995 of 39 per cent.

Average annual growth in employment between 1995 and 2005 was 2,6 per cent. Corresponding to the greater growth in employment for females during the period, female average annual growth rate was 3,5 per cent, while for males it was just below 2 per cent. However, it must be taken into account that female employment increased from a much lower base in 1995, compared to male employment.

Table 5 presents a breakdown of the employed according to certain demographic characteristics. Most of average annual growth rate in employment can be explained by the increase in African employment, particularly the growth in African female employment. While African females accounted for 38,4 per cent of the African employed in 1995, their share increased to 42,5 per cent in 2005. In fact, African females contributed the greatest share, 45 per cent, to the total increase in employment. Coupled with the share contribution of 40 per cent from African males, the increase in African employment accounted for 85 per cent of the total growth in employment.

In line with the labour force the workforce appears to have aged, with 45-65 year olds accounting for 44 per cent of the growth in employment, and females in this age bracket accounting for the greatest share in the change, namely 18,4 per cent of the total increase in employment. This implies that increasing numbers of older women are working or that women are choosing to stay longer in employment. However, in terms of the actual number of employed, the 45-54 and 55-65 year age categories account for the smallest and third smallest share in total employment. Except for the 15-24 year age group, women experienced greater average annual growth rates in employment in all age categories and as a result the female share in employment increased in all age categories except 15-24 year olds.

The average annual employment growth rate between 1995 and 2005 was highest for those with degrees, pointing to a skills bias in the demand for labour. However, at around 6 per cent, this category of employment does not represent a large proportion of the South African workforce. In all other significant changes over the period, employment growth in all education categories has been higher for females than males. This is particularly true for those with degrees, although female employment started from a much lower base in 1995. Women's share of employment increased for all educational categories, but most for those with no education, incomplete GET education and for those with degrees. Holders of matric certificates accounted for the greatest share in the change in employment (45 per cent), with males accounting for 24 per cent and females accounting for 22 per cent.

Table 5: Demographic Characteristics of the Employed, 1995 and 2005

	000s	1995			2005			Average Annual Growth Rate (%)		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
By Race	Africa	3,787	2,358	6,145	4,893	3,613	8,507	2.59	4.36	3.31
		61.6	38.4	100.0	57.5	42.5	100.0			
	Coloured	660	488	1,147	741	588	1,330	1.17 *	1.89 *	1.49 *
		57.5	42.5	100.0	55.7	44.2	100.0			
	Asian	242	118	359	280	161	441	1.47 *	3.12 *	2.07 *
		67.4	32.9	100.0	63.6	36.4	100.0			
	White	1,109	753	1,863	1,123	867	1,993	0.13 *	1.42 *	0.68 *
		59.5	40.4	100.0	56.4	43.5	100.0			
By Age Group	15-24 years	654	472	1,126	848	568	1,416	2.64	1.87	2.32
		58.1	41.9	100.0	59.9	40.1	100.0			
	25-34 years	1,979	1,302	3,281	2,445	1,708	4,153	2.14	2.75 *	2.39
		60.3	39.7	100.0	58.9	41.1	100.0			
	35-44 years	1,744	1,119	2,863	1,831	1,420	3,253	0.49 *	2.41	1.28 *
		60.9	39.1	100.0	56.3	43.6	100.0			
	45-54 years	1,000	590	1,590	1,271	1,104	2,376	2.43	6.46	4.10
	62.9	37.1	100.0	53.5	46.5	100.0				
	55-65 years	422	234	656	660	443	1,103	4.58	6.59	5.33
		64.3	35.7	100.0	59.9	40.1	100.0			
By Education	None	484	288	772	362	329	691	-2.87	1.34	-1.11
		62.7	37.3	100.0	52.4	47.6	100.0			
	Incomplete GET	1,902	1,132	3,034	1,985	1,318	3,303	0.43 *	1.53	0.85 *
		62.7	37.3	100.0	60.1	39.9	100.0			
	Complete GET	1,313	782	2,095	1,674	1,157	2,832	2.46	3.99	3.06
		62.7	37.3	100.0	59.1	40.9	100.0			
	Matric	1,261	836	2,097	1,915	1,434	3,351	4.26	5.54	4.80
		60.1	39.9	100.0	57.1	42.8	100.0			
	Diploma/Certificate with Matric	460	431	890	541	540	1,082	1.64 *	2.29 *	1.97 *
	51.7	48.4	100.0	50.0	50.0	100.0				
Degree	286	160	446	427	356	784	4.10	8.32	5.80	
	64.1	35.9	100.0	54.5	45.4	100.0				

Source: OHS 1995, LFS 2005:2 (Statistics SA); Own Calculations

Notes: Other and Unspecified categories have been omitted from the table; * Not significant at the five per cent level.

3.2 Employment by Sector and Occupation

As already noted, more than half of the net increase in employment between 1995 and 2005 accrued to female jobseekers. In this section more light will be shed on the sectors as well as the occupation groups where women found employment. This will be contrasted with the sectors and occupation groups where men have found jobs over the decade.

The structural shift that has been taking place in the South African economy since the 1970s is characterised by a move away from production in the primary and secondary sectors to production in the tertiary sector. Restructuring in the manufacturing sector in response to globalisation has led to more capital-intensive production which continued in the 1990s (Nattrass, 2003: 146). The change in the demand for labour has therefore been driven by

the structural changes in the economy (i.e. the increased share of production in the tertiary sectors) and changes in the production methods used within each sector (for example an increased preference for capital over labour) (Bhorat & Hodge, 1999: 2; Poswell, 2002: 9).

This trend has continued after 1995, with most of the net new jobs created after 1995 in the tertiary sector (see Bhorat & Oosthuizen, 2005: 20; Oosthuizen & Van der Westhuizen, 2005: 11). In fact, between 1995 and 2003, the tertiary sector contributed more than 94 per cent to the total increase of 2,1 million jobs in the economy. Over this period, total employment in the secondary sectors increased by 19,3 per cent, while total employment in the tertiary sectors increased by 32,4 per cent (Oosthuizen & Van der Westhuizen, 2005: 11).

Continuing the historical trend, the primary sector shed jobs at an annual average rate of 2,2 per cent in the decade since 1995. Table 6 shows that the decline in employment in the primary sectors was the result of job losses in both Agriculture (from 1,2 million to 925 000 workers) and in Mining and Quarrying (441 000 jobs to 411 000 workers).

Table 6: Changes in Employment by Sector and Gender, 1995 and 2005

	1995			2005			Average Annual Growth Rates		
	Male 000s	Female 000s	Total 000s	Male 000s	Female 000s	Total 000s	Male	Female	Total
Primary Sectors	1,400	277	1,677	996	340	1,336	-3.3%	2.1%	-2.2%
	83.5%	16.5%	100%	74.6%	25.4%	100%			
Agriculture	978	258	1,236	608	317	925	-4.6%	2.1% *	-2.9%
	79.1%	20.9%	100%	65.7%	34.2%	100%			
Mining and Quarrying	422	19	441	388	23	411	-0.8% *	1.9% *	-0.7% *
	95.7%	4.3%	100%	94.4%	5.6%	100%			
Secondary Sectors	1,467	499	1,968	2,047	694	2,741	3.4%	3.3%	3.4%
	74.5%	25.4%	100%	74.7%	25.3%	100%			
Manufacturing	976	461	1,437	1,113	593	1,707	1.3% *	2.6% *	1.7% *
	67.9%	32.1%	100%	65.2%	34.8%	100%			
Utilities	74	10	85	77	23	100	0.3% *	8.8% *	1.6% *
	87.1%	11.8%	100%	76.8%	23.2%	100%			
Construction	417	28	446	858	77	935	7.5%	10.7%	7.7%
	93.5%	6.3%	100%	91.7%	8.2%	100%			
Tertiary Sectors	2,823	2,876	5,700	3,990	4,202	8,195	3.5%	3.9%	3.7%
	49.5%	50.5%	100%	48.7%	51.3%	100%			
Wholesale and Retail Trade	920	748	1,668	1,543	1,480	3,024	5.3%	7.1%	6.1%
	55.2%	44.8%	100%	51.0%	48.9%	100%			
Transport, Storage and Communication	406	71	477	491	125	616	1.9% *	5.8%	2.6% *
	85.1%	14.9%	100%	79.7%	20.3%	100%			
Financial and Business Services	318	262	581	739	556	1,296	8.8%	7.8%	8.4%
	54.7%	45.1%	100%	57.0%	42.9%	100%			
Community, Social and Personal Services	1,080	1,095	2,175	1,000	1,192	2,192	-0.8% *	0.8% *	0.1% *
	49.7%	50.3%	100%	45.6%	54.4%	100%			
Private Households	99	700	799	217	850	1,067	8.2%	2.0%	2.9%
	12.4%	87.6%	100%	20.4%	79.6%	100%			
Total	5,798	3,717	9,515	7,055	5,242	12,301	2.0%	3.5%	2.6%
	60.9%	39.1%	100%	57.4%	42.6%	100%			

Source: OHS 1995, LFS 2005:2 (Statistics SA)

Notes: Other and Unspecified categories have been omitted from the table

* Not significant at the five per cent level.

Over the last two years, however, there appears to have been a turnaround in employment trends in the secondary sector (also see Oosthuizen, 2006: 26). In the decade between 1995 and 2005, employment in the secondary sectors increased at an average annual rate of 3,4 per cent (equal to a total growth rate of 39,3 per cent over the period) from just below 2 million to 2,7 million workers. This was driven by gradual increases in employment in the Manufacturing and Utilities sectors. The bulk of the increased employment in the secondary sector is attributable to a more than doubling of the number of jobs in the Construction industry. Employment in this sector grew by an annual average rate of 7,7 per cent, from about 450 000 workers in 1995 to 935 000 workers in 2005.

Over the same period, employment in the tertiary sector grew by an average rate of 3,7 per cent per annum (equal to a total growth rate over the decade of about 44 per cent) from 5,7 million workers to a total of 8,2 million workers. Two sectors added jobs at a higher average rate than the tertiary sector average, namely Wholesale and Retail Trade at 6,1 per cent and Financial and Business Services at 8,4 per cent. In fact, employment in the Financial and Business Services sector experienced the most rapid growth of all sectors over the decade.

Total female employment growth in the secondary sector averaged 3,3 per cent per annum, slightly below the aggregate average growth rate of 3,4 per cent in employment in the secondary sector. This was driven by a significant increase in the number of women working in Construction. While the number of women working in this sector remained relatively small and growth took off from a very small base, it more than doubled over the period, growing at an annual average growth rate of 10,7 per cent.

Increased female employment in the tertiary sector was spread across all the main sectors. Three sectors added jobs at a higher rate than the tertiary sector average of 3,9 per cent per annum, namely Financial and Business Services (7,8 per cent), Wholesale and Retail Trade (7,1 per cent), and Transport, Storage and Communication (5,8 per cent) .

Table 7 shows the shares, by gender and sector, in total employment growth over the decade. Female employees in the tertiary sector benefited from almost 48 per cent of the jobs created between 1995 and 2005. Women working in the Wholesale and Retail Trade sector accounted for the largest share (26,3 per cent) of aggregate employment growth. This may partly be explained by Statistics South Africa's increased accuracy in capturing informal sector trade, which women dominate. Female employment expansion in the Financial and Business Services sector accounted for 10,5 per cent of the total increase in employment.

Table 7: Share of Total Employment Growth by Sector and Gender, 1995 - 2005

	Male	Female
Primary Sectors	-14.5%	2.2%
Agriculture	-13.3%	2.1%
Mining and Quarrying	-1.2%	0.1%
Secondary Sectors	20.8%	7.0%
Manufacturing	4.9%	4.8%
Utilities	0.1%	0.5%
Construction	15.8%	1.8%
Tertiary Sectors	41.9%	47.6%
Wholesale and Retail Trade	22.4%	26.3%
Transport, Storage and Communication	3.0%	1.9%
Financial and Business Services	15.1%	10.5%
Community, Social and Personal Services	-2.9%	3.5%
Private Households	4.2%	5.4%
Total	45.1%	54.7%

Source: OHS 1995, LFS 2005:2 (Statistics SA)

Notes: Other and Unspecified categories have been omitted from the table

With the exception of domestic workers, all occupation groups experienced an increase in demand for labour between 1995 and 2005 (see Table 8). The increase in the number of net new jobs was the largest for Skilled Agricultural and Fishery Workers and particularly for women in this category. The increase was, however, from a very low base and making any

deductions dubious. Managers accounted for the second largest increase in employment with an average annual growth rate of 5,5 per cent.

Females in Elementary Occupations experienced the largest growth in employment with an average annual increase of almost 10 per cent. In fact, more than a quarter of net new jobs created between 1995 and 2005 accrued to females in Elementary Occupations. This may, however, again reflect the increased accuracy in capturing informal workers as this category includes a wide range of elementary workers, including street vendors. Elementary Occupations also account for the largest share by occupation group of women employees, with 22 per cent (1,2 million workers) of females employed in this category. Female Managers experienced the second fastest increase in employment, with an average annual growth rate of 8,4 per cent. While the number of female Managers more than doubled to 248 000 over the period, the increase was from a very low base and women still occupied only 28,9 per cent of management positions in 2005 (up from 22,2 per cent in 1995). In addition, female management positions only accounted for 5 per cent of the total new jobs created, while male Managers benefited from 8 per cent of the total increase in employment.

With an average annual increase of 8,2 per cent, female Craft and Trade Workers experienced the third fastest increase in employment. Again it is from a relatively low base and may also be a reflection of the increased accuracy in capturing informal workers in this category. Male workers in this category only experienced a 4 per cent annual average increase. This was, however, from a much higher base and as a result, male Craft and Trade Workers accounted for the second largest share (17 per cent) in the total increase in employment.

It is not surprising that 97 per cent of domestic workers in 2005 were female. In only two other occupation groups did females account for more than half the number of workers in that category in 2005. Just over half of all Professionals were female, while almost 70 per cent of Clerks were female.

Table 8: Changes in Employment by Occupation Group and Gender, 1995 and 2005

	1995			2005			Average Annual Growth Rate			Share in Total Growth	
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
	000s	000s	000s	000s	000s	000s	%	%	%	%	%
Managers	389	111	500	606	248	857	4.5%	8.4%	5.5%	7.8%	4.9%
Professionals	692	694	1,387	891	894	1,785	2.6%	2.6%	2.6%	7.1%	7.2%
Clerks	410	726	1,136	364	824	1,188	-1.2%*	1.3%*	0.4%*	-1.7%	3.5%
Service & Sales Workers	636	447	1,083	896	711	1,607	3.5%	4.7%	4.0%	9.3%	9.5%
Skilled Agricultural & Fishery Workers	99	16	115	163	138	302	5.1%	24.0%	10.1%	2.3%	4.4%
Craft & Trade Workers	989	130	1,119	1,458	286	1,744	4.0%	8.2%	4.5%	16.8%	5.6%
Operators & Assemblers	947	161	1,108	986	142	1,127	0.4%*	-1.3%*	0.2%*	1.4%	-0.7%
Elementary Occupations	1,419	460	1,879	1,644	1,167	2,811	1.5%	9.8%	4.1%	8.1%	25.4%
Domestic Workers	137	938	1,075	29	831	859	-14.4%	-1.2%*	-2.2%	-3.9%	-3.9%
Total	5,798	3,717	9,515	7,055	5,242	12,301	2.0%	3.5%	2.6%	45.1%	54.7%
	60.9%	39.1%	100%	57.4%	42.6%	100%					

Source: OHS 1995, LFS 2005:2 (Statistics SA); Own Calculations

Notes: Other and Unspecified categories have been omitted from the table

* Not significant at the five per cent level.

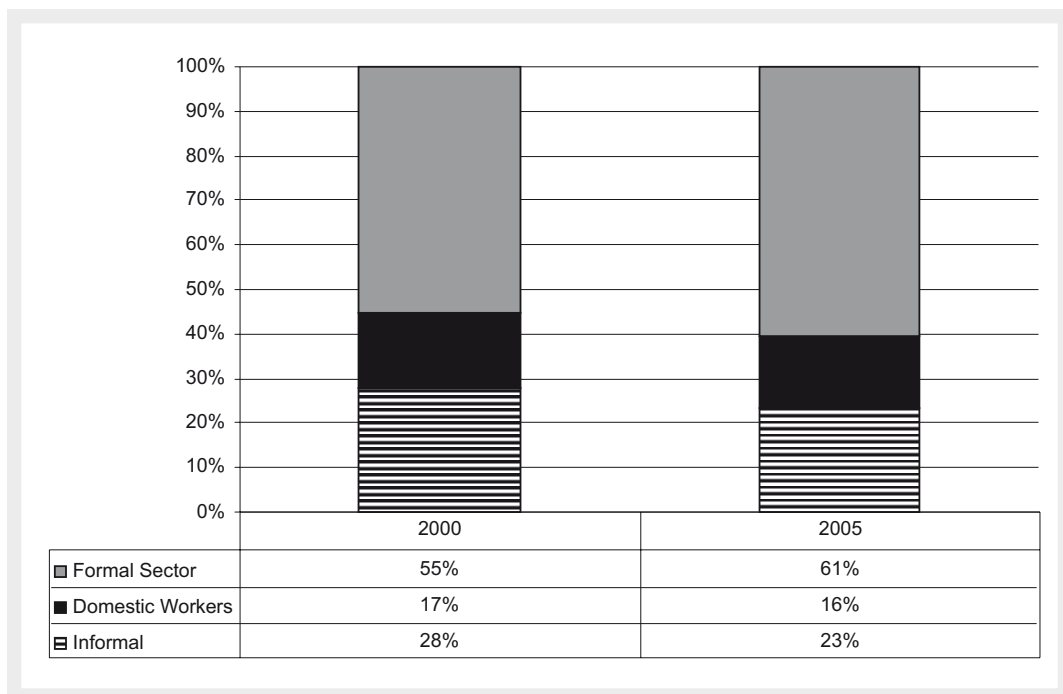
3.3 Informal Sector Employment

The difficulty in distinguishing between formal and informal sector employment in South Africa has been well documented, as have claims that at least some of the increase in informal sector employment (and therefore in total employment) has been the result of improvements in recording of the informal sector (see Casale, Muller & Posel, 2004; Muller, 2003).

It is difficult to compare survey estimates of the size of informal sector employment over time due to the evolution of the questions that attempt to capture informal sector employment. The 1995 OHS was unable to accurately capture informal sector employment. Subsequent OHSs were better able to capture informal work, while improved questions in the LFSs were designed to identify informal employment and better distinguish between the formal and informal sectors (Muller, 2003: 4; Borat & Oosthuizen, 2005: 18).

In order to obtain some indication of the share of the employed women working in the informal sector, Figure 4 presents a breakdown of female employment using the September 2000 LFS and the September 2005 LFS.

Figure 4: Female Employment: Formal and Informal Sector, 2000 and 2005



Source: LFS2000:2; LFS 2005:2 (Statistics SA); Own Calculations

In 2000, 55 per cent of employed women were working in formal sector jobs. The informal sector accounted for 45 per cent of female employment, with 17 per cent of the total number of female employees working as domestic workers and 28 per cent as true informal sector workers. By 2005, the share of women working in the formal sector has increased to 61 per cent, with the share of women working in other informal jobs dropping to 23 per cent. The share of employed women working as domestic workers remained relatively stable between 2000 and 2005. Using the figures presented in Table 8, it can be estimated that 25 per cent of employed women worked as domestic workers in 1995. Between 1995 and 2005 the share of recorded domestic workers in total (female) employment therefore declined by nine percentage points. It is, however, difficult to determine if the entire decline was due to a smaller share of women working as domestic workers or if it was also a reflection of some female informal workers being recorded as domestic workers in 1995.

This section has shown that women benefited more from the increased demand for labour between 1995 and 2005, with more than 55 per cent of the net new jobs created over the period accruing to females. It has also been shown that African females accounted for about 45 per cent of the total growth in employment. Generally, it has been women who had either completed their GET or Matric that have managed to find a job. In addition, the female workforce appears to be getting older, as it was mostly women over the age of 25 that found employment. Finally it was shown that while some women did manage to find employment in the highly skilled categories, such as Managers and Professionals (about 12 per cent of total net new jobs), more than a quarter of all the net new jobs created was accounted for by females finding work in Elementary Occupations.

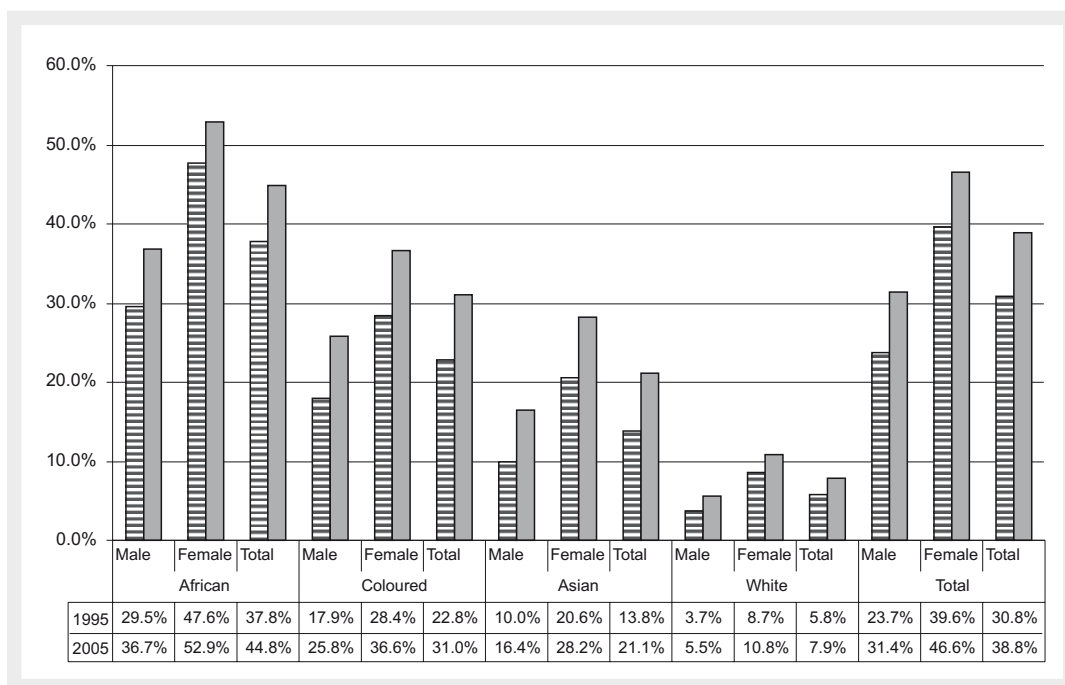
4. Unemployment

4.1 Female and Male Unemployment Contrasted

In Section 3.1 it was shown that both male and female broad unemployment rates increased between 1995 and 2005. Figure 5 illustrates the changes in the broad (expanded) unemployment rates by race and gender over the last decade.

Every single race-gender category experienced an increase in its unemployment rate between 1995 and 2005. The changes in the Asian (male, female and total) and in the White (male, female as well as total) unemployment rates were not statistically significant over the period.

Figure 5: Broad Unemployment Rates by Race and Gender



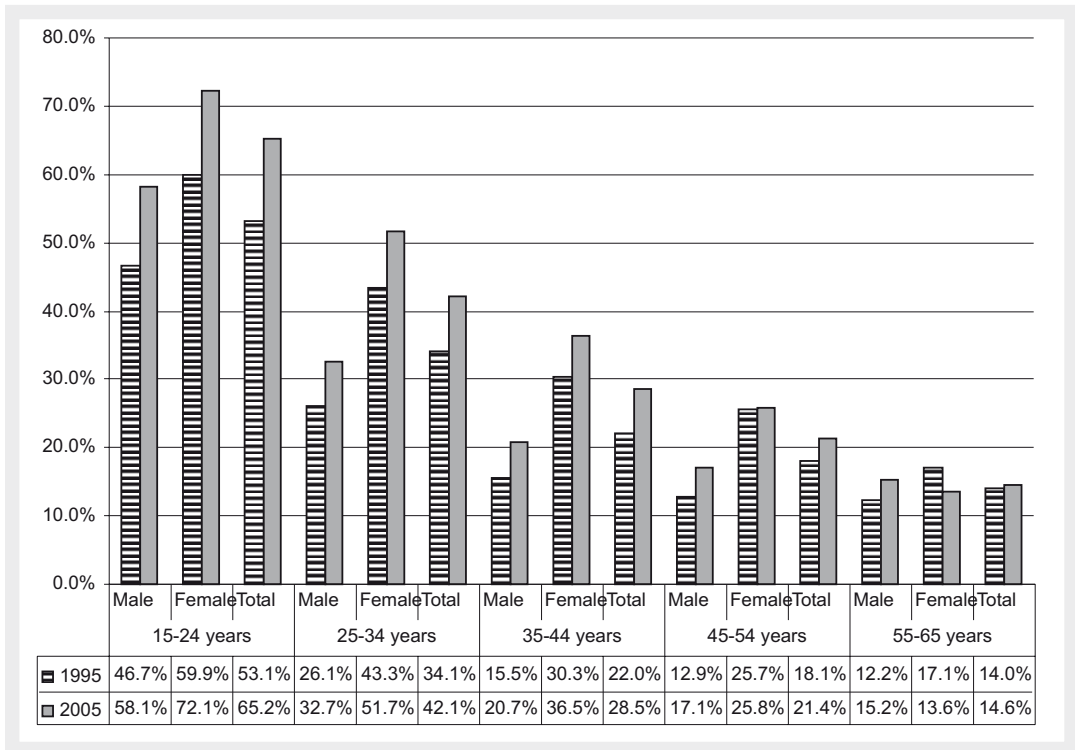
Source: OHS 1995, LFS 2005:2 (Statistics SA); Own Calculations

Particularly striking in the above figure is that within every race group females continue to experience higher unemployment rates. Total broad female unemployment increased by seven percentage points to 46,6 per cent in 2005. Over the same period, broad male unemployment increased at a slightly faster rate by 7,7 percentage points. However, at 31,4 per cent, male unemployment was still more than 15 percentage points lower than female unemployment in 2005.

Unemployment continued to be highest amongst African females, who experienced an increase in their unemployment rate of about five percentage points to almost 53 per cent in 2005. The unemployment rate amongst African males increased by 7,2 percentage points to 36,7 per cent in 2005. Over the same period, female Coloured unemployment increased by eight percentage points to 36,6 per cent in 2005, while Coloured males saw their unemployment rate increase by almost the same magnitude to 25,8 per cent. It is interesting to note that, while still lower than African unemployment, Coloured unemployment increased at a faster rate than African unemployment.

It is clear from the rising levels and rates of unemployment that the South African economy has been unable to create enough jobs to accommodate new job seekers. Figure 6 shows that it is particularly young new entrants, and specifically young female entrants, to the job market that struggle to find a job.

Figure 6: Broad Unemployment Rates by Age and Gender, 1995 and 2005



Source: OHS 1995, LFS 2005:2 (Statistics SA)

Broad unemployment rates are highest in the 15 to 24 years and 25-34 years age groups. In addition, these age groups also experienced the highest increases in their unemployment rates between 1995 and 2005. An increase of 12 percentage points pushed the unemployment rate for females in the 15 to 24 age group to just above 72 per cent in 2005. Male labour market participants in that age group saw their unemployment rate increase by 11 percentage

points to 58,1 per cent. Females in the 25 to 34 year age group experienced an increase of 8 percentage points to almost 52 per cent in 2005. Over the same period, their male counterparts saw an increase of 6,6 percentage points to just below 33 per cent. While all job-seekers in the 35 to 44 age groups experienced slightly smaller increases in their unemployment rates, with an unemployment rate of 36,5 per cent in 2005, the females in that group still had a much higher unemployment rate than not only the males in their age group but also the males in the 25-34 year group.

The unemployment rates in the two oldest age-groups are much lower in both years. With the exception of the increase in male unemployment amongst 45 to 54 year olds, the changes in the unemployment rates between 1995 and 2005 for these two age groups are not statistically significant.

It has been found that an individual's level of education can be an important predictor of his or her ability to find employment. The South African economy's increasing demand for highly skilled labour, the continued mechanisation of its manufacturing sector and pursuit of global competitiveness means that lower skilled workers and those with poor education will continue to battle to find employment and as a result will have proportionally larger shares in unemployment (Bhorat & Oosthuizen, 2005: 32).

The evidence presented in Table 9 confirms that higher levels of education are related to lower unemployment rates. Individuals with a Matric or a tertiary qualification generally experienced lower unemployment rates in both years.

Table 9: Broad Unemployment Rates by Gender and Highest Level of Education

	1995	2005
Male None	23.1%*	26.5%*
Female None	47.8%*	41.4%*
Total None	34.7%*	34.5%*
Male Incomplete GET	28.7%	35.2%
Female Incomplete GET	46.1%	50.3%
Total Incomplete GET	36.4%	42.2%
Male Complete GET	27.1%	39.4%
Female Complete GET	46.6%	58.5%
Total Complete GET	35.8%	49.0%
Male Matric	21.0%	30.0%
Female Matric	34.6%	45.8%
Total Matric	27.0%	37.8%
Male Dip/Cert with matric	6.5%*	9.7%*
Female Dip/Cert with matric	9.3%	16.5%
Total Dip/Cert with matric	7.9%	13.2%
Male Degree	3.3%*	4.4%*
Female Degree	5.0%*	4.4%*
Total Degree	3.9%*	4.4%*

Source: OHS 1995, LFS 2005:2 (Statistics SA)

Notes: Other and Unspecified categories have been omitted from the table

* Changes not significant at the five per cent level.

With the exception of females with no education, all unemployed individuals with no education and females with degrees, all individuals experienced increases in their unemployment rates between 1995 and 2005. For the three groups mentioned, declines in their unemployment rates are not statistically significant. Across all the different levels of education, females continue to have significantly higher levels of unemployment than their similarly educated male counterparts. All individuals with some tertiary education (either degree or diploma/certificate coupled with matric) had significantly lower levels of unemployment. In fact, all degreed individuals had unemployment rates of only 4,4 per cent in 2005.

Finally we look at unemployment by location. As mentioned before, the LFSs no longer contain information by rural/urban areas and instead provincial unemployment rates will be examined. In all provinces, male as well as female unemployment rates increased between 1995 and 2005. In a number of cases, however, these increases are not statistically significant. Statistically significant increases in unemployment rates are found in the Northern Cape (males and total), Free State (male, female and total), KwaZulu-Natal (male, female and total), Gauteng (male, female and total) as well as for males in Limpopo.

Table 10: Broad Unemployment Rates by Gender and Province, 1995 and 2005

	1995	2005
Western Cape Male	14.7%	20.9%
Western Cape Female	26.6%*	30.6%*
Total Western Cape	20.0%*	25.5%*
Eastern Cape Male	37.3%*	39.5%*
Eastern Cape Female	48.0%*	46.9%*
Total Eastern Cape	42.6%*	43.4%*
Northern Cape Male	19.5%	30.9%
Northern Cape Female	43.1%*	49.9%*
Total Northern Cape	29.5%	39.9%
Free State Male	19.2%	28.1%
Free State Female	36.5%	47.5%
Total Free State	26.8%	37.7%
KwaZulu-Natal Male	26.9%	38.5%
KwaZulu-Natal Female	43.2%	48.4%
Total KwaZulu-Natal	34.3%	43.4%
North West Male	25.7%*	34.1%*
North West Female	45.4%*	53.1%*
Total North West	33.8%*	43.3%*
Gauteng Male	19.1%	24.5%
Gauteng Female	30.6%	41.0%
Total Gauteng	24.1%	31.9%
Mpumalanga Male	24.3%*	30.0%*
Mpumalanga Female	49.1%*	52.9%*
Total Mpumalanga	34.7%*	41.5%*
Limpopo Male	30.8%	43.1%
Limpopo Female	53.9%*	61.4%*
Total Limpopo	42.2%	53.4%

Source: OHS 1995, LFS 2005:2 (Statistics SA)

Notes: Other and Unspecified categories have been omitted from the table

* Changes in these rates between 1995 and 2005 not significant at the five per cent level.

Unemployment rates vary considerably across provinces and appear to be largely driven by urban-rural differences and historical reasons. The highest unemployment rates in 2005 were found in provinces with large rural areas such as Limpopo (total unemployment rate of 53,4 per cent), KwaZulu-Natal (total unemployment rate of 43,4 per cent), Eastern Cape (43,3 per cent) and North West (43,3 per cent). In addition, it appears that provinces (such as Limpopo, Eastern Cape, Mpumalanga and North West) that include areas that were previously designated as “homelands” or “self-governing territories” under the apartheid system have higher unemployment rates than other provinces (Oosthuizen, 2006: 39). Lowest rates were found in predominantly urban provinces, with total unemployment in the Western Cape at 25,5 per cent and in Gauteng at 31,2 per cent in 2005.

In all provinces and for both years, the unemployment rates for women were considerably higher than those for men. In 2005, Limpopo exhibited the highest unemployment rate for women at 61,4 per cent, almost 20 percentage points higher than for males in that province. Only Western Cape females had an unemployment rate of less than 40 per cent (30,6 per cent) in 2005, but this rate is considerably higher than that of males in the Western Cape (20,9 per cent). Women in Gauteng had the second lowest provincial female unemployment rate at 41 per cent, while men in the province had an unemployment rate of 24,5 per cent. Women in all the other seven provinces had unemployment rates of higher than 45 per cent in 2005.

Although women benefited more from the increase in employment over the decade between 1995 and 2005, it was not enough to absorb all the additional entrants to the labour force. As a result, female unemployment rates increased over the period. Female unemployment rates continued to be higher than male unemployment rates for all races in 2005, with African females experiencing the highest rate of 53 per cent. Unemployment rates by age showed it has been young female entrants to the labour market that has struggled to find jobs. Unemployment rates by education again confirmed that a higher level of education significantly increases the ability to find employment. Across all education levels, however, women continued to experience higher unemployment rates. The same trend was observed in the provincial unemployment rates with female unemployment rates exceeding the rates for men in all provinces.

5. Returns to Employment by Gender

In Section 4 it was shown that the majority of employment created in the post-apartheid era accrued to women and thus that women benefited disproportionately more than men from the increased demand for labour between 1995 and 2005. Previous research has found that the increase in female employment generally reflects an increase in the number of women working in lower paid and less secure forms of employment (see Casale, 2004). The evidence presented in Section 3 confirmed that the majority of women that entered the workforce between 1995 and 2005, found jobs as elementary workers. This section examines the changes in earnings of both men and women between 1995 and 2005 and in more detail the changes in earnings of men and women between 2001 and 2005.

Table 11 provides the nominal mean and median monthly earnings³ for men and women in 1995 and 2005, while Table 12 shows the real mean and median monthly earnings. The earnings figures in Table 11 indicate that employed women from all race groups earned less than their male counterparts both in 1995 and 2005, despite the fact that in nominal terms, women experienced larger increases over the period.⁴ In addition, White men and women earned more than the other race groups, with African men and women earning the least of all race groups.

3 The earnings figures reported here are monetary earnings. Where respondents in the OHS and the LFS chose an income bracket instead of indicating an actual income figure, the midpoint value of that bracket was given to them. In both years, however, the majority of respondents provided an actual income estimate. In all years, respondents that indicated that they had more than one job were excluded from the analysis as it was impossible to determine which activity was the individual's main job in 1995 and the LFSs do not provide information on the income from the second job (also see Casale, 2004:6).

4 The differences between the female and male mean earnings for Africans and Coloureds are not statistically significant in 2005.

Table 11: Nominal Mean and Median Monthly Earnings, 1995-2005

Rands	Male		Female		% Change 1995-2005	
	1995	2005	1995	2005	Male	Female
	Mean (Std. dev.) Median	Mean (Std. dev.) Median	Mean (Std. dev.) Median	Mean (Std. dev.) Median	Mean Median	Mean Median
All Races	2,825 (10,533) 1,499	4,000 (6,183) 2,001	1,668 (2,781) 1,125	2,994 (29,042) 1,200	42% 33%	79% 7%
African	1,612 (4,018) 1,200	2,538 (3,539) 1,517	1,244 (1,750) 800	2,162 (34,192) 830	57% 26%	74% 4%
Coloured	1,683 (2,215) 1,200	3,792 (4,793) 2,500	1,290 (1,224) 1,040	2,980 (4,031) 2,000	125% 108%	131% 92%
Asian	3,762 (5,476) 2,500	5,990 (5,708) 4,001	2,237 (2,881) 1,600	3,753 (3,898) 3,001	59% 60%	68% 88%
White	7,540 (22,241) 5,000	10,866 (10,988) 8,000	3,187 (4,866) 2,500	6,729 (6,922) 5,251	44% 60%	111% 110%

Source: OHS 1995, LFS 2005:2 (Statistics SA), Own Calculations

Notes: Standard deviations of mean earnings in parentheses.

Table 12 shows the real⁵ mean and median earnings for men and women in 1995 and 2005. With the exception of the decline in overall male mean earnings and the increase in the mean earnings for Coloured females, all changes in real mean earnings between 1995 and 2005 are statistically insignificant.

⁵ Nominal earnings were converted into real earnings (expressed in 2000 prices) using the Consumer Price Index (StatsSA, 2006).

Table 12: Real Mean and Median Monthly Earnings, 1995 and 2005

Rands	Male		Female		% Change 1995-2005	
	1995	2005	1995	2005	Male	Female
	Mean (Std. dev.) Median	Mean (Std. dev.) Median	Mean (Std. dev.) Median	Mean (Std. dev.) Median	Mean Median	Mean Median
<i>Real Earnings</i>						
All Races	3,923 (14,629) 2,082	3,125 (4,830) 1,563	2,317 (3,862) 1,563	2,339 (22,689) 938	-20% -25%	1% * -40%
African	2,239 (5,580) 1,667	1,983 (2,765) 1,185	1,727 (2,431) 1,111	1,689 (26,712) 648	-11% * -29%	-2% * -42%
Coloured	2,337 (3,076) 1,667	2,963 (3,744) 1,953	1,792 (1,700) 1,444	2,328 (3,149) 1,563	27% * 17%	30% 8%
Asian	5,225 (7,606) 3,472	4,680 (4,459) 3,126	3,107 (4,002) 2,222	2,932 (3,045) 2,345	-10% * -10%	-6% * 6%
White	10,472 (30,891) 6,944	8,489 (8,584) 6,250	4,427 (6,758) 3,472	5,257 (5,408) 4,102	-19% * -10%	19% * 18%

Source: OHS 1995, LFS 2005:2 (Statistics SA), Own Calculations

Notes: * Change not statistically significant at the 5 per cent level.

The earnings figures presented above should be treated with caution. It has already been highlighted that the improvement in the recording of informal sector employment after 1995 may cast doubt over the accuracy of the reported increase in employment between 1995 and 2005. This also impacts on the accuracy of the reported earnings for the two periods. In addition, the questions capturing earnings information differ considerably between the 1995 OHS and the 2005 LFS, making it even more difficult to compare changes in earnings accurately. Burger and Yu (2006) have found that when comparing real earnings between 1995 and 2005, using all available OHSs and LFSs, real wages remained fairly stable over the period with the exception of an almost 40 per cent drop associated with the changeover from the OHS to the LFS. In addition, the September 2000 LFS reported average earnings which were much higher than in the surveys directly before and following it. In an attempt to present a more accurate description of changes in returns to employment, the remainder of this report will utilise earnings information from the September 2001 LFS and the September 2005 LFS.

Comparing the nominal earnings of men and women in 2001 and 2005 again shows that over the shorter period, women of all race groups experienced larger increases in their earnings than their male counterparts (See Table 13). With the exception of Coloured males, all changes in nominal earnings are statistically significant.

Table 13: Nominal Mean and Median Monthly Earnings, 2001 and 2005

Rands	Male		Female		% Change 2001-2005	
	2001	2005	2001	2005	Male	Female
	<i>Mean (Std. dev.) Median</i>	<i>Mean (Std. dev.) Median</i>	<i>Mean (Std. dev.) Median</i>	<i>Mean (Std. dev.) Median</i>	<i>Mean Median</i>	<i>Mean Median</i>
Nominal Earnings						
All Races	3,197 (6,601) 1,733	4,000 (6,183) 2,001	2,111 (3,416) 950	2,994 (29,042) 1,200	25%	42%
African	1,834 (2,365) 1,251	2,538 (3,539) 1,517	1,310 (2,067) 600	2,162 (34,192) 830	38%	65%
Coloured	2,952 (14,153) 1,733	3,792 (4,793) 2,500	1,881 (2,077) 1,251	2,980 (4,031) 2,000	28% *	58%
Asian	4,372 (4,224) 3,500	5,990 (5,708) 4,001	3,240 (2,813) 2,500	3,753 (3,898) 3,001	37%	16%
White	8,421 (8,178) 5,900	10,866 (10,988) 8,000	5,127 (5,841) 4,001	6,729 (6,922) 5,251	29%	31%

Source: LFS 2001:2; LFS 2005:2 (Statistics SA), Own Calculations

Notes: * Change not statistically significant at the 5 per cent level.

African and Coloured women experienced the largest increases in their mean nominal earnings (65 per cent and 58 per cent respectively). However, the earnings of White women continued to be more than twice those of African and Coloured females in 2005. While Asian females were in a better position than African and Coloured women, they still only earned about 65 per cent of the average White female wage in 2005.

Taking the effect of inflation into account, only the increases in the earnings of African men and Coloured women are statistically significant, with Coloured women experiencing an increase in their earnings of more than 30 per cent between 2001 and 2005.

Table 14: Real Mean and Median Monthly Earnings, 2001 and 2005

	Male		Female		% Change 2001-2005	
	2001	2005	2001	2005	Male	Female
	<i>Mean (Std. dev.) Median</i>	<i>Mean (Std. dev.) Median</i>	<i>Mean (Std. dev.) Median</i>	<i>Mean (Std. dev.) Median</i>	<i>Mean Median</i>	<i>Mean Median</i>
Real Earnings in Rands						
All Races	3,025 (6,245) 1,640	3,125 (4,830) 1,563	1,997 (3,232) 899	2,339 (22,689) 938	3% * -5%	17% * 4%
African	1,735 (2,237) 1,184	1,983 (2,765) 1,185	1,240 (1,955) 568	1,689 (26,712) 648	14% 0%	36% * 14%
Coloured	2,793 (13,390) 1,640	2,963 (3,744) 1,953	1,780 (1,965) 1,184	2,328 (3,149) 1,563	6% * 19%	31% 32%
Asian	4,137 (3,997) 3,311	4,680 (4,459) 3,126	3,065 (2,661) 2,365	2,932 (3,045) 2,345	13% * -6%	-4% * -1%
White	7,966 (7,737) 5,582	8,489 (8,584) 6,250	4,851 (5,526) 3,785	5,257 (5,408) 4,102	7% * 12%	8% * 8%

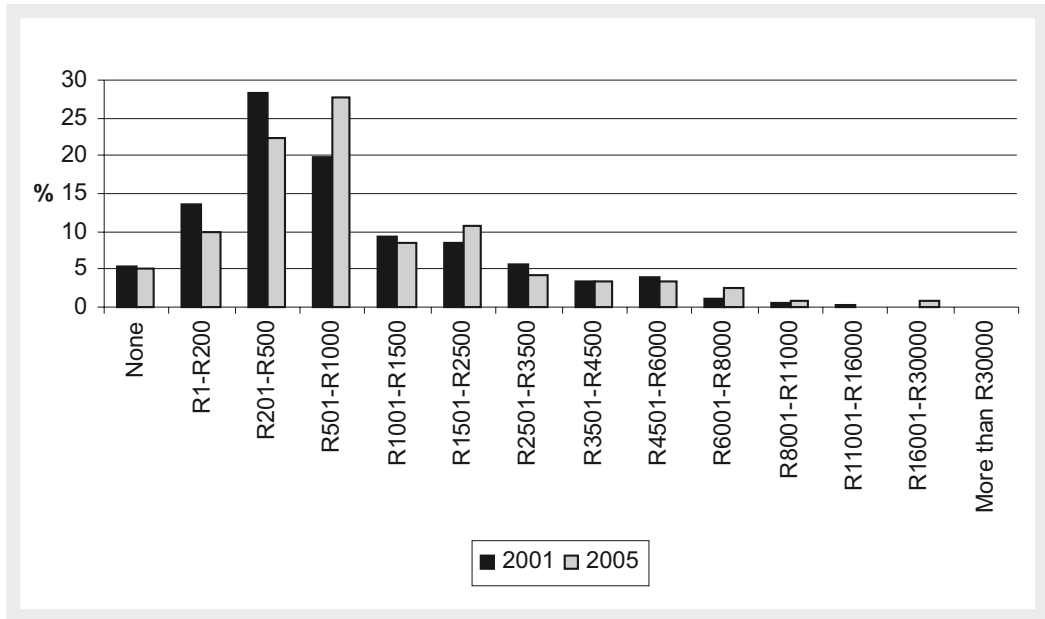
Source: LFS 2001:2; LFS 2005:2 (Statistics SA), Own Calculations

Notes: * Change not statistically significant at the 5 per cent level.

The earnings figures presented in the tables above clearly show that, in both nominal and real terms, women of all races continued to earn less than their male counterparts. The only exception was in 2005 where the difference in the earnings of Coloured males and females are not statistically significant. In addition, White women continued to earn more than African women. While mean earnings tell us how average earnings have changed, it does not capture any changes in the distribution of earnings. Figures 7 and 8 show how the distribution of the real monthly earnings for African and White women has changed between 2001 and 2005.

In 2001 and 2005, African women were concentrated in the lower earnings categories. There was some movement out of the bottom three earnings categories, mainly into the R501-R1 000 category. However, a steady share (85 per cent) of African women earned less than R2 500 a month in real terms in 2001 as well in 2005.

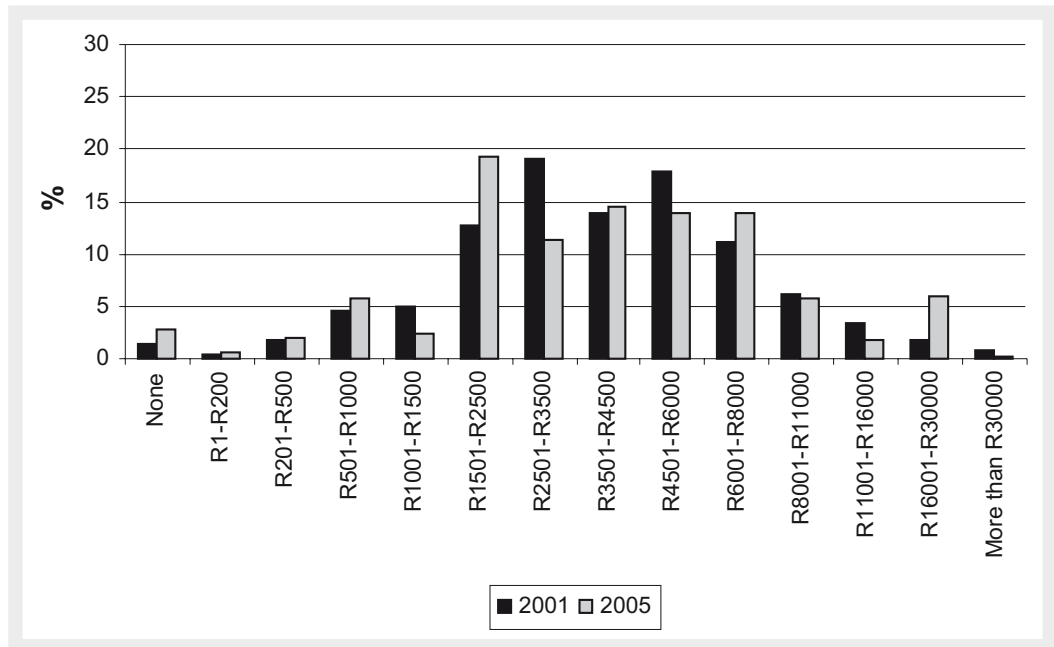
Figure 7: Distribution of Real Monthly Earnings for African Women, 2001 and 2005



Source: LFS 2001:2; LFS 2005:2 (Statistics SA), Own Calculations

In contrast, both in 2001 and 2005 White women were concentrated in the earnings categories between R1 501 and R8 000. While a slightly larger share of White women earned less than R2 500 in 2005 (33 per cent, up from 26 per cent in 2001), the proportion in the second highest earning category (R16 001-R30 000) increased by four percentage points over the period.

Figure 8: Distribution of Real Monthly Earnings for White Women, 2001 and 2005



Source: LFS 2001:2; LFS 2005:2 (Statistics SA), Own Calculations

It has been shown that educational attainment has a strong positive effect on the earnings of the employed in South Africa (see Bhorat & Leibbrandt, 2001; Casale, 2004: 10). The real monthly earnings figures presented in Table 15 confirm this. In both 2001 and 2005, a higher level of education is associated with higher monthly earnings for male and females irrespective of race and for Africans. For Whites, however, only the relatively higher earnings of men with a Matric or a tertiary qualification are statistically significant in 2001. For White women in 2001, the higher earnings of women with a Matric as opposed to Complete GET is statistically significant as well as the difference in the earnings of White women with a Degree versus a Diploma. In 2005, only the difference in the earnings of White women with a Diploma versus a Degree is statistically significant.

Table 15: Real Mean Monthly Earnings by Gender and Highest Level of Education, 1995 and 2005

<i>Rands</i>	2001		2005		% Change 2001 - 2005	
	Male	Female	Male	Female	Male	Female
All Races						
None	898	405	1,041	490	15.9% *	21.2% *
Incomplete GET	1,305	663	1,345	725	3.0% *	9.3% *
Complete GET	2,185	1,249	1,994	1,200	-8.7% *	-4.0% *
Matric	3,916	2,720	3,776	2,542	-3.6% *	-6.5% *
Diploma/Certificate with Matric	5,993	4,074	6,086	4,323	1.6% *	6.1% *
Degree	11,160	6,631	11,709	10,258	4.9% *	54.7% *
African						
None	900	402	1,028	475	14.3% *	18.0% *
Incomplete GET	1,224	584	1,252	637	2.3% *	9.1% *
Complete GET	1,539	884	1,408	842	-8.5% *	-4.8% *
Matric	2,287	1,577	2,333	1,572	2.0% *	-0.3% *
Diploma/Certificate with Matric	3,959	3,506	4,468	3,862	12.9% *	10.2% *
Degree	6,373	5,553	9,999	12,896	56.9% *	132.2% *
White						
None		331				
Incomplete GET	4,236	2,499	4,404	2,551	4.0% *	2.1% *
Complete GET	4,905	2,966	5,979	4,073	21.9% *	37.3% *
Matric	6,664	4,230	7,248	4,230	8.8% *	0.0% *
Diploma/Certificate with Matric	8,612	5,153	8,586	5,355	-0.3% *	3.9% *
Degree	13,311	7,803	13,378	8,147	0.5% *	4.4% *

Source: LFS 2001:2; LFS 2005:2 (Statistics SA), Own Calculations

Notes: Other and Unspecified categories have been omitted from the table

* Changes not significant at the five per cent level

A second very important point that emerges from the earnings figures presented above is that, with a few exceptions, women continued to earn less than men with the same level of education. The difference between the earnings of males and females with a Degree, irrespective of race, is not statistically significant in 2005. The difference between the earnings of African males and females with a tertiary qualification is not statistically significant in 2001 as well as in 2005. In addition, the difference between the earnings of White males and females who have not completed their GET is not statistically significant in 2001 and in 2005. Also in 2005, the difference in the earnings of White men and women with a Complete GET and with a Degree is not statistically significant. In all other categories, men earned higher monthly wages than their female counterparts, with the differences statistically significant.

Women with degrees, irrespective of race, were the only female educational category that experienced a statistically significant increase in real earnings between 2001 and 2005, with an increase of almost 55 per cent. In addition, African men with a degree experienced a statistically significant increase of 57 per cent in their real earnings. This represents a substantial and rapid increase in real earnings of almost 12 per cent per annum over the period, possibly related to the current skilled shortages experienced in the country and the

large demand for highly educated black workers, in particular, as firms make efforts to reach their employment equity targets.

Again, racial bias is evident. With the exception of degreed women, White women earned considerably more than their African counterparts within each educational category in 2001 and 2005. These differences are particularly striking at the level of Matric and less. On average, White women with an Incomplete GET education (Grade 8 or less) earned more than four times the earnings of their African counterparts in 2005. In the same year, White women with a Complete GET education earned almost five times the average female African wage, while White women with Matric earned almost three times more than African women with Matric. The difference in the earnings of African and White women with a Degree is not statistically significant 2005.

Table 16 compares the real mean monthly earnings for males and females by occupation group. It also shows how the real earnings of African men and women differ from their White counterparts. At the aggregate level in 2001, the mean monthly earnings of women were lower than the earnings of their male counterparts and significant for all occupation groups except Clerks and Domestic Workers. By 2005, the difference in the mean earnings of male and female Managers and Professionals are no longer statistically significant, while the difference between the earnings of Clerks and Domestic Workers also remain statistically insignificant.

Statistically significant increases in real earnings over the period were experienced by men working as Operators and Assemblers (20 per cent) and by female Domestic Workers (25 per cent). These increases were driven by statistically significant increases in the real earnings of African men working as Operators and Assemblers and in the real earnings of African female Domestic Workers. None of the other changes in real earnings between 2001 and 2005 are statistically significant.

Table 16: Real Mean Monthly Earnings by Occupation Group and Gender, 2001 and 2005

Rands	2001		2005		% Change 2001 - 2005	
	Male	Female	Male	Female	Male	Female
All Races						
Managers	9,195	6,135	9,060	7,839	-1.5% *	27.8% *
Professionals	6,568	4,622	6,849	5,626	4.3% *	21.7% *
Clerks	3,321	3,101	3,777	3,141	13.7% *	1.3% *
Service & Sales Workers	2,238	1,324	2,170	1,332	-3.0% *	0.6% *
Skilled Agricultural & Fishery Workers	1,965	500	2,274	514	15.7% *	2.6% *
Craft & Trade Workers	2,280	993	2,165	1,043	-5.0% *	5.0% *
Operators & Assemblers	1,836	1,390	2,196	1,641	19.6%	18.1% *
Elementary Occupations	1,061	742	1,208	832	13.8% *	12.1% *
Domestic Workers	616	453	626	564	1.5% *	24.6%
African						
Managers	5,172	5,075	5,569	7,757	8% *	53% *
Professionals	4,129	3,820	5,286	5,720	28% *	50% *
Clerks	2,619	2,120	2,893	2,378	10% *	12% *
Service & Sales Workers	1,819	957	1,703	1,054	-6% *	10% *
Skilled Agricultural & Fishery Workers	595	163	348	165	-41% *	2% *
Craft & Trade Workers	1,496	788	1,579	780	6% *	-1% *
Operators & Assemblers	1,674	1,171	1,959	1,387	17%	18% *
Elementary Occupations	929	660	1,011	732	9% *	11% *
Domestic Workers	612	447	634	563	4% *	26%
White						
Managers	10,568	6,530	11,556	8,456	9% *	29% *
Professionals	9,985	5,878	10,090	6,211	1% *	6% *
Clerks	4,745	4,167	6,360	3,923	34% *	-6% *
Service & Sales Workers	4,508	2,784	4,598	2,978	2% *	7% *
Skilled Agricultural & Fishery Workers	8,937	3,849	13,447	6,712	50% *	74% *
Craft & Trade Workers	5,553	3,450	5,289	3,635	-5% *	5% *
Operators & Assemblers	3,856	2,089	5,065	7,409	31% *	255% *
Elementary Occupations	4,440	2,817	3,936	4,991	-11% *	77% *
Domestic Workers	0	581	133	0		

Source: LFS 2001:2; LFS 2005:2 (Statistics SA), Own Calculations

Notes: Other and Unspecified categories have been omitted from the table

* Changes not significant at the five per cent level

In 2001, with the exception Managers and Professionals, the earnings of African women were statistically significantly less than that of their male counterparts. By 2005, the differences in the earnings of African male and female Clerks and Skilled Agricultural Workers are no longer statistically significant.

In 2001, only the earnings of White female Clerks, Craft and Trade Workers and Operators are not statistically different from the earnings of their male counterparts. In all other occupation groups, White women earned less than White men and the differences are statistically

significant. By 2005, White women earned statistically significantly less than White men working as Professionals, Clerks or Service and Sales Workers. For other occupation groups the differences in White male and female earnings are not statistically significant in 2005.

Focusing only on women, again the key impact of race on the level of earnings is apparent. With the exception of Managers in both years, Professionals in 2005 and Operators in both years where the differences are not statistically significant, White women earned more than African women in all other occupation groups. The gaps are particularly large in the semi- and lower skilled occupations. White female Services and Sales workers earned almost three times more than African women in those jobs in 2005. In the same year White women working as Craft and Trade workers earned about five times more than African women in that occupation group. White women in Elementary Occupations earned about seven times more than their African counterparts.

The evidence presented above confirmed that in terms of mean monthly earnings, women of all race groups earned less than men in 2001 and in 2005, with the exception of Coloureds in 2005. Again it has also been confirmed that generally a higher level of education is associated with a higher level of earnings. With the exception of African women with a degree in 2005, White women earned more than African women with the same level of education. Racial discrimination also remained in the different occupation groups, with White women earning more than their African counterparts in all job categories with the exception of Managers, Professionals (only 2005) and Operators, where the difference in earnings are not statistically significant.

6. Multivariate Analysis of Employment and Earnings

The descriptive analysis in the preceding sections of this report has shown how one or two variables at a time relate to the experiences of women in the labour market, including their participation in the labour force, whether they are employed or not and their level of earnings. In reality a wide range of variables simultaneously interact to determine these various labour market outcomes. A simple descriptive analysis cannot take account of these variables simultaneously. An analysis by education, for example, ignores the different age, occupational or sectoral distributions that exist in the groups being analysed. The next step, therefore, is to combine the variables identified in the descriptive analysis into an econometric model. This model will determine the importance of all these variables in explaining labour force participation, employment and earnings (see Borat & Leibbrandt, 2001 & Oosthuizen, 2006).

The model is set up in three stages. During the first stage, we start with a full sample of potential female labour market participants and estimate a participation probability model. Then in the second stage we estimate an employment probability model for the reduced sample of female labour force participants. The final stage involves estimating an earnings function using the sample of employed females.

This process is followed because of the fact that the sample of female labour market participants is highly unlikely to be a random sample of women of working age. The group of potential labour market participants has already undergone some kind of selection process whereby they made the decision to enter the labour market or not. The participation equation, therefore, attempts to shed some light on the factors impacting on an individual's decision to enter the labour force. A probit model is used to estimate the participation equation. Once the participants are determined, another probit model is used to derive the employment equation conditional on the characteristics of all female labour market participants. The final stage models the earnings of those women who found employment (See Borat & Leibbrandt, 2001: 112,113 & Oosthuizen, 2006: 53).

The Heckman two-step approach is used to cope with the sample selection problem. After the female labour force participation probit is estimated, the estimates are used to derive an estimate for the inverse Mills ratio (λ) to be included in the employment probit. The inverse Mills ratio (λ) is a measure of the extent to which the sample suffers from selectivity bias. The inclusion of λ makes the employment probit conditional on positive labour force participation. The selection λ derived from the employment probit is then included in the earnings equation (Bhorat & Leibbrandt, 2001: 114; Oosthuizen, 2006: 55).

For the covariates which are dummies, the following are the referent variables for all the equations:

- ⊙ Age: 15-24 years
- ⊙ Race: African
- ⊙ Province: Gauteng
- ⊙ Sector: Manufacturing
- ⊙ Occupation: Elementary Workers

The labour force participation probit includes some household level variables which are likely to impact on a person's decision to enter the labour force, namely the number of children up to seven years old in the household, the number of children between eight and 15 in the household and the number of adults over 60 in the household. Table 17 presents the results from the female labour force participation probit.

The negative coefficients for the race groups indicate that in both years, African women were more likely to enter the labour force than women from other race groups. In 2001, Asian women were 22 per cent less likely to enter the labour force than African women. This increased to 25 per cent in 2005. In 2001, White women were 26 per cent less likely than African women to enter the labour force, which was almost unchanged in 2005. The coefficient for Coloured women is not statistically significant in 2001, indicating that Coloured and African women, *ceteris paribus*, were equally likely to enter the labour force. In 2005, however, Coloured women were 5 per cent less likely than African women to participate in the labour force. The statistically significant positive coefficients for the four age groups show that in both years, women between the ages of 15 and 24 years were the least likely to enter the labour force. This is not surprising as females in this age group may still be attending educational institutions.

Table 17: Female Broad Labour Force Participation Equations, 2001 and 2005

	2001		2005	
	Marginal Effects	x-bar	Marginal Effects	x-bar
Coloured	-0.0277	0.0908	-0.0526 *	0.0875
Asian	-0.2225 *	0.0245	-0.2521 *	0.0232
White	-0.2575 *	0.0952	-0.2690 *	0.0908
25-34 years	0.5740 *	0.1681	0.5865 *	0.1720
35-44 years	0.5965 *	0.1156	0.5930 *	0.1155
45-54 years	0.5201 *	0.0830	0.5398 *	0.0892
55-65 years	0.2633 *	0.0648	0.2952 *	0.0691
No education to Incomplete GET	0.0454 *	4.9022	0.0454 *	5.1787
Complete GET	0.0455 *	0.8921	0.0502 *	1.0355
Matric	0.1597 *	0.1748	0.2031 *	0.2028
Diploma	0.0755 *	0.0496	-0.0276	0.0530
Degree	0.0030	0.0383	0.0288	0.0382
Eastern Cape	-0.0381 *	0.1603	-0.0629 *	0.1530
Northern Cape	-0.0116	0.0191	-0.0200	0.0192
Free State	-0.0009	0.0626	-0.0521 *	0.0632
KwaZulu Natal	-0.0230 **	0.2121	-0.0338 *	0.2071
North-West	-0.0392 *	0.0798	-0.0270	0.0810
Western Cape	-0.0314 **	0.0949	-0.0106	0.0980
Mpumalanga	0.0119	0.0689	0.0128	0.0695
Limpopo	-0.0118	0.1273	-0.0300 **	0.1278
No of children under 7 years	0.0100 *	1.2652	0.0074 **	1.1023
No of children aged 8-15 years	-0.0401 *	1.2398	-0.0327 *	1.1590
No of adults over 60 years	-0.0769 *	0.3525	-0.0872 *	0.3400
Observed Probability		0.3945		0.4112
Predicted Probability (at x-bar)		0.3390		0.3580
Number of Observations		55732		57208
Chi ²		14618.1 *		11988.4 *
Pseudo R ²		0.4128		0.436

Source: LFS 2001:2; LFS 2005:2 (Statistics SA); Own Calculations

Notes: * Significant at the one per cent level

** Significant at the five per cent level

The education splines capture the impact of education on a female's decision to enter the labour force. With the exception of Degree in both years and Diploma in 2005, all the education variables are statistically significant with positive coefficients. Positive coefficients mean that higher levels of educational attainment relate to a higher probability of taking part in the labour force (Oosthuizen, 2006: 54). The statistically insignificant coefficients for the two tertiary education splines mean that education beyond Grade 12 does not increase the likelihood of entering the labour force.

As mentioned before, the LFSs no longer capture information according to urban/rural classification. In this probit provinces were used to present the effect of location. In 2001, only the coefficients for the Eastern Cape, KwaZulu Natal, North West and the Western Cape are statistically significant. The negative signs of the coefficients indicate that women in those

provinces were less likely to enter the labour force than women living in Gauteng. In 2005, the coefficients for the North West and the Western Cape are no longer statistically significant; indicating that living in those provinces as opposed to living in Gauteng had no positive or negative impact on a woman's decision to enter the labour force. Women living in the Eastern Cape and KwaZulu Natal became even less likely to enter the labour force than their Gauteng counterparts in 2005, relative to 2001. In addition, the coefficients for the Free State and Limpopo became statistically significant, indicating that women in those provinces were less likely to enter the labour force than women living in Gauteng.

The three household level variables were statistically significant in both years. The positive coefficients for the number of children under the age of seven years indicate that a greater number of children under the age of seven years living in a household increase the probability of females entering the labour market. In contrast, and interestingly, a greater number of children between the ages of eight and 15 years that reside in a household lower the probability of female labour force participation. It is difficult to accurately interpret these results. On the one hand a larger number of young children may lead to women staying at home to care for these children, while on the other hand the financial burden of young children in a household may act as an incentive to enter the labour market. It is apparent that impact of the increased financial burden posed by young children (under the age of seven years) in the household on labour force participation and of other similar factors outweigh the impacts of any factors related to the number of young children in the household that reduce labour force participation. The negative coefficients for the number of adults over the age of 60 years in both years imply that the greater the number of adults over 60 (who may be receiving a pension) living in a household, the less likely a female of working age will be to enter the labour force.

Now that the participation equation has been estimated, the sample of female labour participants is retained and the employment equation is estimated, estimating the probability of female labour force participants finding employment. The lambda that was derived from the participation probit is included in the employment probit. The results in Table 18 show that in 2001 and 2005 the coefficients for lambda are negative and statistically significant. This means that female labour force participants are different from women that decided not to enter the labour force and that the Heckman two-step approach is both justified and necessary.

Race played an important role in both 2001 and 2005 in females' probability of being employed, with African women in both years the least likely to find a job. In 2001, Coloured women were 17 per cent more likely, with Asian women 27 per cent more likely and White women about 42 per cent more likely to be employed than African women. By 2005, these gaps had closed slightly, with Coloured women 12 per cent more likely, Asian women 25 per cent more likely and White women 35 per cent more likely to be employed than African women. It is important to note that these racial differences in the probability of finding employment remain even when controlling for age, education, location, age or experience and the various other variables

included in the model.

In both 2001 and 2005 the coefficients for 25 to 34 year old women are not statistically significant. The positive significant coefficients for the other three age groups indicate that in 2001 as well as 2005, women aged 34 years and older were more likely to be employed than women between the ages of 15 and 24 years and, by extension, those between 25 and 34 years. The coefficients for all three age groups also increased in size between 2001 and 2005, indicating that these groups experienced an increase in their probability of finding a job over the period relative to women between the ages of 15 and 24 years.

Table 18: Female Employment Equations, 2001 and 2005

	2001		2005	
	Marginal Effects	x-bar	Marginal Effects	x-bar
Coloured	0.1734 *	0.0975	0.1150 *	0.0933
Asian	0.2707 *	0.0253	0.2481 *	0.0229
White	0.4152 *	0.1101	0.3483 *	0.0992
25-34 years	-0.0381	0.3586	0.0337	0.3614
35-44 years	0.1598 *	0.2336	0.1857 *	0.2278
45-54 years	0.2495 *	0.1378	0.3064 *	0.1502
55-65 years	0.4088 *	0.0486	0.4313 *	0.0521
No education to Incomplete GET	-0.0203 *	6.7866	-0.0122 *	7.0316
Complete GET	-0.0147 **	1.5600	-0.0148 **	1.7570
Matric	0.0479 *	0.3441	0.0719 *	0.3854
Diploma	0.2019 *	0.1064	0.2674 *	0.1045
Degree	0.0601 *	0.0819	0.0980 *	0.0763
Eastern Cape	0.0101	0.1332	0.0051	0.1266
Northern Cape	-0.0167	0.0189	-0.0701 *	0.0186
Free State	-0.0007	0.0666	-0.0225	0.0638
KwaZulu Natal	0.0002	0.2034	0.0003	0.1937
North-West	-0.0725 *	0.0754	-0.0848 *	0.0804
Western Cape	0.1067 *	0.1078	0.0951 *	0.1117
Mpumalanga	0.0153	0.0650	-0.0559 *	0.0681
Limpopo	-0.0926 *	0.1096	-0.1515 *	0.1084
lambda	-0.2721 *	0.5554	-0.2025 *	0.5160
Observed Probability		0.5206		0.5331
Predicted Probability (at x-bar)		0.5396		0.5598
Number of Observations		21637		22169
Chi ²		2370.8 *		2006.5 *
Pseudo R ²		0.1814		0.1825

Source: LFS 2001:2; LFS 2005:2 (Statistics SA); Own Calculations

Notes: * Significant at the one per cent level

** Significant at the five per cent level

The coefficients of the education splines indicate that women with less than a Matric education were less likely to find employment in both years. The statistically positive coefficients for women with a Matric or a tertiary qualification confirm that both in 2001 and 2005 a higher level of education increased the probability of a female finding employment. In fact, the magnitudes

of these coefficients increased over the period, indicating that the positive impact of having a Matric, diploma or a degree became stronger over the period.

The statistically significant positive coefficients for the Western Cape indicate that women living in that province were more likely in 2001 and well as 2005 to find employment than women living in Gauteng, although the effect appears to have weakened slightly by 2005. Women living in the North West and Limpopo were less likely in both years to find a job than women living in Gauteng, with the effect stronger for both provinces in 2005. For all other provinces the coefficients for 2001 are not statistically significant, indicating that women living in those provinces were neither less nor more likely to find a job than their counterparts living in Gauteng. By 2005, however, the negative coefficients for the Northern Cape and Limpopo have become statistically significant, indicating that women residing in these two provinces were less likely to find employment than women living in Gauteng.

Table 19 presents the earnings functions for employed women in 2001 and 2005. In this case earnings are measured by the log of the total monthly wage earned by the employed. The lambda derived when estimating the employment probit was included in the earnings equation. Again it is negative and significant in both years, indicating that there was sample selection bias, which was corrected for through the inclusion of lambda in the estimation of the earnings equation.

The results from the earnings equations again confirm that African women earned less than women from other population groups and that the gap has in fact widened between 2001 and 2005. In 2001, Coloured women earned 13 per cent more than African women, increasing to 22 per cent in 2005. White women earned 32 per cent more than African women in 2001, with the gap increasing to 38 per cent in 2005. In both years Asian women earned about 28 per cent more than African women.

The positive returns to education are also again evident, with additional years of education impacting positively on the earnings of women in 2001 as well as in 2005. A greater positive impact on earnings is associated with Matric or tertiary education in 2001, while the effect associated with these levels of education (particularly Matric or a Degree) becoming stronger in 2005.

The coefficients for the provinces indicate that women living in Gauteng earned more than their female colleagues in the rest of the country in 2001 and 2005. The effect was slightly weaker for women residing in the Western Cape who earned 10 per cent less in 2001 and 7 per cent in 2005 less than women living in Gauteng. Women living in the other seven provinces earned between 20 per cent and 50 per cent less than women in Gauteng.

Table 19: Female Earnings Equations, 2001 and 2005

	Coefficients	
	2001	2005
Coloured	0.1263 *	0.2156 *
Asian	0.2757 *	0.2759 *
White	0.3181 *	0.3786 *
No education to Incomplete GET	0.0411 *	0.0382 *
Complete GET	0.0932 *	0.0716 *
Matric	0.1231 *	0.1881 *
Diploma	0.1261 *	0.1438 *
Degree	0.1235 *	0.1975 *
Eastern Cape	-0.5002 *	-0.3502 *
Northern Cape	-0.3656 *	-0.3145 *
Free State	-0.4464 *	-0.4332 *
KwaZulu Natal	-0.1958 *	-0.3305 *
North-West	-0.2379 *	-0.2176 *
Western Cape	-0.0952 *	-0.0652 **
Mpumalanga	-0.3324 *	-0.3121 *
Limpopo	-0.3768 *	-0.4459 *
Managers	1.0430 *	1.0161 *
Professionals	0.6124 *	0.6419 *
Clerks	0.5225 *	0.5436 *
Service & Sales Workers	0.2243 *	0.1561 *
Skilled Agricultural Workers	0.2352 *	0.0788
Craft & Trade Workers	0.0125	0.0342
Operators & Assemblers	0.1467 *	0.3017 *
Domestic Workers	0.4477 *	0.1118
Mining and Quarrying	0.0720	0.3936 *
Agriculture	-0.2954 *	-0.0393
Utilities	0.1401	0.0370
Construction	0.0202	0.0871
Wholesale and Retail Trade	-0.3510 *	-0.3383 *
Transport	0.0925	0.1093
Finance	0.0926 *	0.1601 *
Community and Social Services	0.0068	0.0559
Private Households	-0.8643 *	-0.3053 **
Other	0.2680	-0.2639
Experience	0.0140 *	0.0178 *
Experience squared	-0.0003 *	-0.0003 *
Union members	0.4521 *	0.4661 *
Log of hours per month	0.2221 *	0.2856 *
Lambda	-0.6420 *	-0.4290 *
Constant	5.5259 *	5.1441 *
Number Observed	10058	10222
F	558.84 *	418.62 *
Adjusted R ²	0.6839	0.6144

Source: LFS 2001:2; LFS 2005:2 (Statistics SA); Own Calculations

Notes: * Significant at the one per cent level

** Significant at the five per cent level

With the exception of Craft and Trade Workers in both years, Skilled Agricultural Workers in 2005 and Domestic Workers in 2005, the coefficients for the occupation groups are all positive and significant in 2001 as well as in 2005. This means that relative to female Elementary Workers, these occupation groups earned more in both years. In both years, the earnings of female Managers were more than double that of female Elementary Workers. Professionals earned around 60 per cent more than their counterparts in Elementary Occupations, while Clerks earned about 50 per cent more than Elementary Workers. For both these occupation groups the differentials widened slightly between 2001 and 2005. In the other semi-skilled occupations (Services and Sales, Skilled Agriculture, Craft and Trade workers and Operators and Assemblers), women earned between 15 per cent and 30 per cent more than female Elementary Workers. In 2001 female Domestic Workers earned almost 45 per cent more than female Elementary Workers.

The results by industry show that, relative to the Manufacturing sector, the earnings of women working in the other two secondary sectors (Construction and Utilities) were not statistically different from the earnings of females working in the Manufacturing industry in 2001 as well as 2005. Women working in the Agricultural sector earned about 30 per cent less than their female counterparts in Manufacturing in 2001. In 2005, the coefficient for Agriculture is statistically insignificant. While the coefficient for Mining is statistically insignificant in 2001, it became significant in 2005 with the positive sign indicating that women in the Mining sector earned almost 40 per cent more than females in the Manufacturing sector. Women working in Trade earned around 30 per cent less than women in Manufacturing. This may partly reflect the large number of women working as informal traders. Women in the Finance sector earned 9 per cent more in 2001 and 16 per cent more in 2005 than women in Manufacturing. The vast majority of women working in Private Households are domestic workers and it is not surprising that they earned significantly less than female labours in Manufacturing. The differential did however decline from 86 per cent in 2001 to 31 per cent in 2005.

The positive and significant coefficients for experience indicate that an additional year of experience generated a return to earnings for females of about 1,4 per cent in 2001 and about 1,8 per cent in 2005. The negative and significant coefficients for experience squared indicate diminishing returns to experience, implying that after a certain amount of years, an additional year of experience does not translate into increased earnings.

Union membership is associated with significantly higher earnings in both years. In 2001, female union members earned 45 per cent more than their counterparts who did not belong to a union. This increased to almost 47 per cent in 2005. Finally, the positive and statistically significant coefficients for the log of hours worked suggest that an increase of one per cent in the total number of hours worked per month increased earnings by 0,22 per cent and 0,29 per cent in 2001 and 2005 respectively.

7. Conclusion

Women are increasingly engaging with the South African economy through increased participation in the labour force. This feminisation of the South African labour force between 1995 and 2005 has been driven specifically by greater numbers of African women entering the labour force. Women accounted for almost six in ten new labour force members over the period, African women alone accounting for almost five of those six. This rapid growth of the female labour force has arguably been spurred by improvements in geographical and occupational mobility that occurred during the late 1980s and 1990s.

The educational profile of the labour force, particularly amongst females, has shown improvement since 1995. The portions of the female labour force that demonstrated the most rapid rates of growth were those with Complete GET, Matric or tertiary educations. Rapid labour force growth has not been limited to young people as the largest percentage increases in female labour force participation occurred in the two oldest age groups (45-54 years and 55-65 years). While the number of female labour force participants in these age groups remain relatively small compared to the other age groups, these increases do suggest that females are choosing to remain in the labour force for longer than before or alternatively having no choice but to stay in the labour force and continue to work or look for work as they become older.

Women benefited more from the increased demand for labour over the period, accounting for 55 per cent of the increase in employment between 1995 and 2005, the bulk of which accrued to African women. In line with the labour force, the female workforce has aged over the period, with the oldest two age groups displaying the largest annual growth rates.

In line with the findings of previous studies that women remain overrepresented in low-income, less secure employment, the analysis has shown that the majority of women found jobs as unskilled and low-paid Elementary Workers between 1995 and 2005. In fact, female Elementary Workers accounted for more than a quarter of all net new jobs created between 1995 and 2005. In terms of industry, more than one-quarter of new jobs created accrued to women in the Wholesale and Retail Trade sector. This may partly be explained by Statistics South Africa's increased accuracy in capturing informal sector trade.

The increase in the number of jobs accruing to women was, however, not nearly enough to absorb all the additional female entrants to the labour market. Female unemployment rates increased for all covariates, but African women and young women in particular struggled to find employment. In 2005, the female African unemployment rate stood at 53 per cent, in contrast to the aggregate rate of 39 per cent and the aggregate female unemployment rate of 47 per cent. In the same year, more than seven in ten jobseekers between the ages of 15 and 24 years were unable to find employment, as were more than five in ten women aged 25 to 34 years. Across all the different levels of education, females continue to have significantly

higher levels of unemployment than their similarly educated male counterparts. All individuals with some tertiary education (either degree or diploma/certificate coupled with matric) were significantly less often unemployed.

It is clear that discrimination by gender and race remains when returns to employment are considered. In terms of real mean monthly earnings, women of all race groups earned less than men in 2001 and in 2005, with the exception of Coloureds in 2005. While a higher level of education is generally associated with a higher level of earnings, White women earned more than African women with the same level of education, with the exception of degreed African women in 2005. The latter is, though, an encouraging sign. Racial discrimination also remained in the different occupation groups, with White women earning more than their African counterparts in all job categories with the exception of Managers, Professionals (only 2005) and Operators and Assemblers.

An individual's probability of employment is determined by a wide range of variables, with the key roles of gender and race highlighted in this paper. It is evident that women continue to suffer discrimination in the labour market, in terms of lower quality employment and lower remuneration. African women, specifically, are undoubtedly the most vulnerable participants in the labour force, particularly if they are young and poorly educated. They are the least likely to find employment relative to women of other races. Even those African women who did find employment continue to earn considerably less than their White counterparts, with very large differences especially at the lower skills levels. While progress has been made in advancing the position of women in the labour market over the past decade, important challenges remain.

References

- Bhorat, H. & Hodge, J. 1999. "Decomposing Shifts in Labour Demand in South Africa", *South African Journal of Economics*, 67(3)
- Bhorat, H. & Leibbrandt, M. 2001. "Modelling Vulnerability and Low Earnings in the South African Labour Market". In: Bhorat, H. et. al. (eds.) *Fighting Poverty Labour Markets and Inequality in South Africa*. Cape Town: UCT Press
- Bhorat, H. & Oosthuizen, M. 2005. *The Post-Apartheid South African Labour Market*. Development Policy Research Unit Working Paper No 05/93. Cape Town: University of Cape Town
- Burger, R. & Yu, D. 2006. *Constructing an Earnings Series for South Africa from the Household Surveys: 1995-2005*. Department of Economics, University of Stellenbosch
- Casale, D., Muller, C. & Posel, D. 2004. *Two Million Net New Jobs: A Reconsideration of the Rise in Employment in South Africa, 1995-2003*. Paper presented at the TIPS/DPRU Forum, 13-15 October 2004, Somerset West, South Africa.
- Casale, D. & Posel, D. 2002. "The Continued Feminisation of the Labour Force in South Africa: An Analysis of Recent Data and Trends, *The South African Journal of Economics* 70(1): pp. 156-184, March 2002
- Casale, D. 2004. *What has the Feminisation of the Labour Market 'Bought' Women in South Africa? Trends in Labour Force Participation, Employment and Earnings, 1995-2001*. Development Policy Research Unit Working Paper No 04/84. Cape Town: University of Cape Town
- Elder, S. & Schmidt, D. 2004. *Global Employment Trends for Women*. ILO Employment Strategy Paper No 2004/8. ILO Employment Trends Unit. Employment Trends Department. Available at <http://www.ilo.org/public/english/employment/strat/download/esp8.pdf>
- Kingdon, G. & Knight, J. 2005. *Unemployment in South Africa, 1995 – 2003: Causes, Problems and Policies*. Paper Presented at the International Conference on "Shared Growth in Africa" at the La Palm Royal Beach Hotel, Accra, Ghana. 21-22 July 2005. Available at http://www.issar.org/1%20Kingdon_Knight.pdf

- Muller, C. 2003. *Measuring South Africa's Informal Sector: An Analysis of National Household Surveys*. Development Policy Research Unit Working Paper No 03/71. Cape Town: University of Cape Town.
- Nattrass, N. 2003. "The State of the Economy: A Crisis of Employment". In Daniel, J., Habib, A. & Southall, R. (eds.) *State of the Nation 2003-2004*. Pretoria: HSRC.
- Oosthuizen, M. 2006. *The Post-Apartheid Labour Market: 1995-2003*. Development Policy Research Unit Working Paper No 06/103. Cape Town: University of Cape Town.
- Oosthuizen, M. & Van der Westhuizen, C. 2005. *Overview of the Post-Apartheid Labour Market, 1995-2003*. Unpublished DPRU Research Report for the Department of Trade and Industry.
- Posel, D. & Casale, D. 2005. *Who Replies in Brackets and what are the Implications for Earnings Estimates? An Analysis of Earnings Data from South Africa*. Paper Presented at the DPRU/TIPS Forum at Glenburn Lodge, Johannesburg. 30 November – 1 December 2005. Available at <http://www.tips.org.za/research/item.asp?ID=774>
- Poswell, L. 2002. *The Post-Apartheid South African Labour Market – A Status Report*. Cape Town: Development Policy Research Unit, University of Cape Town.
- Standing, G. 1999. "Global Feminization Through Flexible Labor: A Theme Revisited". In: *World Development*. 27 (3). pp. 583-602.
- Statistics South Africa. 2006. *CPI History: Metropolitan Areas - All Items*. P0141.1. Available at <http://www.statssa.gov.za/keyindicators/CPI/CPIHistory.pdf>