

Labour Force Trends in Cape Town

September 2005 to March 2007

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Citation: City of Cape Town (2008), Strategic Development Information and GIS Department, Labour Force Trends in Cape Town – September 2005 to March 2007, Karen Small, 14 pages.

Labour Force Survey data supplied by Statistics South Africa.

Disclaimer: Please be advised that the sample sizes within individual categories are small and as a result statistical confidence in using these data is limited.

1 Introduction

The Labour Force Survey (LFS) captures a wide range of information about the labour force. This report looks at the changes in the characteristics of the labour force in Cape Town from September 2005 to March 2007.

2 Methodology

The LFS is conducted in March and September each year by Statistics South Africa on a national scale and is stratified on a District Council basis. The master sample was a multi-stage stratified sample with an overall sample size of 3000 Primary Sampling Units (PSUs). The PSUs were allocated to the 53 District Councils using the power allocation method. Finally the PSUs were sampled using probability proportional to size principles. In order to obtain a better picture of movements into and out of the labour market over time a rotating panel methodology was used (see Appendix A for details). A two-stage weighting procedure was also done on the data. The details can be found in Appendix B.

The target population was all households as well as residents in hostels for workers, convents and monasteries. Institutions, such as old age homes, hospitals, prisons and military barracks, were not included in the survey.

Prior to September 2005 the master sample was stratified on a Provincial basis and it was not possible to analyse the data for the Cape Town Metropolitan area. The number individuals sampled for Cape Town are given in Table 1.

Date	Black African	Coloured	Asian	White	Unknown	Total
September 2005	798	1,182	21	317	13	2,331
March 2006	799	1,182	22	345	5	2,353
September 2006	843	1,159	25	296	0	2,323
March 2007	904	1,153	41	344	8	2,450

Table 1: Number of individuals sampled

3 Definitions

The **population of working age** is all persons aged 15 to 64 years.

The **labour force**, or **economically active**, is all employed and unemployed persons of working age.

The **employed**, or **workers**, are all persons of working age who were working in the seven days prior to the survey or who did not work but did have a job or business.

The **official (narrow) definition of unemployment** are those persons of working age who did not work during the seven days prior to the interview, want to work and are available to start work within two weeks of the interview, and 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 unofficial, definition of unemployment** excludes the criterion of having taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview.

The **not economically active** are all persons of working age who are not available to work as well as the discouraged work seekers.

4 Labour Force Trends

4.1 Labour Force Characteristics

In March 2007 the size of the labour force for Cape Town was estimated to be 1,559,611 a growth of 79,297 since September 2005. Females in the labour force have increased from 47.0% in September 2005 to 47.6% in March 2007. Further details can be found in Appendix C.

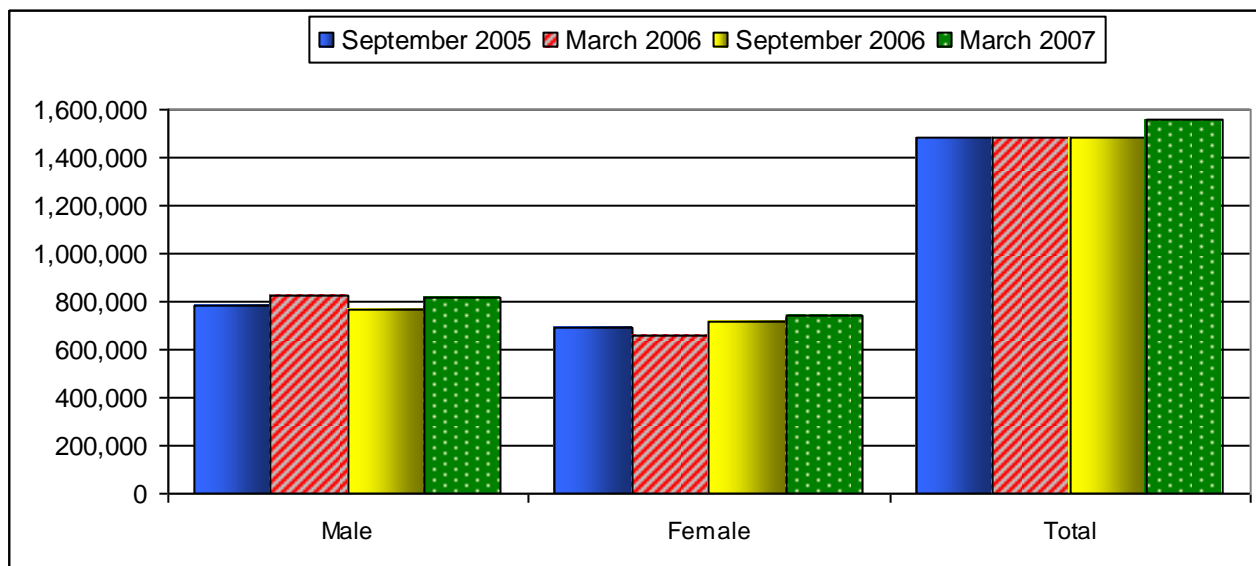


Figure 1: Labour force by gender

As can be seen from Figure 1 there were more males than females in the labour force and the variations are small. The number of females in the labour force grew faster than the number of males with females increasing by 6.8% from September 2005 to March 2007 and males by 4.1%. The total number in the labour force remained almost constant from September 2005 to September 2006 and increased by 5.3% in March 2007.

4.2 Employment Status

The number of people employed grew from 1,172,154 in September 2005 to 1,264,197 in March 2007.

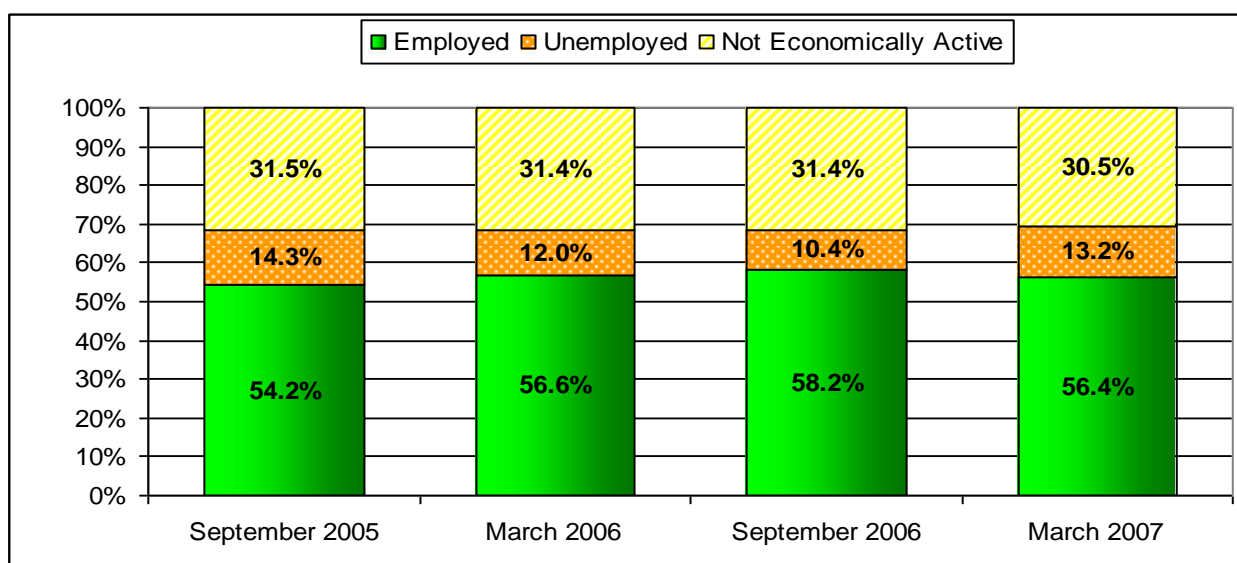


Figure 2: Employment status

The percentage of the population of working age that is not economically active has shown a slight decrease from 31.5% in September 2005 to 30.5% in March 2007 (see Figure 2). The percentage employed rose from 54.2% in September 2005 to 58.2% in September 2006 and then dropped to 56.4% in March 2007. Those unemployed dropped from 14.3% in September 2005 to 10.4% in September 2006 and then rose to 13.2% in March 2007.

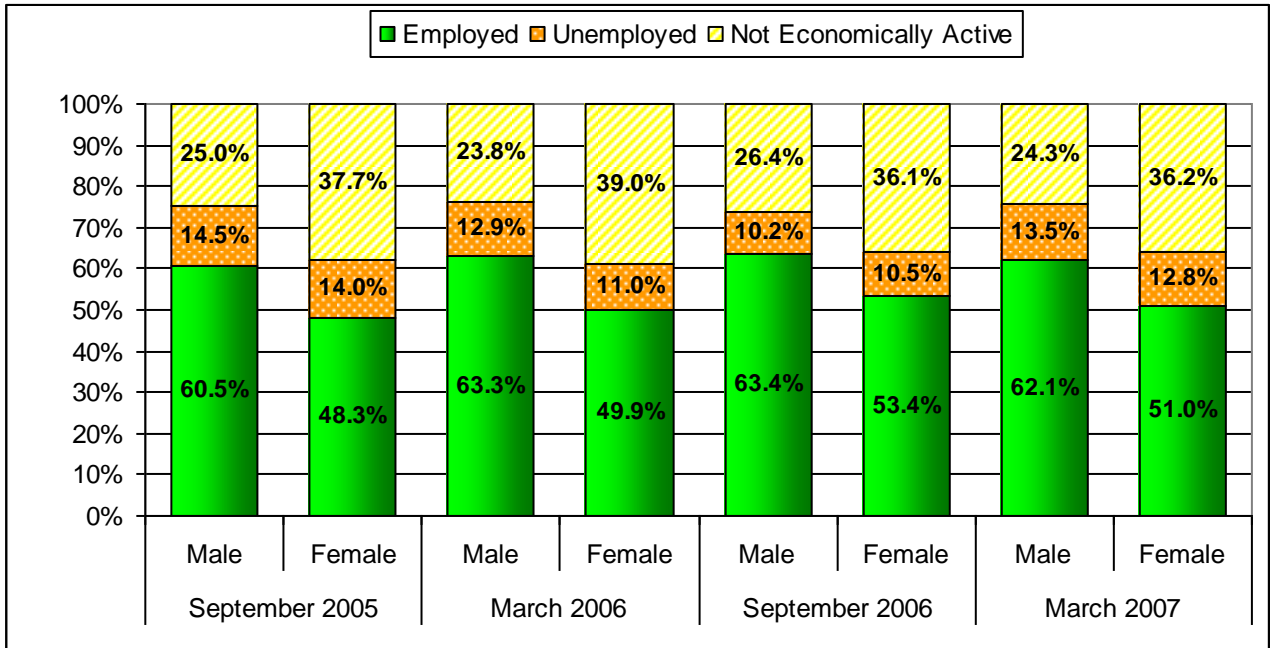


Figure 3: Employment status by gender

The variations in employment status by gender can be seen in Figure 3. The percentage of females employed is always lower than that of males and the percentage of females who are not economically active is always higher. The number of males employed showed the largest change from September 2005 to March 2006 with an increase of 2.8% while those unemployed showed the largest change from September 2006 to March 2007 with an increase of 3.3% due largely to a decline in the number of discouraged work seekers. For females the largest change in the percentage employed occurred between March 2006 and September 2006 with an increase of 3.5% and for those unemployed a decrease of 3.0% between September 2005 and March 2006 was the largest change.

4.3 Labour Force Absorption and Participation Rates

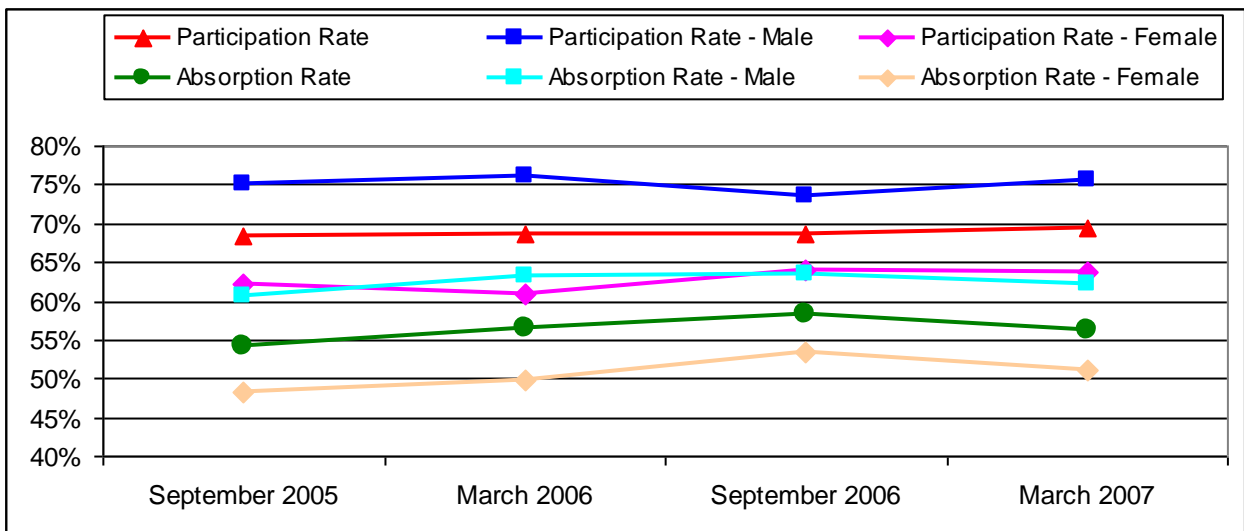


Figure 4: Labour force absorption and participation rates

The labour force absorption rate is the percentage of the population of working age who are employed. This rate rose from 54.2% in September 2005 to 58.2% in September 2006 and then dropped to 56.4% in March 2007 (see Figure 4). From September 2005 to March 2007 the absorption rate increased by 2.2%. The same trend is seen for both males and females with males peaking at 63.4% and females at 53.4% in September 2006. Over the total time period the absorption rate increased by 1.6% for males and 2.7% for females.

The labour force participation rate is the sum of the number of employed and unemployed as a percentage of the population of working age. From September 2005 to March 2007 the rate increased from 68.5% to 69.5%, with most of the increase occurring in the last six months (see Figure 4). For males the participation rate increased from September 2005 to March 2006 by 1.2% and then fell by 2.6% in the next six months rising again by 2.1% in March 2007. For females the participation rate fell by 1.3% from September 2005 to March 2006 and then rose by 2.9% in September 2006 where it remained constant.

4.4 Employment by Occupation

Occupation	Sept 2005	March 2006	Sept 2006	March 2007
Legislators, senior officials & managers	131,498	144,495	135,468	150,240
Professionals	73,684	96,111	78,529	63,320
Technical & associated professionals	128,979	162,311	200,636	143,561
Clerks	184,481	175,449	165,998	176,481
Service, shop & market sales workers	153,393	172,539	140,619	190,600
Skilled agricultural & fishery workers	5,317	7,328	5,383	5,337
Craft & related trades workers	158,055	155,246	153,763	141,010
Plant & machine operators & assemblers	74,128	81,593	90,501	101,244
Elementary occupations	200,318	180,573	217,334	217,072
Domestic workers	62,302	50,751	69,263	75,333
Grand Total	1,172,154	1,226,397	1,257,495	1,264,197

Table 2: Employment by occupation

As can be seen from Table 2 the largest number of workers is employed in elementary occupations. By March 2007 the number of service, shop and market sales workers had grown to 190,600 the second largest group. Also by March 2007 those employed as professionals had dropped to 63,320 with only skilled agricultural and fishery workers being lower.

Occupation	Sept 2005 to March 2006	March 2006 to Sept 2006	Sept 2006 to March 2007	Sept 2005 to March 2007
Legislators, senior officials & managers	12,997	-9,027	14,772	18,742
Professionals	22,427	-17,582	-15,210	-10,364
Technical & associated professionals	33,332	38,325	-57,076	14,582
Clerks	-9,031	-9,451	10,483	-8,000
Service, shop & market sales workers	19,146	-31,920	49,981	37,207
Skilled agricultural & fishery workers	2,011	-1,945	-47	20
Craft & related trades workers	-2,808	-1,483	-12,754	-17,045
Plant & machine operators & assemblers	7,465	8,908	10,743	27,116
Elementary occupations	-19,745	36,761	-263	16,754
Domestic workers	-11,551	18,512	6,071	13,031
Grand Total	54,243	31,097	6,702	92,043

Table 3: Change in employment by occupation

The changes in the number employed in each of the occupations between each of the surveys, as well as from September 2005 to March 2007, are shown in Table 3. Over the full time period service, shop and market sales workers increased the most followed by plant and machine

operators and assemblers. Craft and related trades workers had the largest decline followed by professionals between September 2005 and March 2007.

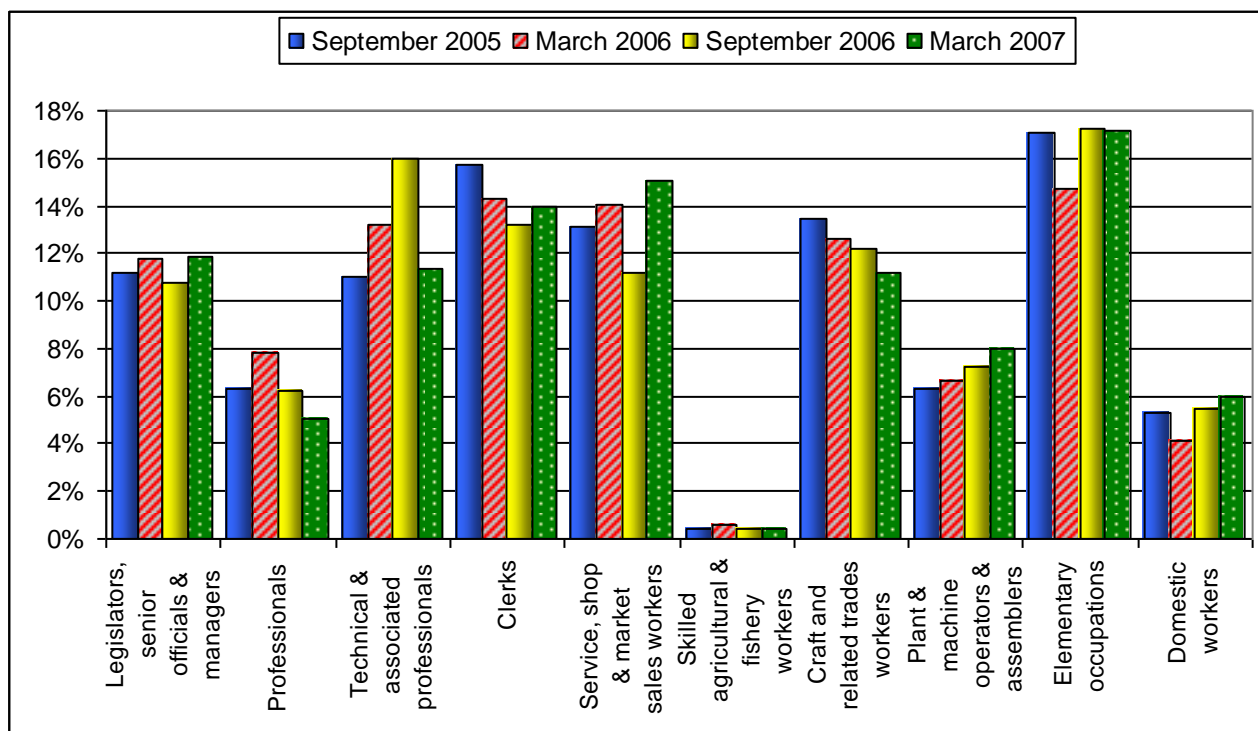


Figure 5: Employment by occupations

The percentage of workers employed in elementary occupations was the highest for each of the surveys at about 17% with the exception of March 2006 when it fell to 14.7% (see Figure 5). By March 2007 service, shop and market sales workers had risen to 15.1% from 13.1% in September 2005 with a drop to 11.2% in September 2006. Legislators, senior officials and managers varied between 10.8% in September 2006 and 11.9% in March 2007. Domestic workers rose to 6.0% in March 2007 having been at 4.1% in March 2006. Plant and machine operators and assemblers show a steady increase from 6.3% in September 2005 to 8.0% in March 2007. Craft and related trades workers show a steady decline from 13.5% in September 2005 to 11.2% in March 2007.

4.5 Formal and Informal Sector Employment

Sector	September 2005	March 2006	September 2006	March 2007
Formal	985,587	1,031,105	1,037,483	1,014,271
Informal	122,280	138,522	148,203	170,220
Domestic Workers	62,302	50,751	69,263	75,333
Unknown	1,984	6,019	2,546	4,373
Grand Total	1,172,154	1,226,397	1,257,495	1,264,197

Table 4: Formal and informal sector employment

The number of people employed in the informal sector showed a steady increase from September 2005 to March 2007 (see Table 4). Those employed in the formal sector increased from September 2005 to September 2006, with slower growth in the second six months, followed by a decline in March 2007. The number of domestic workers declined significantly from September 2005 to March 2006 but then increased significantly in both September 2006 and March 2007.

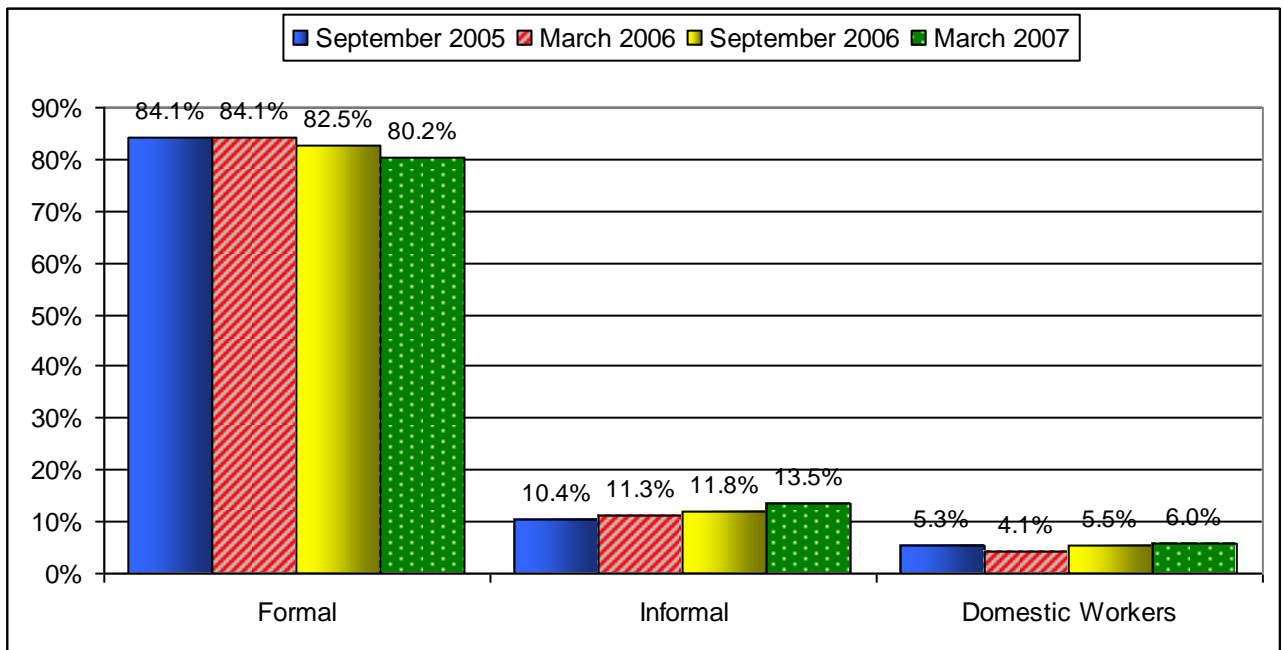


Figure 6: Employment by sector

As can be seen from Figure 6 over 80% of those employed are in the formal sector but there was a decline from 84.1% in both September 2005 and March 2006 to 80.2% in March 2007. There was a growth of those employed in the informal sector from 10.4% in September 2005 to 13.5% in March 2007. Domestic workers increased from 5.3% in September 2005 to 6.0% in March 2007 with a decline to 4.1% in March 2006.

4.6 Employment by Industry

Industry	Sept 2005	March 2006	Sept 2006	March 2007
Agriculture	6,087	14,313	7,000	17,239
Mining and quarrying	-	-	-	2,566
Manufacturing	203,287	231,873	217,183	194,358
Utilities	7,335	8,660	7,110	9,916
Construction	105,096	95,086	92,616	86,930
Wholesale and retail trade	320,132	340,309	346,100	362,758
Transport	61,019	60,289	66,806	68,702
Financial intermediation	179,242	187,316	203,474	190,698
Community and personal services	212,149	230,799	227,505	237,972
Private households	77,809	57,752	88,828	93,057
Unknown	0	0	870	0
Grand Total	1,172,154	1,226,397	1,257,495	1,264,197

Table 5: Employment by industry

The industry employing the largest number of people is wholesale and retail trade with an increase from 320,132 in September 2005 to 362,758 in March 2007 (see Table 5). Community and personal services has the next highest number of workers with 237,972 in March 2007. Manufacturing and financial intermediation both had in excess of 190,000 workers in March 2007. With the exception of mining and quarrying, which only had workers in the sample in March 2007, utilities (electricity, water and gas supply) had the lowest number of workers with 9,916 in March 2007. Agriculture shows very clear seasonality with the number of workers in March 2006 and March 2007 more than double the number in September 2005 and September 2006.

Industry	Sept 2005 to March 2006	March 2006 to Sept 2006	Sept 2006 to March 2007	Sept 2005 to March 2007
Agriculture	8,226	-7,313	10,239	11,152
Mining and quarrying	-	-	2,566	2,566
Manufacturing	28,586	-14,690	-22,826	-8,929
Utilities	1,326	-1,550	2,806	2,582
Construction	-10,009	-2,470	-5,686	-18,165
Wholesale and retail trade	20,177	5,791	16,658	42,626
Transport	-730	6,517	1,896	7,683
Financial intermediation	8,074	16,159	-12,776	11,456
Community and personal services	18,650	-3,293	10,466	25,823
Private households	-20,057	31,076	4,229	15,248
Unknown	0	870	-870	0
Grand Total	54,243	31,097	6,702	92,043

Table 6: Changes in employment by industry

Wholesale and retail trade showed the largest increase in the number of workers increasing by 42,626 from September 2005 to March 2007 (see Table 6). Community and personal services showed the next largest increase over the four surveys in spite of a small decrease between March 2006 and September 2006. Of all the industries agriculture showed the biggest percentage increase (183.2%) from September 2005 to March 2007, increasing by 11,152 workers. Construction lost the largest number of workers with a decrease of 18,165 between September 2005 and March 2007. Manufacturing did show an increase between September 2005 and March 2006 but then declined giving a decrease of 8,929 workers over the full period.

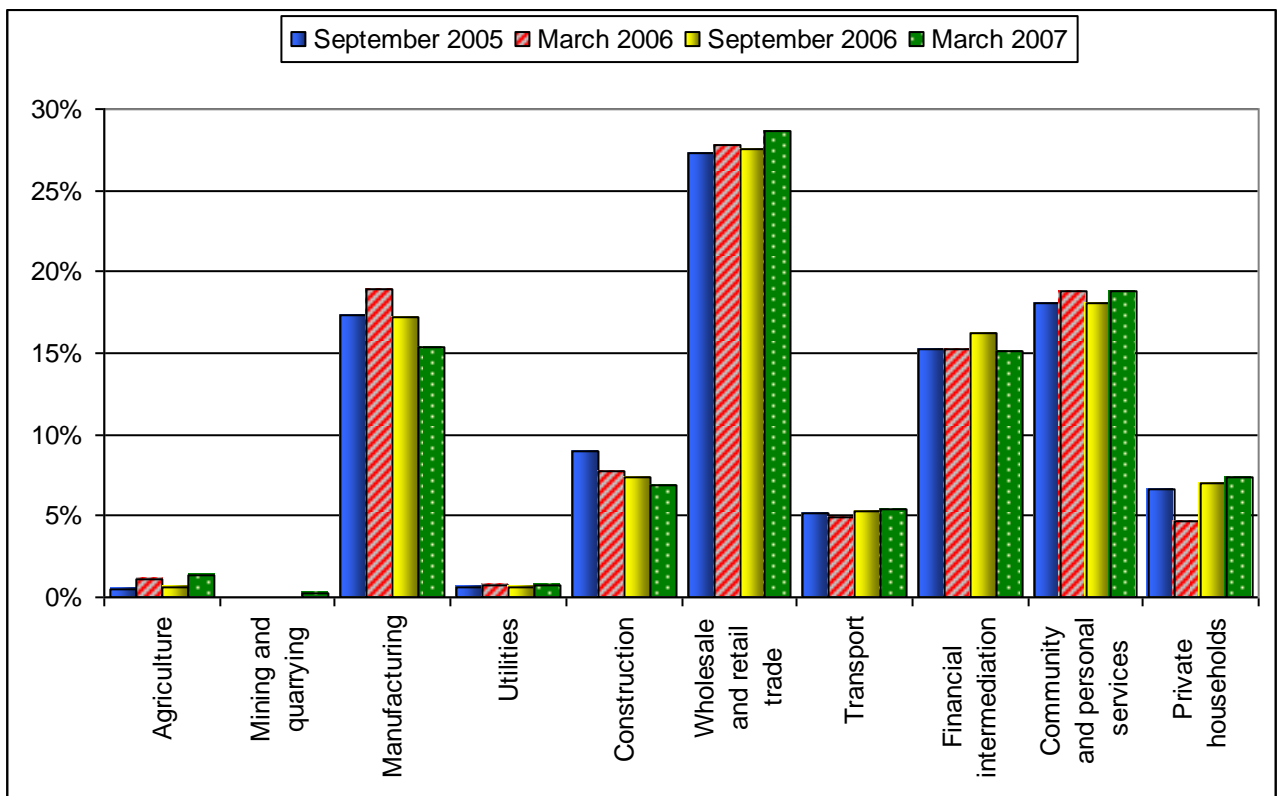


Figure 7: Employment by industry

Figure 7 shows that wholesale and retail trade has the largest percentage of workers increasing from 27.3% in September 2005 to 28.7% in March 2007. Except for March 2006 community and personal services has the next highest percentage of workers varying between 18.1% and 18.8%. Manufacturing peaked at 18.9% in March 2006 and then declined to 15.4% by March 2007. Construction shows a consistent decline from 9.0% in September 2005 to 6.9% in March 2007.

Over the entire time period utilities always had less than 1% of the workers and agriculture increased from 0.5% to 1.4%.

4.7 Annual Income of Employed

All those who were employed were asked their total salary or pay for their main job including overtime, allowances and bonus and before any tax or other deductions and the period for which this was applicable. All responses were then converted to annual income.

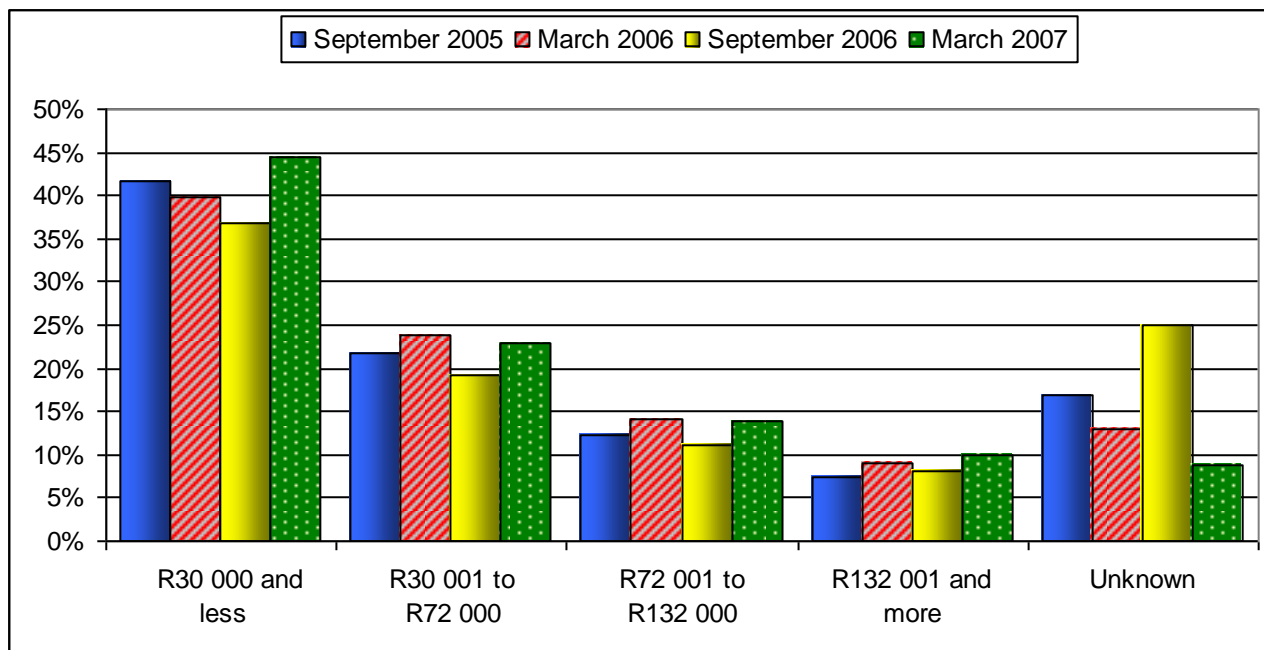


Figure 8: Annual income of employed

As can be seen from Figure 8 between 40% and 45% of those employed earn less than R30 000 per annum with the exception of September 2006 which dropped to 36.8%. Those earning over R132 000 per annum vary from 7.4% in September 2005 to 9.9% in March 2007. Due to the large variation in the percentage of the employed with an unknown annual income, comparisons over the four surveys cannot be made.

The reasons for unknown income are predominantly refused or “don’t know” with less than 0.2% of incomes unspecified. Those who refused showed the biggest variation peaking at 18.7% of those employed in September 2006 with the lowest in March 2007 at 5.5%. In September 2006 9.1% and in March 2006 5.8% refused. For those who “don’t know” the percentage declined from 7.8% in September 2005 to 3.2% in March 2007.

4.8 Unemployment

The number of unemployed in Cape Town declined from 308,160 in September 2005 to 223,827 in September 2006 and then increased to 295,414 in March 2007. This is largely in an inverse relationship with discouraged work seekers (see 4.9)

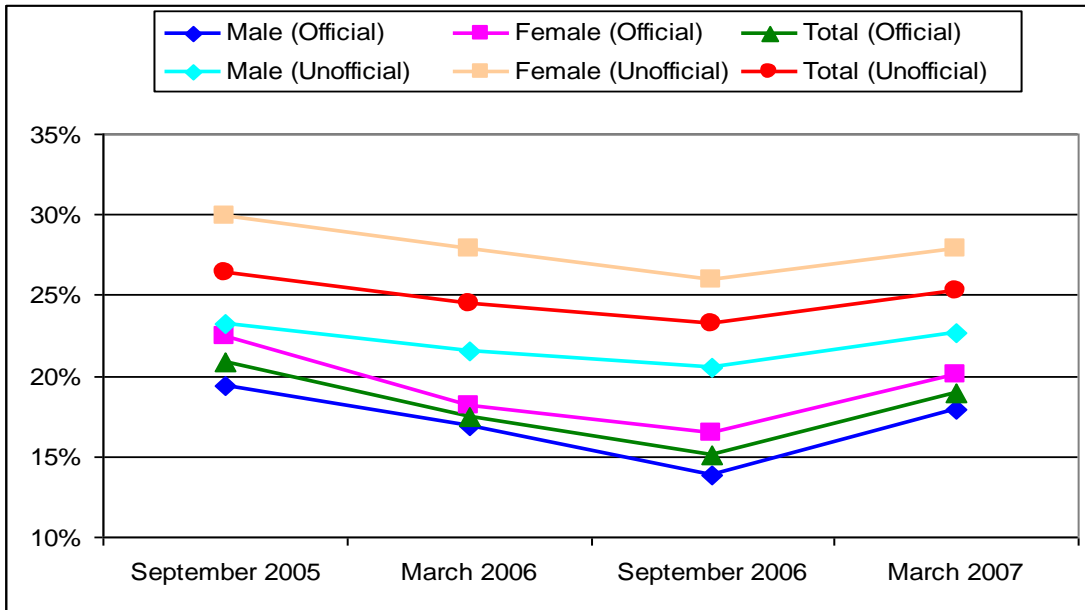


Figure 9: Unemployment rates by gender

The unemployment rate dropped from 20.8% in September 2005 to 15.1% in September 2006 and then rose to 18.9% in March 2007 (see Figure 9). The unemployment rate for both males and females follows the same pattern with female unemployment rates always being higher than that for males.

When looking at the expanded definition of unemployment, which includes those who are available for work but have not taken active steps to look for work in the four weeks prior to the survey, the unemployment rate rises significantly (see Figure 9). The rate follows the same pattern declining from 26.5% in September 2005 to 23.2% in September 2006 and then rising to 25.2% in March 2007. The difference in unemployment rates for males and females is also much larger with the female rate being 6.6% higher than the male rate in September 2005 and 5.2% higher in March 2007.

4.9 Discouraged Work Seekers

Discouraged work seekers are those who are available and willing to work but did not take any active steps to look for work or to start some form of self-employment in the four week prior to the survey. They are thus not officially classified as unemployed. The number of discouraged work seekers increased from 113,531 in September 2005 to 155,885 in September 2006 and then declined to 130,925 in March 2007.

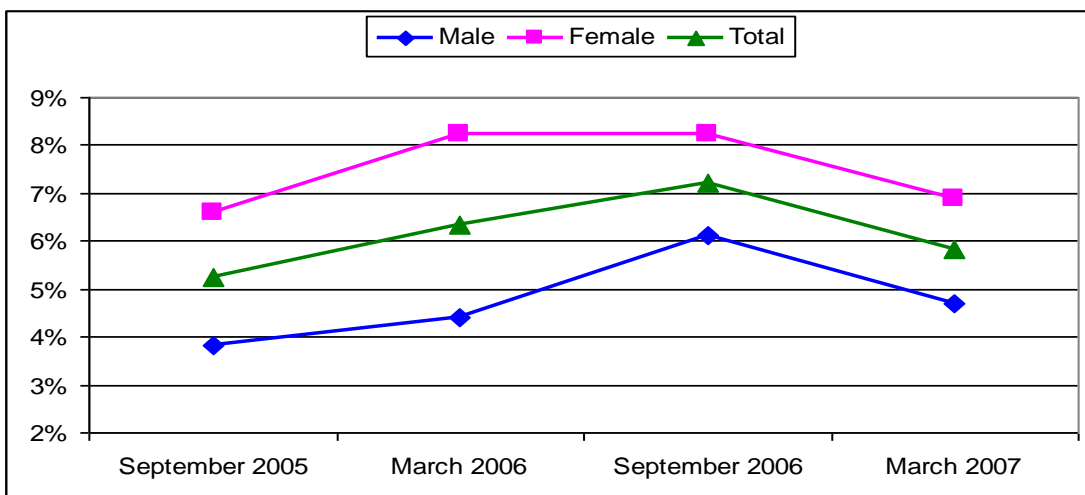


Figure 10: Discouraged work seekers

The percentage of the working age population who were discouraged work seekers rose from 5.3% in September 2005 to 7.2% in September 2006 and then dropped to 5.8% in March 2007 (see Figure 10). The percentage of females is significantly higher than that of males being almost double in March 2006. Males rose from 3.8% in September 2005 to 6.1% in September 2006 with the rise in the second six months being much larger than the first. Males then dropped to 4.7% in March 2007. Females rose from 6.6% in September 2005 to 8.2% in March 2006, then remained constant and dropped to 6.9% in March 2007.

5 Conclusion

The four surveys show that the number of people employed in Cape Town increased with each survey from September 2005 to March 2007. However as a percentage of the population of working age it peaked at 58.2% in September 2006 and then fell to 56.4% in March 2007.

The occupations having the largest increases were service, shop and market sales workers and plant and machine operators and assemblers while craft and related trades workers showed the largest declines followed by professionals.

The percentage of workers employed in the informal sector increased by 3.1% while those in the formal sector declined by 3.9%. The industries experiencing the largest gains were wholesale and retail trade and community and personal services. Construction was the only industry which lost workers consistently over the four surveys.

Unemployment declined from 20.8% in September 2005 to 15.1% in September 2006 and then rose to 18.9% in March 2007. Discouraged work seekers showed the opposite rising from 5.3% in September 2005 to 7.2% in September 2006 and then falling to 5.8% in March 2007.

Within some of the individual categories the sample sizes are small and could be the cause of the variations over the four surveys and the results should thus be used with caution.

As additional surveys become available they will also be analysed to determine whether or not there are seasonal variations in the labour force and to continue to monitor the changes in employment and unemployment in Cape Town.

Appendices

Appendix A – Rotating Panel Methodology

Statistics South Africa uses a rotating panel methodology for the LFS, to ultimately obtain a better picture of movements into and out of the labour market over time. The rotating panel methodology involves visiting the same dwelling units on a number of occasions (in this instance, five at most). After the panel is established, a proportion of the dwelling units is replaced each round (in this instance, 20%). New dwelling units are added to the sample to replace those that are taken out. The advantage of this type of design is that it provides the basis for monitoring changes in the work situation of members of the same households over time, while retaining the larger picture of the overall employment situation in the country. It also allows for both longitudinal and cross-sectional analysis.

Source: **Labour Force Survey, March 2007: Metadata**/Statistics South Africa. Pretoria: Statistics South Africa, 2007, 85p. [Report No. P0210 (2007)]

Appendix B – Weighting the LFS of March 2007

A two-stage weighting procedure was applied to the LFS

The PSU inclusion probability is given by

$$P_{PSU} = \frac{n_{PSU}}{N_{PSU}} \cdot n_s,$$

where n_{PSU} is the number of households constituting the selected PSU during census fieldwork, n_s is the number of PSUs per stratum, in this case the District Council (DC) and N_{PSU} is the number of households constituting the selected stratum during census fieldwork.

The household inclusion probability per PSU is given by

$$P_{HH} = \frac{n_{HH}}{H_{HH}},$$

where n_{HH} is the number of selected dwelling units per PSU, H_{HH} is the number of dwelling units in the PSU in question at a particular time different from the census time.

The non-response adjustment factor is given by $\frac{1}{r_{HH}}$, where r_{HH} is the response rate and is given by

$r_{HH} = \frac{n_{RESP}}{n_T}$ where n_{RESP} is the number of responding households and n_T is the total number of visited

households (in the sampled dwelling units) per PSU. The design weights adjusted for non-response are now given by

$$W_{HH} = \frac{1}{P_{PSU} \cdot P_{HH} \cdot r_{HH}}$$

A SAS macro called CALMAR was used to benchmark W_{HH} to the population estimates. The mid-year population estimates were adjusted to give population estimates for March 2007 (when survey fieldwork took place).

Source: **Labour Force Survey, March 2007: Metadata**/Statistics South Africa. Pretoria: Statistics South Africa, 2007, 85p. [Report No. P0210 (2007)]

Appendix C – Labour Market Indicators

	September 2005	March 2006	September 2006	March 2007
Employed	1,172,154	1,226,397	1,257,495	1,264,197
Unemployed (Official definition)	308,160	259,641	223,827	295,414
Labour Force	1,480,314	1,486,038	1,481,322	1,559,611
Not Economically Active	682,147	680,553	678,356	683,339
Population of working age	2,162,461	2,166,591	2,159,678	2,242,950
Discouraged work-seekers	113,531	137,227	155,885	130,925
Unemployment Rate	20.82%	17.47%	15.11%	18.94%
Labour Force Participation Rate	68.46%	68.59%	68.59%	69.53%
Labour Absorption Rate	54.20%	56.60%	58.23%	56.36%

	September 2005		March 2006		September 2006		March 2007	
	Male	Female	Male	Female	Male	Female	Male	Female
Employed	633,211	538,943	685,605	540,792	661,858	595,637	670,853	593,344
Unemployed (Official definition)	151,921	156,239	139,954	119,687	106,449	117,378	146,245	149,169
Labour Force	785,131	695,182	825,559	660,479	768,307	713,015	817,098	742,513
Not Economically Active	261,158	420,990	257,666	422,887	276,262	402,094	262,869	420,470
Population of working age	1,046,289	1,116,172	1,083,225	1,083,366	1,044,570	1,115,109	1,079,967	1,162,983
Discouraged work-seekers	39,975	73,556	47,860	89,367	63,968	91,918	50,711	80,214
Unemployment Rate	19.35%	22.47%	16.95%	18.12%	13.86%	16.46%	17.90%	20.09%
Labour Force Participation Rate	75.04%	62.28%	76.21%	60.97%	73.55%	63.94%	75.66%	63.85%
Labour Absorption Rate	60.52%	48.28%	63.29%	49.92%	63.36%	53.42%	62.12%	51.02%