## Statistical release

# Monthly earnings of South Africans, 

## 2010

## Embargoed until:

30 November 2010
13:00

## Enquiries:

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Stats SA Library Cataloguing-in-Publication (CIP) Data
Monthly earnings of South Africans, 2010/Statistics South Africa. Pretoria: Statistics South Africa, 2010

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## 1. Introduction

The data used in this report are from the Quarterly Labour Force Survey (QLFS), which is a householdbased sample survey conducted by Statistics South Africa (Stats SA). It collects data on the labour market activities of individuals aged 15 years and above who live in South Africa. However, this report only covers labour market activities of persons aged 15 to 64 years.

Stats SA added earnings questions to the QLFS questionnaire from the third quarter of 2009. This was done with the aim of producing relative earnings data and earnings distributions. Relative earnings relate to the comparisons of the earnings of one socio-demographic group with the earnings of other groups, for example, female to male earnings ratios, population group ratios, and so forth, while earnings distributions measure inequality in the earnings distribution of any socio-demographic group, for example, are the earnings of men more unequally distributed than the earnings of women, or, how does earnings inequality vary by province?

Because of their superiority when describing the distribution of earnings, and because of their much greater stability through time, Stats SA will use only medians and other quantiles in published data. The relationships and degrees of inequality change relatively slowly over time when measured in medians certainly much slower than the estimates of employment and unemployment change from quarter to quarter.

When the rate of change in a variable such as earnings ratios is slow, data that are more precise than the QLFS data are required in order to distinguish real change from the random errors that are present in all survey-based data. In order to increase the precision of the earnings data, Stats SA will publish only annual averages. Estimates of QLFS annual averages are much more precise than estimates for a single quarter because the annual average sample is $75 \%$ larger than a quarterly sample. For this report four quarters have been pooled together (Q4:2009 - Q3:2010).

The primary medium of publication of the annual averages of earnings will be the QLFS annual report "Labour market dynamics in South Africa - Report No. 02-11-02". However, now that earnings data for the five quarters are available, Stats SA has decided to publish a preview of what the newly available QLFS earnings statistics say about current earnings distributions in South Africa.

This report will therefore focus on relative earnings and earnings distributions in line with the purpose for which earnings data were collected.

## Distinguishing between earnings and incomes:

What the QLFS measures are the gross earnings of employees and the net earnings of employers and own-account workers. It is essential to distinguish this concept of earnings from the concept of income:

- Income is inclusive; it covers all sources of household revenue and includes not only earnings but also grants, other sources of revenue from government such as UIF, as well as investment income.
- Income is generally measured at the household level (household income) while earnings are usually, as is the case here, measured for individual employed persons
- Income is generally measured over the course of a year. The earnings data here refer to the current monthly pay, regardless of what came before or after.
The degree of inequality observed in earnings distributions is almost certain to be less than the degree of inequality observed in income distributions. There are two reasons for this:
- The entire population aged 15 years and over is included in the income statistics, not just the employed population. The not employed portion of the population (about 60\% of the population) will generally have much lower incomes because they have no earnings.
- People at the high end of the earnings distribution are more likely to also have investment income, and frequently investment income above the median.

It is appropriate to compare the degree of inequality between income and earnings distributions if the objective is to measure that difference. However, it is inappropriate to judge the validity of income data or earnings data by comparing the two.

## Impact of reference periods

One needs to be very careful when comparing the monthly earnings data presented in this report and the annual earnings data collected in, say, the Income and Expenditure Survey (IES).

The QLFS data refer to the rate at which people earn during a given quarter, for example, R5 243 per month or R3 511 per month. Data from a source like the IES measure how much people earned over the course of the year. There are two factors that determine annual earnings. One is the rate of pay (so many rand per month), and the other is how many months during the year did the person work. It is not, therefore, appropriate to multiply monthly earnings by 12 to arrive at annual earnings.

## 2. Highlights of the results

Tables and figures in this publication generally have the following layout to portray the shape of the earnings distribution.

|  | No. of <br> employees | Bottom <br> $5 \%$ | Bottom <br> 10\% | Bottom <br> 25\% | Median | Top <br> $\mathbf{2 5 \%}$ | Top <br> $\mathbf{1 0 \%}$ | Top <br> $5 \%$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |  |
| South Africa | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |  |

The number R570 under "Bottom 5\%" indicates the monthly earnings level where $5 \%$ of all employees earned R570 or less. Similarly, the number R17 000 indicates the monthly earning level where $5 \%$ of all employees earned R17 000 or more. The other headings (e.g. "Bottom 25\%") can be interpreted in the same way.

It should also be noted that for both the "Bottom" and the "Top", the $25 \%$ levels include the $10 \%$ and $5 \%$ levels and the $10 \%$ level includes the $5 \%$ level.

Table A: Distribution of monthly earnings by status in employment

|  | No. of employees | $\begin{gathered} \text { Bottom } \\ 5 \% \end{gathered}$ | $\begin{gathered} \text { Bottom } \\ \text { 10\% } \end{gathered}$ | $\begin{gathered} \text { Bottom } \\ 25 \% \end{gathered}$ | Median | $\begin{aligned} & \text { Top } \\ & \text { 25\% } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Top } \\ & \text { 10\% } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Top } \\ & 5 \% \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| Total | 12951 | 500 | 800 | 1400 | 2812 | 6900 | 13000 | 18900 |
| Employees | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Employers | 686 | 650 | 1200 | 3000 | 7000 | 16000 | 35000 | 58333 |
| Own-account workers | 1207 | 217 | 400 | 867 | 1820 | 4333 | 10000 | 17000 |

Due to rounding, numbers do not necessarily add up to totals.
Table A shows that of the 12,9 million paid workers in the year to September 2010, 11,1 million (or $85,4 \%$ ) were employees, while own-account workers and employers accounted for $9,3 \%$ and $5,3 \%$ of total paid employment respectively. The median monthly earnings were highest for employers at R7 000, followed by employees with their median at R2 800, and the lowest median monthly earnings were observed among the own-account workers at R1 820.

The analysis based on Table A has shown that the shape of the distributions of employers and own-account workers differ substantially from those of employees. (The distributions of employers and own-account workers also differ substantially from each other.)

Analysis based on all employed would therefore yield less informative information on the relationship between socio-demographic characteristics and earnings since these relationships are different for each status in employment. The analysis that follows will therefore be based on employees only.

### 2.1 Median earnings by sex

Figure 1: Distribution of monthly earnings for employees by sex


South African employees who were in paid employment had median monthly earnings of R2 800. The median monthly earnings for men ( R 3033 ) were higher than that for women ( R 2340 ) - women in paid employment earned $77,1 \%$ of what men did.

### 2.2 Median earnings by population group and sex, employees

Figure 2: Distribution of monthly earnings for employees by population group


Median monthly earnings of white (R9500) and Indian/Asian (R6000) population were substantially higher than the median monthly earnings of their coloured (R2 652) and black African (R2 167) counterparts. Black Africans earned $22, \%$ of what the white population earned; $36,1 \%$ of what Indians/Asians earned; and $81,7 \%$ of what the coloured population earned.

In the bottom 5\%, black Africans earned R500 or less per month while the white population earned R2 000 or less, while in the top $5 \%$ they earned R12 567 or more compared to the white population who earned R34 000 or more per month.

Table B: Monthly earnings ratios of other population groups-to-white population

|  |  |
| :--- | ---: |
|  | Ratios |
| Black African | 22,8 |
| Coloured | 27,9 |
| Indian/Asian | 63,2 |

The other population groups' ratio of monthly earnings to white population earnings was highest among Indian/Asians whose median earnings were $63,2 \%$ of median earnings of the white population - which means black African and coloured populations were the worst paid employees as their median earnings were $22,8 \%$ and $27,9 \%$ respectively of what the white population median earnings were.

Figure 3: Women -to-men median monthly earnings ratios for employees by population group


Women's-to-men's median monthly earnings ratios were higher among Indian/Asian (100,0\%) and coloured ( $78,1 \%$ ) population than among black Africans ( $69,3 \%$ ) and white population ( $66,4 \%$ ).

### 2.3 Median earnings by age, employees

Figure 4: Distribution of monthly earnings for employees by age


Median monthly earnings for paid workers increased with age in the four quarters ended September 2010. For instance, the median monthly earnings for those aged 15-24 years (R2 100) were the lowest and the highest were observed among those aged 55-64 years (R3 500).

Employees in the prime age group (25-54 years) who were in the bottom $25 \%$ of the earnings scale earned R1 500 or less per month while those in the younger or older ages earned R1 300 or less.

When comparing the youngest (15-24 year olds) and the oldest (55-64 year olds) employees, the younger employees earned more than the older employees in the bottom $5 \%$ but in the top $5 \%$ older employees earned more than the younger ones - where those aged 15-24 earned R12 000 per month while those aged 55-64 years earned R20 000 per month.

### 2.4 Median earnings by education, employees

Table C: Distribution of monthly earnings by education

| Education level | Employees | Bottom 5\% | $\begin{array}{r} \text { Bottom } \\ 10 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \end{array}$ | Median | $\begin{aligned} & \text { Top } \\ & \text { 25\% } \end{aligned}$ | $\begin{aligned} & \text { Top } \\ & \text { 10\% } \\ & \hline \end{aligned}$ | Top 5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| All levels of education | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| No schooling | 307 | 400 | 450 | 700 | 1100 | 1950 | 3800 | 5500 |
| Less than primary completed | 897 | 390 | 470 | 800 | 1300 | 2167 | 4000 | 5000 |
| Primary completed | 512 | 450 | 600 | 975 | 1500 | 2600 | 4333 | 5600 |
| Secondary not completed | 3607 | 500 | 750 | 1200 | 1993 | 3467 | 6000 | 8950 |
| Secondary completed | 3455 | 900 | 1200 | 2000 | 3500 | 7000 | 11000 | 15000 |
| Tertiary | 2134 | 1500 | 2500 | 5500 | 10000 | 15000 | 23333 | 33000 |
| Other | 146 | 500 | 700 | 1300 | 2380 | 5400 | 10000 | 15000 |

Median monthly earnings for paid workers increased with level of education - the higher the level of education the higher the earnings. For instance the median monthly earnings for those with no schooling was $84,6 \%$ of the median monthly earnings for those with less than primary completed earned; the median monthly earnings for those with secondary completed was $35,0 \%$ of the median monthly earnings for those with tertiary education.

### 2.5 Distribution of earnings by province, employees

Table D: Distribution of monthly earnings by province


Of the 11058000 employees in South Africa, $5 \%$ had monthly earnings that were R570 or less. In contrast, the top $5 \%$ had monthly earnings that were R17 000 or more.

Median monthly earnings was highest for 3,3 million employees in Gauteng at R3 683, followed by North West at R3 000, Mpumalanga at R2 777 and Western Cape at R2 700. The 710000 employees in Limpopo had the lowest median earnings, at R1 800, followed by Free State at R1 900 and Northern Cape at R2 100. However, medians alone do not tell the whole story. While Western Cape had the fourth highest median, their poorest paid $5 \%$, had the highest earnings among the poorest paid in all of the nine provinces.

### 2.6 Earnings by occupation, employees

Table E: Distribution of monthly earnings by occupation

|  | No. of employees | Bottom 5\% | $\begin{array}{r} \text { Bottom } \\ 10 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \end{array}$ | Median | $\begin{aligned} & \text { Top } \\ & \text { 25\% } \end{aligned}$ | Top | $\begin{gathered} \text { Top } \\ 5 \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| All occupations | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Manager | 605 | 2000 | 3000 | 6000 | 10500 | 18000 | 31000 | 48000 |
| Professional | 622 | 1500 | 2500 | 6000 | 10000 | 16500 | 26000 | 35000 |
| Technician | 1346 | 1200 | 1733 | 3200 | 7500 | 11300 | 15500 | 19250 |
| Clerk | 1426 | 1000 | 1500 | 2400 | 4500 | 8000 | 12000 | 15000 |
| Sales and services | 1538 | 600 | 888 | 1500 | 2420 | 4300 | 9000 | 12000 |
| Skilled agriculture | 46 | 500 | 800 | 1200 | 2167 | 6000 | 12000 | 16700 |
| Craft and related trade | 1240 | 800 | 1083 | 1733 | 2900 | 5200 | 10000 | 14000 |
| Plant and machine operator | 1069 | 840 | 1083 | 1700 | 2817 | 4500 | 7000 | 9550 |
| Elementary | 2283 | 450 | 600 | 1040 | 1517 | 2600 | 4333 | 5500 |
| Domestic worker | 882 | 300 | 400 | 650 | 1000 | 1400 | 2000 | 2400 |

As expected, monthly earnings was highest among managers and lowest among elementary workers including domestic workers. The managers had median monthly earnings of R10 500 while elementary employees had median monthly earnings of R1517. The table also shows that the top $5 \%$ of employees in all occupations earned R17 000 or more while the bottom 5\% earned R570 or less per month.

The inequality in earnings seems to be higher among the top occupations. For example, the top $10 \%$ managers earn R31 000 or more per month, while the bottom 10\% managers earn R3 000 or less per month.

Table F: Median monthly earnings by occupation and sex

|  | Number of employees (Thousand) |  | Median earnings (Rand) |  | Women-tomen ratio earnings |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women | Men | Women | Men |  |
| All occupations | 4875 | 6183 | 2340 | 3033 | 0,77 |
| Manager | 204 | 401 | 9000 | 12000 | 0,75 |
| Professional | 296 | 326 | 9500 | 12000 | 0,79 |
| Technician | 754 | 592 | 7006 | 8000 | 0,88 |
| Clerk | 985 | 441 | 4200 | 4800 | 0,88 |
| Sales and services | 650 | 889 | 2000 | 2700 | 0,74 |
| Skilled agriculture | 17 | 29 | 1517 | 2817 | 0,54 |
| Craft and related trade | 138 | 1103 | 1950 | 3000 | 0,65 |
| Plant and machine operator | 150 | 919 | 1902 | 3000 | 0,63 |
| Elementary | 831 | 1452 | 1430 | 1625 | 0,88 |
| Domestic worker | 850 | 32 | 1000 | 1000 | 1,00 |

The earnings gap between women and men is evident in all occupations except domestic work. Overall, women had median monthly earnings of R2 340 or about $77 \%$ of the R3 033 median earnings of their male counterparts.

Among managers, women with a median earnings of R9 000 earned $75 \%$ as much as men managers with a median monthly earnings of R12 000. The biggest gap between women and men is among skilled agriculture employees; however this should be interpreted with caution because of the small numbers involved. The gap between the two groups narrows among technicians, clerks and elementary workers where women earn $88 \%$ as much as their male counterparts.

### 2.7 Earnings by fringe benefits, employees

Fringe benefits in this section are defined as having access to pension, medical aid or paid leave.
Figure 5: Monthly earnings for employees with or without fringe benefits by sex


Figure 5 shows that among men and women employees, the monthly median earnings of those with access to fringe benefits were higher than those without benefits (i.e. R4500 compared to R1733). However, differences in median earnings between employees with benefits and those without benefits were slightly higher among women. Women without fringe benefits earned $27,4 \%$ of what women with benefits earned, while men without benefits earned $38,5 \%$ of their male counterparts with benefits.

Figure 6: Distribution of monthly earnings for employees with or without fringe benefits


The earnings of persons with access to benefits exceed those of persons not having access to benefits both below and above the median. This difference was however more pronounced in the top $25 \%$, with persons with no access to fringe benefits in the top $5 \%$ earning $33,3 \%$ as much as persons receiving benefits.

Figure 7: Monthly earnings (below the median) for employees with or without fringe benefits by sex


Among those with benefits and earned below the median men earned more than women. For instance in the bottom $5 \%$ women earned R900 or less while men earned R1 200 or less. The same picture is observed among those without benefits whose earnings were below the median where men continued to earn more than women.

Table G: Distribution of monthly earnings for employees by usual hours worked and sex

|  | No. of employees | Bottom $5 \%$ | $\begin{array}{r} \text { Bottom } \\ 10 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \end{array}$ | Median | Top 25\% | Top | Top |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| Both sexes | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Less than 35 hours | 1030 | 300 | 400 | 550 | 1000 | 2000 | 5980 | 10500 |
| 35 or more hours | 10028 | 700 | 1000 | 1600 | 3000 | 7000 | 12850 | 17763 |
| Women | 4875 | 500 | 650 | 1200 | 2340 | 6200 | 11000 | 15000 |
| Less than 35 hours | 703 | 300 | 400 | 500 | 910 | 1800 | 10000 | 5172 |
| 35 or more hours | 4172 | 600 | 850 | 1400 | 2613 | 7000 | 15000 | 12000 |
| Men | 6183 | 750 | 1040 | 1733 | 3033 | 7000 | 14000 | 20000 |
| Less than 35 hours | 327 | 260 | 400 | 650 | 1200 | 2600 | 12000 | 7000 |
| 35 or more hours | 5856 | 867 | 1181 | 1800 | 3207 | 7000 | 20000 | 14000 |

Table G shows exactly what one would expect; those who work more hours per week have higher median monthly earnings. However, weekly hours (above or below 35 hours) do not tell the whole story of differences in the volume of work done by female and male employees. Firstly, hours of an individual can be greatly above, or greatly below, 35 hours. Secondly, for a given number of hours per week, some employees will work every week of the month, and some will work less.

That said, even this partial adjustment for the volume of work has an interesting impact on the female to male median earnings ratio. Table H below is derived from Table G .

Table H: Women-to-men median earnings ratios by usual hours worked

| Hours worked | Median |  | Women-to-men <br> earning Ratio (\%) |
| :--- | ---: | ---: | ---: |
|  | Women |  |  |
|  | $\mathbf{2 3 4 0}$ | $\mathbf{3 0 3 3}$ | $\mathbf{7 7 , 1}$ |
| Less than 35 hours | 910 | 1200 | 75,8 |
| 35 or more hours | 2613 | 3207 | 81,5 |

For those working less than 35 hours, the earnings ratio declines from that of all employees. On the other hand for the median earnings of only women and men working 35 or more hours the earnings ratio rises substantially to $81,5 \%$.

It is evident that when comparing the earnings of women compared to those of men, it is important to include the volume of work dimension.

### 2.8 Earnings in the formal and informal sector, employees

Table I: Median monthly earnings by sector

|  | No. of employees | Bottom 5\% | $\begin{array}{r} \text { Bottom } \\ 10 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \end{array}$ | Median | $\begin{aligned} & \text { Top } \\ & \text { 25\% } \end{aligned}$ | $\begin{aligned} & \text { Top } \\ & \text { 10\% } \end{aligned}$ | $\begin{array}{r} \text { Top } \\ 5 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| Both sexes | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Formal | 8571 | 867 | 1200 | 2000 | 3683 | 8000 | 14000 | 19000 |
| Informal | 787 | 450 | 600 | 1000 | 1600 | 2600 | 4500 | 8000 |
| Agriculture | 568 | 500 | 700 | 1000 | 1213 | 1517 | 2730 | 4800 |
| Private household | 1132 | 300 | 400 | 650 | 1000 | 1500 | 2000 | 2600 |

Median monthly earnings for the informal sector employees were R1 600. This is $43 \%$ of R3 683 which was the median monthly earnings of the formal sector employees. Median monthly earnings were lowest for those working in private households. This is only $27 \%$ of R3 683 which was that of the formal sector employees.

The bottom $10 \%$ in the formal sector earned R1 200 or less per month while the top $10 \%$ earned R14 000 or more per month.


PJ Lehohla
Statistician-General: Statistics South Africa

## 3. Technical notes

### 3.1. Earnings reporting patterns

Readers will notice that many of the medians and the $25 \%, 10 \%$, and $5 \%$ thresholds end in 0,00 , or even 000. This simply reflects respondent reporting practices when it comes to answering the earnings questions on the QLFS.

In every country it has been observed that when asked to provide a numerical answer, respondents have a strong tendency to round off their answers, some ending in 5, 0, 00 and so on, depending on how large the number is. That is why, for example, censuses and surveys prefer to ask date of birth rather than age. Respondents seldom "round" dates.

A strong majority of respondents who are employees relate to their rate of pay as monthly. Therefore, a similar preponderance of earnings values on QLFS records are exactly as stated by the respondent, rounding and all.

That said, since medians and other thresholds in this report are the earnings value found on a particular QLFS record, it is highly likely that the earnings report will have been rounded. Occasionally, the chosen record will be more precise and that precision will show up as an earnings value that does not end in 0,00 or 000.

### 3.2. Converting to monthly earnings

To facilitate the reporting of earnings by respondents (and thereby improve their accuracy) the QLFS asks employed respondents:

In your main job, what is the easiest way for you to tell us your wages or salary before taxes or any other deduction? Would it be ...
1 = Monthly?
2 = Weekly?
3 = Fortnightly (every two weeks)?
4 = Daily?
5 = Hourly?
$6=$ Annually?

That having been established, the respondent is then asked:
What is your (choose one) annual/ monthly I weekly I daily I hourly wage or salary before deductions?
(Include tips and commissions)


The result is a set of QLFS records with pay amounts expressed in a variety of frequencies, from hourly to annual.

To make the earnings data useful, all pay frequencies must be converted to one frequency. Because it is the norm in South Africa, "monthly" was chosen.

The earnings reported by any respondent who did not report monthly earnings must, therefore, be converted to monthly earnings. For annual, the conversion simply consists of dividing by 12 . For those who report hourly, the conversion is based on the reported usual weekly hours (yielding weekly earnings) and then multiplied by 4.3 (the average number of weeks in a month (52/12)).

Other frequencies are converted to monthly using similar techniques.

### 3.3. Distinguishing properties of medians and means

The two most frequently used statistics for summarising distribution data are the median and the mean.
The median is the earnings level that divides the population in half. The median says that half the population earns less than the median and half earns more.

The mean (or average) is the sum of all the earnings in the population divided by the number of people receiving those earnings.

To better appreciate the distinction between the median and the mean take the two hypothetical and extremely simplistic distributions of monthly earnings shown in Figures $A$ and $B$ below.

Figure A: Individual monthly earnings (Rand)

| 106 | 220 | 376 | 412 | 566 | 670 | 752 | 867 | 978 | 1113 | 1693 | 1289 | 1360 | 1551 | 1692 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Mean $=$ R 910
Median $=$ R 867

Figure B: Individual monthly earnings (Rand)

| 106 | 220 | 376 | 412 | 566 | 670 | 752 | 867 | 978 | 1113 | 1693 | 1289 | 1360 | 2296 | 3289 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

```
Mean = R 1 066
```

Median = R 867

The earnings in Figure B are the same as in Figure A, except that the last two records have substantially higher earnings.

The presence of additional earnings in these two records changes the mean from R910 to R1 066 while leaving the median unchanged.

The mean suggests that something significant has happened in the earnings distribution but the median implies that most earners are not better off - a more appropriate representation of reality.

The vulnerability of the mean to being substantially affected by just a few extremely high earnings records is why the mean is so unstable from quarter to quarter. With the QLFS, one quarter of the sample is replaced each quarter and so the entrance or departure of high earning respondents moves the mean back and forth but not the median.

### 3.4. Survey requirements and design

The Quarterly Labour Force Survey (QLFS) frame has been developed as a general-purpose household survey frame that can be used by all other household surveys irrespective of the sample size requirement of the survey. The sample size for the QLFS is roughly 30000 dwellings per quarter.

The sample is based on information collected during the 2001 Population Census conducted by Stats SA. In preparation for the 2001 Census, the country was divided into 80787 enumeration areas (EAs). Stats SA's household-based surveys use a master sample of primary sampling units (PSUs) which comprises EAs that are drawn from across the country.

The sample is designed to be representative at provincial level and within provinces at metro/non-metro level. Within the metros, the sample is further distributed by geography type. The four geography types are: urban formal, urban informal, farms and tribal. This implies, for example, that within a metropolitan area the sample is representative at the different geography types that may exist within that metro.

The current sample size is 3080 PSUs. It is divided equally into four subgroups or panels called rotation groups. The rotation groups are designed in such a way that each of these groups has the same distribution pattern as that which is observed in the whole sample. They are numbered from one to four and these numbers also correspond to the quarters of the year in which the sample will be rotated for the particular group.

The sample for the redesigned Labour Force Survey (i.e. the QLFS) is based on a stratified two-stage design with probability proportional to size (PPS) sampling of PSUs in the first stage, and sampling of dwelling units (DUs) with systematic sampling in the second stage.

### 3.5. Sample rotation

Each quarter, a $1 / 4$ of the sampled dwellings rotate out of the sample and are replaced by new dwellings from the same PSU or the next PSU on the list. Thus, sampled dwellings will remain in the sample for four consecutive quarters. It should be noted that the sampling unit is the dwelling, and the unit of observation is the household. Therefore, if a household moves out of a dwelling after being in the sample for, say two quarters, and a new household moves in, the new household will be enumerated for the next two quarters. If no household moves into the sampled dwelling, the dwelling will be classified as vacant (unoccupied).

### 3.6. Weighting

The sampling weights for the data collected from the sampled households are constructed in such a manner that the responses could be properly expanded to represent the entire civilian population of South Africa. The weights are the result of calculations involving several factors, including original selection probabilities, adjustment for non-response, and benchmarking to known population estimates from the Demographic Analysis division of Stats SA.

### 3.7. Non-response adjustment

In general, imputation is used for item non-response (i.e. blanks within the questionnaire) and edit failure (i.e. invalid or inconsistent responses). The eligible households in the sampled dwellings can be divided into two response categories: respondents and non-respondents; and weight adjustment is applied to account for the non-respondent households (e.g. refusal, no contact, etc.).

### 3.8. Final survey weights

The final survey weights are constructed using regression estimation to calibrate to the known population counts at the national level population estimates (which are supplied by the Demography division) crossclassified by 5 -year age groups, gender and race, and provincial population estimates by broad age groups. The 5 -year age groups are: $0-4,5-9,10-14$, etc., and 65 and over. The provincial-level age groups are: $0-$ $14,15-34,35-64$, and 65 years and over. The calibrated weights are constructed such that all persons in a household would have the same final weight.

For this report, since four quarters have been pooled together, the original final weights were divided by 4 to get the annual average.

### 3.9. Estimation

The final survey weights are used to obtain the estimates for various domains of interest, e.g. number of persons employed in agriculture in the province of Western Cape, number of females employed in manufacturing, etc.

### 3.10. Reliability of the survey estimates

Because estimates are based on sample data, they differ from figures that would have been obtained from complete enumeration of the population using the same instrument. Results are subject to both sampling and non-sampling errors. Non-sampling errors include biases from inaccurate reporting, processing, and tabulation, etc., as well as errors from non-response and incomplete reporting. These types of errors cannot be measured readily. However, to the extent possible, non-sampling errors can be minimised through the procedures used for data collection, editing, quality control, and non-response adjustment. The variances of the survey estimates are used to measure sampling errors. The variance estimation methodology is discussed below.

## (i) Variance estimation

The most commonly used methods for estimating variances of survey estimates from complex surveys such as the QLFS, are the Taylor-series Linearization, Jackknife Replication, Balanced Repeated Replication (BRR), and Bootstrap methods (Wolter, 2007) ${ }^{1}$. The Fay's BRR method has been used for variance estimation in the QLFS because of its simplicity.

## (ii) Coefficient of variation

It is more useful in many situations to assess the size of the standard error relative to the magnitude of the characteristic being measured (the standard error is defined as the square root of the variance). The coefficient of variation $(c v)$ provides such a measure. It is the ratio of the standard error of the survey estimate to the value of the estimate itself expressed as a percentage. It is very useful in comparing the precision of several different survey estimates, where their sizes or scale differ from one another.

## (iii) P-value of an estimate of change

The p-value corresponding to an estimate of change is the probability of observing a value larger than the particular observed value under the hypothesis that there is no real change. If $p$-value $<0,01$, the difference is highly significant; if $p$-value is between 0,01 and 0,05 , the difference is significant; and if $p$-value $>0,05$, the difference is not significant.

[^1]
## 4. Definitions

## Distributions:

Top 5 (or 10 or 25) \%: The earnings level at which 5\% (or 10\% or $25 \%$ ) of all of the records have higher earnings.

Bottom 5 (or $\mathbf{1 0}$ or 25) \%: The earnings level at which $5 \%$ (or $10 \%$ or $25 \%$ ) of all of the records have lower earnings.
Employed persons are those aged 15-64 years who, during the reference week: did any work for at least one hour; or had a job or business but were not at work (temporarily absent).
Informal sector: The informal sector has the following two components:
i) Employees working in establishments that employ less than five employees, who do not deduct income tax from their salaries/wages; and
ii) Employers, own-account workers and persons helping unpaid in their household business who are not registered for either income tax or value-added tax.

Median: When the QLFS records are arranged from the one with the lowest earnings to the one with the highest, the median is the record where half the records have lower earnings than the median and half the records have higher earnings.

## Status in employment

There are four statuses in employment which, when added together, are equal to the employed.
Employee: A person who works for a public sector or private sector employer and receives remuneration in wages, salary, commission, tips, piece-rates or pay in kind.

Employer: (employing one or more employees): a person who operates his/her own economic enterprise or engages independently in a profession or trade, and hires one or more employees.

Own-account worker: (not employing any employees): a person who operates his/her own economic enterprise or engages independently in a profession or trade, and hires no employees.

Unpaid in a household business: Because these workers are not paid, they are excluded from the earnings questions.

## Appendix 1

Table 1: Distribution of monthly earnings by status in employment

|  | Number of employees | $\begin{array}{r} \text { Bottom } \\ 5 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 10 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \\ \hline \end{array}$ | Median | $\begin{aligned} & \text { Top } \\ & \text { 25\% } \end{aligned}$ | $\begin{aligned} & \text { Top } \\ & \text { 10\% } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Top } \\ 5 \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| All statuses in employment | 12951 | 500 | 800 | 1400 | 2812 | 6900 | 13000 | 18900 |
| Employees | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Employers | 686 | 650 | 1200 | 3000 | 7000 | 16000 | 35000 | 58333 |
| Own-account workers | 1207 | 217 | 400 | 867 | 1820 | 4333 | 10000 | 17000 |

Table 2: Distribution of monthly earnings for employees by selected demographic variables

|  | No. of employees | $\begin{array}{r} \text { Bottom } \\ 5 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 10 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \\ \hline \end{array}$ | Median | $\begin{aligned} & \text { Top } \\ & 25 \% \end{aligned}$ | $\begin{aligned} & \text { Top } \\ & \text { 10\% } \end{aligned}$ | $\begin{gathered} \hline \text { Top } \\ 5 \% \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Total | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Gender |  |  |  |  |  |  |  |  |
| Male | 6183 | 750 | 1040 | 1733 | 3033 | 7000 | 14000 | 20000 |
| Female | 4875 | 500 | 650 | 1200 | 2340 | 6200 | 11000 | 15000 |
|  |  |  |  |  |  |  |  |  |
| Population group |  |  |  |  |  |  |  |  |
| Black African | 7629 | 500 | 700 | 1200 | 2167 | 4500 | 9000 | 12567 |
| Coloured | 1411 | 850 | 1083 | 1560 | 2652 | 5500 | 10000 | 14000 |
| Indian/Asian | 405 | 1500 | 2000 | 3300 | 6000 | 11000 | 16500 | 25000 |
| White | 1613 | 2000 | 3000 | 5000 | 9500 | 15000 | 25000 | 34000 |
|  |  |  |  |  |  |  |  |  |
| Age group |  |  |  |  |  |  |  |  |
| 15-24 yrs | 1213 | 592 | 800 | 1300 | 2100 | 4000 | 8900 | 12000 |
| 25-34 yrs | 3857 | 600 | 867 | 1500 | 2500 | 6000 | 11000 | 15000 |
| 35-44 yrs | 3136 | 600 | 867 | 1500 | 3000 | 7400 | 13000 | 18000 |
| $45-54$ yrs | 2021 | 500 | 800 | 1500 | 3467 | 8298 | 15000 | 20000 |
| 55-64 yrs | 831 | 450 | 650 | 1300 | 3500 | 8000 | 14000 | 20000 |
|  |  |  |  |  |  |  |  |  |
| Education level |  |  |  |  |  |  |  |  |
| No schooling | 307 | 400 | 450 | 700 | 1100 | 1950 | 3800 | 5500 |
| Less than primary completed | 897 | 390 | 470 | 800 | 1300 | 2167 | 4000 | 5000 |
| Primary completed | 512 | 450 | 600 | 975 | 1500 | 2600 | 4333 | 5600 |
| Secondary not completed | 3607 | 500 | 750 | 1200 | 1993 | 3467 | 6000 | 8950 |
| Secondary completed | 3455 | 900 | 1200 | 2000 | 3500 | 7000 | 11000 | 15000 |
| Tertiary | 2134 | 1500 | 2500 | 5500 | 10000 | 15000 | 23333 | 33000 |
| Other | 146 | 500 | 700 | 1300 | 2380 | 5400 | 10000 | 15000 |
|  |  |  |  |  |  |  |  |  |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 4488 | 700 | 1000 | 1950 | 4333 | 9700 | 16000 | 22000 |
| Living together as husband and wife | 1300 | 520 | 800 | 1300 | 2167 | 4000 | 8500 | 12000 |
| Widow/Widower | 346 | 400 | 480 | 867 | 1733 | 4500 | 11000 | 15000 |
| Divorced/Separated | 365 | 500 | 780 | 1400 | 3500 | 8700 | 14000 | 18444 |
| Never married | 4558 | 500 | 800 | 1300 | 2167 | 4500 | 9500 | 13000 |

Table 3: Distribution of monthly earnings for employees by selected population group and sex

|  | No. of employees | $\begin{array}{r} \text { Bottom } \\ 5 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 10 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \end{array}$ | Median | Top 25\% | Top 10\% | Top 5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| Both sexes | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Black African | 7629 | 500 | 700 | 1200 | 2167 | 4500 | 9000 | 12567 |
| Coloured | 1411 | 850 | 1083 | 1560 | 2652 | 5500 | 10000 | 14000 |
| Indian/Asian | 405 | 1500 | 2000 | 3300 | 6000 | 11000 | 16500 | 25000 |
| White | 1613 | 2000 | 3000 | 5000 | 9500 | 15000 | 25000 | 34000 |
| Women | 4875 | 500 | 650 | 1200 | 2340 | 6200 | 11000 | 15000 |
| Black African | 3275 | 450 | 570 | 1000 | 1733 | 3900 | 9000 | 12000 |
| Coloured | 663 | 600 | 997 | 1365 | 2383 | 5000 | 9520 | 12500 |
| Indian/Asian | 167 | 1517 | 1950 | 3000 | 6000 | 10000 | 14000 | 16000 |
| White | 770 | 1700 | 2500 | 4333 | 7640 | 12000 | 17000 | 24000 |
| Men | 6183 | 750 | 1040 | 1733 | 3033 | 7000 | 14000 | 20000 |
| Black African | 4354 | 650 | 900 | 1500 | 2500 | 4700 | 9000 | 13000 |
| Coloured | 748 | 1000 | 1300 | 1733 | 3050 | 6000 | 11000 | 15000 |
| Indian/Asian | 238 | 1300 | 2000 | 3500 | 6000 | 11500 | 20000 | 32500 |
| White | 843 | 2200 | 3000 | 6000 | 11500 | 18000 | 30000 | 40000 |

Table 4: Distribution of monthly earnings for employees by province and sex

| Both sexes | No. of employees | $\begin{array}{r} \text { Bottom } \\ 5 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 10 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \\ \hline \end{array}$ | Median | Top 25\% | Top 10\% | Top 5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
|  | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Western Cape | 1617 | 950 | 1200 | 1733 | 2700 | 5500 | 11000 | 16000 |
| Eastern Cape | 1064 | 470 | 600 | 1200 | 2200 | 5200 | 11110 | 15000 |
| Northern Cape | 253 | 500 | 780 | 1200 | 2100 | 6000 | 11000 | 15167 |
| Free State | 662 | 433 | 600 | 1000 | 1900 | 5000 | 11000 | 15300 |
| KwaZulu-Natal | 2055 | 470 | 700 | 1200 | 2487 | 5900 | 11000 | 15000 |
| North West | 627 | 600 | 830 | 1350 | 3000 | 6000 | 11800 | 15000 |
| Gauteng | 3338 | 867 | 1200 | 1950 | 3683 | 8500 | 15000 | 20000 |
| Mpumalanga | 733 | 600 | 800 | 1300 | 2777 | 7500 | 13000 | 18000 |
| Limpopo | 710 | 400 | 500 | 900 | 1800 | 4500 | 11000 | 14000 |
| Women | 4875 | 500 | 650 | 1200 | 2340 | 6200 | 11000 | 15000 |
| Western Cape | 756 | 800 | 1083 | 1500 | 2500 | 5000 | 10000 | 13000 |
| Eastern Cape | 515 | 400 | 500 | 1000 | 2000 | 5500 | 11000 | 14045 |
| Northern Cape | 118 | 433 | 600 | 1030 | 1733 | 5000 | 11000 | 13750 |
| Free State | 289 | 350 | 500 | 867 | 1600 | 4564 | 10000 | 14000 |
| KwaZulu-Natal | 954 | 450 | 520 | 1000 | 1800 | 5000 | 10500 | 13417 |
| North West | 236 | 450 | 600 | 1000 | 2200 | 6000 | 11000 | 14000 |
| Gauteng | 1388 | 700 | 1000 | 1700 | 3500 | 8000 | 12850 | 16700 |
| Mpumalanga | 308 | 500 | 650 | 1083 | 2000 | 5800 | 11700 | 15000 |
| Limpopo | 310 | 400 | 500 | 700 | 1200 | 3500 | 10000 | 12700 |
| Men | 6183 | 750 | 1040 | 1733 | 3033 | 7000 | 14000 | 20000 |
| Western Cape | 860 | 1083 | 1300 | 1820 | 3000 | 6000 | 12000 | 19000 |
| Eastern Cape | 549 | 500 | 780 | 1300 | 2383 | 5000 | 12000 | 16000 |
| Northern Cape | 135 | 693 | 1000 | 1343 | 2600 | 6400 | 11868 | 18000 |
| Free State | 372 | 550 | 800 | 1200 | 2340 | 5500 | 12000 | 17000 |
| KwaZulu-Natal | 1101 | 650 | 990 | 1517 | 2800 | 6000 | 12000 | 17000 |
| North West | 391 | 800 | 1000 | 1700 | 3400 | 6000 | 12000 | 17800 |
| Gauteng | 1950 | 1000 | 1300 | 2167 | 3900 | 8900 | 16000 | 25000 |
| Mpumalanga | 425 | 800 | 1000 | 1517 | 3250 | 8500 | 14000 | 20000 |
| Limpopo | 399 | 500 | 700 | 1200 | 2300 | 5000 | 12000 | 15000 |

Table 5: Distribution of monthly earnings for employees by sector and sex

|  | No. of employees | $\begin{array}{r} \text { Bottom } \\ 5 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 10 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \end{array}$ | Median | Top | $\begin{aligned} & \text { Top } \\ & \text { 10\% } \\ & \hline \end{aligned}$ | Top 5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| Both sexes | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Formal | 8571 | 867 | 1200 | 2000 | 3683 | 8000 | 14000 | 19000 |
| Informal | 787 | 450 | 600 | 1000 | 1600 | 2600 | 4500 | 8000 |
| Agriculture | 568 | 500 | 700 | 1000 | 1213 | 1517 | 2730 | 4800 |
| Private households | 1132 | 300 | 400 | 650 | 1000 | 1500 | 2000 | 2600 |
| Women | 4875 | 500 | 650 | 1200 | 2340 | 6200 | 11000 | 15000 |
| Formal | 3511 | 650 | 1000 | 1800 | 3500 | 8000 | 12500 | 16000 |
| Informal | 286 | 400 | 500 | 780 | 1300 | 2500 | 4500 | 9000 |
| Agriculture | 200 | 500 | 650 | 880 | 1192 | 1400 | 2000 | 3467 |
| Private households | 878 | 300 | 400 | 607 | 1000 | 1400 | 2000 | 2400 |
| Men | 6183 | 750 | 1040 | 1733 | 3033 | 7000 | 14000 | 20000 |
| Formal | 5060 | 1000 | 1300 | 2100 | 3796 | 8083 | 15000 | 20000 |
| Informal | 501 | 500 | 650 | 1083 | 1733 | 2817 | 4420 | 7000 |
| Agriculture | 368 | 500 | 750 | 1000 | 1300 | 1647 | 3033 | 5522 |
| Private households | 254 | 260 | 400 | 650 | 1000 | 1600 | 2600 | 3467 |

Table 6: Distribution of monthly earnings for employees by occupation and sex

|  | No. of employees | Bottom $5 \%$ | $\begin{array}{r} \text { Bottom } \\ 10 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \end{array}$ | Median | $\begin{aligned} & \text { Top } \\ & \text { 25\% } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Top } \\ & \text { 10\% } \\ & \hline \end{aligned}$ | Top |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| Both sexes | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Manager | 605 | 2000 | 3000 | 6000 | 10500 | 18000 | 31000 | 48000 |
| Professional | 622 | 1500 | 2500 | 6000 | 10000 | 16500 | 26000 | 35000 |
| Technician | 1346 | 1200 | 1733 | 3200 | 7500 | 11300 | 15500 | 19250 |
| Clerk | 1426 | 1000 | 1500 | 2400 | 4500 | 8000 | 12000 | 15000 |
| Sales and services | 1538 | 600 | 888 | 1500 | 2420 | 4300 | 9000 | 12000 |
| Skilled agriculture | 46 | 500 | 800 | 1200 | 2167 | 6000 | 12000 | 16700 |
| Craft and related trade | 1240 | 800 | 1083 | 1733 | 2900 | 5200 | 10000 | 14000 |
| Plant and machine operator | 1069 | 840 | 1083 | 1700 | 2817 | 4500 | 7000 | 9550 |
| Elementary | 2283 | 450 | 600 | 1040 | 1517 | 2600 | 4333 | 5500 |
| Domestic worker | 882 | 300 | 400 | 650 | 1000 | 1400 | 2000 | 2400 |
| Women | 4875 | 500 | 650 | 1200 | 2340 | 6200 | 11000 | 15000 |
| Manager | 204 | 1700 | 2500 | 4700 | 9000 | 14800 | 25000 | 31000 |
| Professional | 296 | 1100 | 2000 | 5000 | 9500 | 14000 | 23000 | 28750 |
| Technician | 754 | 1000 | 1500 | 3000 | 7006 | 11000 | 14000 | 16000 |
| Clerk | 985 | 1000 | 1400 | 2300 | 4200 | 8000 | 11000 | 14300 |
| Sales and services | 650 | 500 | 600 | 1150 | 2000 | 3500 | 7000 | 9900 |
| Skilled agriculture | 17 | 500 | 600 | 1000 | 1517 | 5700 | 11000 | 16700 |
| Craft and related trade | 138 | 607 | 800 | 1300 | 1950 | 3500 | 7500 | 10200 |
| Plant and machine operator | 150 | 550 | 800 | 1213 | 1902 | 3033 | 4500 | 7700 |
| Elementary | 831 | 450 | 500 | 1000 | 1430 | 2167 | 3700 | 4600 |
| Domestic worker | 850 | 300 | 400 | 640 | 1000 | 1400 | 2000 | 2400 |
| Men | 6183 | 750 | 1040 | 1733 | 3033 | 7000 | 14000 | 20000 |
| Manager | 401 | 2500 | 3500 | 7000 | 12000 | 20000 | 35000 | 61667 |
| Professional | 326 | 2000 | 3500 | 6800 | 12000 | 20000 | 33000 | 50000 |
| Technician | 592 | 1300 | 2000 | 3400 | 8000 | 12000 | 18000 | 25000 |
| Clerk | 441 | 1200 | 1600 | 2600 | 4800 | 8500 | 12850 | 16000 |
| Sales and services | 889 | 900 | 1300 | 1800 | 2700 | 5000 | 10000 | 13000 |
| Skilled agriculture | 29 | 500 | 867 | 1300 | 2817 | 6000 | 12500 | 16000 |
| Craft and related trade | 1103 | 867 | 1200 | 1800 | 3000 | 5500 | 11000 | 15000 |
| Plant and machine operator | 919 | 867 | 1200 | 1733 | 3000 | 4800 | 7367 | 9800 |
| Elementary | 1452 | 480 | 650 | 1083 | 1625 | 2817 | 4500 | 6000 |
| Domestic worker | 32 | 260 | 400 | 650 | 1000 | 1500 | 2167 | 2500 |

Table 7: Distribution of monthly earnings for employees by education status and age

|  | No. of employees | Bottom $\qquad$ | $\begin{array}{r} \text { Bottom } \\ 10 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \\ \hline \end{array}$ | Median | $\begin{array}{r} \text { Top } \\ 25 \% \\ \hline \end{array}$ | $\begin{aligned} & \text { Top } \\ & \text { 10\% } \\ & \hline \end{aligned}$ | $\begin{array}{r} \text { Top } \\ 5 \% \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| 15-64 yrs | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| No schooling | 307 | 400 | 450 | 700 | 1100 | 1950 | 3800 | 5500 |
| Less than primary completed | 897 | 390 | 470 | 800 | 1300 | 2167 | 4000 | 5000 |
| Primary completed | 512 | 450 | 600 | 975 | 1500 | 2600 | 4333 | 5600 |
| Secondary not completed | 3607 | 500 | 750 | 1200 | 1993 | 3467 | 6000 | 8950 |
| Secondary completed | 3455 | 900 | 1200 | 2000 | 3500 | 7000 | 11000 | 15000 |
| Tertiary | 2134 | 1500 | 2500 | 5500 | 10000 | 15000 | 23333 | 33000 |
| Other | 146 | 500 | 700 | 1300 | 2380 | 5400 | 10000 | 15000 |
| 15-34 yrs | 5070 | 600 | 867 | 1400 | 2500 | 5200 | 10400 | 15000 |
| No schooling | 43 | 400 | 500 | 800 | 1137 | 1733 | 2600 | 3705 |
| Less than primary completed | 198 | 325 | 450 | 800 | 1100 | 1600 | 2500 | 3800 |
| Primary completed | 160 | 450 | 600 | 975 | 1300 | 2006 | 3250 | 4333 |
| Secondary not completed | 1756 | 500 | 700 | 1100 | 1733 | 2700 | 4500 | 6500 |
| Secondary completed | 1993 | 800 | 1127 | 1800 | 3000 | 5700 | 9600 | 12000 |
| Tertiary | 864 | 1200 | 2100 | 4000 | 8400 | 13000 | 20000 | 30000 |
| Other | 56 | 600 | 900 | 1300 | 1950 | 4000 | 8000 | 11000 |
| 35-64 yrs | 5987 | 500 | 800 | 1500 | 3089 | 8000 | 14000 | 19000 |
| No schooling | 264 | 390 | 440 | 700 | 1100 | 1950 | 4000 | 5674 |
| Less than primary completed | 699 | 400 | 470 | 800 | 1300 | 2500 | 4160 | 5233 |
| Primary completed | 352 | 450 | 560 | 950 | 1517 | 3000 | 4520 | 6000 |
| Secondary not completed | 1851 | 500 | 800 | 1300 | 2167 | 4000 | 7000 | 10000 |
| Secondary completed | 1461 | 1000 | 1500 | 2500 | 4500 | 8300 | 13000 | 17000 |
| Tertiary | 1270 | 1770 | 3000 | 6800 | 11000 | 16000 | 25000 | 35000 |
| Other | 90 | 500 | 650 | 1300 | 2600 | 5800 | 11500 | 24000 |

Table 8: Distribution of monthly earnings for employees by education status and sex

|  | No. of employees | Bottom 5\% | $\begin{array}{r} \text { Bottom } \\ 10 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \end{array}$ | Median | Top 25\% | $\begin{aligned} & \text { Top } \end{aligned}$ | Top $5 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| Both sexes | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| No schooling | 307 | 400 | 450 | 700 | 1100 | 1950 | 3800 | 5500 |
| Less than primary completed | 897 | 390 | 470 | 800 | 1300 | 2167 | 4000 | 5000 |
| Primary completed | 512 | 450 | 600 | 975 | 1500 | 2600 | 4333 | 5600 |
| Secondary not completed | 3607 | 500 | 750 | 1200 | 1993 | 3467 | 6000 | 8950 |
| Secondary completed | 3455 | 900 | 1200 | 2000 | 3500 | 7000 | 11000 | 15000 |
| Tertiary | 2134 | 1500 | 2500 | 5500 | 10000 | 15000 | 23333 | 33000 |
| Other | 146 | 500 | 700 | 1300 | 2380 | 5400 | 10000 | 15000 |
| Women | 4875 | 500 | 650 | 1200 | 2340 | 6200 | 11000 | 15000 |
| No schooling | 132 | 348 | 400 | 600 | 900 | 1300 | 1950 | 2383 |
| Less than primary completed | 358 | 300 | 400 | 600 | 1000 | 1500 | 2383 | 3200 |
| Primary completed | 211 | 400 | 470 | 700 | 1100 | 1733 | 3000 | 3900 |
| Secondary not completed | 1488 | 450 | 600 | 980 | 1500 | 2500 | 4400 | 6500 |
| Secondary completed | 1535 | 750 | 1000 | 1700 | 3000 | 6000 | 10000 | 12500 |
| Tertiary | 1105 | 1200 | 2000 | 5000 | 8700 | 12300 | 16700 | 24000 |
| Other | 45 | 433 | 500 | 867 | 1700 | 3500 | 7000 | 8700 |
| Men | 6183 | 750 | 1040 | 1733 | 3033 | 7000 | 14000 | 20000 |
| No schooling | 175 | 400 | 500 | 867 | 1350 | 2600 | 5000 | 6067 |
| Less than primary completed | 538 | 433 | 650 | 1005 | 1517 | 2817 | 4500 | 6000 |
| Primary completed | 301 | 600 | 800 | 1200 | 1800 | 3033 | 5000 | 7000 |
| Secondary not completed | 2119 | 650 | 975 | 1500 | 2400 | 4000 | 6500 | 10000 |
| Secondary completed | 1918 | 1083 | 1500 | 2167 | 3900 | 7500 | 12000 | 16000 |
| Tertiary | 1028 | 2000 | 3000 | 6500 | 11200 | 18000 | 30000 | 40000 |
| Other | 101 | 850 | 1040 | 1517 | 2800 | 5633 | 12000 | 24000 |

Table 9: Distribution of monthly earnings for employees by usual hours worked and sex

|  | No. of employees | Bottom 5\% | $\begin{array}{r} \text { Bottom } \\ 10 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \\ \hline \end{array}$ | Median | Top 25\% | Top 10\% | Top 5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| Both sexes | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| Less than 35 hours | 1030 | 300 | 400 | 550 | 1000 | 2000 | 5980 | 10500 |
| 35 or more hours | 10028 | 700 | 1000 | 1600 | 3000 | 7000 | 12850 | 17763 |
| Women | 4875 | 500 | 650 | 1200 | 2340 | 6200 | 11000 | 15000 |
| Less than 35 hours | 703 | 300 | 400 | 500 | 910 | 1800 | 10000 | 5172 |
| 35 or more hours | 4172 | 600 | 850 | 1400 | 2613 | 7000 | 15000 | 12000 |
| Men | 6183 | 750 | 1040 | 1733 | 3033 | 7000 | 14000 | 20000 |
| Less than 35 hours | 327 | 260 | 400 | 650 | 1200 | 2600 | 12000 | 7000 |
| 35 or more hours | 5856 | 867 | 1181 | 1800 | 3207 | 7000 | 20000 | 14000 |

Table 10: Distribution of monthly earnings for employees by benefits and sex

|  | No. of employees | $\begin{array}{r} \text { Bottom } \\ 5 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 10 \% \end{array}$ | $\begin{array}{r} \text { Bottom } \\ 25 \% \end{array}$ | Median | Top 25\% | Top 10\% | Top 5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand | Rand |  |  |  |  |  |  |
| Both sexes | 11058 | 570 | 845 | 1500 | 2800 | 6500 | 12000 | 17000 |
| With benefits | 7021 | 1000 | 1365 | 2200 | 4500 | 9100 | 15000 | 20000 |
| Without benefits | 4037 | 400 | 500 | 900 | 1500 | 2500 | 4333 | 6500 |
| Women | 4875 | 500 | 650 | 1200 | 2340 | 6200 | 11000 | 15000 |
| With benefits | 2995 | 900 | 1200 | 2000 | 4384 | 9000 | 13038 | 16590 |
| Without benefits | 1880 | 400 | 470 | 750 | 1200 | 1900 | 3300 | 5007 |
| Men | 6183 | 750 | 1040 | 1733 | 3033 | 7000 | 14000 | 20000 |
| With benefits | 4026 | 1200 | 1500 | 2500 | 4500 | 9800 | 16000 | 23000 |
| Without benefits | 2157 | 500 | 700 | 1100 | 1733 | 2850 | 5000 | 8000 |


[^0]:    User Information Services
    Tel: (012) 3108600 / 4892 / 8390

[^1]:    ${ }^{1}$ Wolter KM, 2007. Introduction to Variance Estimation, $2{ }^{\text {nd }}$ Edition. New York: Springer-Verlag.

