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the wage structure of
highly qualified white employees
as af 1 march, 1971

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It is known that employers have a constant need for recent statistics on wage levels for purposes of wage administration. It is also known that this need is satisfied by a number of undertakings in the private sector. Since it is not the aim and function of the Human Sciences Research Council to rend= er similar routine services, this report should not be regarded as an attempt to compete with the private sector.

However, it would appear that vocational guidance officers and education= al, manpower and economic planners also have; at present, a definite need for more specialized statistics on the wages of certain groups of employees. This report is the first in a series which will deal with an investigation into the wages of highly qualified workers and, in the first instance,aims at satisfying the needs mentioned above. However, since it seems probable that there are employers of highly qualified workers who will be able to utilize the data collected providing that they are published before the wage levels concerned are obsolete, it was decided to issue this publication.

The speedy publication of the wage levels, however, could only take place at the cost of more detailed processing and analysis of the data available. There is, nevertheless, a plan afoot for further processing of the data col= lected and, in due course, for publishing further reports in which the pro= cessed findings will be made known. Among other things, attention will be de= voted to the relation between wages and the market for highly qualified workers, as well as the possible influence on wages of factors such as occu= pation, occupational function, qualifications, age, experience, et cetera and combinations thereof.

I trust that the private and government sectors will find this report useful.

This research was possible only through the co-operation of approximate= ly 18000 highly qualified persons throughout the country who voluntarily completed questionnaires and returned them without delay. Their co-operation is appreciated.

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## CONTENTS

PAGE3.2 Occupational function2
3.2 Occupational function ..... 2
3.3 Highly qualified person ..... 2
3.4 Level of qualification ..... 2
3.5 Field of qualification ..... 3
3.6 Government sector ..... 3
3.7 Median ..... 3
3.8 First and Third quartile ..... 4
TO WHAT EXTENT IS THE TEST GROUP REPRESENTATIVE ..... 4
WAGE STRUCTURE ACCORDING TO EMPLOYER ..... 8
WAGE STRUCTURE ACCORDING TO EMPLOYER'S BRANCH OF INDUSTRY ..... 10
THE GEOGRAPHICAL WAGE STRUCTURE ..... 13
WAGE STRUCTURE ACCORDING TO OCCUPATIONAL FUNCTION ..... 13
WAGE STRUCTURE ACCORDING TO LEVEL OF QUALIFICATION ..... 20
WAGE STRUCTURE ACCORDING TO FIELD OF QUALIFICATION
WAGE STRUCTURE ACCORDING TO AGE ..... 27
WAGE STRUCTURE ACCORDING TO EXPERIENCE ..... 31
WAGE STRUCTURE ACCORDING TO OCCUPATION AND OCCUPATIONAL GROUP ..... 32
CONCLUDING REMARK ..... 39
PAGE
4.1 GEOGRAPHICAL DISTRIBUTION OF THE TEST GROUP ..... 5
4.2 ANALYSIS OF THE TEST GROUP ACCORDING TO SEX ..... 5
4.3 AGE DISTRIBUTION OF THE TEST GROUP ..... 6
4.4 ANALYSIS OF THE TEST GROUP ACCORDING TO FIELD OF QUALIFICATION ..... 7
4.5 ANALYSIS OF THE TEST GROUP ACCORDING TO LEVEL OF QUALIFICATION ..... 7
5.1 WAGE STRUCTURE ACCORDING TO TYPE OF EMPLOYER AS AT 1 MARCH, 1971 ..... 8
6.1 WAGE STRUCTURE ACCORDING TO EMPLOYER'S BRANCH OF INDUSTRY, AS AT 1 MARCH, 1971 ..... 10
7.1 THE GEOGRAPHICAL WAGE STRUCTURE, AS AT 1 MARCH, 1971 ..... 14
8.1 WAGE STRUCTURE ACCORDING TO OCCUPATIONAL FUNCTION, AS AT 1 MARCH, 1971 ..... 17
9.1 WAGE STRUCTURE ACCORDING TO LEVEL OF QUALIFICATION, AS AT 1 MARCH, 1971 ..... 20
10.1 WAGE STRUCTURE ACCORDING TO FIELD OF QUALIFICATION, AS AT 1 MARCH, 1971 ..... 24
11.1 WAGE STRUCTURE ACCORDING TO AGE, AS AT 1 MARCH, 1971 ..... 27
12.1 WAGE STRUCTURE ACCORDING TO EXPERIENCE SINCE FIRST COMMENCING FULL- TIME OCCUPATION, AS AT 1 MARCH, 1971 ..... 32
13.1 WAGE STRUCTURE ACCORDING•TO OCCUPATION. AND OCCUPATIONAL GROUP, AS ..... 35 AT 1 MARCH, 1971 (MEN)
13.2 WAGE STRUCTURE ACCORDING TO OCCUPATION AND OCCUPATIONAL GROUP, AS AT 1 MARCH, 1971 (WOMEN) ..... 38

## FIGURES

PAGE
3.1 WAGE SCALE ..... 4
5.1 WAGE STRUCTURE ACCORDING TO TYPE OF EMPLOYER, AS AT 1 MARCH, 1971 ..... 9
6.1 WAGE STRUCTURE ACCORDING TO EMPLOYER'S BRANCH OF INDUSTRY, AS AT 1 MARCH, 1971 (MEN) ..... 11
6.2 WAGE STRUCTURE ACCORDING TO EMPLOYER'S BRANCH OF INDUSTRY, AS AT 1 MARCH, 1971 (WOMEN) ..... 12
7.1 THE GEOGRAPHICAL WAGE STRUCTURE, AS AT 1 MARCH, 1971 (MEN) ..... 15
7.2 THE GEOGRAPHICAL WAGE STRUCTURE, AS AT 1 MARCH, 1971 (WOMEN) ..... 16
8.1 WAGE STRUCTURE ACCORDING TO OCCUPATIONAL FUNCTION, AS AT 1 MARCH, 1971 (MEN) ..... 18
8.2 WAGE STRUCTURE ACCORDING TO OCCUPATIONAL FUNCTION, AS AT 1 MARCH, 1971 (WOMEN) ..... 19
9.1 WAGE STRUCTURE ACCORDING TO LEVEL OF QUALIFICATION, AS AT 1 MARCH, 1971 (MEN) ..... 21
9.2 WAGE STRUCTURE ACCORDING TO LEVEL OF QUALIFICATION, AS AT 1 MARCH, 1971 (WOMEN) ..... 22
10.1 WAGE STRUCTURE ACCORDING TO FIELD OF QUALIFICATION, AS AT 1 MARCH, 1971 (MEN) ..... 25
10.2 WAGE STRUCTURE ACCORDING TO FIELD OF QUALIFICATION, AS AT 1 MARCH, 1971 (WOMEN) ..... 26
11.1 WAGE STRUCTURE ACCORDING TO AGE, AS AT 1 MARCH, 1971 (MEN) ..... 28
11.2 WAGE STRUCTURE ACCORDING TO AGE, AS AT 1 MARCH, 1971 (WOMEN) ..... 29
11.3 THE MEDIAN WAGE OF HIGHLY QUALIFIED EMPLOYEES ACCORDING TO SEX, AGE AND TYPE OF EMPLOYER, AS AT 1 MARCH, 1971 ..... 30
12.1 WAGE STRUCTURE ACCORDING TO EXPERIENCE SINCE FIRST COMMENCING FULL-TIME OCCUPATION, AS AT 1 MARCH, 1971 (MEN) ..... 33
12.2 WAGE STRUCTURE ACCORDING TO EXPERIENCE SINCE FIRST COMMENCING FULL- TIME OCCUPATION, AS AT 1 MARCH, 1971 (WOMEN) ..... 34

The situation with regard to the supply of and demand for labour will, in an ideal labour market, be reflected in the wage structure. Even in a normal labour market which is usually defective in many ways, the wage structure can shed light on the market situation and some of the factors influencing it.

However, since it is impossible to obtain a complete image of the coun= try's wage structure from the available statistics on wages, a decision was taken to institute an investigation into some of the facets thereof which are lacking. This report deals with aspects of the wage structure of the highly qualified labour force according to variables which are related to wage levels - variables such as occupation, occupational function, qualifications, age, experience, branch of industry, et cetera.

THE INVESTIGATION
It is estimated that there are, at present, 120000 highly qualified Whites in the Republic of South Africa and in South-West Africa, of whom 78173 or 65, 1 per cent are registered in the National Register of Natural and Social Scientists. Of the 78173 registered persons, 66555 or 85,1 per cent are younger than 66 years of age and have not yet retired on pension.

On the strength of the above-mentioned, it can thus be estimated that there are, at present, approximately 102120 highly qualified Whites in the Republic of South Africa and in South-West Africa who are younger than 66 years of age and have not yet retired on pension.

On 1 March, 1971, a questionnaire was posted to every second person among the aforementioned 66555 highly qualified Whites who are not over the age of 65 and have not yet retired on pension (see Appendix A). Particulars were re= quested on the persons' occupations, occupational positions; experience, occu= pational functions, branches of industry, wages and fringe benefits. After six weeks, 14291 properly completed and usable questionnaires had been re= ceived. These represent 43,1 per cent of the questionnaires dispatched and 14,0 per cent of the estimated population of 102120 highly qualified Whites who are younger than 66 years of age and have not yet retired on pension.

Apart from the data collected with the aid of the questionnaire, particu= lars concerning the respondents' ages, qualifications, place of residence and sex were obtained from the National Register. This was rendered possible be= cause the respondents' National Register numbers had originally been entered on the questionnaires. In not a single case was it necessary to link a com= pleted questionnaire with the name and/or address of a person.

In order to safeguard the anonymity of respondents still further, no re= port is made on any indentifiable group whose members number less than eight.

Where the number of respondents in a group ( $N$ - in the tables) is rela= tively small, the relative wage level of the group must be carefully assessed since there is a possibility that the group's wage level will be influenced to such an extent by a small group of exceptional cases that a distorted picture of the actual situation will be obtained. Such a possibility is fairly limit= ed, however, when medians and quartiles are used for purposes of comparison, as was done in this report.

Not all of the data collected with the aid of the questionnaire will be used in this report. Thus, for example, no report will be made on fringe be= nefits since a separate report is being prepared in this conncection.

Of the data collected those indeed used in this report have bearing on concepts such as "wage", "highly qualified person", "level of qualification", "field of qualification" and "occupational function." Moreover, the collect= ed data in this report are given as first quartile, median and third quartile wages.

The above-mentioned concepts are now briefly described for the sake of the accuracy of the interpretation of the data.

### 3.1 WAGE

As can be seen in the questionnaire (see Appendix A - Question 6), the respondents were requested to supply only the amounts which they receive as remuneration for the direct practice of their present occupations as their wage (salary). Fringe benefits such as pension, accommodation, bonuses, overtime earnings, allowances, as well as income from other sources such as spouse's wage, dividends and rental receipts were thus, for the purpose of this report, not regarded as wages.

In the above-mentioned delineation of concepts, the importance of fringe benefits such as pension, accommodation and bonuses as factors in the supply of and demand for labour, is not in any way under-estimated. It may even be that fringe benefits play a more important role in some labour markets than nominal wages.

However, since it would appear from the completed questionnaires that there is great uncertainty among some workers as to the value of the fringe be= nefits that they receive and the amounts which they stated are not, for this reason, above suspicion in all cases, a decision was taken to exclude the fringe benefits from consideration in this report. At a later date a separate report will, however, be devoted exclusively to fringe benefits.

In the case of those who are self-employed and who are dealt with only in paragraph 5 one should always subsitute net profit for the concept "wage".

### 3.2 OCCUPATIONAL FUNCTION

Occupational function (see Question 4) refers to the function or activity to which the worker devotes most of his working hours. It is tacitly accepted that a worker's wage is chiefly intended as remuneration for the occupational function which he performs on behalf of his employer and also if he is his own employer.

### 3.3 HIGHLY QUALIFIED PERSON

The concept "highly qualified person" refers to any person who is in possession of at least a Bachelor's degree or another qualification which, for the purposes of the National Register of Natural and Social Scientists, is regarded as being equivalent to at least a Bachelor's degree.

Since wage levels play such an important rôle in the investigation, it is clear that only highly qualified persons who are also economically active could be included in the investigation. Consequently none of the highly qua= lified persons who are not economically active, for example pensioners, house= wives, full-time students and everyone over the age of 65 , were included in the test group.

### 3.4 LEVEL OF QUALIFICATION

Each of the respondents was classified in one of six qualification-level
groups on the strength of his/her highest qualification. The six levels of qualification distinguished are the following:
(a) Level 1 - Diploma equivalent to a Bachelor's degree
(b) Level 2 - Bachelor's degree
(c) Level 3 - Bachelor's degree plus a post-graduate diploma
(d) Level 4 - Honours degree
(e) Level 5 - Master's degree
(f) Level 6 - Doctorate

### 3.5 FIELD OF QUALIFICATION

Each of the respondents was classified in only one of the 20 fields of qualification mentioned below on the strength of his/her highest qualification. A worker who possesses qualifications on the basis of which he can be placed in more than one field of qualification (for example a worker who has two doctorates) is placed in the list below, in the first field in which he quali= fied. The sequence of the list is based on the estimated earning power of the holders of the various qualifications.

List of fields of qualifications

```
Medicine and surgery
Dentistry
Engineering
Law
Pharmacy
Land surveying, town and regional planning
Architecture and quantity surveying
Veterinary science
Librarianship
Economics, commerce, finance, management, administration et cetera
    Natural science (botany and zoology, chemistry, physics, etc.)
    Agriculture, forestry and soil conservation
    Domestic science and food technology
    Paramedical
    Sociology and social work
    Political sciences and Bantu administration
    Military science
    Theology
    Teaching and education
    Literature, philosophy, psychology, arts, etc.
```


### 3.6 GOVERNMENT SECTOR

The concept "government sector" refers to the central, provincial, local, regional, Bantu, Coloured and Indian authorities and government bodies as well as all semi-government and government-subsidized, government-financed and government-controlled organizations such as the postal service, the SAR $E H$, the South African Reserve Bank, SASOL, PHOSCOR, ISCOR, IDC, CSIR, HSRC, the agricultural and other control and marketing boards, universities, governmentsubsidized schools and colleges, et cetera.
3.7 MEDIAN (Me) OR SECOND QUARTILE ( $Q_{2}$ )

The median (Me) or second quartile ( $Q_{2}$ ) is a statistical concept indicat= ing an intermediate value of a group of observations. The median wage of a
specific group of workers - take, for example, all surveyors in government service - indicates that 50 per cent of them earn more and 50 per cent less than the indicated median wage (see also Figure 3.1).
3.8 FIRST QUARTILE $\left(Q_{1}\right)$ AND THIRD QUARTILE $\left(Q_{3}\right)$

The first and third quartiles are two statistical concepts which provide an indication of the way in which a group of observations is distributed around a specific intermediate value, the median. In this report, for example, the first quartile $\left(Q_{1}\right)$ of the wage of a specific group of workers indicates that 25 per cent of the group receive less and 75 per cent more than the $Q_{1}$ wage. The third quartile $\left(Q_{3}\right)$ of the group's wage will indicate that 75 per cent of the group earn less and 25 per cent of the group more than the $Q_{3}$ wage. This also means that 50 per cent of the group of workers earn more than the $Q_{1}$ wage, but less than the $Q_{3}$ wage. It can be presented schematically as follows.

FIGURE 3.1
WAGE SCALE

|  |  | R8000 |  |
| :---: | :---: | :---: | :---: |
|  |  | R7000 | 25\% of the group of workers |
|  |  | R6000 |  |
|  | $Q_{3}$ | R5000 |  |
| 25\% of the group of workers |  | R4000 |  |
|  | Me | R3000 | group of workers |
|  | $Q_{1}$ | R2000 |  |
|  |  | R1000 | of the group of workers |

TO WHAT EXTENT IS THE TEST GROUP REPRESENTATIVE

Before the findings of an investigation which was carried out with the aid of a sample can be described as reliable, it is necessary to prove that the sample or test group is representative of the population. It is clear, however, that a sample or test group can only be compared with the population if the characteristics of the latter, which must be compared with those of the test group, are known. However, the sample used in this investigation was drawn from a population of which some characteristics are unknown.

The test group consists of 14291 economically active, highly qualified Whites who are younger than 66 years of age. As was explained in paragraph 2, the group was drawn from approximately 102000 highly qualified Whites who are younger than 66 years of age and have not yet retired on pension. However, the group of 102000 highly qualified Whites includes an unknown number of highly qualified housewives of whom none could be included in the investiga= tion because they are not economically active and thus receive no wage or net profit.

The actual population of this investigation thus consists of all economic= ally active highly qualified Whites who are younger than 66 years of age. Since most of the characteristics of the population are unknown and the test group can thus not be compared with them, the test group will be compared with
the 66555 highly qualified Whites who are younger than 66 years of age, have not yet retired on pension and are registered in the National Register of Natural and Social Scientists. (The last-mentioned group of 66555 highly qualified persons will henceforth be called the "National Register group".)

A report will also shortly be made on the representativeness of the National Register of Natural and Social Scientists. At this stage it might just be mentioned that according to provisional analyses the National Register is to a high degree representative of all graduates in the country.

When the test group is compared with the National Register group (66555), it should continually be borne in mind that the National Register group is not the actual population and that the two groups will, of necessity, differ from each other in some respects. These differences will have to be taken into account in the assessment of the representativeness of the test group.

There is little reason to assume that the economically active, highly qualified Whites under the age of 66 will be differently distributed through= out the country than all highly qualified Whites who are younger than 66 years of age. The geographical distribution of the test group is compared with that of the National Register group in Table 4.1

TABLE 4.1
GEOGRAPHICAL DISTRIBUTION OF THE TEST GROUP

|  | National Register |  | Test group |  |
| :--- | ---: | ---: | ---: | ---: |
| Province/area |  | N | $\%$ | $N$ |

```
x}=10,37
p 18,465 at the 0,1% level
```

The $X^{2}$ and $p$ values of Table 4.1 indicate that the test group can be regarded as a representative sample of the National Register group at the 0,1 per cent level.

On the other hand, there is little reason to assume that the sex distri= bution of the test group will compare favourably with that of the National Register group. The reason for this is the fact that many highly qualified women of child-bearing age who are included in the National Register are not economically active and thus could not be included in the test group. The sex distribution of the test group is compared with that of the National Regis= ter group in Table 4.2.

TABLE 4.2
ANALYSIS OF THE TEST GROUP ACCORDING TO SEX

Sex
National Register Test group
Sex

| $N$ |  | $N$ | $\%$ |
| :---: | ---: | ---: | ---: |
| 50536 | 75,9 | 12512 | 87,6 |
| 16019 | 24,1 | 1779 | 12,4 |
|  | 100 | 14291 | 100 |

As can be expected, the percentage of women in the National Register group ( $24,1 \%$ ) is much larger than the percentage of women in the test group ( $12,4 \%$ ) , as Table 4.2 shows.

From the above-mentioned percentages one can safely deduce that as re= gards sex distribution, the test group is apparently more representative of the population than is the National Register group.

Since the test group contains fewer women of child-bearing age ( 25 to 34 years of age) than the National Register group, it can be expected that the test group and particularly the younger half thereof, will be older than the women in the National Register group. The age distribution of the two groups is compared in Table 4.3.

TABLE 4.3
AGE DISTRIBUTION OF THE TEST GROUP

| Group | Age |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | $Q_{1}$ | Me | $Q_{3}$ |
| National Register group | 66555 | 29,8 | 38,4 | 48,8 |
| Test group | 14291 | 30,9 | 39,5 | 49,2 |

According to Table 4.3 the test group's $Q_{1}$ and median ages are each 1,1 years older and the $Q_{3}$ age 0,4 years older than that of the National Register group. The fact that the test group, as was expected, is slightly older than the National Register group, thus indicates that the chances are good that the age structure of the test group will not differ notably from that of the po= pulation.

The qualification structure of the test group is compared with that of the National Register group in Tables 4.4 and 4.5

Since it is known that certain fields of study such as teaching, litera= ture, social work, domestic science and librarianship are more often pursued by women than men and that there is a smaller percentage of women in the test group and population than the National Register group, it can be expected that the percentage of highly qualified persons in the corresponding fields of qualification in the test group and population will be lower than the percent= age in the National Register group.

On the other hand, it is also known that more men than women pursue such fields of study as engineering, architecture, economics, commerce, management, military science, science and theology and it can consequently be expected that the percentage of highly qualified persons in these fields in the test group and population will be higher than in the National Register group, be= cause there is a larger percentage of men in the test group than in the National Register group.

Moreover, it is known that more men than women obtain Master's degrees and doctorates. Of the 10164 holders of Master's degrees and doctorates in the National Register, 89,1 per cent are men and 10,9 per cent are women. Consequently it can be expected that the percentage of the test group having Master's degrees and doctorates will be larger than the corresponding percent= age of the National Register group.

TABLE 4.4

## ANALYSIS OF THE TEST GROUP ACCORDING TO FIELD OF QUALIFICATION

\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{2}{*}{Field of qualification} \& \multicolumn{2}{|l|}{National Register} \& \multicolumn{2}{|l|}{Test group} \\
\hline \& N \& \& N \& \% \\
\hline Medicine and surgery \& 5823 \& 8,7 \& 1297 \& 9,1 \\
\hline Dentistry \& 807 \& 1,2 \& 191 \& 1,3 \\
\hline Engineering \& 7792 \& 11,7 \& 1997 \& 14,0 \\
\hline Law \& 3482 \& 5,2 \& 777 \& 5,4 \\
\hline Pharmacy \& 1870 \& 2,8 \& 425 \& 3,0 \\
\hline Town and regional planning and surveying \& 550 \& 0,8 \& 159 \& 1,1 \\
\hline Architecture and quantity surveying \& 1771 \& 2,7 \& 435 \& 3,0 \\
\hline Veterinary Science \& 370 \& 0,6 \& 91 \& 0,6 \\
\hline \begin{tabular}{l}
Librarian \\
Economics, commerce, finance, management, administra=
\end{tabular} \& 566
8541 \& 0,9
12,8 \& 73

228 \& 0,5 <br>

\hline | tion etc. |
| :--- |
| Pure natural science (botany and zoology, chemistry, physics etc.) | \& 8541

7014 \& 12,8
10,5 \& 2287
1458 \& 16,0
10,2 <br>
\hline Agriculture, forestry and soil conservation \& 2042 \& 3, 1 \& 521 \& 3,6 <br>
\hline Domestic science and food technology \& 324 \& 0,5 \& 31 \& 0,2 <br>
\hline Paramedical \& 569 \& 0,9 \& 55 \& 0,4 <br>
\hline Sociology and social work \& 1487 \& 2,2 \& 184 \& 1,3 <br>
\hline Political sciences and Bantu administration \& 399 \& 0,6 \& 92 \& 0,6 <br>
\hline Military science \& 93 \& 0,1 \& 25 \& 0,2 <br>
\hline Theology \& 1243 \& 1,9 \& 318 \& 2,2 <br>
\hline Teaching and education \& 10195 \& 15, 3 \& 1923 \& 13,5 <br>
\hline Literature and philosophy, psychology, arts, etc. \& 11617 \& 17,5 \& 1952 \& 13,7 <br>
\hline TOTAL \& 66555 \& 100 \& 14291 \& 100 <br>
\hline
\end{tabular}

TABLE 4.5
ANALYSIS OF THE TEST GROUP ACCORDING TO LEVEL OF QUALIFICATION

| Level of qualification | National Register | Test group |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  | N | $\%$ | N |

It appears from the analyses of the National Register, that the diplomas which are considered equivalent to a Bachelor's degree are mainly diplomas in engineering, architecture, commerce, surveying, pharmacy and law. These are all fields of study which are more often pursued by men than by women. Since the test group contains a larger percentage of men than does the National Register group, it can be expected that the test group will contain a larger percentage of holders of such diplomas than will the National Register group.

It can be seen from Tables 4.4 and 4.5 that the test group confirms all four of the above-mentioned expectations. From this it can be deduced that the test group is a better stratified sample of the population of economically active, highly qualified Whites under the age of 66, than is the National Register group. Moreover, the actual size of the test group (14 291) and the fact that this represents more than 14,0 per cent of the population, taken
together with the fact that the stratification of the test group is apparently just as can be expected, indicates that the findings of the investigation are reliable to a very high degree.

In a subsequent report on this subject, the above-mentioned problems of comparison will be eliminated by instituting separate investigations into the representativeness of the male and female test groups.

## WAGE STRUCTURE ACCORDING TO EMPLOYER

In Table 5.1 and Figure 5.1, the wage structure of the 14291 highly qua= lified workers is analysed according to the type of employer (see Question 2, Appendix A).

TABLE 5.1
WAGE STRUCTURE ACCORDING TO TYPE OF EMPLOYER AS AT 1 MARCH, 1971
Rands per annum

| Type of employer | Men |  |  |  |  | Women |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ | $N$ | \% | $Q_{1}$ | $\mathrm{Me}=$ <br> dian | $Q_{3}$ |
| Self-employed | 3098 | 24,76 | 8279 | 12082 | 16156 | 91 | 5,11 | 4097 | 7050 | 11125 |
| Government or provincial administration | 3188 | 25,48 | 5223 | 6464 | 7725 | 1022 | 57,45 | 3250 | 3970 | 4993 |
| Local authority | 446 | 3,57 | 6044 | 7052 | 8122 | 56 | 3,15 | 2722 | 3346 | 4437 |
| Semi-government, governmentcontrolled or governmentsubsidized organizations | 1790 | 14,30 | 5094 | 6718 | 8210 | 308 | 17,31 | 3117 | 4011 | 5333 |
| Private sector | 3990 | 31,89 | 4967 | 6736 | 8969 | 302 | 16,98 | 2453 | 3307 | 4559 |
| TOTAL | 12512 | 100 | 5457 | 7237 | 10032 | 1779 | 100 | 3148 | 3895 | 5087 |

According to Table 5.1 and Figure 5.1, it is especially striking that the remuneration of self-employed workers (net profit) is much higher than that of employees. It should, however, be borne in mind that a self-employed worker is, at the same time, also an entrepreneur and that his net profit consequent= ly does not merely represent a wage. It also includes his entrepreneurial wage and risk premium. The amounts appearing in Table 5.1 as wage or net profit of self-employed workers can thus, strictly speaking, not be compared with those of employees without further consideration. For this reason ${ }_{2}$ self-employed workers are not taken into account in the rest of this report.

Another striking feature of Table 5.1 and Figure 5.1 , is that the median wage of the male employees of local authorities is higher than the median wage of all other groups of employees, while the difference in the median wage of male and female employees in the case of local authorities is greater than in the case of any other groups of employees.

According to Table 5.1, the female employees of the private sector are the most inadequately remunerated group of highly qualified workers.

It would appear that the $Q_{1}$ wage and the median wage which the three government sectors (Government and provincial administrations, local autho= rities and semi-government, government-controlled or government-subsidized or= ganizations) pay their employees compare quite favourably with the wage earned by employees in the private sector. This is especially true when the greater measure of occupational security enjoyed by the employee in the government sec= tor is considered. The $Q_{3}$ wage for men in the three government sectors is, however, much lower than that of the private sector.

FIGURE 5.1

Wage
WAGE STRUCTURE ACCORDING TO TYPE OF EMPLOYER AS AT 1 MARCH, 1971

16000

15000

14000

13000

12000

11000

10000

9000

8000

7000

6000

5000

4000

3000
^ Third quartile Median

Women
$\checkmark$ First quartile
Private sector

From the above it can be deduced that the government sectors pay a compe= titive nominal wage to their male employees in the lower grades, while the nominal wage of their employees in the higher grades cannot really compete on an equal footing with that of the private sector.

It is also to be noted that, whereas the wage structure of male employees of the three government sectors is, with one exception, inferior to that of male employees in the private sector, female employees of the three government sectors are more adequately remunerated throughout than female employees of the private sector.

According to Table 5.1 and Figure 5.1, it is clear that the wage of $\mathrm{fe}=$ male employees and the income of female self-employed persons are both consi= derably lower than those of men. The reason for this situation must be ascribed, inter alia, to factors such as distribution of age and experience and the qualification and occupational structure of the female workers' group. (See Par. 8 to 13).

In Table 6.1 and Figures 6.1 and 6.2 , the wage structure of highly quali= fied employees is analysed according to their employers' branch of industry (see Question 5 of the Appendix).

TABLE 6.1
WAGE STRUCTURE ACCORDING TO EMPLOYER'S BRANCH OF INDUSTRY, AS AT 1 MARCH, 1971 Rands per annum

MEN

| Employer's branch of industry | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | N | $Q_{1}$ | $\begin{aligned} & \text { Me= } \\ & \text { dian } \end{aligned}$ | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ <br> dian | $Q_{3}$ |
| Forestry, agriculture and fishing | 147 | 4706 | 5937 | 7958 | 312 | 4127 | 5194 | 6780 |
| Mining | 403 | 6277 | 7861 | 10231 | 31 | 5187 | 7750 | 9708 |
| Electricity, gas and water | 27 | 6687 | 9250 | 12125 | 199 | 5670 | 7305 | 8244 |
| Building and construction | 244 | 6472 | 8125 | 10500 | 58 | 6750 | 7875 | 8562 |
| Manufacturing industry | 1116 | 5958 | 7433 | 9390 | 181 | 5479 | 7159 | 8644 |
| Transport, storage and communication | 40 | 6166 | 8000 | 11500 | 261 | 5362 | 7577 | 8553 |
| Commerce | 417 | 5654 | 7369 | 9422 | 5 |  |  |  |
| Financing | 316 | 5108 | 7060 | 10576 | 36 | 6125 | 8000 | 10666 |
| Professional services | 704 | 4413 | 6065 | 7472 | 703 | 6125 | 7486 | 8812 |
| Other personal services | 462 | 3629 | 4346 | 5217 | 14 | 4375 | 5333 | 6750 |
| Protection services | 2 |  |  |  | 83 | 4237 | 5250 | 7270 |
| Other community services | 30 | 4350 | 5000 | 5875 | 3536 | 5225 | 6462 | 7529 |
| Other | 82 | 5187 | 6666 | 8625 | 5 |  |  |  |
| TOTAL | 3990 | 4967 | 6736 | 8969 | 5424 | 5236 | 6572 | 7931 |
| WOMEN |  |  |  |  |  |  |  |  |
| Forestry, agriculture and fishing | 5 |  |  |  | 28 | 2722 | 3200 | 5500 |
| Mining | 19 | 3187 | 4250 | 8125 | 2 |  |  |  |
| Electricity, gas and water |  |  |  |  | 2 |  |  |  |
| Building and construction | 6 |  |  |  | 2 |  |  |  |
| Manufacturing industry | 43 | 2812 | 3472 | 5625 | 4 |  |  |  |
| Transport, storage and communication | 4 |  |  |  | 12 | 3100 | 3400 | 3833 |
| Commerce | 38 | 2350 | 3277 | 4375 |  |  |  |  |
| Financing | 25 | 2604 | 3187 | 3875 | 2 |  |  |  |
| Professional services | 88 | 2545 | 3375 | 4625 | 199 | 3345 | 4720 | 6875 |
| Other personal services | 33 | 2069 | 2562 | 3475 | 5 |  |  |  |
| Protection services |  |  |  |  | 6 |  |  |  |
| Other community services | 20 | 2333 | 3000 | 4000 | 1119 | 3221 | 3905 | 4858 |
| Other | 21 | 2281 | 3437 | 4458 | 4 |  |  |  |
| TOTAL | 302 | 2453 | 3307 | 4559 | 1386 | 3216 | 3959 | 5016 |




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One of the striking phenomena in Table 6.1 and Figure 6.1 is the great difference existing in some sectors (such as, inter alia, electricity,gas and water, transport and communication and professional services) between the wage structure of the government sector and that of the private sector.

A second striking feature is that the wage structure of the government sector is considerably better than that of the private sector in some branches of industry such as finance and the personal and community services, while in other branches of industry, such as agriculture, forestry and fisheries, tran= sport and communication, mining, electricity, gas and water supply, it is noticeably weaker than that of the private sector.

In the assessment of the wage levels in Table 6.1 and of the above re= marks, it should, however, be borne in mind that the numbers of respondents in some of the groups are relatively small.

7 THE GEOGRAPHICAL WAGE STRUCTURE
The geographical wage structure of the highly qualified employee is ana= lysed in Table 7.1 and Figures 7.1 and 7.2

A striking phenomenon apparent in Table 7.1 and Figure 7.1 is that the median wage of male employees in the government sector in the Transvaal and in South-West Africa is lower than that of male workers in the private sector, while the median wage of male employees in the government sector in the Cape Province, Orange Free State and Natal is, on the other hand, higher than that of male employees in the private sector. In contrast with this, the $Q_{3}$ wage of the male employees in the government sector is higher than that of male employees in the private sector in Pretoria and Bloemfontein only.

According to Table 7.1 and Figure 7.2 , the wage structure of female em= ployees in the government sector is, in all respects and in all fields, supe= rior to that of the private sector.

Another striking feature is the fact that male employees on the Witwaters= rand earn considerably more than male employees in Pretoria, while there is not much difference between the wage structures of female employees on the Witwatersrand and in Pretoria (see Table 7.1 and Figures 7.1 and 7.2).

In this connection, it is interesting to note that approximately half of the 87000 graduates included in the National Register are domiciled in the Transvaal. Of the number of graduates in the Transvaal, approximately onethird live in Pretoria, one-third in Johannesburg and approximately a third in the rest of the province.
wage structure according to occupational function
In Table 8.1 and Figures 8.1 and 8.2, the wage structure of highly quali= fied employees is analysed according to occupational function (see Question 4 of Appendix 4).

As could be expected, it appears from Table 8.1 and Figures 8.1 and 8.2 that those persons in management and administration are considerably better remunerated, in both the government and private sectors, than persons practising any of the other occupational functions.

A second striking feature of the wage structure according to occupational function is that, in certain occupational functions, viz planning and design, education and training, production and inspection and consulting, advising and services, the government's remuneration of its male employees is superior to that of persons in the private sector who practise the same occupational func= tions. The remuneration pattern of the two sectors in two other occupational functions, viz management and administration and research and development is, on the other hand, exactly the reverse.

TABLE 7.1
THE GEOGRAPHICAL WAGE STRUCTURE, AS AT 1 MARCH, 1971
Rands per annum
MEN
Wage structure

| Area | Private sector |  |  |  | Government sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | $Q_{1}$ | $\begin{aligned} & \text { Me= } \\ & \text { dian } \end{aligned}$ | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ |
| Cape Town and Bellville | 526 | 4765 | 6352 | 8273 | 481 | 5437 | 6761 | 8112 |
| Port Elizabeth and Uitenhage | 136 | 4375 | 6346 | 8250 | 138 | 5062 | 6423 | 7446 |
| East London | 29 | 4225 | 6125 | 7937 | 45 | 5062 | 6575 | 7593 |
| Kimberley | 14 | 5750 | 7166 | 8250 | 28 | 5250 | 6625 | 7500 |
| Cape Province | 994 | 4372 | 6113 | 7941 | 1362 | 5219 | 6500 | 7514 |
| Durban, Inanda and Pinetown | 332 | 4937 | 6700 | 8333 | 295 | 5451 | 6803 | 8170 |
| Pietermaritzburg | 56 | 5333 | 6900 | 9500 | 151 | 5352 | 6519 | 7973 |
| Natal | 463 | 4875 | 6507 | 8185 | 580 | 5106 | 6585 | 7987 |
| Witwatersrand | 1544 | 6086 | 7798 | 10378 | 839 | 5753 | 7039 | 8433 |
| Pretoria | 302 | 4643 | 5954 | 7489 | 1381 | 5169 | 6856 | 8303 |
| Vereeniging and Vanderbijlpark | 67 | 5229 | 7062 | 8812 | 85 | 6066 | 6795 | 7781 |
| Potchefstroom and Klerksdorp | 65 | 4284 | 5354 | 7843 | 155 | 4437 | 6284 | 7201 |
| Transvaal | 2289 | 5246 | 7231 | 9477 | 2889 | 5321 | 6700 | 8148 |
| Bloemfontein | 53 | 4208 | 5386 | 6958 | 235 | 4904 | 6269 | 7608 |
| Sasolburg | 27 | 5093 | 6375 | 9208 | 47 | 5375 | 6437 | 8281 |
| Odendaalsrus, Virginia and Welkom | 44 | 4666 | 6625 | 9333 | 32 | 5285 | 6500 | 7600 |
| Orange Free State | 181 | 4508 | 5522 | 7734 | 464 | 5160 | 6333 | 7416 |
| Windhoek | 32 | 5416 | 6875 | 8500 | 80 | 4750 | 6666 | 7812 |
| South-West Africa | 63 | 4982 | 6625 | 8312 | 129 | 4602 | 6113 | 7489 |
| TOTAL | 3990 | 4967 | 6736 | 8969 | 5424 | 5236 | 6572 | 7931 |
| WOMEN |  |  |  |  |  |  |  |  |
| Cape Town and Bellville | 44 | 2222 | 3071 | 3857 | 144 | 3107 | 3600 | 5277 |
| Port Elizabeth and Uitenhage | 8 | 1500 | 2125 | 2375 | 42 | 3203 | 3600 | 4406 |
| East London | 6 |  |  |  | 10 | 3250 | 4000 | 7250 |
| Kimberley |  |  |  |  | 14 | 3083 | 3750 | 4625 |
| Cape Province | 76 | 2107 | 3000 | 3937 | 374 | 3172 | 3804 | 4912 |
| Durban, Inanda and Pinetown | 24 | 2416 | 3250 | 4500 | 117 | 3263 | 4125 | 5234 |
| Pietermaritzburg | 2 |  |  |  | 29 | 3525 | 4416 | 6093 |
| Natal | 29 | 2541 | 3281 | 4437 | 180 | 3297 | 4129 | 5312 |
| Witwatersrand | 128 | 2638 | 3395 | 4650 | 270 | 3242 | 4216 | 5241 |
| Pretoria | 25 | 3104 | 3750 | 4687 | 286 | 3181 | 3932 | 5206 |
| Vereeniging and Vanderbijlpark |  |  |  |  | 13 | 3708 | 4625 | 5218 |
| Potchefstroom and Klerksdorp |  |  |  |  | 47 | 3239 | 3892 | 4906 |
| Transvaal | 175 | 2708 | 3463 | 4726 | 711 | 3224 | 4028 | 5086 |
| Bloemfontein | 8 | 2500 | 3000 | 3500 | 47 | 3148 | 3550 | 4656 |
| Orange Free State | 15 | 2229 | 2583 | 3208 | 97 | 3170 | 3660 | 4534 |
| Windhoek | 4 |  |  |  | 18 | 3416 | 4250 | 5125 |
| South-West Africa | 7 |  |  |  | 24 | 3500 | 4200 | 5000 |
| TOTAL | 302 | 2453 | 3307 | 4559 | 1386 | 3216 | 3959 | 5016 |

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\begin{aligned}
& \text { FIGURE } 7.2 \\
& \text { THE GEOGRAPHICAL WAGE STRUCTURE, AS AT } 1 \text { MARCH, } 1971 \\
& \text { Rands per annum } \\
& (\text { WOMEN })
\end{aligned}
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TABLE 8.1
WAGE STRUCTURE ACCORDING TO OCCUPATIONAL FUNCTION,AS AT 1 MARCH, 1971
Rands per annum
MEN

| Occupational function | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ <br> dian | $\mathrm{Q}_{3}$ |
| Management and administration | 1779 | 6485 | 8150 | 10804 | 1169 | 6389 | 7762 | 9105 |
| Research and development | 151 | 4625 | 6010 | 7432 | 485 | 4095 | 5305 | 7195 |
| Planning and design 1) | 318 | 5325 | 6661 | 7887 | 283 | 5551 | 7023 | 8035 |
| Education and training ${ }^{1 /}$ | 101 | 3647 | 5050 | 6097 | 2285 | 5285 | 6365 | 7162 |
| Production and inspection | 158 | 4916 | 6307 | 7187 | 101 | 5078 | 6375 | 7913 |
| Consultation, rendering of advice and service | 1125 | 4062 | 5188 | 7257 | 776 | 5305 | 6918 | 8418 |
| Investigation, prediction and reporting | 307 | 4424 | 5597 | 7120 | 241 | 4401 | 5921 | 7242 |
| Other | 51 | 3675 | 4916 | 6203 | 84 | 4166 | 5642 | 7583 |
| TOTAL | 3990 | 4967 | 6736 | 8969 | 5424 | 5236 | 6572 | 7931 |
| WOMEN |  |  |  |  |  |  |  |  |
| Management and administration | 50 | 3022 | 4000 | 6916 | 104 | 2850 | 4000 | 6285 |
| Research and development | 19 | 2458 | 3625 | 4625 | 78 | 2703 | 3357 | 4361 |
| Planning and design 1) | 14 | 2312 | 3250 | 4250 | 13 | 3225 | 3625 | 6437 |
| Education and training ${ }^{1}$ | 68 | 2200 | 2900 | 4000 | 867 | 3354 | 4108 | 4930 |
| Production and inspection | 11 | 2187 | 3125 | 3708 | 13 | 3031 | 3437 | 4687 |
| Consultation, rendering of advice and service | 101 | 2475 | 3319 | 4579 | 250 | 2939 | 3640 | 5750 |
| Investigation, prediction and reporting | 30 | 2550 | 3187 | 3916 | 37 | 2958 | 3386 | 5291 |
| Other | 9 | 3312 | 3875 | 4687 | 24 | 2875 | 3285 | 4250 |
| TOTAL | 302 | 2453 | 3307 | 4559 | 1386 | 3216 | 3959 | 5061 |

1) It is known that the wages of university lecturers were increased by an average of about R9OO per annum after 1 March, 1971, but with retrospective effect from 1 January, 1971.

The occupational function group in the government sector which is least adequately remunerated, is "research and development", while "education and training" is the group in the private sector which receives the poorest remu= neration.

As has already been noted (see Par. 5, 6 and 7), the private sector's remuneration of its female employees is, practically throughout, poorer than that of the government sector. In the light of the above, it is striking to note that, according to Table 8.1 and Figure 8.2, the private sector pays bet= ter wages to female workers in management and administration and research and development than does the government sector.

It should constantly be borne in mind that wage levels are probably al= ways simultaneously influenced by more than one factor, while, in these ana= lyses, note is taken of only one factor, viz occupational function. Thus, for example, it can be assumed with a reasonable amount of certainty that the num= ber of years of experience of employees who are here classified under manage= ment and administration is much higher than that of persons classified in some of the other occupational function groups.

FIGURE 8.1
WAGE STRUCTURE ACCORDING TO OCCUPATIONAL FUNCTION, AS AT $1 \mathrm{MARCH}, 1971$
Rands per annum
(MEN)


FIGURE 8.2
WAGE STRUCTURE ACCORDING TO OCCUPATIONAL FUNCTION, AS AT 1 MARCH, 1971 Rands per annum (WOMEN)


In Table 9.1 and Figures 9.1 and 9.2 , the wage structure of highly quali= fied employees is analysed according to level of qualification.

TABLE 9.1
WAGE STRUCTURE ACCORDING TO LEVEL OF QUALIFICATION, AS AT 1 MARCH, 1971
Rands per annum
MEN

| Level of qualification | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ |
| Diploma equivalent to a Bachelor's degree $\begin{array}{lllllllll}456 & 6285 & 7409 & 9250 & 219 & 6209 & 7312 & 8181\end{array}$ |  |  |  |  |  |  |  |  |
| Bachelor's degree | 1962 | 4635 | 6307 | 8327 | 1992 | 4631 | 6411 | 8057 |
| Bachelor's degree plus a postgraduate diploma | 212 | 4208 | 5202 | 6769 | 931 | 5488 | 6391 | 7136 |
| Honours degree | 459 | 4020 | 5087 | 7053 | 861 | 4660 | 6201 | 6961 |
| Master's degree plus equivalent diplomas | 784 | 6606 | 8106 | 10623 | 905 | 5577 | 6855 | 8042 |
| Doctorate plus equivalent diplomas | 117 | 6725 | 9138 | 12159 | 516 | 6924 | 8074 | 9295 |
| TOTAL | 3990 | 4967 | 6736 | 8969 | 5424 | 5236 | 6572 | 7931 |
| WOMEN |  |  |  |  |  |  |  |  |
| Diploma equivalent to a Bachelor's degree | 14 | 3750 | 4500 | 4937 | 8 | 3500 | 4500 | 5500 |
| Bachelor's degree | 197 | 2434 | 3182 | 4041 | 609 | 2990 | 3351 | 4274 |
| Bachelor's degree plus a postgraduate diploma | 48 | 2125 | 3250 | 4500 | 501 | 3481 | 4279 | 5078 |
| Honours degree | 28 | 2833 | 3600 | 5000 | 144 | 3464 | 4260 | 5166 |
| Master's degree plus equivalent diplomas | 13 | 3708 | 4875 | 6875 | 94 | 4328 | 5181 | 6750 |
| Doctorate plus equivalent diplomas | 2 |  |  |  | 30 | 6035 | 6600 | 7437 |
| TOTAL | 302 | 2453 | 3307 | 4559 | 1386 | 3216 | 3959 | 5016 |

According to Table 9.1 and Figures 9.1 and 9.2, the most striking aspect of the wage structure according to level of qualification, is the fact that holders of diplomas which are regarded as equivalent to a Bachelor's degree are so much better remunerated than holders of Bachelor's degrees, Honours de= grees, and Bachelor's degrees plus post-graduate diplomas. This can probably be attributed to the particular occupational distribution of holders of diplo= mas which are equivalent to Bachelor's degrees. The majority of the latter are diplomas in engineering, architecture, surveying, commerce, law and phar= macy, which all give access to highly remunerative occupations.

The second striking phenomenon to be observed in Table 9.1 and Figure 9.1 is the fact that holders of Honours degrees constitute the least adequately remunerated male group. This can probably be ascribed to the fact that the majority of universities only recently began to confer Honours degrees in most fields of study, with the result that most holders of Honours degrees will still be relatively young.

It is also possible that the majority of Honours degrees are awarded in fields of study which give access only to poorly remunerated occupations. How=

FIGURE 9.1
wage structure according to level of qualification, as at 1 march, 1971
Rands per annum
(MEN)


FIGURE 9.2
WAGE STRUCTURE ACCORDING TO LEVEL OF QUALIFICATION, AS AT 1 MARCH, 1971
Rands per annum (WOMEN)

ever, finality on this matter will only be reached after the combined influence of more than one factor, including level of qualification, has been analysed. This will be done in a subsequent report.

It is also noticeable that both male and female holders of Master's de= grees and doctorates, with the exception of male employees in the service of the government sector who hold Master's degrees, are better paid than other employees. On the strength of that, it would appear that advanced study does, in fact, pay.

WAGE STRUCTURE ACCORDING TO FIELD OF QUALIFICATION
The wage structure of the highly qualified employees is analysed accor= ding to field of qualification in Table 10.1 and Figures 10.1 and 10.2.

At first glance, the low $Q_{1}$ and median wages of employees of the private sector who have obtained a degree in law are rather surprising (see Table 10.1 and Figure 10.1). However, the phenomenon can probably be ascribed to the fact that articled clerks who have already graduated are actually still only student lawyers and thus earn a very low wage.

The great difference which, according to Table 10.1 and Figure 10.1, exists between the $Q_{1}$ and median wages of medical practitioners in the service of the private sector and those in the service of the government sector, can probably be ascribed to the relatively low wages received by housemen and postgraduate students employed by training hospitals. It should be remembered, however, that post-graduate students are students in the true sense of the word and that housemen are actually still only students. It can be seen from Table 10.1, that, as soon as they have completed their studies, they receive a better wage than any group in other fields of study.

It appears from Table 10.1 and Figure 10.1 that there is also a great difference between the wages of theologians in the service of the private sector and those in the service of the government sector. However, the diffe= rence should be seen in the light of the fact that the theologians in the service of the private sector are mainly ministers and priests in whose cases fringe benefits, which might rather be described as wages in natura, form a large part of their available incomes. The theologians in the service of the government sector also include lecturers and professors at theological semi= naries who receive far fewer fringe benefits than ministers and priests.

Finally, it would appear from Table 10.1 and Figures 10.1 and 10.2 that the wage received by an employee of the government sector who possesses a teaching or an educational qualification compares so favourably with the wage that he/she can obtain in the private sector that, from a financial point of view, it would not pay a graduate teacher to leave the government sector for a post in the private sector. Note that the employees referred to above are not necessarily active as teachers in either the private or the government sectors. They are merely qualified for teaching.

Another striking phenomenon to be observed in Table 10.1 and Figures 10.1 and 10.2 , is the fact that the difference between the $Q_{1}$ and $Q_{3}$ wages which men can earn is generally much greater than that between the wages which women can earn. However, there are certain important exceptions to the rule. Thus, for example, the difference between the $Q_{1}$ and $Q_{3}$ wages of male teachers and educationists in the government sector, male theologians in the private sector and male pharmacists in the government sector is approximately as small as that in respect of female workers in general. Such a wage structure may probably, in the long run, lead to shortages of employees in the occupations concerned.

TABLE 10.1
WAGE STRUCTURE ACCORDING TO FIELD OF QUALIFICATION, AS AT 1 MARCH, 1971 Rands per annum

MEN

| Field of qualification | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ | N | $Q_{1}$ | $\begin{aligned} & \text { Me= } \\ & \text { dian } \end{aligned}$ | $Q_{3}$ |
| Medicine and surgery | 61 | 8625 | 10038 | 11916 | 448 | 6860 | 8306 | 10122 |
| Dentistry | 7 |  |  |  | 14 | 8150 | 8500 | 10125 |
| Engineering | 976 | 6316 | 7732 | 9982 | 806 | 6156 | 7504 | 8431 |
| Law | 142 | 4281 | 6000 | 9687 | 141 | 5303 | 7250 | 9287 |
| Pharmacy | 126 | 5416 | 6607 | 8343 | 51 | 5146 | 5423 | 6402 |
| Town and regional planning | 17 | 7062 | 7916 | 8937 | 59 | 6734 | 7718 | 8394 |
| Architecture | 81 | 6093 | 6977 | 8296 | 63 | 7152 | 8159 | 9140 |
| Veterinary science | 7 |  |  |  | 48 | 6249 | 7071 | 8100 |
| Librarianship |  |  |  |  | 22 | 4687 | 6125 | 7125 |
| Economics, commerce, management etc. | 1176 | 5361 | 7376 | 9714 | 441 | 5485 | 6929 | 8315 |
| Pure natural science | 461 | 4935 | 6460 | 8293 | 726 | 4211 | 6014 | 7495 |
| Agriculture, forestry, soil conser= vation | 124 | 4555 | 5375 | 7250 | 294 | 4250 | 5217 | 6739 |
| Domestic science and food technology Paramedical |  |  |  |  | 5 4 |  |  |  |
| Sociology and social work | 19 | 3718 | 4416 | 6208 | 45 | 3781 | 5583 | 6791 |
| Government and public administration | 21 | 3708 | 4916 | 6937 | 68 | 5115 | 6166 | 7571 |
| Military science | 3 |  |  |  | 22 | 3392 | 4500 | 6083 |
| Theology | 276 | 3705 | 4283 | 5062 | 38 | 5875 | 6833 | 8031 |
| Teaching and education | 100 | 4666 | 6093 | 7166 | 1226 | 6006 | 6448 | 7125 |
| Literature and philosophy | 392 | 3838 | 5133 | 6500 | 903 | 4532 | 6121 | 7185 |
| TOTAL | 3990 | 4967 | 6736 | 8968 | 5424 | 5236 | 6572 | 7931 |
| WOMEN |  |  |  |  |  |  |  |  |
| Medicine and surgery Dentistry | 4 |  |  |  | 81 | 6236 | 8112 | 9097 |
| Engineering |  |  |  |  | 4 |  |  |  |
| Law |  |  |  |  | 6 |  |  |  |
| Pharmacy | 17 | 4031 | 4550 | 4975 | 12 | 4000 | 5000 | 5300 |
| Town and regional planning |  |  |  |  | 2 |  |  |  |
| Architecture | 4 |  |  |  | 3 |  |  |  |
| Veterinary science | 2 |  |  |  | 3 |  |  |  |
| Librarianship | 3 |  |  |  | 47 | 3114 | 3750 | 5031 |
| Economics, commerce, management etc. | 24 | 3111 | 3444 | 5000 | 26 | 3375 | 4666 | 6250 |
| Pure natural science | 55 | 2729 | 3522 | 4406 | 142 | 3018 | 3451 | 4531 |
| Agriculture, forestry, soil conser= vation |  |  |  |  | 5 |  |  |  |
| Domestic science and food technology |  |  |  |  | 25 | 3437 | 4194 | 4875 |
| Paramedical | 9 | 2062 | 2625 | 3125 | 34 | 2821 | 3333 | 4250 |
| Sociology and social work | 27 | 2281 | 2875 | 3708 | 89 | 2664 | 3279 | 4109 |
| Government and public administration Military science |  |  |  |  | 2 |  |  |  |
| Theology |  |  |  |  |  |  |  |  |
| Teaching and education | 48 | 2111 | 3166 | 4416 | 481 | 3521 | 4294 | 5078 |
| Literature and philosophy | 105 | 2366 | 3079 | 4093 | 423 | 3101 | 3440 | 4453 |
| TOTAL | 302 | 2453 | 3307 | 4559 | 1386 | 3216 | 3959 | 5016 |



FIGURE 10.1
WAGE STAUCTURE ACCO FDING TO FIELD OF QUALIFICATION, AS AT 1 NARCH, 1971
Rands per annum
(MEN)








The wage structure of the highly qualified employee is analysed according to age in Table 11.1 and Figures 11.1, 11.2 and 11.3.

$$
\text { TABLE } 11.1
$$

WAGE STRUCTURE ACCORDING TO AGE, AS AT 1 MARCH, 1971
Rands per annum
MEN

| Age groups | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | N | $Q_{1}$ | $\begin{aligned} & \text { Me= } \\ & \text { dian } \end{aligned}$ | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ <br> dian | $Q_{3}$ |
| 20-24 | 153 | 2802 | 3648 | 4375 | 174 | 3149 | 3500 | 3910 |
| 25-29 | 863 | 3949 | 4914 | 6265 | 918 | 3792 | 4386 | 5278 |
| 30-34 | 753 | 5255 | 6523 | 7888 | 896 | 4942 | 6009 | 6632 |
| 35-39 | 597 | 5755 | 7384 | 9454 | 706 | 6076 | 6615 | 7504 |
| 40-44 | 477 | 6226 | 7898 | 10129 | 673 | 6350 | 7220 | 8218 |
| 45-49 | 443 | 6261 | 8234 | 10919 | 677 | 6582 | 7503 | 8625 |
| 50-54 | 315 | 7014 | 8613 | 12125 | 579 | 6773 | 7762 | 9057 |
| 55-59 | 199 | 6729 | 8397 | 12250 | 444 | 6723 | 7871 | 9260 |
| 60-64 | 161 | 5309 | 8093 | 11350 | 315 | 6542 | 7850 | 9224 |
| 65 | 29 | 4375 | 6750 | 9125 | 42 | 6812 | 7800 | 9083 |
| TOTAL <br> Median age | $\begin{aligned} & 3990 \\ & 36,39 \\ & \hline \end{aligned}$ | $4967$ | 6736 | 8969 | $\begin{array}{r} 5424 \\ 39,63 \\ \hline \end{array}$ | 5236 | 6572 | 7931 |
| WOMEN |  |  |  |  |  |  |  |  |
| 20-24 | 70 | 2279 | 2833 | 3367 | 293 | 2787 | 3139 | 3346 |
| 25-29 | 97 | 2784 | 3464 | 4437 | 364 | 3136 | 3500 | 4000 |
| 30-34 | 31 | 2687 | 3625 | 5625 | 140 | 3766 | 4400 | 5000 |
| 35-39 | 19 | 2125 | 2464 | 4125 | 96 | 4065 | 4642 | 5466 |
| 40-44 | 29 | 3156 | 4250 | 6187 | 119 | 3955 | 4734 | 6015 |
| 45-49 | 26 | 3062 | 3800 | 4916 | 126 | 4116 | 4738 | 5875 |
| 50-54 | 15 | 1958 | 3250 | 6125 | 112 | 4500 | 5187 | 6454 |
| 55-59 | 10 | 2416 | 2833 | 3375 | 84 | 4291 | 5318 | 6611 |
| 60-64 | 4 |  |  |  | 48 | 4590 | 5375 | 6500 |
| 65 |  |  |  |  | 4 |  |  |  |
| TOTAL | 302 | 2453 | 3307 | 4559 | 1386 | 3216 | 3959 | 5016 |
| Median age | 28,68 |  |  |  | 30,79 |  |  |  |

The most striking phenomenon to be observed in Table 11.1 and Figure 11.1 is the fact that male employees' $Q_{1}$ wages in the private sector and in the government sector differ very little from each other, while the $Q_{3}$ wage of the male employees in the private sector is sometimes, in the higher age groups, very much higher than that of male workers in the government sector. This con= firms the conclusion previously drawn (see par. 5.1), viz that the government pays its employees a competitive nominal wage in the lower grades while its employees' nominal wages in the higher grades do not compare at all favourably with those of the private sector.

From Table 11.1 and Figures 11.2 and 11.3 it is quite clear that the high= ly qualified women employed by the government sector receive much better remu= neration than those employed in the private sector.

FIGURE 11.1
WAGE STRUCTURE ACCORDING TO AGE, AS AT 1 MARCH, 1971
Rands per annum
(MEN)


WAGE STRUCTURE ACCORDING TO AGE, AS AT 1 MARCH, 1971
Rands per annum
(WOMEN)


FIGURE 11.3
THE MEDIAN WAGE OF HIGHLY QUALIFIED EMPLOYEES ACCORDING TO SEX, AGE AND TYPE OF EMPLOYER, AS AT 1 MARCH, 1971
Rands per annum
(MEN AND WONEN)


The considerable difference between the wage structures of male and fe= male employees in all sectors (this is particularly apparent from Figure 11.3) should not simply be interpreted as discrimination against women, since there are perhaps more factors than just that of sex that play a r8le in the determi= nation of wage levels. Finality can only be reached on this matter after the combined influence of two or more factors on the wage structures of the sexes has been investigated. It may, for example, be possible that at a certain age - say 45 years - women have much less experience than men of the same age because family circumstances prevented them,for many years, from practising an occupation. Moreover, it is also possible that the qualification structure and/or the occupational structure and/or occupational function-structure etc., play a more important role in the determination of the wage structure of women than that played by sex alone.

Finally, it is striking that female employees, as a group, are much young= er than male employees. According to Table 11.1, the median age of female em= ployees is 28,68 years and 30,79 years as opposed to 36,39 years and 39,63 years for male employees. It is also interesting to note that both male and female employees of the government sector are older than those of the private sector. According to Table 11.1, the respective median ages are 39,63 years and 30,79 years for the government sector as opposed to 36,39 years and 28,68 years for the private sector.

## WAGE STRUCTURE ACCORDING TO EXPERIENCE

The wage structure of the highly qualified employee is analysed according to experience in Table 12.1 and Figures 12.1 and 12.2 (see question 3 (a), Appendix A).

The wage structure of male employees according to experience, as it ap= pears from Table 12.1 and Figure 12.1, shows, in broad outline, the same pat= tern as their wage structure according to age, as it appears from Table 11.1 and Figure 11.1. The most striking difference is the fact that the wages of male employees of the private sector who have approximately 32 years' expe= rience are noticeably lower than those of male employees with five years' less or five years' more experience. However, this phenomenon is not present among male employees of the government sector. A possible explanation for the phenomenon is the fact that such workers gained their first experience from 1939 to 1944 and this was perhaps military experience which is recognized for wage purposes by the government sector, but not by the private sector.

Nothing can be said with certainty at this stage about the noticeable irregularities which appear in both the wage structure according to age and the wage structure according to experience of female employees of the private sector (see Tables 10.1 and 11.1). However, it would appear that the first decrease which takes place in the earning power of women in the private sector more or less corresponds to a levelling off in the wage curve of female work= ers in the government sector. The two phenomena may both be the result of the decrease in economic activity which normally takes place among women during the child-bearing years ( 25 to 34 years).

TABLE 12.1
WAGE STRUCTURE ACCORDING TO YEARS OF EXPERIENCE SINCE FIRST COMMENCING FULLTIME OCCUPATION, AS AT 1 MARCH, 1971

Rands per annum
MEN

| Years of experience since <br> first full-time position | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | N | $Q_{1}$ | Me= dian | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ |
| 0 | 25 | 3025 | 3607 | 4187 | 52 | 3095 | 3404 | 4000 |
| 1 | 169 | 3220 | 3875 | 4816 | 211 | 3348 | 3815 | 4432 |
| 3 | 165 | 3716 | 4630 | 5553 | 183 | 3842 | 4418 | 5278 |
| 5 | 156 | 4374 | 5180 | 6468 | 174 | 4153 | 4716 | 5673 |
| 0-4 | 664 | 3521 | 4296 | 5295 | 815 | 3558 | 4140 | 4989 |
| 5-9 | 683 | 4532 | 5661 | 6983 | 808 | 4524 | 5355 | 6429 |
| 10-14 | 630 | 5432 | 6904 | 8221 | 735 | 5567 | 6353 | 7210 |
| 15-19 | 525 | 6055 | 7668 | 9537 | 653 | 6189 | 6941 | 8012 |
| 20-24 | 515 | 6417 | 8203 | 10622 | 724 | 6528 | 7358 | 8425 |
| 25-29 | 306 | 6750 | 8500 | 12305 | 526 | 6579 | 7560 | 8527 |
| 30-34 | 249 | 6515 | 8291 | 11250 | 513 | 6697 | 7691 | 9101 |
| 35-39 | 172 | 6666 | 9388 | 12611 | 348 | 6680 | 8009 | 9311 |
| 40-44 | 89 | 6390 | 8361 | 13218 | 141 | 6602 | 7750 | 9234 |
| 45 and more | 26 | 6125 | 7400 | 9375 | 15 | 5437 | 7250 | 10375 |
| TOTAL <br> Median experience | $\begin{aligned} & 3990 \\ & 14,67 \end{aligned}$ | 4967 | 6736 | 8969 | $\begin{array}{r} 5424 \\ 17,21 \end{array}$ | 5236 | 6572 | 7931 |
| WOMEN |  |  |  |  |  |  |  |  |
| 0 | 8 | 2000 | 2500 | 3000 | 47 | 2859 | 3158 | 3354 |
| 1 | 38 | 2275 | 2777 | 3343 | 180 | 2790 | 3152 | 3366 |
| 3 | 20 | 2333 | 3200 | 4000 | 126 | 3094 | 3444 | 3831 |
| 5 | 19 | 2968 | 3375 | 4208 | 69 | 3284 | 3779 | 4325 |
| 0-4 | 126 | 2298 | 3000 | 3492 | 540 | 2959 | 3243 | 3500 |
| 5-9 | 53 | 2937 | 3708 | 4718 | 238 | 3527 | 4149 | 4743 |
| 10-14 | 43 | 2482 | 3812 | 6062 | 145 | 4040 | 4493 | 5282 |
| 15-19 | 22 | 2350 | 4500 | 6416 | 134 | 4412 | 4968 | 6089 |
| 20-24 | 24 | 2625 | 4000 | 5250 | 106 | 4336 | 5105 | 6406 |
| 25-29 | 7 |  |  |  | 65 | 4465 | 5650 | 6734 |
| 30-34 | 9 | 4125 | 5250 | 7875 | 57 | 4791 | 5850 | 6895 |
| 35-39 |  |  |  |  | 27 | 5187 | 6250 | 6875 |
| 40-44 | 2 |  |  |  | 13 | 5625 | 6416 | 7458 |
| 45 and more |  |  |  |  |  |  |  |  |
| TOTAL | 302 | 2453 | 3307 | 4559 | 1386 | 3216 | 3959 | 5016 |
| Median experience | 6,86 |  |  |  | 7,71 |  |  |  |

WAGE STRUCTURE ACCORDING TO OCCUPATION AND OCCUPATIONAL GROUP
The wage structure of highly qualified persons in some occupations and occupational groups is indicated in Tables 13.1 and 13.2 (see Question 1, $A p=$ pendix A).

It is considered desirable that the size of a group should always be borne in mind when the group's wage level is compared with that of another group. Attention is once more drawn to the fact that wage levels reported below do not include the net profit of self-employed workers. These are only the wages of employees.

## FIGURE 12.1

WAGE STRUCTURE ACCORDING TO EXPERIENCE SINCE FIRST COMMENCING FULL-TIME OCCUPATION,AS AT 1 MARCH, Rands per annum
(MEN)



TABLE 13.1
WAGE STRUCTURE ACCORDING TO OCCUPATION AND OCCUPATIONAL GROUP, AS AT 1 MARCH, 1971 Rands per annum

MEN

| Occupation/Occupational group | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | $N$ | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ |
| Engineers, Architects, Surveyors and similar scientists |  |  |  |  |  |  |  |  |
| Chemical and metallurgical engineers | 72 | 5200 | 6800 | 7833 | 40 | 4750 | 6666 | 8250 |
| Electrical engineers | 102 | 5950 | 7318 | 9031 | 238 | 5640 | 7263 | 7952 |
| Mining engineers | 64 | 8666 | 10000 | 13500 | 9 | 6625 | 8750 | 10750 |
| Civil engineers | 243 | 6051 | 7341 | 9258 | 295 | 6799 | 7865 | 8882 |
| Mechanical engineers | 180 | 6333 | 7379 | 8452 | 121 | 5770 | 7160 | 8484 |
| Other engineers | 55 | 5910 | 2041 | 8562 | 70 | 6295 | 7500 | 8159 |
| Architects | 35 | 6267 | 7083 | 8562 | 32 | 7125 | 8111 | 8625 |
| Town, city and regional planners | 11 | 5187 | 6375 | 9125 | 23 | 4343 | 7583 | 8541 |
| Quantity surveyors | 30 | 6041 | 6833 | 7750 | 24 | 6500 | 7833 | 9125 |
| Surveyors : land, mining, nautical |  |  |  |  | 28 | 7083 | 7750 | 8357 |
| Other surveyors and architects | 16 | 6666 | 7666 | 9500 | 5 |  |  |  |
| Unclassified | 1 |  |  |  |  |  |  |  |
| TOTAL | 809 | 6128 | 7368 | 9164 | 885 | 6272 | 7536 | 8426 |
| Chemists, Physicists, Geologists and other physical scientists |  |  |  |  |  |  |  |  |
| Chemists | 79 | 4491 | 5375 | 6906 | 111 | 4575 | 6250 | 7732 |
| Metallurgists | 36 | 5500 | 6666 | 8000 | 10 | 5250 | 7750 | 8750 |
| Physicists |  |  |  |  | 42 | 4750 | 6214 | 7650 |
| Geologists | 61 | 4732 | 6450 | 7718 | 30 | 5125 | 7000 | 7916 |
| Other natural scientists | 8 | 5500 | 6000 | 6500 | 31 | 3718 | 5250 | 7562 |
| Unclassified | 4 |  |  |  | 3 |  |  |  |
| TOTAL | 188 | 4666 | 6125 | 7305 | 227 | 4493 | 6259 | 7769 |
| Veterinary surgeons, Biologists, $\mathrm{Bo}=$$\frac{\text { tanists, Agronomists and similar }}{\text { scientists. }}$ |  |  |  |  |  |  |  |  |
| Veterinary surgeons |  |  |  |  | 34 | 5875 | 6857 | 8083 |
| Biologists |  |  |  |  | 17 | 3625 | 5125 | 6291 |
| Microbiologists |  |  |  |  | 20 | 4250 | 6125 | 7000 |
| Botanists |  |  |  |  | 20 | 3400 | 4666 | 5375 |
| Zoologists |  |  |  |  | 28 | 3625 | 4750 | 6300 |
| Biochemists |  |  |  |  | 19 | 4937 | 6583 | 8208 |
| Agronomists, pasture researchers, agriculturalists, agricultural researchers |  |  |  |  |  |  |  |  |
| researchers | 14 | 4916 | 6250 | 7375 | 33 | 4312 | 5458 | 7187 |
| Foresters |  |  |  |  | 23 | 3729 | 4916 | 6375 |
| Entomologists |  |  |  |  | 19 | 3468 | 4375 | 6041 |
| Cattle-breeding professional officers |  |  |  |  | 23 | 4075 | 4687 | 6062 |
| Agricultural economists |  |  |  |  | 14 | 3791 | 4125 | 4750 |
| Hydrobiologists |  |  |  |  | 10 | 2375 | 3333 | 4750 |
| Soil chemists |  |  |  |  | 10 | 4416 | 5000 | 6625 |
| Other biological scientists | 42 | 4725 | 5312 | 6458 | 42 | 4343 | 5083 | 6919 |
| Unclassified | 6 |  |  |  | 8 |  |  |  |
| TOTAL | 78 | 4671 | 5300 | 6425 | 358 | 4116 | 5134 | 6674 |


| Occupation/Occupational group | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ |
| Medical and Paramedical practitioners. |  |  |  |  |  |  |  |  |
| Physicians | 45 | 8375 | 9464 | 10843 | 260 | 6195 | 7476 | 8491 |
| Psychiatrists |  |  |  |  | 11 | 7375 | 8250 | 9125 |
| Medical specialists or surgeons | 8 | 10666 | 12000 | 13000 | 88 | 8250 | 10076 | 10641 |
| Medical pathologists |  |  |  |  | 22 | 9062 | 10111 | 10722 |
| Dentists | 7 |  |  |  | 14 | 8125 | 8416 | 10125 |
| Pharmacists | 93 | 5289 | 6328 | 7319 | 41 | 5142 | 5375 | 6267 |
| Other medical practitioners | 13 | 6562 | 7375 | 10375 | 62 | 7291 | 8264 | 9218 |
| Unclassified | 2 |  |  |  | 3 |  |  |  |
| TOTAL | 168 | 6045 | 7250 | 9833 | 501 | 6347 | 8143 | 9368 |
| Teachers and lecturers |  |  |  |  |  |  |  |  |
| colleges) | 59 | 3875 | 5083 | 5902 | 1293 | 5200 | 6246 | 6783 |
| University lecturers ${ }^{1}$ |  |  |  |  | 817 | 5412 | 6583 | 7633 |
| Inspectors of Education |  |  |  |  | 104 | 8045 | 8214 | 8383 |
| Other teachers, training officers Unclassified | 9 | 4625 | 5249 | 7375 | $\begin{array}{r} 16 \\ 2 \end{array}$ | 4750 | 5833 | 6300 |
| TOTAL | 68 | 3888 | 5125 | 5944 | 2232 | 5325 | 6375 | 7172 |
| Members of the legal profession |  |  |  |  |  |  |  |  |
| Judges |  |  |  |  | 10 | 14500 | 15000 | 17250 |
| Magistrates, Bantu Commissioners |  |  |  |  | 14 | 4250 | 6000 | 8250 |
| Advocates, legal advisers | 10 | 4875 | 7500 | 10500 | 24 | 6666 | 8000 | 9166 |
| Lawyers, conveyancers, notaries | 67 | 4482 | 5250 | 7041 | 14 | 5125 | 8000 | 10250 |
| Other | 2 |  |  |  | 13 | 3062 | 3875 | 6687 |
| Articled lawyer's clerks | 52 | 1676 | 2090 | 2900 |  |  |  |  |
| Unclassified | 1 |  |  |  |  |  |  |  |
| TOTAL | 132 | 2333 | 4312 | 6000 | 75 | 5125 | 7437 | 9562 |
| Other human scientists |  |  |  |  |  |  |  |  |
| Chartered accountants, auditors | 139 | 5319 | 6659 | 8125 | 19 | 4937 | 6250 | 7062 |
| Articled accountant clerks | 72 | 2323 | 3050 | 4500 |  |  |  |  |
| Cost accountants, appraisers | 16 | 4500 | 5666 | 6500 |  |  |  |  |
| Management consultants | 14 | 7083 | 7750 | 10250 |  |  |  |  |
| Actuaries | 20 | 8000 | 11333 | 14000 |  |  |  |  |
| Economists, marketing officers, trade commissioners | 59 | 5093 | 6437 | 8041 | 50 | 6178 | 7500 | 10166 |
| Linguists, interpreters, translators, terminologists, lexicologists |  |  |  |  | 20 | 5000 | 6200 | 7250 |
| Librarians, archivists, clireitors |  |  |  |  | 45 | 4354 | 5875 | 6958 |
| Sociologists, social workers |  |  |  |  | 27 | 3937 | 5187 | 7062 |
| Psychologists, occupational analysts |  |  |  |  | 46 | 4375 | 6200 | 6925 |
| Information officers, liaison officers | 12 | 4250 | 5000 | 6166 | 38 | 3812 | 5187 | 7083 |
| Educationists |  |  |  |  | 14 | 6375 | 7750 | 8875 |
| Other human scientists | 29 | 4125 | 5083 | 6625 | 63 | 4395 | 5750 | 6825 |
| Data processors and system analysts | 55 | 5218 | 6250 | 7541 | 12 | 6000 | 6375 | 8500 |

[^0]| Occupation/Occupational group | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ dian | $Q_{3}$ |
| Statisticians, mathematicians | 9 | 4625 | 4850 | 5375 | 40 | 4000 | 5166 | 7500 |
| Programmers | 16 | 3375 | 3800 | 4500 | 16 | 3666 | 4200 | 4750 |
| Accountants (not chartered) | 195 | 5279 | 6869 | 7980 | 49 | 5525 | 6656 | 7696 |
| Articled actuary clerks | 12 | 3833 | 4333 | 6166 |  |  |  |  |
| Unclassified | 1 |  |  |  | 1 |  |  |  |
| TOTAL | 649 | 4535 | 6259 | 7720 | 440 | 4544 | 6120 | 7446 |
| Persons in managerial, executive and administrative occupations |  |  |  |  |  |  |  |  |
| Managing directors, financiers | 231 | 8158 | 11541 | 16021 |  |  |  |  |
| Company directors | 69 | 10178 | 13300 | 17500 |  |  |  |  |
| Other directors |  |  |  |  | 24 | 8749 | 10500 | 15000 |
| Mine managers | 14 | 9250 | 12333 | 14250 |  |  |  |  |
| Managers of factories, works, production, construction | 220 | 7038 | 8807 | 10740 |  |  |  |  |
| Sales and marketing managers, Owners of businesses | 95 | 6125 | 7562 | 9708 |  |  |  |  |
| Credit and commercial managers | 154 | 7781 | 9916 | 12178 |  |  |  |  |
| Personnel managers, personnel consultants | 57 | 4660 | 6062 | 7625 | 29 | 4406 | 5250 | 6875 |
| Branch and district managers | 78 | 6175 | 7833 | 9625 | 14 | 6250 | 7000 | 9625 |
| Other managers |  |  |  |  | 32 | 7875 | 8900 | 10750 |
| Company secretaries | 103 | 6455 | 7634 | 8687 |  |  |  |  |
| Secretaries of mines, works, etc. | 35 | 5291 | 6812 | 8031 |  |  |  |  |
| Other secretaries | 14 | 5250 | 5875 | 7750 | 28 | 5400 | 7500 | 8312 |
| Administrative officers, for example town clerks, supervisors, treasurers | 153 | 5604 | 7263 | 8493 | 274 | 5238 | 6759 | 7992 |
| Control and administration officers | 29 | 9325 | 10550 | 11916 | 113 | 8008 | 9875 | 10693 |
| Other managers | 16 | 6333 | 7250 | 8500 |  |  |  |  |
| Members of parliament/Provincial Council |  |  |  |  | 5 |  |  |  |
| Members of the diplomatic corps Unclassified | 1 |  |  |  | 23 | 4437 | 6050 | 8125 |
| TOTAL | 1269 | 6700 | 8449 | 11515 | 542 | 5859 | 7607 | 9163 |
| Sales workers and related persons |  |  |  |  |  |  |  |  |
| Insurance agents, insurance brokers | 17 | 3875 | 5250 | 7093 |  |  |  |  |
| Representatives, for example, fac= tory, sales service, technical, advertising | 35 | 3839 | 4535 | 5562 |  |  |  |  |
| Salesmen, demonstrators, colporteurs |  |  |  |  |  |  |  |  |
| Other sales occupations | 41 | 4812 | 5833 | 7333 | 3 |  |  |  |
| TOTAL | 93 | 4203 | 5093 | 6839 | 3 |  |  |  |
| Other occupational groups |  |  |  |  |  |  |  |  |
| Ministers of religion and priests | 402 | 3580 | 4280 | 5144 | 12 | 5458 | 6583 | 7125 |
| Writers, reporters and publishers | 46 | 4125 | 5500 | 6750 | 22 | 4083 | 5250 | 6083 |
| Clerks | 41 | 3203 | 3644 | 3914 | 44 | 3045 | 3562 | 4250 |
| Technicians | 24 | 4000 | 5333 | 6500 | 24 | 3562 | 4333 | 6250 |
| Farmers, hunters and fishermen | 16 | 2500 | 4000 | 5500 |  |  |  |  |
| Police officers, prison warders and members of the armed forces |  |  |  |  | 38 | 4187 | 5250 | 6750 |
| Transport and communication workers |  |  |  |  | 14 | 3250 | 4250 | 5125 |
| Other and unclassified | 7 |  |  |  | 7 |  |  |  |
| TOTAL | 536 |  |  |  | 161 |  |  |  |
| GRAND TOTAL | 3990 | 4967 | 6736 | 8969 | 5424 | 5236 | 6572 | 7931 |

TABLE 13.2
WAGE STRUCTURE ACCORDING TO OCCUPATION AND OCCUPATIONAL GROUP, AS AT 1 MARCH, 1971 Rands per annum

WOMEN

| Occupation/Occupational group | Wage structure |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private sector |  |  |  | Government sector |  |  |  |
|  | N | $Q_{1}$ | $\begin{aligned} & \text { Me= } \\ & \text { dian } \end{aligned}$ | $Q_{3}$ | N | $Q_{1}$ | $\mathrm{Me}=$ <br> dian | $Q_{3}$ |
| Medical and para-medical practitioners |  |  |  |  |  |  |  |  |
| Physicians |  |  |  |  | 55 | 5475 | 7375 | 8366 |
| Medical specialists or surgeons |  |  |  |  | 10 | 9250 | 10200 | 10700 |
| Dieticians |  |  |  |  | 10 | 4125 | 4666 | 5125 |
| Pharmacists | 18 | 3875 | 4500 | 4950 | 11 | 4187 | 5050 | 5325 |
| Medical assistants |  |  |  |  | 18 | 2916 | 3500 | 4375 |
| Nurses and midwives |  |  |  |  | 12 | 2500 | 2875 | 3250 |
| Other medical practitioners | 17 | 2656 | 3150 | 4875 | 12 | 7000 | 8125 | 9000 |
| Unclassified | 1 |  |  |  | 3 |  |  |  |
| TOTAL | 36 | 2875 | 4125 | 5000 | 131 | 3645 | 5875 | 8244 |
| Teachers and lecturers. |  |  |  |  |  |  |  |  |
| Teachers (primary, secondary and |  |  |  |  |  |  |  |  |
| industrial schools, technical colleges) | 52 | 2214 | 2777 | 4000 | 676 | 3310 | 3947 | 4760 |
| University lecturers ${ }^{1)}$ |  |  |  |  | 136 | 4147 | 4884 | 6433 |
| Other educational and training officers | 2 |  |  |  | 10 | 5250 | 6250 | 7625 |
| TOTAL | 54 | 2232 | 2833 | 3937 | 822 | 3367 | 4133 | 4949 |
| Other human scientists. |  |  |  |  |  |  |  |  |
| Linguists, intrepreters, translators |  |  |  |  | 11 | 3125 | 3625 | 6062 |
| Librarians, archivists |  |  |  |  | 92 | 2842 | 3340 | 4350 |
| Sociologists, social workers | 20 | 2277 | 2750 | 3500 | 59 | 2591 | 3113 | 3847 |
| Information and liaison officers |  |  |  |  | 11 | 3062 | 3291 | 3541 |
| Other human scientists | 58 | 2928 | 3400 | 4166 | 51 | 3198 | 3650 | 5041 |
| TOTAL | 78 | 2694 | 3368 | 4083 | 224 | 2880 | 3365 | 4300 |
| Other occupational groups |  |  |  |  |  |  |  |  |
| Engineers, architects and surveyors | 12 | 4666 | 6500 | 10500 | 13 | 3812 | 4416 | 7375 |
| Chemists, physicists, geologists and other physical scientists | 17 | 2812 | 3650 | 4375 | 18 | 3083 | 4000 | 5083 |
| Veterinary surgeons, biologists, botanists, agronomists and similar scientists |  |  |  |  |  |  |  |  |
| Ministers of religion, priestesses and missionaries | 5 |  |  |  |  |  |  |  |
| Members of the legal profession |  |  |  |  | 3 |  |  |  |
| Writers, artists etc. | 17 | 2208 | 3041 | 3395 | 14 | 3187 | 3750 | 4916 |
| Technicians |  |  |  |  | 6 |  |  |  |
| Managerial, executive and admini= |  |  |  |  |  |  |  |  |
| Clerks | 27 | 1910 | 2458 | 2946 | 52 | 2568 | 2863 | 3233 |
| Saleswomen | 6 |  |  |  |  |  |  |  |
| Service workers |  |  |  |  | 2 |  |  |  |
| Unclassified | 5 |  |  |  | 4 |  |  |  |
| TOTAL | 134 |  |  |  | 209 |  |  |  |
| GRAND TOTAL | 302 | 2453 | 3307 | 4559 | 1386 | 3216 | 3959 | 5016 |

1) It is known that the wages of university lecturers were increased by an average of approximately R9OO per annum after 1 March, 1971, but with retrospective effect from 1 January, 1971.

It is by no means the intention of this report to indicate and explain all the differences between the wage structure of various groups of highly qualified persons. Where necessary, the obvious factors which should be taken into account in the interpretation of the data, were indicated. How= ever, without further analyses, it will not be possible to reveal all the factors which influence wage structure and the part which each of them plays. The data in this report should consequently be judged with the greatest circumspection and with due observance of the content of Paragraph 3.

## COMMUNICATION

KOMM-1/Erasmus, P.F./Die radio as massakommunikasiemedium met spesiale verwysing na die situasie in Suid-Afrika/1970/R1,35/(Afrikaans only)

KOMM-2/Erasmus, P.F./Beeldradio as massakommunikasiemedium met spesiale verwysing na die moontlike instelling van sodanige diens in Suid-Afrika/1971/R0,40/(Afrikaans only)

INFORMATION
Humanitas/Half-yearly publication of the HSRC/R1,50
Newsletter/Monthly publication wich contains the latest information on research by the HSRC/Free

Annual Report/Is published once a year/RO,55
IN-1/Fourie, E.C./Register of current research in the human sciences in South Africa 1968/1969/R2,75

IN-3/Geggus, C./Awards available for undergraduate study at South African universities II (UCT, UN, UPE, PU, UNISA and GENERAL)/1969/R1, 10

IN-5/Evaluation of South African and Foreign Educational qualifications/1970/R0,55
IN-6/Sauer, G. and Geggus, C./Directory of research organizations in the human sciences in South Africa/1970/R1,15

IN-9/Sauer, G. and Stimie, C.M./General Information/1970/Free
IN-10/Fourie, E.C./Register of research in the human sciences in South Africa 1969/ 1970/R3,25

IN-11/Geggus, C. and Stimie, C.M./Training after Standard Ten excluding university training/1971/RO,90

IN-13/Stimie, C.M./Education in South Africa/1971/RO, 50

LANGUAGES, LITERATURE AND ARTS
Nienaber, P.J./Suid-Afrikaanse Dokumentasiesentrum vir Taal en Lettere/1970/Free/ (Afrikaans only)

Nienaber, P.J./National Documentation Centre for Music/1971/Free

## MANPOWER

MM-1/Terblanche, S.S./The supply of and demand for town and regional planners/1969/RO, 35 MM-2/Terblanche, S.S./The demand for and supply of medical practitioners/1969/RO,30 MM-3/Terblanche, S.S./The occupational situation of a group of new graduates/1969/R0,50 MM-4/Redelinghuys, J.H./A pilot study of the Bantu entrepreneur in the Tswana homeland/ 1970/RO,90

MM-12/Ebersohn, D./Die nasionale register van natuur- en geesteswetenskaplikes soos op 30 September 1967/Free/(Afrikaans only)

MM-13/Terblanche, S.S. and Van der Westhuizen, A.I./Die vraag en aanbod van Kleurlingmannekrag, 1973/RO, 35/(Afrikaans only)

MM-14/Wolmarans, C.P./Die plek en funksie van navorsing op die gebied van Publieke Administrasie in die Instituut vir Mannekragnavorsing/1970/Free/(Afrikaans only)

MM-15/Meij, L.R./The study of the human factors involved in the development of the Bantu homelands/1970/R1,85

MM-16/Terblanche, S.S./Die verband tussen inkomsteverskille, beroep en onderwyspeil van ekonomiese bedrywige Blankes in 1960/R1,00/(Afrikaans only)

MM-17/Terblanche, S.S./Die vraag na en aanbod van ingenieurs, 1973 en 1980/R1,50/ (Afrikaans only)

MM-18/Boshoff, F./Die rol van lone in die volkshuishouding/1971/(in print)/(Afrikaans only)

MM-22/Wessels, D.M./Deeltydse werk vir getroude vroue/R1,50/(Afrikaans only)
MT-1/Verhoef, W. and Roos, W.L./The aim and experimental design of Project Talent Survey/1969/RO,65

MT-2/Roos, W.L./The 1965 Talent Survey test programme/1970/R0,70
MT-3/Roos, W.L./The intellectually superior pupil: A background description at Standard Six level/1970/RO,50

MT-4/Strydom, A.E./Participation in sport, school achievement and adaptation of Standard Six boys/1970/RO,55

MT-5/Smith, F.B./The only child in the family: A comparative study/1971/RO,50

## SOCIOLOGY

S-1/Van der Merwe, C.F./Die Afrikaanse landelike en stedelike gesin: 'n Vergelykende ondersoek/1969/RO,90/(Afrikaans only)

S-2/Kellerman, A.P.R., Botha, A.J.J. and De Vos, H. van N./Die arbeidspatroon van Kleurlinge in Oos- en Noord-Kaapland : Statistiese gegewens/1969/R1,40/(Afrikaans only)

S-3/Kellerman, A.P.R./Ondersoek na die leefbaarheid van sekere plattelandse kerns in die opvanggebied van die Hendrik Verwqerddam/1969/R1,30/(Afrikaans only)

S-4/Grové, D./Werkskuheid onder die Kleurlinge /1969/RO,90/(Afrikaans only)
S-5/Kellerman, A.P.R. and Van der Westhuizen, N.J./Die arbeidspatroon van Kleurlinge in Transvaal: Statistiese gegewens/1970/R2,80/(Afrikaans only)

S-6/Van der Walt, Tj./Kleurlingvroue met Bantoemans/R2,40/(Afrikaans only)
S-7/Strijdom, H.G. and Van Tonder, J./A manual for determining the cost of maintaining a family/1970/RO,55

S-8/Kellerman, A.P.R./Kontak van Kleurlinge met Bantoes in die Kaapse Skiereiland met besondere verwysing na die werksituasie/1971/in print)/(Afrikaans only)

S-9/Mostert, W.P./Ondersoek na die gesinsbouproses by Afrikaanssprekende egpare. Fase I: Fertiliteitsbegeertes en gesinsbeplanning by die paisgetroudes/1970/R1,20/(Afrikaans

S-10/Strijdom, H.G./Blanke manlike dowes in Transvaal/1971/(in print)/(Afrikaans only)
S-11/Trytsman, D.F. and Bester, C.W./Health education: A bibliography/1970/R2,40

## HUMAN SCIENCES RESEARCH COUNCIL.

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Dear Sir/Madam,

## THE SALARY STRUCTURE OF HIGHLY QUALIFIED MANPOWER


#### Abstract

Why does one person earn more than another? What is the role of factors such as qualifications, occupation, occupational function, training, etc. in the origin of differences in income? These questions have important implications for manpower, especially when they have bearing on the highly qualified worker.

Because of your professional and/or academic qualifications you are among about 3 per cent of the white population who can be described as highly qualified. Your name is included in a sample of 40000 persons drawn from the National Register of Natural and Social Scientists. The information necessary for answering the above questions will be gathered from this sample. Would you please complete the attached questionnaire and return it in the addressed envelope.


The information supplied is confidential and will be treated as such. Please do not write your name on the questionnaire. The number on the questionnaire is merely used to test, by means of a computer, the representativeness of the sample on the strength of such data as age, sex and qualifications which appear in the Register. The personnel who handle the questionnaire will not be able to link your name to the informatron supplied.

A report on this research will be published and the date will be announced in the press.

Your cooperation in this very important research project will be highly appreciated.

Yours faithfully,


## PRESIDENT.

('n Afrikaans vraelys is op aanvraag beskikbaar)


Office use occupational description, irrespective of your qualifications, training and rank, for example "chemical engineer" and not "professional officer" "researcher", or "civil servant".


2 WHICH ONE OF THE STATEMENTS BELOW IS APPLICABLE TO YOU?
I am self-employed (including managing directors who own more than $50 \%$ of a company's shares). $\square$
I work for the Government or a provincial administration. $\square$
I work for a local government (e.g. city or town council). $\square$
I work for a semi-government, government-controlled or government-subsidised organisation (e.g. CSIR, ISCOR, universities).

My employer is a member of the private sector (e.g. private firms, organisations, enterprises, etc.).

I am unemployed but seeking employment.


I am voluntarily outside the labour market (e.g. housewives, students, retired persons). $\square$
None of the above. Please specify type of employer:
$\qquad$
$\qquad$

> IF YOU ARE UNEMPLOYED OR VOLUNTARILY OUTSIDE THE LABOUR MARKET (THAT IS, IF YOU HAVE MARKED 6 OR 7 IN QUESTION 2 ABOVE), YOU NEEI) NOT COMPLETE THE REST OF THE QUESTIONNAIRE. PLEASE RETURN IT.

HOW MANY FULL YEARS OF WORKING EXPERIENCE HAVE YOU HAD
(a) SINCE THE COMMENCEMENT OF YOUR FIRST FULL-TIME JOB? $\square$
(b) IN YOUR PRESENT OCCUPATION?

4 WHICH ONE OF THE CATEGORIES LISTED BELOW BEST DESCRIBES THE FUNCTION TO WHICH YOU DEVOTE MOST OF YOUR WORKING TIME?

Managerial and administrative
Research and development
Planning and design
Education and training
Production and inspection
Consulting, advisory and service $\quad \square$
Investigation, prediction and reporting $\quad 7$
None of the above 8

5 WHICH ONE OF THE CATEGORIES LISTED BELOW IS THE MOST SUITABLE DESCRIPTION OF THE MOST IMPORTANT ACTIVITY OF YOUR EMPLOYER (OR YOURSELF IF YOU ARE YOUR OWN EMPLOYER)?

Forestry, agriculture and fishing 01

Mining (including digging and quarrying) 02
Electricity, gas and water supply (including generation, production, purification and distribution)

03

Building and construction 04

Manufacturing (including production, processing and printing)


Transport, storage and communication (SABC SAR \& H, postal services, SAA, etc.)
$\square$

Commerce and Trade (wholesale, retail, meat and motor)

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07
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Financing (banks, building societies, IDC, etc.) $\quad 08$
Professional services (medical, juridical, engineering etc.)
Other personal services (hotel-keeping, sport, entertainment, religious guidance, etc.)


Protection services (police, defence force, prisons, traffic control, etc.) $\square$
All other community and government services as rendered by ordinary civil service, provincial administration, local government (city and town councils), semi-government-, government-controlled or government-subsidised organisations (CSIR, National Parks Board, marketing control board, etc.)

None of the above. Please specify type of employer:

6 WHAT IS YOUR GROSS SALARY PER ANNUM (1.3.1971)? Excluding overtime, bonuses, allowances and other fringe benefits (see question 7). Indicate only the salary received in connection with the direct practice of your present occupation. If you own your own business, indicate your nett profit instead of gross salary.
$\qquad$ per annum
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7 WITH REGARD TO EACH OF THE FRINGE BENEFITS LISTED BELOW, PLEASE INDICATE WHETHER OR NOT YOU RECEIVE IT FROM YOUR EMPLOYER. IF YOU DO RECEIVE IT, WHAT, IN YOUR ESTIMATION, IS ITS AVERAGE ANNUAL VALUE FOR YOU AND YOUR FAMILY?

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[^0]:    1) It is known that the wages of university lecturers were increased by an average of approximately R900 per annum after 1 March, 1971, but with retrospective effect from 1 January, 1971.

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