

THE RHODESIAN JOURNAL OF ECONOMICS

The Quarterly Journal of the Rhodesian Economic Society

Editorial Board:

A. M. Hawkins (Editor), D. G. Clarke, J. A. C. Girdlestone, A. F. Hunt
and M. L. Rule.

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Articles

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MANPOWER REQUIREMENTS AND EXISTING VACANCIES:

A note on the Central Statistical Office Survey

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The labour market in Rhodesia may be divided, both on a practical and on a legal level, into skilled, semi-skilled and unskilled segments. Employment and training policies will, moreover, be directly influenced by the availability of manpower in each of these segments in relation to the requirements of the economy. The criteria by which surplus or shortage of skills are evaluated are not, however, clear-cut, and it was precisely because of the failure of the April, 1971, conference between Government, employer and employee representatives to reach agreement on the existing manpower supply situation that the Central Statistical Office (C.S.O.) was approached to conduct a survey of existing vacancies.¹

The survey was conducted by the C.S.O. but the working party set up after the April conference ultimately sanctioned the form of this survey. It is the intention of the author of this note to evaluate the validity of the conclusions reached in the final C.S.O. report, and to reflect upon some of their implications for employment and training policy.

The Real Issues: Background to the Conflict

It is important for subsequent interpretation to understand the reasons for the initial breakdown of the labour conference and to classify any existing vested interests. In terms of the Industrial Conciliation Act,² registered trade unions may not be segregated on the basis of race, but unions may elect to confine their interests to particular levels of occupation within an industry. The "skilled" unions thus bargain against employer groups for improvements in wages and working conditions, and are most effective when either they or their members are able to resist competition from workers of a lower order of skill and are able to influence the composition of the flow of additional workers acquiring the requisite skills and entering the market.³ In the Rhodesian context, a general acceptance of a skilled labour shortage by employers, employees and the Government would imply policy changes to overcome this shortage by one or more of the following means—

- (a) the importation, *via* increased immigration promotion programmes, of the skills that are in short supply;
- (b) an increase in the facilities for the training of local persons in these trades, and the extension of facilities to sectors of the population that have to date been largely excluded from such training (in this case to the African population);
- (c) the employment of different techniques of production that would enable semi-skilled workers to perform "fragmented" aspects of industrial functions under qualified supervision.⁴ This would also involve the provision of intermediate technical training facilities.

The impact of these changes would be on the supply side of the labour equation. The numbers of workers capable of filling existing vacancies would increase and employers would be in a better position to resist requests for wage increases. Interest groups in this situation are thus clearly discernible. It is in the interest of employers to accept the existence of a labour shortage, whereas the "skilled" trade unions will preserve, at least for the immediate future,

their temporary market advantage if it was accepted that present supplies of skilled manpower are adequate for the needs of the country.

The conflict of interests that therefore existed between participants in the April conference could only be resolved by an appeal for a dispassionate investigation, and the form of that investigation must therefore be examined.

The Survey: Questionnaire Design

The questionnaire was designed in an attempt to gain information in order to answer two basic questions—

- (a) what is the present position with regard to skilled tradesmen employed in Rhodesia? The primary focus of attention was "with the trades designated for apprenticeship in terms of the Apprenticeship Training and Skilled Manpower Development Act, 1968". Employers were requested to list numbers employed on November 30, 1971, in each of 73 designated occupational categories, detailed by a further breakdown into five age categories.⁵
- (b) what vacancies exist in these occupations? Vacancies were defined as "the number of additional personnel whom the employer would have been willing to employ on the 30th November, 1971, had they been available".⁶

The details collected by this survey enabled data to be presented in respect of—

- (i) numbers employed by age groups, number of vacancies and vacancy rates;
- (ii) number employed, number of vacancies and vacancy rates by area;
- (iii) number employed by age group, number of vacancies and vacancy rates in each industrial sector;
- (iv) number employed, number of vacancies and vacancy rates in each industrial sector by area;
- (v) number employed, number of vacancies and vacancy rates by size of establishments.

A subsidiary and less closely defined aspect of the survey examined vacancies in other occupations and fields in which firms experienced problems in the recruitment of suitable personnel. The data cover an estimated 97,5 per cent of the relevant labour force.

Although the data gathered is both very detailed and useful, there were two fundamental elements of the manpower problem which were not examined. These were the rates at which the present training facilities in Rhodesia were producing tradesmen, and the rate at which both numbers employed and vacancies were growing.

It may be argued that both of these factors could not have been surveyed with any meaningful degree of accuracy, but in fact valuable information could have been gathered with very little additional complication to either questionnaire or respondent.

Details of "apprentices under training" are available from records maintained by the apprenticeship authorities and a closer scrutiny of these will show the capacity and effectiveness of the country's training programmes in each trade and in relation to existing vacancies. Certain of these details are published annually in the report of the Chairman of the Apprenticeship Training and Skilled Manpower Development Authority. A less conclusive, but neverthe-

less very interesting aspect of this problem could have been clarified by a more careful selection of the division of age groups. The actual age divisions employed were under 35 years, 35-49 years, 50-59 years, 60-64 years and 65 years and over. This division is difficult to justify. The latter two of the five categories covered only 4.84 per cent of the total population surveyed, whereas by comparison, the first two categories covered 78.07 per cent. A closer distinction between numbers employed in each age category at the lower end of the age scale might have demonstrated the relative attractiveness of occupations to younger persons, and remedies might have been apparent from such comparisons. The C.S.O. have justified the concentration on a closer definition of numbers in the pre- and post-retirement age groups on the grounds that the age groups were specially selected to quantify the outflow to be expected at the higher ages, but such concentration must be queried in the light of the small numbers employed in these age groups and in respect of the need for an assessment of long-term remedies which should be based on the conclusions of the survey.

The rate of growth of vacancies would have been more difficult to assess. Any question that required the respondent to give a subjective estimate of what he thought his manpower requirements would be over the following year would not have achieved this objective. The responses would be subject to such error that no interpretation of them could be made with any confidence. This in fact constituted one of the major weaknesses of January 1971 Manpower Survey undertaken by ACCOR.⁷ The problems, however, are not insuperable. A comparison of numbers employed at 30th November, 1970, with those employed at the time of the survey (the figures would be available to employers from wage sheets and other employment records that by law must be kept) would not give any details of the rate of growth of vacancies, but would have given some details concerning the connection between manpower requirements and increased output. This relationship can then be used as a crude measure of projected requirements. These problems of measuring projected requirements will be reduced as further comparative information becomes available from subsequent surveys of this kind, and this information will then be used to supplement data continually being processed by the Apprenticeship Training and Skilled Manpower Development Authority.

A revision of the form of the questionnaire would thus have involved little additional expense, but would have enabled the extraction of data of considerably increased relevance and value. The present data are of value, but are incomplete. The application of them to the issues at stake will have to be accompanied by a significant amount of information gathered from other sources. Since certain of this information is either classified or not generally available in published form, a fuller discussion of the manpower position will be confined to selected interest groups. In so far as the problem is central to the social and economic structure of the country, such restriction is unfortunate.

There is one additional point that perhaps should be made in relation to the last two manpower surveys in Rhodesia. Both have been conducted without reference to racial and sexual variables in the labour force. These are, however, of critical importance, since potential labour reserves may exist in either sexual or racial groups and these sources should be borne in mind when relief of shortage is contemplated. In particular, the racial factor can no longer conveniently be ignored in Rhodesia and it is therefore a point of concern that it was not taken into account in this survey.

These criticisms are somewhat negative, and are offered in the hope that the shortcomings may be avoided in any possible future survey. On a more positive level it remains to assess the validity and reliability of the data collected and examine their implications for policy.

The Survey: Reliability of Conclusions

The Central Statistical Office in Rhodesia has established an enviable record of accuracy and reliability. The results of the survey of existing vacancies cover an estimated 97.5 per cent of the relevant labour force and the data are therefore very comprehensive. The definitions employed (vacancy rate, industrial sector, etc.) are unambiguous and in general the data collected have been processed and presented with typical clarity. There are, however, certain factors which are beyond the control of those conducting the survey and these factors operate on the respondent, tailoring the reliability of answers to questions. The reliability of data that have been collected must therefore be appraised by reference to any such factors which may have influenced respondents at the time of the survey. These will be dealt with under three major headings.

(i) *Identification of the Statistical Item*

Employers were requested to give details of numbers employed and vacancies existing for workers in 'the trades which have been designated for apprenticeship'. There was no closer specification of the item, and hence responses were subject to a degree of subjective interpretation. In particular, various grades of qualification are possible within a trade "designated for apprenticeship". There is a regularisation of qualifications in Rhodesia, but comparability with certificated qualifications in other countries cannot be made either directly or with ease.

Since a significant percentage of Rhodesia's tradesman population is immigrant, comparability of units is in fact a relevant issue. The interpretation of an employer might also influence his response. One employer might list a competent "welder" or "bricklayer" who has not passed through a formal apprenticeship as a skilled worker in a "trade designated for apprenticeship", whereas another might have similarly qualified personnel on his staff but would not record them as skilled workers. There was (justifiably) no insistence that numbers employed be registered journeymen, and although this provided flexibility as a means of overcoming problems of definition, it induces a possibility of error that must be borne in mind.

This issue is also of relevance as far as the listing of "vacancies" is concerned. The level of skill required by employers to fill existing vacancies will vary between employers, and there is thus a need to interpret the precise aggregate "vacancy" figures cautiously.

(ii) *The Attitude of Respondents*

It is possible to argue that the survey was conducted in an attempt to evaluate the validity of arguments of two parties in a clearly demarcated dispute. The Confederation of Rhodesian Employers and the Associated Chambers of Commerce of Rhodesia had both argued that a manpower shortage existed and that this was a serious problem. The questionnaire was, moreover, sent to constituent members of these groups. The employers were afforded an opportunity to substantiate the claims that their appointed representatives had been making and since they stood to gain in terms of lower input costs from a satisfactory resolution of the conflict such substantiation was both predictable and forthcoming.

The questionnaire was accompanied by a letter from the Confederation of Employers appealing for accuracy in returns, but with personal interests at stake any error in assessment by respondents was likely to inflate the actual level of existing vacancies.

(iii) *The Timing of the Survey*

The questionnaires were posted on 25th November, 1971—the day of the announcement in the House of Assembly of the terms of the settlement of the Anglo-Rhodesian constitutional dispute.

Employers were required to record the number of additional personnel they would have been willing to employ on 30th November, had they been available. By the time the first reminders were posted on 14th December, 65.55 per cent of employers had replied and only 18.15 per cent of replies were outstanding on 7th January, 1972, when second reminders were posted.⁸

The coincidence of the circulation of the questionnaire and the constitutional settlement meant that employers were responding in an atmosphere of abnormal optimism about future prospects and would have been more willing to take on additional personnel at that time than subsequently, when internal disturbances and increasing scepticism concerning the possibility of implementation of the settlement terms had damped initial optimism.

The *Rhodesian Financial Gazette* of 26th November, 1971, reported that "Rhodesian business, unanimously delighted by the settlement announcement has quickly begun to take stock of the likely economic implications" and argued that "one can assume that for many businessmen, the fact that there still has to be a test of acceptability is not going to deter them from pressing ahead with new business opportunities".

By the end of February, the situation had changed radically. The same newspaper, in its report of 25th February, 1972, observed that "big business has been reduced to a crawl in Rhodesia, while the settlement decision is awaited. Development has slowed appreciably and there appears little likelihood of any significant change until the 'yes' or 'no' verdict is announced."

It is interesting to speculate how responses would have differed had employers been required to report the numbers of additional personnel they would have been prepared to employ had they been available on 28th February, 1972.

Vacancies and Manpower Shortage

The C.S.O. report on the survey specifically recorded a definition of "vacancies" that did not imply direct comparison with "manpower shortage". There is no shortage, for example, if the number of suitably qualified unemployed tradesmen equals the number of recorded vacancies at the time of the survey. Despite this distinction, those who have been interpreting the results appear to regard the two terms as synonymous. Mr. M. Britten, General Secretary of ACCOR, for example, continually referred to a "shortage" of 8.6 per cent in his statement that followed the publication of the report, thereby implicitly regarding vacancies as equivalent to shortage of manpower.⁹

The survey did not attempt to record the numbers of tradesmen who were unemployed at the time of the survey, and this number must be deducted from "vacancies" in order to derive a closer appreciation of the actual shortage of

manpower. It is difficult to measure numbers unemployed with any degree of accuracy, since the problems of definition of qualification, the fact that certain unemployed persons will have registered with more than one employment agency, and the lack of compulsory or automatic registration of unemployed persons all complicate precise measurement.

In fact, unemployed tradesmen at the time of the survey would be composed of those registered with the Government Employment Service and with private employment agencies, work seekers who have not registered with either, and workers who were between jobs at the month end (the date of the survey). There were, for example, 30 qualified journeymen registered at the Government Employment Exchanges alone.¹⁰ This number excludes skilled workers who do not possess formal certificated qualifications and since qualified journeymen would normally find little difficulty in securing employment, the number is perhaps significant.

Although it is impossible to quantify the numbers thus unemployed, it is not unreasonable to argue that they would not have been large enough to fill existing vacancies, even given perfect knowledge and labour mobility. The point made here is not that the vacancy rate be ignored, but that the manpower shortage be recognised as distinct from the vacancy rate.

The impact of the first of the three factors isolated for discussion cannot be judged, but the latter two factors would tend to boost the level of existing vacancies recorded. The latter observation would moreover, suggest that caution be exercised in the application of vacancy rates to manpower shortages.

The somewhat unequivocal observation that there is an 8.6 per cent vacancy level in the trades designated for apprenticeship should not be interpreted as a specific aggregate or a target figure at which remedial action should be directed, but should rather be generally interpreted as an indication of an existing gap between the level of demand for skills and the corresponding flow of skills onto the market, the magnitude of which is significant but not critical in so far as the structural growth of the economy is concerned.

The Implications of the Survey Results

At present, skilled workers are supplied from one of two major sources. They are either trained via apprenticeship in terms of the Apprenticeship Training and Skilled Manpower Development Act, 1968, or are attracted to the country under the Government Immigration Promotion programme.¹¹ The first of these sources has proved inadequate in its present form,¹² whereas the second cannot be relied upon as a permanent source of supply. Immigration studies in a number of countries have shown that immigrants are fairly selective in respect of comparing employment opportunities and standards of living in the countries between which they are able to choose, and there is no *a priori* guarantee that any country will be able to maintain competitive advantage in these respects. The only guarantee of adequate supplies of skilled manpower lies in the generation of those skills from within the settled population.

The effective solutions to the manpower problem will therefore have to be selected from the following list of policy options:

- (i) The present training facilities for apprentices could be expanded, and facilities made available to a wider cross-section of the population. This would essentially involve a deliberate attempt to increase the proportion of African apprentices, since presumably the supply from

the European sector of the population is at capacity. Where employers appear resistant to such initiative, direct Government sponsorship (*via* persuasion and *via* employment of African apprentices in state and quasi-state bodies), would be required.

- (ii) There could be increased on-the-job training of semi-skilled workers, but effective training would have to be supervised and formalised in some way. This policy could only be effective in relieving the manpower shortage if accompanied by a relaxation, in certain circumstances, of the "no job fragmentation" policy of both Government¹³ and the Trade Unions.
- (iii) Technical Colleges, catering specifically for an intermediate level of skill could be promoted, but once again would only be effective if a greater degree of job fragmentation were permitted.
- (iv) A blend of these policy options is also possible.

Policy change would have the greatest impact on solving manpower problems if—

- (a) manpower policies, priorities and targets are carefully selected and closely and specifically formulated, and
- (b) agreed policies are continually re-appraised in the light of information gained from the process of implementation.

These options and issues will therefore form the bases of the renewed discussions which were suspended in August, 1971. The outcome of the discussions will have far-reaching long-term consequences for the Rhodesian labour market. It is in the hope of providing more precise information as a background to these discussions that this note is offered.

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REFERENCES AND FOOTNOTES

¹ Rhodesia: *Survey of Existing Vacancies*, November 1971. C.S.O., Salisbury, DL/618/275, April 1972, p. 1.

² Act 29/1959.

³ In this regard Trade Union leaders often argue that the employment of apprentices is at the discretion of employers, and the fact that very few Africans eventually become apprentices is seen as a reflection of employer preference and prejudice. Employers, on the other hand, frequently cite employee attitudes as being of an overriding nature. The issues are complex, and it is not possible to specify the influence of each of these groups on, for example, the racial composition of the flow. The net effect, however, is probably a consequence of both elements, but the effect, whatever its causes, remains important.

⁴ At present, annexures to Industrial Council agreements list the tasks that may be performed by semi-skilled workers, and these work rationalisation agreements are continually revised in accordance with changing technology.

⁵ A copy of the questionnaire is appended to the report. (DL/618/275.)

⁶ *Survey of Existing Vacancies*, op. cit., p. 2.

⁷ ACCOR. *Manpower and Wage Survey of the Rhodesian Economy*, January 1971.

⁸ *Survey of Existing Vacancies*, op. cit., p. 1.

⁹ *The Business and Financial Review. Rhodesia Herald*, Thursday, 27 April, 1972.

¹⁰ Figures supplied on request by the Ministry of Labour.

¹¹ It is argued that increasing supplies via "fragmentation" of jobs would reduce the attractiveness of the country to immigrants and thereby automatically close another avenue of supply. A fuller discussion of the value of creating and maintaining an industrial structure conducive to immigration promotion lies beyond the scope of this paper.

¹² "Inadequacy" in this context does not imply criticism of the actions of the responsible training authority, but refers specifically to the fact that for whatever reason, the supply of apprentices has not met existing demands.

¹³ This generalisation is based on the following Ministerial statement:

"Any erosion of the rate for the job, for example, by massive fragmentation negotiated for reasons of expediency at the industrial council table, will inevitably mean a lowering of standards, a situation which Government cannot accept if it is to protect the interests of the country as a whole. . . . I will, nevertheless, concede that, with technological advances taking place almost daily, it would be quite unrealistic to apply inflexible rules which would have the effect of preserving out-dated methods and of inhibiting a modern rationalisation of job content." *Government's Policy on Labour*. Ministry of Labour and Social Welfare. 30th April, 1971.



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