

What have we learnt about unemployment from microdatasets in South Africa?

by

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Abstract

This paper summarises the findings of four recent papers by the authors on different aspects of unemployment in South Africa. Based on statistical analysis using household datasets, the papers are concerned with the impact of local unemployment on local wages; the appropriate definition and measure of unemployment in the particular circumstances of the South African labour market; the nature of unemployment, i.e. the extent to which it can be described as voluntary; and the pattern of incidence of unemployment, with particular focus on explaining the large racial gap in the unemployment rate.

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1. Introduction

At 36% on a broad definition, the South African unemployment rate is one of the highest in the world. High and growing joblessness has made unemployment not only a prominent economic issue in South Africa but also a social and political one. Vigorous academic debate about the *nature* of South African unemployment - whether much of it is voluntary or not - dates back to at least 1980 (Kantor, 1980; Gerson, 1981; Knight, 1982; Simkins, 1982). However, the continuing high rate of unemployment has focused attention on the very definition and magnitude of South African unemployment itself, and discussion of these issues has not been confined to academic circles alone.

Despite its prevalence, unemployment is little researched and understood in South Africa. The investigation of unemployment – its nature, causes and cures - requires the availability of reliable microeconomic data, that is data collected directly from individuals or collected about individuals from their households. Preferably, it requires longitudinal data, *i.e.* data tracking a sample of individuals over a period of time, rather than simple cross-section data capturing information at only one point in time. However, even reliable cross-section data were not available in South Africa until the mid-1990s, and this hindered research into unemployment and related questions. The availability of the nationally representative SALDRU survey relating to 1993 and the subsequent, annual, October Household Surveys has encouraged research on both theoretical and policy-relevant questions about South African unemployment by economists including Klasen and Woolard (1998, 2000) and Kingdon and Knight (1999, 2000, 2001a, 2001b).

This paper summarises our four papers (Kingdon and Knight, 1999, 2000, 2001a, 2001b). These papers examine the following issues about South African unemployment: the spatial relationship between unemployment and wages; the appropriate measure of unemployment for the South African labour market, *i.e.* whether the narrow or broad measure of unemployment is the more relevant; the nature of unemployment, *i.e.* the extent to which

South African unemployment can be characterised as ‘voluntary’; and the incidence of unemployment, focusing particularly on how much of the racial gap in the incidence of unemployment can be explained by observed differences in the economic characteristics of unemployed persons. In investigating these topics, the papers explore the relationship between unemployment and poverty and between unemployment and perceived well-being. As we show below, South Africa is a fascinating country in which to investigate these issues.

It is useful, at the start, to clarify the meaning of two terms used in the paper in order to engage the non-economist reader. The ‘labour force’ consists of all adults (typically persons aged 16-64) who are available, willing, and wanting to do economic work. Thus, the only adults typically out of the labour force are housewives, students, and retired, disabled, or ill persons. There are two main definitions of unemployment: the narrow and the broad. The narrow definition counts as unemployed all jobless persons who want work and searched for work in the recent past (typically, in the four weeks prior to the survey visit). These people are referred to in this paper as the ‘searching unemployed’. The broad definition drops the search criterion and counts as unemployed all jobless persons who report that they want work even if they did not search in the reference period. In other words, the broad definition includes both the searching and the non-searching unemployed. The official Statistical agency (Statistics South Africa) adopted the narrow concept as its official definition of unemployment in 1998.

Table 1
Unemployment rates in South Africa, 1993-1999

	Source	Broad definition	Narrow definition	Broad-narrow gap
1993	SALDRU	31.2	13.0*	18.2*
1994	OHS	31.5	20.0	11.5
1995	OHS	29.2	16.9	12.3
1996	OHS	35.6	21.0	14.6
1997	OHS	37.6	22.9	14.7
1998	OHS	38.6	26.1	12.5
1999	OHS	36.2	23.3	12.9

Source: Authors’ own calculations from SALDRU data; OHS figures from StatsSA (1998, p3) and StatsSA’s webpage (StatsSA, 2000).

Note: * The large difference in narrow unemployment rates between SALDRU and OHS sources is due to the fact that the SALDRU survey used a reference period (for job-search) of one week whereas the OHS surveys use one of four weeks.

Table 1 shows that South Africa has a remarkably high unemployment rate by international standards. Moreover, that rate – on both the broad and the narrow definitions – has tended to rise over the six years for which data are available. The third notable feature of the table is the huge gap between the broad and the narrow unemployment rates: the choice of definition is potentially important.

2. The wage-unemployment relationship

Kingdon and Knight (1999) investigate the relationship between local unemployment and wages. In the conventional model of the labour market, unemployment and wages are positively related across space. High unemployment regions need to have higher wages in order to compensate potential migrants for the costs of job-search; the high unemployment would otherwise act as a deterrent. However, this view is contradicted by recent evidence of a negative relationship between local unemployment and local wages in many economies, a relationship that has come to be called ‘the wage curve’. There is now an impressive array of evidence in favour of the negative wage curve from the US, UK, and several other OECD countries (Blanchflower and Oswald, 1994). Wages are found to be negatively related to unemployment, and the unemployment elasticity of the wage (the responsiveness of the wage to local unemployment rate) is approximately -0.1. In other words, a 10% increase in the local unemployment rate (say, from 10% to 11%) leads to a 1% decrease in wages.

One of the main explanations for the negative wage-unemployment relationship is the so-called ‘efficiency-wage’ theory. This suggests that in localities where there is high unemployment, workers will want to avoid being fired owing to the difficulty of finding another job. They will thus be motivated to work hard without having to be paid high (motivating or efficiency) wages. However, in localities with little local unemployment, workers will not fear dismissal as much, and will therefore not be motivated to work hard. A job paying a wage premium is worth holding on to: high wages can provide the motivation. Thus, low unemployment areas will have higher wages than high unemployment areas, leading to a negative relationship between wages and unemployment. Another possible explanation for the negative wage-unemployment relationship is that labour unions which care about both their employed and unemployed members may exert lesser pressure for higher wages on employers if local unemployment is high.

There are several reasons why an examination of the wage-unemployment relationship in South Africa is of interest. Firstly, South African unemployment is several times the typical OECD unemployment rate. Its unemployment rate is twice that in urban Cote d'Ivoire - the only other African country where the wage-unemployment relationship has been tested. Are wages negatively related to local unemployment in South Africa, as in these other countries? Are wages as flexible with respect to unemployment at the high South African unemployment rates as in the other countries, where the spatial range of local unemployment rates is much smaller?

Secondly, an analysis of the wage-unemployment relationship can help assessment of alternative definitions of unemployment by showing which measure of the unemployment rate - broad or narrow - is more important in explaining wages. Some analysts have argued that not all of the non-searching unemployed are genuinely in the labour force (ILO, 1996), *i.e.* that persons who did not actively search for work in the reference period may have a less tenuous attachment to the labour market than persons who actively searched. If this is the case, then employers take less account of the non-searching unemployed in their wage-setting behaviour, and we expect the wage-unemployment relationship to be stronger for narrowly measured unemployment than for broadly measured unemployment.

Thirdly, it is of interest to examine whether the degree of responsiveness of wages to unemployment varies between rural and urban areas and between (former) 'homeland' and non-homeland areas. This will suggest whether labour market segmentation is clearer as between rural and urban areas or between homeland and non-homeland areas.

Fourthly, the wage curve has implications for poverty in South Africa. A negative wage-unemployment relationship means that high unemployment in a locality not only has a direct effect on poverty among its households but also an indirect effect via the lower wages of their employed members. A positive wage-unemployment relationship would have less pernicious implications for poverty.

Fifthly, the trade union movement is apparently powerful and allied with the new government in South Africa, and there is an institutional framework - the Bargaining Councils and Wage Boards - to set minimum wages in much of the formal sector. It is of interest to

examine whether this implies that wages will be less responsive to local unemployment conditions than in countries with weaker unionisation and weaker wage-setting institutions.

Using the SALDRU household survey data of 1993, Kingdon and Knight (1999) discover a distinct wage curve in South Africa, *i.e.* wages decrease strongly as local unemployment rates rise. The extent of responsiveness of wages to unemployment - that is, the wage curve elasticity - is similar to that in OECD countries (-0.1) but it persists over a much larger range of unemployment rates, implying that unemployment can have a large impact on wages in South Africa. However, this wage flexibility does not extend to union wages which are well insulated from local unemployment conditions; that is, wages of unionised workers do not fall in high-unemployment localities. The difference between homeland and non-homeland wage responsiveness to unemployment was greater than that between rural and urban wage responsiveness. Thus, labour market segmentation appears to be greater along former 'homeland'/non-homeland lines than along rural-urban lines. Finally, the fact that wages are more responsive to changes in the broad than in the narrow measure of unemployment suggests that in their wage-setting behaviour, employers take into account both the searching and non-searching local jobless persons. This implies that the broad unemployment rate is the relevant one for labour market analysis in South Africa.

3. The definition and magnitude of unemployment:

Kingdon and Knight (2000) investigate the appropriate definition of unemployment in South Africa. In 1998, the South African statistical agency adopted the narrow measure as the official definition of unemployment (StatsSA, 1998, p1). This reversed its earlier decision of 1993 - based on extensive consultations - to use the broad measure as the official definition. The reasons given for preferring the narrow definition were, firstly, that this measure was in line with the main ILO definition which is used by more than 80 percent of countries (page1) and, secondly, that the expanded (broad) rate introduced "more subjectivity into the measure of the unemployment rate, and instability in tracking trends, as it is more difficult to distinguish what constitutes 'wanting' a job than to say whether someone has engaged in definite actions to find one" (page 63). As a result, StatsSA documents often give more information about narrow than broad unemployment rates and present the narrow unemployment rates more

prominently¹. Perceptions about the extent of unemployment in South Africa are affected. For example, when summary statistics are published about important social and economic indicators for the country, the official unemployment rate is often the only one quoted, e.g. see note on Unemployment at the webpage ‘Economic and Financial Data for South Africa’ on South African Reserve Bank’s website (SARB, 2001).

The appropriate definition of unemployment is a highly policy-relevant issue in South Africa because alternative definitions yield very different estimates. Depending on the definition adopted, the rate of unemployment was 23% or 36% in 1999 (Table 1). The choice of definition is liable to affect the political priority attached to reducing unemployment and the targeting of welfare measures towards persons who fall in the 13 percentage points between these two levels of unemployment.

The distinction between the broad and narrow definitions of unemployment turns on whether those not actively searching for work are regarded as part of the labour force and, thus, are counted as unemployed. We set up three tests as to whether the non-searching unemployed are distinct from the searching unemployed. We ask: are they richer, are they happier, and do they have a lesser impact on local wages? If the two groups are indistinguishable on these three tests, then the case for the exclusion of the non-searching persons from the count of the unemployed (implicit in the narrow definition) is weakened.

The lack of job-search among persons claiming to want work may be interpreted in one of two ways. One is that the non-searchers have a ‘taste for unemployment’. In the absence of universal unemployment benefits - a common state of affairs in developing countries - the taste for unemployment hypothesis runs as follows. Given the possibility of redistribution within the household, higher household income may lower search effort among its unemployed members. If high-income households support their poorer members according to need, there can be an incentive to remain needy and a disincentive to do job-search. The larger within-household transfers to unemployed persons in high-income households can produce an income effect: increased income permits individuals to consume more leisure.

¹ For example, in the main chapter on unemployment (chapter 3) in StatsSA(1998a), only the national unemployment rate is given by both the broad and narrow measures. All other rates, such as the unemployment rates for different social groups (by gender, race, education, age, and location) are each given there by the narrow measure only, though the last chapter (chapter 8, p66) does present a single table of broad unemployment rates by gender and location.

The alternative interpretation of low search effort is the ‘discouraged-worker’ hypothesis, i.e. job-search is hampered by impediments such as poverty, cost of job-search, long duration of unemployment, and adverse local economic conditions, such as high local unemployment. Unemployed persons may stop actively searching for work because they are discouraged by the high prevailing rate of unemployment or the long duration of their own unemployment; in these cases the decision not to search is a choice made under duress. The perception that their probability of finding work is low depresses the perceived benefit of job-search. Under this interpretation, searching and non-searching unemployment are not distinct states and the unemployment measure relevant for policy is the broad one.

A substantial literature, covering various countries, confirms the discouraged worker effect for various groups of workers, *i.e.* it is found that adverse economic conditions such as high unemployment and low vacancy rates generally tend to reduce the number of active job-searchers. In Kingdon and Knight (2000) we consider the reasons why there might be a lack of active job-search among jobless South Africans who say they want work. We test whether the searching and non-searching unemployed states are distinct. The commonest test of distinctness inspects the rate of transitions out of unemployment into employment by individuals in the two states. This requires longitudinal data on individuals. While the transition into employment from the searching and non-searching states cannot be examined - since we have only cross-section data - we devise several other tests of distinctness. Firstly, we compare the incidence of poverty as between the searching and non-searching unemployed and examine the determinants of job-search in order to adjudicate between the view that lack of search is governed by tastes and the view that it is governed by constraints. Secondly, we compare perceived quality of life as between the searching and non-searching unemployed, inquiring whether non-searchers are less unhappy than searchers. This is possible because the SALDRU data asked the question ‘how satisfied is this household with the way it lives these days’, which could be used as a measure of happiness. Lastly, we examine the relationship between wages and broadly measured local unemployment rates and compare that with the relationship between wages and narrowly measured unemployment rates.

The findings indicate, firstly, that the non-searching unemployed are more deprived than the searching. The fact that they are not better-off casts doubt on the interpretation based on tastes and favours the alternative interpretation, namely that search is hindered by

constraints. The latter view is supported by the evidence suggesting that job-search is significantly lower among people living in poverty, in remote rural areas, or in areas of high local unemployment than among their opposite numbers. It appears, then, that many unemployed persons do not search actively for work because they are discouraged workers. Secondly, the non-searching unemployed are not significantly happier than the searching unemployed. Their unemployment depresses their well-being to the same extent as is the case for the searching unemployed. Finally, as evidence on the wage-unemployment relationship indicated, local wages are more closely correlated with the broad unemployment rate than with the narrow, suggesting that employers do consider both non-searching and searching persons as genuinely unemployed persons. Taken together, these tests suggest that there is no distinction between the two states that would warrant the exclusion of the non-searching persons from the measure of unemployment.

The finding that the number searching itself depends on the broad unemployment rate conforms to the prediction that very high unemployment will cause many of the unemployed to become discouraged workers. In such conditions, the non-searching unemployed are no less part of the labour force than the searching unemployed and their joblessness is no less associated with hardship. Exclusion of the non-searching unemployed from the official measure of unemployment carries the assumption that they are not part of the labour force. It can weaken policy concern about the non-searching unemployed and play down the unemployment problem. The finding that the two states are not distinct has implications beyond South Africa and casts doubt on the notion that, for the sake of objectivity and international comparability, the narrow measure of unemployment should be generally adopted. It lends weight to the ILO (1982) recommendation that the search criterion should be dropped in countries where the nature of the labour market makes search an endogenous variable, i.e. search itself depends on the unemployment rate.

4. The nature of unemployment:

Kingdon and Knight (2001a) is concerned with the extent to which South African unemployment might be characterised as voluntary. High and rising unemployment is of concern for the costs it imposes on the individual, the society, and the economy. However, these potential costs of unemployment depend on the nature of the beast, in particular on whether unemployment is voluntarily chosen leisure. Whether unemployment is voluntary or

involuntary is an emotive question, with ideological and interest groups taking predictable stances. It is an important question because the alternative interpretations of unemployment carry with them different ethical and policy implications. While the question is of great significance, studies of unemployment in South Africa have not addressed the issue rigorously.

In order to shed light on the nature of South African unemployment, we examine two questions. Firstly, why do the unemployed not enter the informal sector, i.e. the low-paid self-employment sector where they might start up some small business activity? Do they have unrealistic *employment* aspirations, i.e. are choosing leisure rather than (low-paying and low status) informal employment? In other words, is failure to enter the informal sector an outcome of choice or the result of some constraints preventing entry? Secondly, why do the unemployed not enter wage employment more readily? That is, do they have unrealistically high *wage* aspirations?

The distinction between voluntary and involuntary unemployment is entrenched in the labour economics literature. For example, there has been a substantial debate among UK and US labour economists about the extent to which high inter-war unemployment in Britain was voluntary, a result of generous unemployment benefits. While the notion that one can judge whether unemployment is voluntary or involuntary has been questioned theoretically, some economists approach this issue in the psychologists' tradition by examining the happiness levels of the jobless. They find that unemployed persons in various developed countries have much lower levels of happiness or well-being than those in work, and accordingly reject the hypothesis that unemployment is voluntary.

The dominant view of unemployment in developing countries is that much open unemployment is due to search and is voluntary (Harris and Todaro, 1970), that is, people choose to remain jobless while they search for a good job. If there is a free-entry self-employment sector, then those who cannot afford to remain in search-unemployment enter this informal sector. This would appear to rule out the possibility of people being involuntarily unemployed. However, unemployment can still arise because self-employment income may be too low or because the probability of securing wage employment may be considered higher if search is conducted from open unemployment than from self-employment. If search for a formal sector job from the unemployed state is more efficient than from informal employment, those able to afford unemployment remain openly unemployed. However, the poor cannot

afford to do so. If most unemployment in the economy is of the voluntary search variety, the relationship between unemployment and household income is likely to be positive because the well-off will choose search unemployment but the poor will enter informal sector employment. Thus, if there is a positive relationship between unemployment and household income, that would suggest that unemployment is largely voluntary search unemployment.

There are two main possible reasons why the unemployed do not enter the informal sector, corresponding to the supply side and the demand side respectively. One is that they choose not to do so because they prefer unemployment and can afford it. The other is that the unemployed are constrained from entering because of barriers to entry. The former suggests that unemployment is voluntary, and the latter that it is involuntary. We explore the relationship between labour market states (unemployment or informal employment), on the one hand, and poverty and perceived quality of life, on the other, in order to choose between these hypotheses.

Another rationale for characterising a person's unemployment as voluntary is that he or she has unduly optimistic wage aspirations. The wage below which a person would not work is known as the reservation wage, and survey questionnaires such as SALDRU and OHS ask unemployed people their reservation wages. Persons whose reservation wages are greater than the wage they can reasonably expect to get in the labour market, given their characteristics (such as education, age, location, *etc.*), have unduly optimistic wage aspirations and may be considered to be voluntarily unemployed. Kingdon and Knight (2001a) compare self-reported reservation wages with the predicted wages of unemployed persons in order to adjudicate between the voluntary and involuntary unemployment hypotheses.

The findings provide little support for the idea that people choose to be unemployed. The unemployed are, on average, substantially worse off than the informally employed - both in terms of income and expenditure and in terms of a range of indicators of well-being. This contradicts the luxury unemployment interpretation, whereby higher income reduces the incentive to obtain employment in the informal sector and increases the incentive to consume leisure. It might be argued that, given the disutility of work, some people prefer to substitute leisure for higher monetary income, so that their apparent deprivation cannot be used to argue that they are constrained to be unemployed. However, in order to interpret unemployment as voluntary, such people should be less unhappy than employed people. Our findings show that

the unemployed are very substantially (and significantly) less satisfied with their quality of life than informally employed people. They suggest that their unemployment is due to impediments to entering informal work. Although this important issue deserves more research, there are indications that the informal sector has historically been inhospitable to newcomers in South Africa (harsh licensing laws, strict byelaws preventing street vending, laws to discourage mobility of black people to non-homeland areas, *etc*).

The test of the hypothesis that the unemployed have unrealistically high wage aspirations was inconclusive. While about half of the jobless had reservation wages that were higher than the wage they could reasonably expect in wage employment, caution is warranted in concluding that nearly half the jobless are voluntarily unemployed. The reported subjective reservation wages appear unreliable. Firstly, reservation wages bear little relation to predicted wages, and variations in the latter explain only a very small proportion of the variation in the former; secondly, lack of information about the labour market - because of living in remote areas, low education, or lack of previous work experience - causes people to be ignorant about their market worth, and they may well report high reservation wages for this reason; thirdly, people may have reported their *expected* wage in the high-wage formal sector rather than the *minimum* they would accept; fourthly, they may imagine themselves in a bargaining context when asked a question about their reservation wage; fifthly, the question about the reservation wage was not hours- or location-specific; lastly, it was not possible to judge the reasonableness of the reservation wage because it could not be compared with the previously received wage or with wage offers received - no data being available on these. Much better data on reservation wages are needed. However, while some of our findings are consistent with a voluntary search explanation, most are consistent with explanations based on lack of information, bargaining, or the reporting of expected rather than minimum wages. There is no conclusive evidence in favour of voluntary search unemployment as the explanation for reservation wages being higher than predicted wages. Taken as a whole, the evidence makes it implausible that much unemployment in South Africa is voluntary.

5. *The incidence of unemployment*

Kingdon and Knight (2001b) explore the pattern of incidence of unemployment in South Africa and attempt to explain the very large black-white gap in the unemployment rate. There are two particularly striking features of South African unemployment. Firstly, the fact

that rural unemployment rates are higher than urban rates is atypical internationally and is to be explained by historical policies restricting mobility. Secondly, it is striking that the majority (62%) of the unemployed have never held a job before, *i.e.*, they entered unemployment when they entered the labour force. The very long duration of unemployment (38% were unemployed for more than 3 years; another 30% were unemployed for between 1 and 3 years) suggests that the demand-side of the labour market is responsible for a good part of the unemployment rate. Unemployment is very inequitably distributed in South Africa and certain groups are much more likely to enter it and to stay in it than others. Young uneducated Africans living in homelands and remote areas are particularly vulnerable to unemployment.

In the African group - the group that suffers catastrophically high unemployment rates - human capital characteristics such as education and work experience dramatically reduce the chances of unemployment. Possession of higher education reduces an African's predicted probability of unemployment to nil. This is also true to a large extent for the coloured group. While the policy prescription often made from this inverse correlation between education and unemployment is that schooling and skills should be improved and equalised, such a prescription is unlikely to solve the problem: unless there are more jobs in the economy, upgrading education of Africans will at best change the composition of employment in their favour.

A number of factors are associated with unemployment incidence, such as age, home-ownership, and area of residence. The probability of unemployment decreases strongly with age for all races. There are plausible explanations for this finding. The reservation wage ratio (the ratio of a person's reservation wage to predicted wage) falls with age, possibly because older people are better informed and more realistic. Moreover, older people, having more dependents and ties, may be less willing to enter unemployment in order to change jobs. Home-ownership bears an important but complex relation to the chances of being in unemployment. Developed country literature attributes increases in unemployment to the increased rate of home-ownership in these countries, the reason being that home-ownership increases the cost of mobility. Thus there may be a positive effect of home-ownership on probability of unemployment. Home-ownership may be negatively correlated with unemployment if unemployment determines the chances of owning one's own home. The paper finds that for Africans the former influence dominates - home ownership increases the chances of unemployment by 5.4 percentage points. However, for other races the latter effect

is more relevant, their home-ownership being associated with a lower probability of unemployment. Residence in a former ‘homeland’ still entails a significantly greater risk of unemployment than residence elsewhere: a person living in a homeland is 18 percentage points more likely to be unemployed than an otherwise identical person living elsewhere. In non-homeland areas, urban unemployment is significantly higher than rural.

The paper decomposes the total black-white gap in the unemployment rate into two components: the part that can be ‘explained’ by the differing observed characteristics of blacks and whites and the residual, or unexplained, part. The main reason why blacks have a much higher unemployment rate than whites is their lower levels of employment-enhancing characteristics such as education, and their unfavourable location in areas of high unemployment. While 75% of the black-white gap in unemployment incidence is explained by black-white differences in characteristics², there remains a hefty residual (25%) that cannot be explained in that way. Although we refer to this 75% as the ‘explained’ component, *i.e.* the part that cannot be attributed to labour market discrimination, both the lower education and poorer location of Africans are manifestations of pre-labour-market discrimination. For example, differential treatment in the schooling system that subjected Africans to poorer access to education, and differential treatment in apartheid location policies that forcibly confined Africans to the former homeland regions which offer little employment.

The non-explained part of the race gap in unemployment probability (25%) may arise from employer discrimination. However, it may alternatively reflect the lack of control, in our empirical analysis, for productivity-related characteristics such as quality of schooling, which employers may observe but which are unmeasured in our (and most other) datasets. Further research in this area incorporating data on quality of education would be fruitful.

6. Conclusions

In many developing countries open unemployment is a voluntary phenomenon, visible mostly among the better off and the better educated. The poor cannot afford to be unemployed. They eke out a living in the informal sector, which is by far the predominant employer of

² The explained components are 60% and 63%, respectively, in the case of the coloured-white and Indian-white comparisons.

labour in urban as well as rural areas. Against this backdrop, South Africa, with its small free-entry informal sector and its high unemployment, appears to be exceptional.

Our research programme on unemployment in South Africa has provided a number of original insights into the problem of unemployment. Firstly, we have learnt that unemployment and wages are negatively related across space in South Africa but that the strength of this relationship varies considerably by worker-types. Secondly, the data show that the non-searching unemployed are, on average, no richer and no happier than the searching unemployed and that their presence in a locality exerts a downward pressure on wages, suggesting that local employers consider them to be genuine labour force participants. Thus, we have learnt that there is no distinction between the searching and non-searching unemployed persons that would warrant the exclusion of the non-searching from the measure of unemployment. This has important policy implications in South Africa where the narrow measure (which uses a search-test) has been made the official definition of unemployment. Thirdly, the data showed that it would be wrong to characterise much of unemployment in South Africa as voluntary in nature since there was no consistent evidence that unemployed people have unduly optimistic or unrealistic job and wage aspirations. Fourthly, the data has revealed the pattern of unemployment in South Africa, its determinants, and what factors explain the large racial gap in unemployment incidence. In particular, we learnt that observed racial differences in education and location do not explain the whole of the black-white gap in unemployment incidence. The unexplained part of the racial gap may well be due to pre-labour market discrimination in the schooling system rather than due to employer discrimination in the labour market.

The microeconomic analysis that we have presented is consistent with the following macroeconomic picture. The South African labour market is sharply segmented into a formal sector and an informal sector. The formal sector offers limited employment at relatively high wages. People outside the formal sector – except the few doing well in informal sector activities protected by barriers to entry – are avid for formal sector jobs. The free-entry part of the informal sector provides opportunities for only a part of the residual labour force: at the margin income in this sub-sector is low. Hence the remarkably high rate of open unemployment which, in turn, gives the unemployed little incentive to search for work. The slow growth of formal sector employment in relation to the growth of the labour force has caused unemployment to rise over time. During the 1990s, when the broad unemployment rate

rose quite sharply, average wages grew in real terms³. The same reasons that we gave for the spatial flexibility of wages at the micro level – in terms of efficiency wages and wage bargaining – can also be used, at the macro level, to explain the downward rigidity of the average level of real wages in the face of high unemployment.

While we have learnt much from our research programme, a great deal remains to be known about unemployment in South Africa. To explore the many important policy questions concerning unemployment dynamics, better cross-section data with detailed pertinent questions and longitudinal panel datasets involving time series data will be required.

³ Real growth of remuneration per worker in non-agricultural employment averaged 2.9% per annum between 1991 and 1998; the growth of real manufacturing wage for African workers averaged 2.0% per annum between 1980 and 1996 (Fallon and Lucas, 1998, p8, 10; CSS, 1994, p2.17; SARB, 1999, pS-132-33; and StatsSA quoted in SAIRR, 2000, p256, 264).

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