

**THE SOUTH AFRICAN UNEMPLOYMENT DEBATE:  
THREE WORLDS, THREE DISCOURSES?**

**FREDERICK C.v.N. FOURIE**

Department of Economics  
University of the Free State  
January 2012

This is a revised and consolidated version of SALDRU Working Paper 63 of June 2011 with the same title. It is dated January 2012 to differentiate the two in referencing.

## Executive summary

This paper presents a critical survey and meta-analysis of the South African academic literature on unemployment. It asks whether the research has produced a coherent analytical picture. Key elements of seminal contributions are summarised. A number of key themes and findings are identified, as are significant differences relating to subdisciplines but also to epistemology, method and technique (and ideology).

It is demonstrated that the large number of research contributions on unemployment in South Africa can be clustered into a number of *discourses* signified by distinctive topics, approaches, vocabulary, models and data (*inter alia*). It shows that the South Africa unemployment 'discourse landscape' is spacious and varied, with many mountains and hills, some coherence, but also deep valleys/divides.

Three major discourse 'worlds' – labour, poverty-development, and macro – are distinguished, with some sub-discourses. There is much evidence of researchers in particular discourses not engaging with research results produced in other discourses, and even being analytically blinkered by their home discourse. Debate occurs within the discourses, but not much between them.

These divisions reflect numerous divisive factors intrinsic to the scientific process, as institutionalised by universities, research institutes, academic journals, funding agencies and policy-makers – but also by epistemological and ideological forces/preferences.

As a result, to a large extent the insights produced by researchers in the different discourses often are fragmented and disconnected – no complete coherent analytical picture or nuanced, encompassing diagnosis of the intrinsically complex problem of unemployment has been generated. *Three (perhaps five) very different perspectives on unemployment prevail. Many gaps are apparent.* Yet some key analytical insights central to a coherent analytical picture can be distilled:

- The South African labour market is characterised by segmentation, informal-formal and rural-urban dualisms, and segmentation within the informal sector (alongside subsistence and survivalist sectors).
- The nature of such multi-segmentation and of labour market linkages between segments – and factors enabling or disabling persons to transition to a better segment – may be critical to both unemployment and poverty.
- A range of factors – information, entry and mobility barriers, *inter alia* due to the condition of poverty as well as marginalisation – structurally inhibit job searching and entry into labour markets both from a condition of poverty and from one segment to another. These factors intrinsically limit the reach and smoothness of the functioning of labour markets.
- The issues cannot be separated I: One cannot analyse and understand South African unemployment without talking about segmentation *and* about the informal sector *and* about entry and mobility barriers *and* about the impact of poverty conditions *and* about marginalisation. Likewise, one cannot consider marginalisation and chronic poverty without talking about labour markets and income generating activities.
- The issues cannot be separated II: One cannot analyse and understand unemployment in South Africa without dealing thoroughly with  
(a) the real wage elasticity of the demand for labour (= approximately -0.7), in particular the likely positive versus negative impact, on employment, of wage decreases and increases respectively, *and*

(b) the output-elasticity of employment, in particular the important though constrained impact, on (un)employment, of formal sector growth, given a value of 0.5 (approx).

- Pensions and social grants constitute a critical policy nexus that links poverty, marginalisation, inequality, labour supply, (un)employment and macro-fiscal issues. Complex incentive and disincentive effects may be present.
- The impact of education on poverty, inequality and unemployment respectively may be dissimilar and complex. Education only appears to have a significant impact on (un)employment once working-age persons have a matric qualification or higher.
- Gender, race, age and generational aspects influence, in complex ways, the causal relationships surrounding issues such as vulnerability, job search, migrancy, grants and education. These aspects need careful, nuanced analysis.
- There are indications of a bidirectional causality between unemployment and poverty: unemployment causes poverty, but in turn the condition of poverty contributes to unemployment and its persistence. The implications of such a causality for policy to facilitate access of poor people to labour markets can be very important. This may contribute to the observed phenomenon of unemployment persistence (hysteresis).

Such issues raise a number of important challenges to researchers and policy-advisers in the three sub-disciplines. For example:

- Can a macroeconomic analysis of employment and unemployment proceed legitimately without engaging with, and incorporating, the search and access problems caused by poverty and various segmentations?
- Can an analysis of growth, and constraints on growth, proceed without taking account of the implications of segmentation, poverty conditions and marginalisation for the assumed free flow of labour into a formal sector with flexible labour markets?
- Can a growth-oriented employment analysis (or a growth strategy) proceed legitimately without dealing with the constrained employment-creation capacity of formal sector growth *and* the intrinsically-linked worlds of informal production and employment, various types of subsistence and survivalist activities?
- Can a poverty-oriented analysis of unemployment and wages proceed legitimately without engaging with the presence, nature and implications of a negative wage elasticity of the demand for labour or the relative importance of formal sector growth?
- Can labour unions continue to insist that macroeconomic policy measures should shoulder the burden of explaining and resolving unemployment (in conjunction with to industrial strategies to promote labour-intensive formal-sector manufacturing)?

There also is the overarching question whether we adequately integrate the developing-country context of South Africa into our analyses of unemployment and labour markets

If such questions are not addressed, the South African unemployment debate is likely to continue to be intrinsically blinkered by separate discourses. It is highly unlikely that one discourse can provide the analytical insights and policy options necessary to lead to a significant reduction of unemployment (and poverty) in South Africa.

The paper explore the outlines of a conversation towards an integrated understanding of the macroeconomic, labour market and developmental dimensions of unemployment. Such a rich integration of insights and models is essential for policy making in overarching departments (e.g. Treasury; Economic Development) and for the Executive (Cabinet).

# THE SOUTH AFRICAN UNEMPLOYMENT DEBATE: THREE WORLDS, THREE DISCOURSES?

FREDERICK C.v.N. FOURIE \*

## 1. INTRODUCTION

There would be little disagreement that unemployment, together with poverty and inequality, are the most important problems facing South Africa and the creation of a society that is socially, economically and politically sustainable. In 2010 official statistics put the narrowly-defined unemployment rate at approximately 25% while one can estimate the broad rate at approximately 37%, having peaked at approximately 31% and 42.5% respectively in 2003.<sup>1</sup>

Large amounts of research have been published, involving prestigious universities, institutes and international organisations like the World Bank, the ILO and the IMF. Research activity regarding poverty, unemployment and inequality has received a boost during the past decade due to the availability of much better data from household surveys and government labour force surveys. Of particular importance has been the 1993 PSLSD household survey (mostly published in 2000/1), the various OHS, LFS and lately QLFS data sets from Statistics SA, and most recently the NiDS panel data bank, managed by SALDRU.<sup>2</sup>

The question is where all this activity brings us regarding unemployment. It is common cause that meaningful inroads into unemployment have not been made. But do we have a coherent analytical picture of the issue? Exactly where is the debate on unemployment in South Africa? What are the limitations of the literature? And, how should policy-makers deal with the various research findings?

This paper addresses these questions. It is based on a wide-ranging survey and meta-analysis of the South African academic and research debate on unemployment and poverty in the last 10-15 years. The focus is on underlying features of labour markets and unemployment in South Africa and on the research questions asked by analysts in this regard. It critically analyses the contributions and their possible limitations at the conceptual level. The survey involved approximately two hundred papers in relevant South African and international academic journals and working paper series.

---

\* Professor and Research fellow, Department of Economics, University of the Free State. This is a revised and consolidated version of SALDRU Working Paper 63 of June 2011 with the same title. It is dated January 2012 to differentiate the two in referencing.

<sup>1</sup> Changing definitions have led to the official value for broad unemployment in 2010 (32.1%) being approximately 5% lower than what it would have been using the earlier definitions.

<sup>2</sup> PSLSD = Project for Statistics on Living Standards and Development Survey, SALDRU and the World Bank, 1993

OHS = October Household Survey, Statistics South Africa (1993-1999)

LFS = Labour Force Survey, Statistics South Africa (2000-2007)

QLFS = Quarterly Labour Force Survey, Statistics South Africa (since 2008)

NiDS = National Income Dynamics Survey, SALDRU (since 2008)

SALDRU = South African Labour and Development Research Unit, University of Cape Town

DPRU = Development Policy Research Unit, University of Cape Town

## 2. OBJECTIVES AND FRAMEWORK

### 2.1 Objectives

The survey covers a widely scattered diversity of topics, contributions, approaches, models, techniques, findings and policy recommendations.

A first objective is to see whether the research contributions can be organized in a revealing way in terms of approach, characteristics or research questions and whether there are clusters which constitute different discourses. We develop a ‘google-earth’ view and diagram of the major features of the discourse ‘landscape’: mountains, valleys, rifts and faults, rivers and quagmires. This involves much more than a summary of the literature. It characterises and positions the contributions in a meaningful way around a central story line.

A second objective is to distil key themes and findings and evaluate whether the research findings constitute a complete and coherent picture.

A third objective is to identify differences, gaps and limitations, and analyse factors that differentiate or fragment.

The final objective is to identify research challenges in working towards an integrated perspective on unemployment in South Africa.

For a long time the debate focused on the definition, measurement and severity of unemployment. This followed many decades of limited information on black unemployment and scepticism of official unemployment data, as well as the ideologically-laden discourse, in the 1980s, between free-market economists and others on whether unemployment in South Africa is voluntary or involuntary. The 1990s saw several new labour and household surveys as part of government and university-based statistical efforts. Inconsistencies and complexities in these initially were a major source of debate. Most of the issues appear to have been resolved, although not entirely.<sup>3</sup> It will not be considered here.

Likewise, technical limitations of individual research contributions are left to participants in issue-specific or discourse-specific debates. Our focus is at the level of critically analysing approaches, research questions and interpretations – identifying conceptual limitations that constrain our understanding of unemployment. Thus we highlight limitations that derive from a restrictiveness in the questions and dimensions that are considered – rather than the technical-analytical level, where many research debates often remain. This proves to be very revealing.

### 2.2 The discourse landscape: three clusters

It is suggested that three core discourses or clusters (with some sub-clusters) can be distinguished in the unemployment debate:

- (1) a *labour market* cluster,
- (2) a *poverty and development* cluster, and
- (3) a *macro/ macro-sectoral* cluster.

For each of these discourses we identify seminal contributions and aspects (including research method and techniques). We characterise the discourse and, importantly, its relation

---

<sup>3</sup> For a brief tour, see Nattrass (2000); Klasen and Woolard (1999:2-7); Bhorat (1999); Kingdon and Knight (2000); Klasen (2000); Leibbrandt and Woolard (2001); Muller and Posel (2004); Simkins (2004); Du Toit (2007); Meth (2007; 2009); Altman (2008a); Yu (2010a; 2010b).

to other clusters. This clustering indicates the relative positioning and conceptual distance or closeness between approaches – an essential element of understanding the nature and especially the limitations of the unemployment debate. A diagrammatical representation is generated that show the spatial relationships in the overall discourse landscape (diagram 2 in section 7).

The main result that emerges is that there is a significant segregation and fragmentation between the different discourses, in some cases more than others. A reader or policy-maker who is restricted to one discourse is unlikely to garner a nuanced, encompassing diagnosis of the complex problem of unemployment. Debate occurs within the discourses, but not much between them. Three very different perspectives on unemployment prevail. This constitutes a major limitation of the literature. No complete coherent analytical picture of the unemployment problem is produced by the many findings.

Sections 3 and 4 survey and analyse contributions relating to labour market analysis and then poverty, inequality and development analysis. Section 5 provides an overview and provisional assessment of the two micro-level discourses. The macro-economic discourse is discussed and assessed in section 6. Section 7 provides a critical assessment of the entire discourse landscape, and section 8 concludes by identifying key limitations, gaps and research challenges.

### 3. THE LABOUR MARKET DISCOURSE (CLUSTER 1)

A first cluster of research comprises labour market analysis, but also involves a consideration of the informal sector. This cluster is anchored by seminal papers by Kingdon and Knight. They were responding to a much earlier debate between Simkins (1978), Kantor (1980), Gerson (1981; 1982) and Knight (1982) in which the issues of voluntary as against involuntary unemployment, as well as structural unemployment, were debated (see also Bell 1982; Torr 1985; Fourie 1989).

#### 3.1 *Kingdon and Knight*

The Kingdon and Knight set of papers have been a dominant presence in the labour market discourse. They followed a 1996 ILO report on the South African labour market which, *inter alia*, questioned the use of the broad definition of unemployment as well as the extent of voluntary unemployment (Standing et al 1996: 104; 111).

Then both based at the Centre for the Study of African Economies (CSAE) at Oxford University, Kingdon and Knight set out to settle some of these issues on the basis of econometric analyses of the then just-released PSLSD 1993 household survey data as well as newer theories of segmented labour markets that involve rationing, i.e. demand-constrained equilibrium (Layard et al 1991:41-44; Kingdon and Knight 2004a: 393-5; also see Cassim 1982; Hofmeyr 2000). With extensive cross-sectional microeconomic analysis – logit and probit models and earnings functions – these papers also reflect a growing new technical standard in the field.

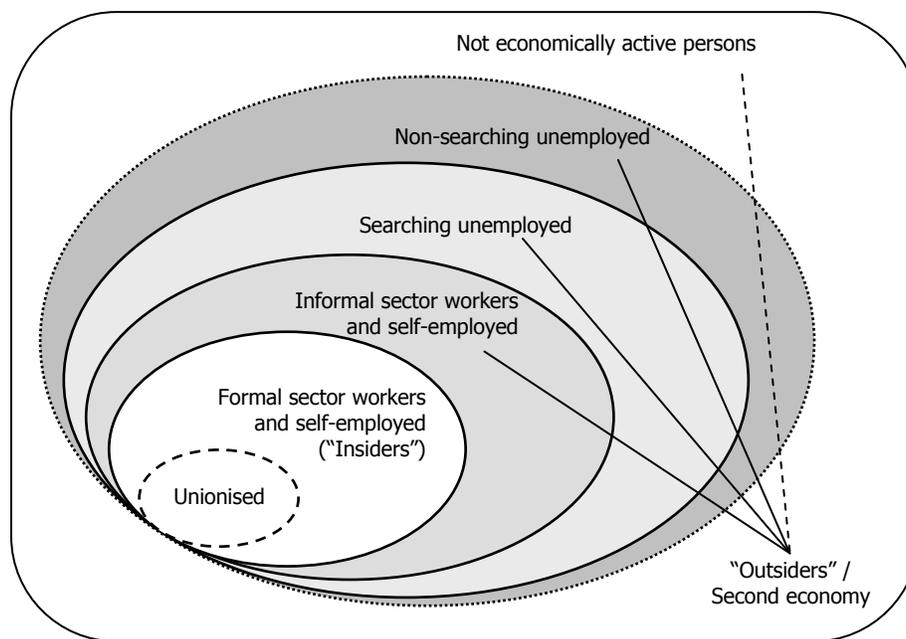
Their conceptual context is, firstly, that of a *segmented labour market* as modelled by Layard et al (1991:41-44), but which comes from a longer tradition of dual markets or insider-outsider models, dating back to Piore (1973). Kingdon and Knight adopt the Layard model and interpret the primary and secondary sectors in South Africa as the formal and informal sectors. This means that the formal sector labour market is rationed (and thus non-clearing)

due to efficiency wage setting or union-bargained wage setting, i.e. by actors with discretionary power.<sup>4</sup> Thus the presence of *sticky, non-clearing wages* also is characteristic of this approach.

The informal sector is taken as competitive and market-clearing. Thus unemployed persons are both involuntarily and voluntarily unemployed – they are willing to work in the rationed formal sector at the going wage there (but have not found work so far), but are *not* willing to work in the informal sector at the going wage.<sup>5</sup> Moreover, while such unwillingness to work is nominally voluntary, barriers to entry may mean “the available set of options is so limited as to render unemployment involuntary for the purpose of forming value judgements and making policies” (2004:394).

Their main conclusions (besides calculating unemployment rates) can be summarized as follows, with reference to the distinctions in figure 1.<sup>6</sup>

Figure 1: Labour market distinctions



(a) *On discouraged workers and the definition of unemployment*

Kingdon and Knight argue (2000; 2006a; 2006b) that the category of discouraged worker – non-searching unemployed – can and must be explicitly identified and recognised. They compare the non-searching and the searching unemployed and conclude that the non-searchers are more deprived than the searchers (and thus face a greater incentive to secure employment), are not happier than the searching unemployed, and face greater

<sup>4</sup> Kingdon and Knight (2008:307) report on earnings data and functions which suggest that “much of the formal sector pays well above the level of competitively determined market wages”.

<sup>5</sup> This is why Layard et al (1991:41) describe the voluntary-versus-involuntary contrapositioning and debate as “fruitless”.

<sup>6</sup> The category of subsistence activity, statistically classified by StatsSA as non-market production, is not shown. For developing countries this may be an important omission in analysis and in the statistical status quo.

discouragement about the prospects of finding jobs and higher costs of job search (2000:6). Thus their lack of job-search is not the outcome of preferences or ‘tastes’ but of constraints (2000:17). They are *discouraged workers* (and their unemployment decidedly involuntary).

The main discouragement factors include a low likelihood of finding a job (high local unemployment, long duration of unemployment), poverty (access to water etc.), limited access to transport and facilities, high cost of searching, etc. (2000:4-5).

Kingdon and Knight (2006a:310) also report regression results suggesting that the job search rate is decreased by higher rates of broad unemployment. Thus, high unemployment rates cause many of the unemployed to become discouraged workers. Kingdon and Knight conclude that under high-unemployment conditions such as those in South Africa discouraged workers cannot be excluded from the measure of unemployment. The non-searching unemployed effectively are an integral part of labour markets – their presence depress wages as set by employers. Therefore the broad definition of unemployment is appropriate (1999:8; 2000:15-17; 2006b:485).<sup>7</sup>

*(b) On voluntary vs. involuntary unemployment*

Kingdon and Knight (2004a) find that most unemployment is involuntary, not voluntary. Comparing the unemployed (both searching and non-searching) with those working in the *informal* sector, they conclude that the unemployed are substantially poorer and living in worse conditions, can gain substantially from informal (self- or wage) employment (given predicted earnings functions), and are less happy than (even) the informally employed or self-employed. Long periods of unemployment suggest it is not a ‘voluntarily chosen job search strategy’, that job search is inhibited by poverty, and that they face substantial barriers to enter the informal sector (2004a:395-403). Only 25% of the unemployed have quit voluntarily rather than due to sacking, retrenchment, illness, or having a temporary job (2004b:203). As Banerjee et al (2008:736) summarise the Kingdon and Knight findings: If unemployment were voluntary, we would expect the unemployed to be as happy as the employed, and discouraged workers to be as happy as the searching unemployed.

*(c) On segmentation*

Kingdon and Knight find that the formal-informal earnings ratio is approximately 3.5:1. After controlling for different personal characteristics, the ratio still is approximately 1.75:1 (2008:305). This indicates substantive segmentation between the formal and informal labour markets.

*(d) Other notable findings*

The majority (62%) of the broadly unemployed have never held a job before. This is worse if a person is black, in a homeland, rural, female, young, and uneducated (Kingdon and Knight 2004b:218). For 68% of the unemployed the duration has been more than 12 months (Kingdon and Knight 2004b:218).<sup>8</sup>

---

<sup>7</sup> On the basis of an empirical investigation of the behaviour and characteristics of persons in various states of ‘labour force attachment’, Dinkelman and Perouz (2002:886) also reject the idea that non-searching unemployed individuals are like people who are ‘out of the labour force’.

<sup>8</sup> The ILO report (Standing et al 1996:124-5), referring to similar 1994 OHS results, questions whether the available data in South Africa mean what they are interpreted to mean, i.e. is what discouraged workers mean by a job the same as what the survey designers mean by it? The same applies to job *seeking*. Kingdon and Knight do not directly respond to this cautionary stance of the

- Rural unemployment rates are higher than urban rates (which is atypical among countries).<sup>9</sup>
- High-versus-low wage differentials in SA is not captured by the urban-rural division, but rather by non-homeland vs. homeland divisions (especially for broadly-measured unemployment; 1999:10).
- The informal sector absorbed 24% of the broad labour force in 2000, declining to 19% in 2002 (2004a:395). This is quite small and in international context an outlier (although their definition and measurement of the informal sector has been questioned).<sup>10</sup>

A noticeable aspect of the Kingdon and Knight analysis is that the Layard et al segmentation model is interpreted in formal-informal sector terms without explanation (Layard et al merely distinguish a 'primary' and a 'secondary' sector). In this way their labour market analysis crosses over into an adjoining area, i.e. the informal sector (see diagram 2).

### 3.2 *Other contributions*

#### *(a) On unionisation and segmentation*

Hofmeyr (2000) highlights the role of the growing influence of unions in wage setting (also see Moll 1993). After decades of legislated segmentation (job reservation, racial job markets and limitations on movement creating rural-urban and urban-urban segments), *de facto* liberalisation and union power may have resulted in a new form of segmentation in the labour market, i.e. between unionised and non-unionised parts of the formal sector – in addition to that between the formal and informal sectors.<sup>11</sup>

Using worker characteristics in multivariate analysis, Hofmeyr estimates sectoral earnings functions to search for unexplained earnings differentials. On that basis he finds substantial

---

ILO researchers. Nattrass (2000:79) argues that both the OHS and PSLSD questionnaires were geared to exclude any gainfully employed 'unemployed'. Thus the high unemployment rates are not the result of a perception problem. Banerjee et al (2006: 17), using 2005 data, confirm these kinds of results (58.9% and 58.6% respectively). However, they do not discuss why 31.7% of those who have 'never worked' say their present unemployment spell has been less than one year. Also see Kingdon and Knight (2006:485).

<sup>9</sup> Later research of Klasen and Woolard (2008:2) confirms the continuation of this pattern, as does Banerjee et al (2006: 10-12). The latter also report a much higher rate of discouraged workers in the labour force in rural areas (40%) as against urban areas (below 10%).

<sup>10</sup> Since Kingdon and Knight (2004a) the appropriate definition and measurement of the informal sector also has become an area of contestation. The basic contrast is between an enterprise-based definition and one that also includes informal jobs in the formal sector. A more inclusive definition would increase the Kingdon and Knight number to approximately 31% for LFS 2003 data (2008:309), which still is relatively low. Other issues are whether domestic workers are to be included, and the treatment of persons in subsistence agriculture. See Heintz and Posel (2008:31, discussed below), Muller and Posel (2004), Muller (2003), Devey, Skinner and Valodia (2006), Valodia (2006; 2007), Altman (2008b), Essop and Yu (2008) and, for a systematic comparison of the various measures proposed, Yu (2010a). Yu's evidence suggest that the South African informal sector is in the mid-range of developing countries. Some scholars of South Africa, e.g. Fields (2011a; 2011b) argues that the concept of informality is too ambiguous and unspecific to be useful at all.

<sup>11</sup> His definition of segmented markets (2000:115) is as follows: where workers with identical skills earn different wages in different segments (or: where wage differences bear no relation to, or cannot be explained by, skill differences). Moll (1993) presents earlier findings on union-nonunion wage differentials amongst white workers.

segmentation between unionised and non-unionised workers in the formal sector *and* between the latter and informal sector workers. Thus, workers in these different segments cannot compete with each other even if they have the same skills and/or characteristics.

*(b) On informal sector segmentation*

The work of Posel and some of her associates at the School of Development Studies (SDS) at UKZN constitutes a large amount of research on labour markets and poverty. Notable is a pioneering focus on the position of women in the labour market (Casale and Posel 2002), but also labour migration (Posel and Casale 2003). Much of this have bearing on the unemployment issue.

Heintz and Posel (2008) take the informal sector analysis further by considering labour market segmentation *within* the informal sector. In contrast to Kingdon and Knight (2004a), they do not assume the informal sector to be competitive, since that leaves the existence of high open unemployment and low informal sector employment unexplained. Their question is whether this puzzle is not explained by segmentation within the informal sector, and what the nature and extent of such segmentation might be.<sup>12</sup> Thus the informal sector is not seen as a homogeneous category. This implies barriers to entry and barriers to mobility not only between formal and informal labour markets, but also between informal activities themselves.

Using more recent data they confirm the formal-informal segmentation found by Kingdon and Knight. Moreover, they find substantive earnings differentials between subsectors of the informal sector, after controlling for observable characteristics. This supports the hypothesis of entry and mobility barriers and the existence of subsectors within the informal sector.<sup>13</sup> Informal employment thus is not a residual form of employment with negligible barriers to entry. Such barriers may be important contributing factors explaining the high rates of open unemployment.

They also argue for the adoption of an expanded, worker-based definition of informal employment rather than the traditional enterprise-based approach. This means also including formal sector employment in ‘unprotected jobs’ – workers without, for example, employment contracts or paid leave and pension contributions. This shows informal employment to have a much larger share of total employment (37%) than for the conventional definition (30%, for 2004), used by Kingdon and Knight (2004a).<sup>14</sup>

---

<sup>12</sup> They define segmentation as “the existence of barriers to mobility within labour markets” (2008:26) which prevents individuals from switching to better remunerated types of employment.

<sup>13</sup> The subsectors, as dictated by the available statistics, are: private, non-agricultural wage employment; non-agricultural self-employment (not own-account); non-agricultural self-employment (own-account); agricultural wage employment; agricultural self-employment; and public sector wage employment. Whether these distinctions make sense from a labour market and mobility barrier point of view is not discussed by the authors. For a distinction of segments of the informal sector that may reflect the reality of work in poor communities better, see Chen et al (2005), chapters 3 and 4.

<sup>14</sup> Kingdon and Knight (2004a) express the size of informal employment as a share of the labour force, not of total employment. The Heintz and Posel ‘expanded’ informal sector figure of 37% of total employment would translate to approximately 31% of the (broad) labour force – comparable to the 24% of Kingdon and Knight; the latter as a percentage of total employment would be approximately 30%. See footnote 9 above.

*(c) On the impact of 'too high' reservation wages*

A standard market analysis of high informal sector unemployment would immediately consider excessive reservation wages, below which unemployed individuals would choose not to work, a likely cause.

There is no consistent evidence that unemployed people have unrealistic job and wage aspirations, i.e. excessive reservation wages (Kingdon and Knight 2001:93; 2004a:403). Natrass and Walker (2005) report on a survey of metropolitan working class people designed to determine whether the unemployed are pricing themselves out of employment. They first determine what respondents would regard as a minimum monthly wage below which they would not accept any job, even if unemployed. The second step is to compare that reservation wage (R1159 in 2000/1) with the predicted wages workers realistically could expect to earn, given their characteristics. For the unemployed persons in the sample the reported reservation wage on average is only 85% of the predicted wage. A regression also reveals a significantly lower chance of being employed when the average wage exceeds the predicted wage. This supports a finding of no evidence that relatively high reservation wages are a cause of unemployment (in the area of Khayelitsha/Mitchell's Plain).

According to Heintz and Posel (2008:29), national level data on reservation wages are not conclusive (at their time of writing), but the empirical evidence that does exist suggest it is unlikely that "unrealistic wage expectations" adequately account for the levels and persistence of unemployment.<sup>15</sup>

Banerjee et al (2006:54; 2008:736) report pooled results, from several LFS waves in 2003-05, on apparent reasons for not working. For unemployed persons aged 20-50, more than half reported being unable to find *any* work, irrespective of the wage/salary. The authors conclude that "reservation wages do not seem to be an important part of the story" (also see Klasen and Woolard 2008:39, discussed below).

*(d) On constraints on labour force participation and search, especially in poor and rural areas*

Research by Borat and Leibbrandt (2001), also provide an econometric analysis of the labour market. They focus on black individuals and distinguish between males and females. Their rationale is that they want to focus on the most vulnerable (i.e. marginalised). In this sense this paper represents a shift of emphasis towards a poverty and development-oriented analysis of unemployment.

They estimate employment probability and earnings functions, but provide a novel focus on the participation decision. Their parallel analysis of the probability of participation throws a different light on the question of voluntary/involuntary unemployment. By including both participation and employment equations, they are consciously "defining unemployment as a state that occurs despite a decision to participate in the labour market. It is therefore clearly involuntary" (2001:113).

Specific factors hinder participation. Participation is lower in more rural provinces/areas, for females (and especially for those with a greater number of children and fewer adult women around), for those without secondary education, and if there are more male adults in the household. They also find that a higher number of aged in the home (in all likelihood increasing pension income) may reduce male adult labour supply (2001:120).

---

<sup>15</sup> Natrass and Walker (2005:504) as well as Klasen and Woolard (2008:37-9) provide econometric evidence of the determinants of reservation wages. The latter contribution (discussed in section 4.1 below) find a non-significant impact for pension and remittance incomes and a positive impact for self-employment income and private income on reservation wages.

The participation equation shows that discouraged workers are those that are statistically closer (in terms of their characteristics) to the non-participants than to the narrowly unemployed. This strongly suggests that those searching for employment are those that are (in their characteristics) more likely to get a job than those no longer searching; this therefore “hints at the importance of structural unemployment in understanding the participation decision” of the discouraged worker (2001:127) – i.e. there is a mismatch of skills/characteristics and jobs.

Unfortunately the limited OHS 1995 data set make a distinction between the formal and informal sectors impossible (2001:115), limiting their analysis with regard to segmentation. Nevertheless, Borhat and Leibbrandt are able to estimate separate models for rural and urban areas, and find significant differences. One noteworthy result is an asymmetry on finding jobs: urban work-seekers could take rural jobs but, on average, rural work-seekers do not have the characteristics to compete in the urban job market (2001:127) – even if migration is possible and good labour market information is available. This suggests spatial rigidities and segmentation, implying barriers to entering urban labour markets.

In a related paper, Leibbrandt, Borhat and Woolard (2001:84) point to work by Wittenberg (1999:42) that suggests that the rural unemployed do not face a level playing field with regard to efficient search strategies. The key transmitters of employment information are networks that stem from those in formal employment. In rural areas the number of unemployed with no access to labour market or employed persons networks is far higher. The rural unemployed thus are disadvantaged in terms of access to labour market information. In addition, rural unemployed often join a household with welfare income, most likely old-age pensioners in very remote areas. This increases the cost of search for these unemployed (also see Klasen and Woolard below). “Unfavourable labour market characteristics and lack of access to information about employment opportunities make it hard for the most needy rural unemployed to compete in the labour market” (2001:84). In this way *poverty contributes to, or causes, unemployment*.

Dinkelman (2004) uses panel data from the KwaZulu-Natal KIDS survey to investigate household-related factors that may influence the success of job search of individuals in a five-year interval. Such factors appear to be quite important compared to demographic variables (Cichello et al 2005:147). The consistently significant factor in her regressions is the presence of pensioners in the household. Having a larger proportion of men and women of pensionable age in the household reduces the probability of search success for men – dramatically. This seems to confirm the non-panel findings of Borhat and Leibbrandt above. Having old men in the household also reduces female search success – perhaps due to the need to care for these men. However, having an old woman in the household *increases* female search success hugely (2004:513). It appears to release working-age women from household duties.

Regarding the net effect, Dinkelman concludes that, for individuals those without jobs, the household may function more as a safety net than as a source of finances for successful search activities (2004:517). In this respect having more pensioners (especially male) and working adults in a household may have important negative labour supply effects.

A novelty is her consideration of the household as a shaper of search culture and capacity – as an institutional context within which particular views regarding work ethic, search ethic, know-how and motivation, but also literacy, language skills and access to transport can influence search effort and search success. However, these variables are unmeasurable and their effect on search success is assumed to be in the 20% unexplained residual attributable to unobservable household effects.

Dinkelman and Perouz (2002), applying a conceptual framework of Wittenberg (2000, also in Wittenberg 2002:1167), investigate factors that determine the decisions of the jobless to adopt one of three 'degrees of labour force attachment': searching or non-searching unemployed or out of the labour force ('broadly' defined). Using 1993 OHS data for logit regressions, they find that unemployed men and women both are more likely to be searching when living in an urban area, and in an area with lower unemployment rates (2002:884). Being in rural areas and in areas with high unemployed contributes to a decision to be non-searching (while having matric is a major positive factor inducing people to participate in the labour force). On the other hand, higher household income from work or other sources such as remittances reduces the incentive to become part of the labour force (either searching or non-searching), as does the presence of migrant workers.

In general, they argue for a focus on different intensities of job search, rather than on binary searching/non-searching unemployed categories, in a search framework.<sup>16</sup>

*(e) On the labour market effects of pensions and grants*

A secondary theme emerging from the contributions above is the labour market effects of old-age pensions (and other grants) due to pension sharing within the household. The key question is whether pension and grant receipts act as a *disincentive* to labour force participation and job search of other family members, or whether they *capacitate and enable* job search and employment. These effects appear to be complicated to unravel empirically, inter alia due to gender and age or generational dimensions which need to be differentiated.

Bertrand et al (2003), using nationally-representative cross-sectional data, found that the pension dramatically reduces the labor supply of prime-age members of the household – but with a smaller reduction for prime-age women, and much more for the oldest prime-age male, often the oldest son. A female pensioner reduces the labour supply of family members twice as much than a male pensioner.

In contrast, Posel et al (2006), using the same data but including labour migrants in the household, find no overall disincentive effect (2009:852). Moreover, a pension assists and encourages rural African women to become migrant workers (with female pension income as the main driver of this result).

Ardington et al (2009), applying longitudinal analysis to KwaZulu-Natal ACDIS data, also highlight the importance of the impact on non-resident household members. They find that large cash transfers to the elderly lead to *increased* employment among prime-aged adults, primarily through labour migration. "The pension's impact is attributable to the increase in household resources it represents, which can be used to stake migrants until they become self-sufficient, and to the presence of pensioners who can care for small children, which allows prime-aged adults to look for work elsewhere" (2009:22).

Findings of Rancchod (2009) regarding 'older adults' are more consistent with Bertrand-type results: he finds that the *loss* of a pension (due to death or out-migration) increases employment probabilities of resident middle-aged and older adults.

---

<sup>16</sup> The use of 'degrees of labour force attachment' is an innovative way of looking at a spectrum of jobless and employment states rather than the conventional categories. It is part of a broader search approach to understanding unemployment. Also see Wittenberg (1999; 2000; 2002); the latter also shows a definite rural-urban dimension to labour market flows, in addition to racial and gender aspects.

Klasen and Woolard (2005, discussed in section 4.1 below) provide evidence on how old-age pensions cause the relocation of adult children to rural areas and away from job opportunities. However, Sienaert (2008:9; 40) finds no significant evidence in this regard.

In a wide-ranging report engaging with most earlier research, Sienaert (2008), using 2002-2004 LFS-based cross-section and constructed panel data, distinguishes results for participation and employment. He finds that the old-age pension “is associated with statistically significant declines in labour force participation and employment probabilities, amongst prime-age individuals in pension-receiving households. These effects are much larger and more robust for employment than broadly-defined participation, and occur mainly when pension recipients are women. Migration probability, on the other hand, is positively affected by the pension” (2008:39).<sup>17</sup>

*(f) On transitions between employment states and between informal and formal sectors*

Banerjee et al (2006, published as 2008) is a component of the ‘Harvard panel’ work that was commissioned for the South African government’s ASGISA initiative. They provide novel insights into job search and constraints faced by the unemployed by quantitatively analysing transitions from unemployment to employment states (and vice versa) as well as transitions between the informal and formal sectors (also see Cichello et al 2005 for similar work on regional data from the 1990s).

The analysis is based on panel data comprising matched LFS waves between September 2001 and March 2004.<sup>18</sup> The resulting transition matrices (2006:36) show that, amidst a relatively stable overall unemployment rate, significant flows of workers across employment states occur – there is a lot of ‘churning’. But entry into employment is not easy. For example, for adults 16–64:

- Of the combined unemployed (either searching or discouraged), only 17% find employment (in either the formal or informal sectors) within six months.<sup>19</sup>
- Of the searching unemployed, 50% still are searching after six months, 19% have become employed, 16% have stopped searching, and 14% have become not economically active.
- Of the non-searching unemployed (discouraged workers), 36% still are in that state after six months, 29% have started actively searching for work, 14% got a job, and 19% have left the labour force.
- Among the not economically active, about 21% changed their status to unemployed, wanting work (both searching and non-searching), but only about 8% have become employed after six months.

---

<sup>17</sup> All these research findings relate to the old-age pension and not the recently expanded system of child support grants, which brought the total number of individuals receiving social grants to more than 15 million in the 2011/12 financial year. The value of the child grant is about a quarter of the old-age pension. Bengtsson (2010) indicates a negative impact on adult labour supply, while Eyal and Woolard (2011) report an opposite effect for a group of black mothers.

<sup>18</sup> Ranchod and Dinkelman (2008) provide more detail on the methods used in matching and analysing the data, and possible pitfalls.

<sup>19</sup> Dinkelman (2004), working with gendered KIDS data from KwaZulu-Natal, produces evidence of higher transition-to-employment rates if the time period is significantly longer: 44% of African men and 49% of African women transition from being ‘searching unemployed’ in 1993 to being employed five years later. For the non-searching unemployed the corresponding values are 39% and 31%.

In general, urban residents, Africans and younger workers are less likely to make the transition from unemployment to employment (2006:45). Another salient point is the importance of that first job. Individuals who have never before held a job are 35 percentage points more likely to be unemployed than workers that have worked before (2006:33; 39).

The general picture is one where job search and job finding is quite difficult and apparently subject to many constraints, e.g. long distances from labour markets, high physical costs of job search, possible racial prejudice against Africans, etc.

The authors also provide interesting results regarding the link between the informal and formal sectors (2006:36):

- Only 12% of those who are initially working in the informal sector make a transition to the formal sector within six months, 52% remain in informal employment, 21% become unemployed and 12% drop out of the labour force. Thus the informal sector is not a strong springboard into the formal sector (2006:5; 42) – as indicated by earlier findings of segmentation.
- However, it is easier to enter the formal sector from the informal sector (12% of informal sector employees make the transition) than from searching (9.5%) and non-searching (4.2%) unemployed states.
- Discouraged workers are twice as likely to find work in the informal sector than in the formal sector. (For the searching unemployed the likelihood of formal sector employment is the same as for the informal sector.)

Thus the informal sector serves as a step towards formal sector employment, but its enabling impact is very limited. The overwhelming majority do not succeed to make the transition.

This conclusion complements earlier work by Cichello et al (2005) using the KIDS data from KwaZulu-Natal. They provide similar transition matrices but cover a five-year interval (1993-1995) rather than the six months of Banerjee et al. In the longer time period a higher percentage (17% as against 12% above) make the transition from informal to formal, fewer (42% against 52%) remain in informal employment, but a higher percentage of informal sector workers end up being non-employed (41% against 33%) (2005:169). Over a longer period the informal sector is a less stable work environment. But the formal sector is not much better: 24% of formal sector workers in 1993 also ended up as non-employed five years later.<sup>20</sup>

Similarly, Altman (2008b:35), using unpublished 2008 results by Valodia, reports an average sustained informal-to-formal transition for 18.3% individuals (for several 6-month periods), and only 7% to remain in informal unemployment for five 6-month periods. This results, for country-wide data, confirms that informality is an unstable employment state over time for most individuals. However, 54% of all workers experienced a work status change in a two-year period from February 2002 to March 2004.

*(g) On the impact of education on unemployment*

Given the apartheid legacy of an inferior education system for black children, the impact of low levels of education and resultant skills gaps on earnings differentials and employment is a recurrent theme, also in the public debate (cf. Van den Berg and Burger 2003:498). In

---

<sup>20</sup> Also interesting is that those who remained in informal employment experienced much larger increases in earnings than those who stayed in formal employment, albeit from a much lower base. There was considerable upward mobility with the informal sector, and a significant narrowing of the formal-informal earnings differential occurred (Cichello et al 2005:173).

many research contributions analysed in this survey the education level of individuals is used as an explanatory variable in explaining (un)employment probabilities and other labour market dimensions. However, few contributions focus directly on education and unemployment, with Kingdon and Knight (2005) and especially Dias and Posel (2007) welcome exceptions. Nevertheless, several aspects of labour demand and supply receive attention elsewhere.

On the labour demand side, Borhat and Hodge (1999) show how changes in production methods have led to positive demand effects for skilled workers and negative effects for unskilled workers over a long period, i.e. 1970–1995. Recent research suggests that the shift towards demand for more skilled labour has continued (Dias and Posel 2007:3; 19). In macro-sectoral analyses (see section 6 below), Banerjee et al (2008) and Rodrik (2006) note that in South Africa agriculture, mining and manufacturing have been the activities most intensive in unskilled labor. But they also have been the sectors in relative decline. This structural change away from the most low-skills intensive parts – and resultant skills supply-and-demand mismatches – is key to understanding the concentration of unemployment among the young, unskilled and black population (Rodrik 2006:2).

On the labour supply side, Borhat and Leibbrandt (2001:113) show that labour market participation is lower for those without secondary education. Kingdon and Knight (2005:5) also show that participation levels typically increase with education level, particularly for women. Klasen and Woolard (2005, discussed below) identify poor initial education as a factor that impedes labour market access.

Dias and Posel (2007:2) demonstrate that unemployment rates in the South African labour market decrease with educational attainment: “education protects against unemployment” (2007:9). Analysing 1995 OHS and 2003 LFS data they find that, overall, the unemployed had lower levels of education than the employed. Their probit regressions show that “individuals with higher education had a significantly lower probability of being unemployed. For example, in 1995, labour force participants with tertiary education on average were twenty per cent less likely than otherwise identical individuals but with only primary education, to be unemployed” (2007:9).

However, the pattern found by Dias and Posel is not constant (nor always intuitive).<sup>21</sup> For example, after 1995 (up to 2003) the unemployed group shows *increasing* proportions of persons with tertiary, matric and incomplete secondary education. In fact, in this interval unemployment increased most amongst both those with some secondary education and those with matric (perhaps due to labour force effects?).<sup>22</sup> On the other hand, the relative benefits of tertiary education in protecting against unemployment *grew* by almost five percentage points in this period.<sup>23</sup>

---

<sup>21</sup> Kingdon and Knight (2005) – who used the same data but somewhat coarser education level distinctions – also highlight the conflicting outcomes for 1995 and 2003: “While secondary and higher education reduced the chances of *long-duration unemployment* (my italics) by about 5 to 6 percentage points in 1995, by the year 2003, possession of these levels of education did not reduce the chances of long-duration unemployment at all” (2005:18).

<sup>22</sup> Dias and Posel (2007:5; 15) also highlight the complex impact of race and gender on the relationship between education and unemployment.

<sup>23</sup> Although employment *rates* rose among those with tertiary education, these labour force participants became even less likely than those with only primary education to be unemployed (Dias and Posel 2007:11). This throws some light on the puzzle of rising unemployment rates amongst graduates (Moleke 2005; Pauw et al 2008).

It appears that the link between education and unemployment is not stable. The effect of education on unemployment probability also is not monotonically increasing in education levels: "... the benefits of higher education in securing employment only 'kick in' when labour force participants have at least matric education" (Dias and Posel 2007:11).

This confirms the first known identification of this pattern by Wittenberg (1999; 2002:1191; also see Dinkelman and Perouz 2002). Using non-parametric and careful graphical analysis, he shows that the inverse relationship between education and the probability of being unemployed really starts once working-age persons have a matric qualification or more (2002:1165; 1191; also Ardington et al 2009: 28-9). He attributes this to the lack of signalling factors available to employers in sorting job applicants. While education at lower levels may in many ways be important in breaking the cycle of poverty and inequality,<sup>24</sup> as far as unemployment as such is concerned, only higher levels make a significant difference.

The value of matric co-exists with high and increasing youth unemployment. Lam et al (2008) record panel data results that confirm that "in contrast to the view sometimes expressed in South Africa, completing secondary school does appear to have a substantial effect on successfully finding a job after leaving school" – and soon, in the first four years (2008:16-18). The puzzle is why more youth do not complete matric to increase the probability of a transition into employment, and rather choose to leave school early to join the ranks of the unemployed, often for long periods. Racial differences related to a longer-run legacy of disadvantaged schooling and school quality is one potential explanation (2008:19).

Amongst those with more education there also is an increase in rates of job search (Dias and Posel 2007:9). This reinforces the view of Wittenberg (1999:31) that better educated individuals have a higher propensity to search. Likewise, Dinkelman and Perouz (2002:884) find that the matric certificate has the single largest positive effect on inducing people to participate in the labour force and that tertiary education is most likely to drive men and women into search, if they do not already have jobs.

A related issue is that of migrants. Posel et al (2006:844) find that labour migrants tend to be significantly more educated on average than non-migrant adults in a rural sample.

Lastly, Dias and Posel (2007: 21-23) find little evidence that skills shortages are a major factor in constraining employment expansion by firms. There appears to be no general excess demand for labour due to a skills constraint on labour supply. Less than 10% of the unemployed in the 2003 LFS attribute their joblessness to a lack of skills or qualifications for jobs that were available. In two firm surveys quoted, firms noted skills shortages as a constraint, but put it only 5<sup>th</sup> or 6<sup>th</sup> on the list: "there is little evidence of extensive shortages of skills leading to sustained vacancies in firms" (2007:23; see Devey et al 2005:55; 70). Lack of work experience apparently is a much more important factor. For Dias and Posel (2007:27) this underscores the importance of focusing on factors, in addition to the quality of labour supplied and other aspects of labour supply, that inhibit an increase in the demand for labour.<sup>25</sup>

---

<sup>24</sup> For discussions of the impact of education on, for example, earnings inequality and intergenerational mobility, see Van der Berg and Burger (2003) and Louw et al (2007).

<sup>25</sup> Amsden (2010:64; 57), commenting on grass-roots efforts to solve poverty through better education, health and living conditions, argues that these do not go far enough "because it aims only at improving the supply side of the labor market, making job-seekers more capable, and not the demand side, making new jobs available for them. It acts as though new ways of earning a living

### 3.3 *The first discourse diagrammatically*

These contributions suffice to define, capture and characterise the labour market discourse about unemployment in South Africa. Diagrammatically cluster 1 is depicted as a part of the entire landscape in figure 2 (section 7). This diagram provides a visual-spatial mapping of the unemployment debate in South Africa, situating the main contributions in clusters and relative to each other. The central grouping around Box 1 shows the main themes and approaches constituting the micro-economic labour-market analysis of unemployment (ignoring the macro-economic box themes for the moment). Bold text indicates the core areas.<sup>26</sup>

While the typical style of analysis in the first cluster displays limited overt engagement with poverty and inequality, the approach of Bhorat and Leibbrandt (2001) relates the labour market discourse to an unemployment discourse that involves poverty. This takes us to the second main discourse.

## 4. THE POVERTY AND DEVELOPMENT DISCOURSE (CLUSTER 2)

We have reached an identifiably new cluster where the study of the labour market is embedded in an analysis of poverty and income inequality amongst households. Two sub-discourses can be distinguished.

### 4.1 *Sub-discourse 2A: From unemployment to poverty and inequality dynamics*

Measuring, understanding, explaining and addressing inequality and poverty represents a core focus of research at SALDRU. While the focus is on inequality and poverty, this work contains important insights regarding unemployment.

#### *(a) On the importance of labour market income in inequality*

In Leibbrandt, Woolard and Bhorat (2001) the question is how the functioning of the labour market – and thus unemployment – relates to, or explains, household incomes inequality and poverty. The main technique is the decomposition of inequality, i.e. the Gini coefficient, by income sources (wage income, self-employment, capital income, state transfers and remittances).

Their decomposition for 1995 Income Expenditure Survey data reveals that household wage income is a dominant factor determining the poverty status of the household and the position of the household in the distribution of total income (2001:30-1):

- 84% of income comes from wage income, remittances and self-employment income (= total labour-market derived income).
- Wage inequality makes a 67% contribution to the overall Gini coefficient of 0.59 in 1995. (For blacks this figure may be as high as 80%)

---

emerge (at a positive wage) simply because the supply of job-seekers is better clothed, housed, and fed”.

<sup>26</sup> The dotted-line box (on flexible and clearing labour markets) shows an approach that conceptually belongs in this cluster, but does not feature in published labour market research on unemployment in South Africa. Its relevance will be seen as other discourses are discussed below.

- There are immense income gaps between high- and low-wage earners, and between the formal and the informal self-employed.

This means that wage income is driving household inequality, and that “access to wage income is central to determining which households are able to avoid poverty and even the depth to which poor households sink below the poverty line” (2001:34). Households with unemployed members tend to be crowded below the poverty line at the lower end of the household income distribution (2001:39).

Similarly Leibbrandt, Borat and Woolard (2001) report that the unemployed predominantly are found in households with no access to wage income. In 1993, 53% of the unemployed lived in a household with no wage earner – a majority of unemployed individuals live in completely unemployed households – and three-quarters of these were in poverty. Having at least one member of the household in wage employment almost halved the probability of that household being in deep poverty (2001:80).

Thus *unemployment is a major cause of poverty* – suggesting bi-directional causality between unemployment and poverty (compare section 3.2(d) above).

*(b) On poverty traps and unemployment*

Klasen and Woolard (2005) study the determinants of income mobility, i.e. which factors cause households to get out of, or into, poverty. They identify factors that explain income changes in a five-year period.

First, a family member getting (or losing) a job is the main event causing a move out of (or into) poverty. An additional dependent family member is the second most important, with changes in remittances in third place. Changes in earnings/wages are much less important.

Secondly, four types of poverty traps are found, i.e. initial conditions that impede efforts of households to improve their incomes. These are: large initial household size, poor initial education, poor initial asset endowment and poor initial employment access (i.e. links to the labour market). Thus “households with few initially employed members and large numbers of unemployed are finding it more difficult to improve their incomes subsequently” (2005:884). This poverty trap, associated with the labour market, suggests “significant segmentation and disadvantages for those from households with little labour market experience” (2005:884).

*(c) On survival strategies, regional immobility and location rigidities in labour markets*

Klasen and Woolard (2008) ask two main questions: First, how do the unemployed survive? Secondly, “how can it be that unemployment is so high in rural areas where there exists almost no enforced labour regulations ... and where wages could (presumably) freely adjust to equilibrate labour demand and supply?” (2008:4).

Using multinomial logit analysis of household surveys from 1993 to 2006, they find that many of the unemployed survive by attaching themselves to a household with some form of income, mostly old-age pensions and other social grants.<sup>27</sup> This pertains, in particular, to unemployed adult children who either stay with their parents (even beyond the age of 25) or move to stay with other family (2008:25-27). Frequently this also applies to those who *become* unemployed. This often keeps them in, or takes them into, more remote rural areas.

---

<sup>27</sup> This research was undertaken before the significant expansion of the system of child grants, which potentially could have a significant impact on individual and household behaviour.

Moreover, it takes them further away from areas with employment opportunities and may thus discourage job search from there (2008:31). Estimates of participation and searching equations show that it also reduces their employment prospects and thus search enthusiasm (2008:35). They find little evidence that access to pension and remittance income discourages search via higher reservation wages (2008:39). The location decision of the unemployed – which gives primacy to economic support/survival rather than employment or search opportunities – is the main causal factor (2008:40). Its net effect is the creation of regional immobility and locational rigidities in the labour market (2005:4; 28).

This also helps to explain the persistence of high (involuntary) rural unemployment, despite no apparent restriction on labour market and wage flexibility in those areas.<sup>28</sup> It also reinforces findings (reported above) that the survivalist behaviour of those in poverty contributes to, or causes, unemployment.

#### 4.2 *Sub-discourse 2B: From poverty to sustainable livelihoods and marginalisation*

An identifiably different site is the adjacent study of poverty and sustainable livelihoods. This often occurs in the context of dualism either between the formal and informal sectors, urban and rural areas, or the first and second economies – or simply in the phenomenon of economic marginalisation. The place of unemployment in this discourse is different from those encountered thus far.

Work done at PLAAS, the Programme for Land and Agrarian Studies at the University of the Western Cape, is representative of this approach.<sup>29</sup> Du Toit (2005) presents a survey of much of the programme's research. The focus is on the structural dimensions of poverty, and specifically chronic poverty, and the livelihood strategies of the poor.

##### *(a) On deprivation, social dynamics and labour market marginalisation*

Noting that much less progress has been made with poverty reduction since the 1990s than was initially hoped, Du Toit draws attention to a different aspect of poverty (and, by implication, employment and unemployment), i.e. “the complexity and diversity of the social dynamics and power relations that underpin it” (2005:1). He criticises analytical traditions that tend to “depoliticise the study of poverty”, often through econometric equations.

The preferred research method brings together both quantitative and qualitative research. The work covers poverty in three types of areas: rural homeland, platteland town and city township. It is based on a broad concept of ‘multidimensional deprivation’ in which monetary deficiency is only one of a set of vulnerabilities – rather than monetary poverty (low income) alone. Their household surveys explore a range of livelihood components and indicators of deprivation – e.g. human capital, household assets, access to services, debts vulnerability, geo-social integration, informal and formal networks, health issues, day-to-day

---

<sup>28</sup> Dinkelman (2004) uses panel data from the KwaZulu-Natal KIDS survey to investigate household-related factors that may influence the success of job search over a five-year interval. As for locational (rural-versus-urban) differences, she finds no statistically significant effect. (The unexpected indication is that initially being in urban areas in KwaZulu-Natal may have reduced the probability of finding a job compared to being in rural areas initially. She attributes this to peculiarities of the particular geographic region of the sample.)

<sup>29</sup> Another group of researchers are based at the School of Development Studies at the University of KwaZulu-Natal, and some in various departments (other than economics) at the University of Cape Town.

household reserves, and so forth. The survey questions seem to have a different tone compared to other household surveys.

They also complement the surveys with in-depth interviews with household heads and primary caregivers. At selected households they record household member life histories, also mapping broader social networks and local political economic dynamics and forces.

This broader method reflects in their data and results. Amongst the key indicators of deprivation they find, for example, that 70-83% of households report going hungry in the previous year. In addition, in some sites up to 64% of households “often went without sufficient food”; or up to 45% of households “often went without sufficient fuel”; and up to 55% of households often went without sufficient shelter” (2005:6-8).

Other research report significant asset poverty and low rates of access to productive resources, even resources for effective household-level food production. A high degree of cash dependency is prevalent, as is poorly paid and insecure employment, once gained (2005: 7-8).

The qualitative data reveal that poor people frequently are vulnerable to exploitation and manipulation by those who are more powerful – i.e. the ‘political economy of poverty and livelihoods’. It comprises the way they are positioned in the local configuration of aspects such as asset distribution, levels of education, access to resources, labour market marginality (employment insecurity and unemployment), and notably social networks and social power relations in their communities – for example relative to the rural elite, public officials and other influential gatekeepers of resource and employment-opportunity (2005:4; 7-11).

Thus the indicators of deprivation reflect factors that undermine livelihood and survival strategies – including access to labour markets. Moreover, the interaction of these factors can make a successful and sustainable escape from poverty, e.g. through employment or self-employment, very difficult (Du Toit and Neves 2007:46). This highlights the strategies (including employment search) by which poor people or their children try to escape deprivation – and the reasons why such attempts may fail or be successful (2005:3; also see Klasen and Woolard 2008).

Whereas those research outputs categorized in cluster 2A embed unemployment in an inequality-poverty nexus, here the entire unemployment-inequality-poverty nexus is embedded even deeper in a rich context of social networks, social relationships, power relationships and systemic historical and political-economic forces.

The explanation of unemployment-inequality-poverty becomes much more complex than labour market inflexibility, distortions or inefficiencies (or similar factors typically captured in standard research). Referring to typical labour market analyses as ‘decontextualised’, Du Toit notes that the unemployed, the marginal workers, employees and employers do not encounter each other in a labour market on equal footing as abstract *homo economicus*, but as individuals and groups shaped and situated in society by (in my words) a history of complex interaction and symbiosis between colonialism, capitalism, racism, sexism and apartheid (see Du Toit 2005: 14, also 19-20).

Therefore, in understanding and addressing poverty, inequality and unemployment, a broader social, sociological and political reality has to be engaged with than ‘malfunctioning labour markets’. This may require a greater diversity of research methodologies, including field work and case studies. Econometric investigations of the duration of income poverty (including unemployment) need to be complemented by information on the underlying structural dimensions that render people vulnerable to being poor for long periods of time (2005:4).

The problem, says Du Toit, is not that the poor are excluded from participating in the economy on grounds such as race, gender, education and location. They *are* participating in the economy. But the *way* they are enabled/allowed to participate and the *way* labour markets function can worsen their poverty, and the *normal* functioning of the economy can perpetuate the inequalities that one observes (2005:20).

*(b) On segmentation, dualism and the 'second economy'*

Du Toit and Neves (2007) make a related point on segmentation and dualism, in particular the 'second economy' metaphor, introduced in the Mbeki-era.<sup>30</sup> This was a recognition that trickle-down effects don't work for those at the margin, requiring different interventions. But the concept was open to misinterpretation. Whereas many see the second economy as being structurally disconnected from the first economy, in reality formal and informal, mainstream and marginal activities often are thoroughly interdependent (2007:iv; also Devey et al 2008:114; Devey and Valodia 2009). The problem of poverty and unemployment is not that many people are excluded from or unintegrated with the economy. However, the *way* they are integrated causes them to be marginalised and powerless to change their position vis-à-vis the 'centre' and to assert themselves as empowered economic actors (2007:36). This applies to both rural and urban situations.

The challenge is not to eliminate the 'laggard' informal or second economy or integrate it into the first economy, but to analyse and adapt the way the (single, but internally differentiated) economy functions so that the marginalised individuals and informal (or survivalist) businesses are empowered and their livelihood and employment strategies supported (also see May and Meth 2007; Von Broembsen 2008).<sup>31</sup>

*(c) On the chronic unemployed as an underclass excluded from employment opportunities*

Seekings (2003; also Seekings and Natrass 2005: chapter 8) asks whether the unemployed constitute an 'underclass'. His concern is the 69% of the unemployed who have never worked before, or the two-thirds of the unemployed with incomes below the poverty line (2003:20) – and the 68% of the unemployed have been unemployed for more than 12 months (2003:10).

Analysing the 1993 PSLSD and 1995 OHS data, he finds that there is evidence that a significant portion of the unemployed and their dependents are in an underclass defined in terms of acute disadvantage. Factors underpinning such special disadvantage in the labour market are:

- Long duration of unemployment – many are long-term unemployed, and have lost the capacity to seek or secure employment.
- Low human capital – they are or have become unemployable, lacking the minimum skills required in the labour market.

---

<sup>30</sup> The concept but not the term was introduced by President Thabo Mbeki. He spoke of 'two nations', and separate First World and Third World economies. Also, the term second economy was not intended to be equivalent to the informal sector, but was quickly christened so by the business community (Du Toit and Neves 2007:6). Actually the second economy is broader and includes the involuntary unemployed and some of the economically inactive.

<sup>31</sup> Altman (2008b:9) notes the distinction between the dualist and structuralist approaches to the informal or second economy (and also a 'legalist' approach). Du Toit and Neves would be closer to the structuralist approach (the second economy as an integral feature of capitalist development), and the Mbeki-approach more dualist (i.e. the second economy as a by-product of underdevelopment).

- Lack of social capital – they have lost or limited contact to social networks or connections to employment opportunities via other working family members or working friends (e.g. migrant workers). This is a particularly important factor, given the way job search (by the unemployed) and recruitment processes (by employers) work in South African labour markets (2003: 13-18).
- Location – they are located a significant distance from areas with employment opportunities, and/or face bad roads to markets etc., often having attached themselves to families in remote areas that receive social pensions (cf. Klasen and Woolard 2008 above).
- Lack of financial capital for possible self-employment (2003:19).
- More than 80% of the potential underclass are in the bottom four deciles of the income distribution, and more than 50% in the bottom two deciles (2003:21). For this underclass, more than 80% of their income comes from pensions and remittances (2003:24; 1993 data).

Such underclass households are less likely to live in a house, less likely to have piped water or a toilet inside the dwelling, and less likely to be satisfied with life. They are susceptible to a range of psychological, social and motivational problems: anxiety, fear, depression, feeling useless and without energy, suffering from boredom, having low self-esteem, being lonely, being without friends or love partners (2003:34).

Because of all these factors, and in particular the lack of social capital and networks, these individuals and households are characterised by exclusion from access to employment opportunities, or at least are very disadvantaged in terms of such access (2003: 4).

There also is the possibility that the underclass actually reproduces itself over generations, with children that are born into underclass households today destined (i.e. with a high probability) to long periods of unemployment in ten or twenty years time (2003: 41). This would impart an ingrained, long-term character to unemployment in South Africa.

#### 4.3 *The second discourse diagrammatically*

Cluster 2 is depicted in the upper portion of figure 2. Boxes 2a and 2a anchor its two subdiscourses, flanked by central themes (bold type) encountered above. The top left quadrant also shows policy-related themes that typically are associated with the marginalisation approaches. Note that segmentation and the informal sector, initially encountered in the labour market discourse, actually link the labour market and poverty/development clusters. This shows that, amidst clustering, themes connect and even overlap – although they may be treated differently in different discourses.

### 5. EMERGING DIFFERENCES AND LIMITATIONS AT THE MICRO LEVEL

The survey has taken us a long way, from segmented labour market analysis to inequality, poverty, livelihood and underclass analysis, through different foci, data, theoretical frameworks, ideological paradigms, and analytical and research techniques.

While the different clusters provide valuable insights and perspectives, there are definite differences between the first two discourses, but also *within* the second discourse, i.e. between its two sub-discourses (2A and 2B). This mostly relates to the research questions that are asked, the problems that are specified and the analytical and empirical approaches that are adopted within particular discourses. These also indicate how intrinsic analytical

limitations can flow from discourse differentiation and segmentation, i.e. from research restricted to a discourse-specific framework or analytical technique.

A first issue is the relationship between unemployment, poverty and inequality, given the developing country context. The labour market analysis of unemployment in cluster 1 uses measures of poverty in its equations, but poverty and inequality are not the overt focus. In contrast, cluster 2A focuses on explaining inequality and aspects of poverty rather than unemployment. Nevertheless, it uncovers how the condition of structural poverty inhibits information on employment opportunities as well as access to labour markets – and thus the functioning of labour markets (whether informal or formal). Cluster 2A also provides valuable insights on unemployment as a major contributor to poverty and human suffering.

In this way the unemployment-related work in cluster 2A shows more overt sensitivity to underdevelopment and vulnerability than ‘purer’ labour market analyses such as those in cluster 1. However, whilst displaying a solid mix of development economics and labour economics, the broader human development angle is not very prominent. The focus is on poverty as low household income. When aspects of education and health feature, they do so primarily as worker characteristics used in explaining inequality, poverty, employment or unemployment. Aspects of human development such as *capabilities* (Sen 1992) appear to be at the margins of analysis. This is the source of one of the criticisms of cluster 2A emanating from cluster 2B, which suggests and uses a richer understanding of ‘multidimensional deprivation’. However, the marginalisation/livelihood cluster is equally constrained: it focuses on poverty relief and poverty reduction rather than human development.

The poverty and inequality analysis in cluster 2A largely leaves the qualitative dimensions of poverty, and notably social and power relations and empowerment (see Luttrell and Quiroz 2009), out of the equation – perhaps because these aspects are more difficult to measure. On the other hand, the livelihoods analysis in cluster 2B appears to be less interested in insights from labour economists regarding the operation of labour markets, perhaps because the latter does not capture the powerlessness of the unemployed poor. Indeed, cluster 2B gives limited attention to unemployment and employment/jobs – a not uncommon tendency in much of the contemporary development debate (also internationally, cf. Amsden 2010:57-9; also Wuyts 2001).

Secondly, with regard to segmentation, the SALDRU/DPRU outputs in cluster 2A have a different emphasis than the formal-informal dualism found in labour market work (cluster 1). They focus more on the rural/urban and homeland/non-homeland divides. And they do not use earnings differentials as the way to prove segmentation. The PLAAS marginalisation work (cluster 2B) broadens segmentation to include the concept of the second economy, though with important qualifications and actually a preference for the concept of non-separated marginalisation (or ‘adverse incorporation’).

It is clear that different disciplinary and discourse perspectives imply a limited engagement with each other’s worlds.

There also is the matter of epistemology and techniques. In line with current trends in standard economic research, the work in clusters 1 and 2A uses highly technical econometric studies based on quantitative data from statistical surveys. Researchers in cluster 2B favour a research method that combines quantitative *and* qualitative research. In addition, they include difficult-to-measure sociological, psychological and political-economic dimensions in their analysis. Both of these may be frowned upon by economists schooled in micro-econometric research techniques. In turn, analysts in the marginalisation tradition are highly critical of analytical traditions that, due to the limitations of their techniques, strip the intensely human

phenomena of poverty and unemployment of the human, social and political dimensions and thus from real understanding.

The latter also explains why the livelihood/marginalisation tradition is critical of adopting the neo-classical labour market model, prevalent in cluster 1 but also found in cluster 2A, as the foundation of analysis: it excludes dimensions perhaps most important to understanding unemployment and poverty. However, for researchers in cluster 1 (but likely also 2A) adherence to the research traditions of standard economics probably is fundamental to the credibility, amongst peers, of their research findings. For them an apparent inability or unwillingness of marginalisation analysts to move beyond case studies to the formulation of testable hypotheses frustrate the advancement of knowledge on the unemployment-poverty interface. (These divisions probably also occur on top of deeper ideological divisions.)

To summarise, with the risk inherent in any generalisation: With regard to a concern with poverty, inequality and development, those in clusters 2A and 2B appear to be relatively close – with cluster 1 some distance away. However, with regard to epistemology, research method and economic models (and perhaps ideology?), many in cluster 2A may feel removed from cluster 2B and indeed a stronger affinity towards cluster 1.

Yet there appears to be limited cross-informed debate. This impression is confirmed by a cursory scan of the references in papers and articles from the different discourses. References across discourses are limited.

## 6. THE MACRO/MACRO-SECTORAL DISCOURSE (CLUSTER 3)

### 6.1 *Introduction*

We now consider issues encountered in macroeconomic debates on unemployment – growth, cyclical unemployment, the NAIRU, etc. This survey started at the labour market discourse and moved quite smoothly to the adjacent poverty-development cluster. Moving to the macro-economic discourse is not such a smooth transition. It is a different world, presenting an aggregate take on employment and unemployment. It uses either analyses of sectoral changes in the economy or aggregate analyses of output, growth, investment, trade and government expenditure, and so forth.<sup>32</sup>

Like the other two discourses, the macro- and macro-sectoral discourse has a distinctive terminology, frame of reference, categories and modes of analysis, and data. It asks very different questions. Yet it also deals with the employed and the unemployed – and the poor, if only indirectly.

The macro- and macro-sectoral discourse also is the one that is reported most frequently in the media.

---

<sup>32</sup> Many ‘macro’ contributions on (un)employment are related to inter-sectoral changes or changes in specific sectors, e.g. employment and output in manufacturing. While many sectoral analyses are at a macro level (analysing aggregated sectors of the national economy), others have a more micro focus, at the industry level (i.e. not firm level). Industry analyses rarely consider *un*employment (which is not sectoral), but rather employment (which could be sectoral). This also applies to trade analyses.

Unfortunately, in contrast to the micro-level clusters, macroeconomic research contributions on South African unemployment are not easy to find.<sup>33</sup> This is a very unsatisfactory state of affairs to discover. What there is, is mostly about economic growth and perhaps employment. This may be surprising given that macroeconomics largely came about as a response to sustained high unemployment during the Great Depression (mainly in the work of Keynes, initially) – and in reaction to the Classical view that unemployment is a temporary aberration in a self-equilibrating market system. This interest faded with the comeback and growing dominance of the Monetarist, New Classical and Real Business Cycle schools in the 1980s and 1990s, at least up to 2007/8.

One reason for the dearth of macroeconomic research on unemployment may be the limited reliable unemployment data series. Data series on unemployment are short and have to be constructed from several surveys that are not fully compatible. Data problems may also explain the reluctance to incorporate the informal sector and discouraged workers into macroeconomic analysis.

One quite general characteristic is that most of the work deals with the formal sector only. This is not trivial, given that informal sector workers comprise approximately 25-30% of all employed (Yu 2010a:25) and that between 1997 and 2003 less than 40% of the total number of new jobs in the economy were created by growth in formal sector employment (Casale et al 2004:988).

It is necessary to distinguish two sub-discourses, of which the second is by far the largest. The first deals with unemployment as such. The second deals with employment, economic growth and sectoral shifts.

## 6.2 *Sub-discourse 3A (unemployment analysis): From unemployment to macroeconomic equilibrium*

### (a) *On an increasing NAIRU*

Banerjee et al (2006; 2008) provide an interesting ‘bridge’ between labour market analysis and macroeconomic analysis. While most of it is labour market analysis (cluster 1), their conceptual framework is anchored in the concept of an equilibrium level of *aggregate* unemployment. This is the point of departure in standard macroeconomic models, with the NAIRU<sup>34</sup> as the long-run equilibrium unemployment level.

Their main question is how the large increase in the rate of unemployment after 1995 should be understood. Was it a short-term deviation from this level due to temporary shocks, and is the rate of unemployment liable to a return to the previous long-run, equilibrium without intervention? Or was it a shift in the long-run rate of unemployment?

Banerjee et al conclude that the entire secular movement in unemployment between 1994 and 2005 can be accounted for by changes in labour force participation (2006:18-19). In addition, the data confirm persistent labour shedding by mining and agriculture since 1970. For 1970-2005, total employment had an annualized growth rate of 1.3 percent per year while the working-age population grew at 2.7 percent per year. Stagnating labour demand thus played a significant role, over a long time, in the growing unemployment problem.

---

<sup>33</sup> See, for example, the macroeconomic focus area of the HSRC's Centre for Poverty, Employment and Growth ([www.hsrc.ac.za/cpeg.phtml](http://www.hsrc.ac.za/cpeg.phtml)), which has only one paper on unemployment as such – a review paper on the unemployment-inflation relationship.

<sup>34</sup> NAIRU = Non-accelerating-inflation rate of unemployment

Thus their analysis indicates the following structural changes: the transition of the mining sector to lower labour-intensity methods and a similar decline in agricultural employment (both causing a fall in the demand for unskilled labour) and, more recently, a massive influx of female labour supply into the labour force after 1994. These are unlikely to be reversed or reversible. An apparent decrease in job search effectiveness may also have increased the equilibrium rate of unemployment (2006:47).

Thus, the rise in unemployment in South Africa since 1994 has been due to structural changes in the economy and amounts to an increase in the long-run equilibrium rate of unemployment. This problem mostly will not be self-correcting (2006:6).

Schoeman et al (2008) also focus on whether the long-run equilibrium rate has increased. They analyse the movement of the rate of unemployment for 1970-1982 and 1983-2002. In the first period, unemployment fluctuated around a mean of approximately 8%, displaying mean-reverting behaviour.

In the second period the rate of unemployment displays a clear upward trend, defying the idea of a return to a stable long-run equilibrium rate of unemployment. Structural changes appear to have occurred. The rate of unemployment was *not* mean-reverting. Time-series analysis shows that hysteresis is present (the series has a unit root): an increase in actual unemployment leads to an increase in the long-term equilibrium rate of unemployment. There is no return to a stable, exogenously determined, natural rate of unemployment. This explains the current and likely future persistence of high rates of unemployment.

It also implies that the long-run rate of unemployment has been endogenously determined, at least since 1983. They estimate a cointegrating vector that underlies long-run unemployment in South Africa. Determinants of long-run unemployment include institutional as well as economic factors (2008:80). The important variables are the interest rate (positive/upward impact) and the fixed capital stock (negative impact). Others with statistically less significant impacts are the degree of unionisation and the real effective exchange rate (both with an upward impact on unemployment). (Labour force growth was not considered.)

*(b) On cyclical unemployment and Okun's law*

Marinkov and Geldenhuys (2007) investigate the existence of Okun's law in South Africa, i.e. whether unemployment in South Africa responds inversely to cyclical changes in aggregate output, in light of the persistently high unemployment rates despite high GDP growth rates in the long upswing after 1994.<sup>35</sup>

They first calculate unemployment-growth elasticities for five-year periods between 1971 and 2005 – and find the expected negative elasticity only for 1971-1975 and 2001-2005. In the other five-year periods employment growth indeed was associated with economic growth, but the latter was not sufficiently high to absorb a growing labour force (amidst growing labour productivity). Thus unemployment could still increase. For 2001-2005 the elasticity value is -0.11 which indicates that, although the rate of unemployment did respond 'correctly' to changes in real GDP, the response was fairly weak. Very high GDP growth rates would be required to decrease the rate of unemployment significantly, given normal labour force and productivity growth.

---

<sup>35</sup> Okun's law refers to a persistent inverse relationship between cyclical output and cyclical unemployment over the course of the business cycle.

The authors isolate cyclical unemployment and output via detrending of annual data. This shows that the cyclical component of total unemployment has become smaller over the period, and did not exceed 15% from 1991 onwards. (Both formal and informal sector employment are included in the data.)

They estimate Okun's coefficient for South Africa for the period 1970-2005 in terms of the output gap and the unemployment gap, i.e. the gap between observed and potential/natural unemployment. They unambiguously find a statistically significant negative Okun-type relationship between cyclical output and cyclical unemployment (2007:389).

The authors find that a 1% increase in the output gap (i.e. in real GDP above potential GDP) is associated with a decrease in cyclical unemployment of between 0.16 and 0.77 percentage points (2007:388). Much higher coefficients were found for the medium run, indicating an average 60% stronger reaction in the medium run. The magnitude of this reaction determines the potency of aggregate demand to influence cyclical unemployment.

### *6.3 Sub-discourse 3B (Macro/macro-sectoral): Economic growth, employment and wages*

#### *(a) On growth, employment and jobless growth*

Hodge (2009) analyses the statistical relationship between economic growth rates and formal employment over time, using a constructed annual time series data of total formal sector employment for the period 1946-2007, and six-year moving averages. Hodge calculates the employment coefficient, i.e. the ratio of employment growth to economic growth. (A value below zero would indicate jobless growth.) For the period 1946-2007 the value fluctuated around an average value of roughly 0.5.<sup>36</sup> This means that economic growth leads to formal sector employment growth of only half the real GDP growth rate.

The period of employment decline in the uncertain early 1990s was a clear outlier. The employment coefficient dropped precipitously to as low as -1.7 for 1994, indicating jobless growth: for the six uncertain years up to 1994, the real economic growth rate averaged 0.5% and the employment growth rate -0.8% (Hodge 2009:498). However, subsequently the employment coefficient returned to its long-term value of approximately 0.5, which indicates that jobless growth is not a long-term characteristic of the South African economy.

His results show a substantial increase in formal sector employment from 1995 up to 2007. Thus the rising rate of unemployment since the middle 1990s was not due to a historically deficient growth or employment performance of the economy (2009:502). The cause is not on the demand or absorption side of the economy, but on the labour supply side, specifically the large increase in the labour force since the mid 1990s, as "previously discouraged workers are attracted by increasing job opportunities in an expanding economy" (2009:501). Similar incentives may also attract more migrants from African countries, e.g. Zimbabwe.

An employment coefficient of 0.5 might be regarded as "woefully inadequate" under conditions of large-scale unemployment, but is not easy to raise. While growth may pick up in the medium term, "the prospects for a sustained lowering of the ... high rates of unemployment depend mostly on future changes in the labour force. Only if labour force

---

<sup>36</sup> Marinkov and Geldenhuys (2007:376) estimate employment elasticities for five-year periods between 1971 and 2005. They find much variation in the value, perhaps because they did not apply smoothing and used five-year periods. The results show a decline since the mid-1980's, i.e. from 3.33 in 1981-1985 to 0.45 in 2001-2005.

growth continues to moderate can we reasonably expect further declines in the rates of unemployment” (2009:502). South Africa simply has too many people in the workforce.

This conclusion can sound cold-blooded – as if he is saying that discouraged workers and those in the informal sector should just stop wanting to work. However, it captures an important implication of the employment coefficient: formal sector growth alone is unlikely to absorb sufficient numbers of people to reduce unemployment rates significantly.

*(b) Digression: On estimating the output elasticity of employment*

Estimating the output elasticity is an area of debate, both micro- and macroeconomic. Many researchers have estimated it and significant variation characterise the results. Data coverage (whether agriculture is included, whether the informal sector is included, etc.) makes a difference. It also depends whether simple elasticities are calculated from annual changes, or whether an elasticity is estimated econometrically from a labour demand function, and whether from panel or time series data.

An early estimate is an elasticity value of 0.29, estimated by Fields et al (1999:14) from a standard labour demand equation in a (non-agricultural formal private sector) cross-sectoral study. These were estimates for 1980-89 – with the period 1990-98 producing insignificant estimates, again suggesting that it may have been a transitional period with uncommon economic behaviour (see footnote 40 below). However, dividing 1990-1998 into two sub-periods provides estimates of approximately 0.85, both statistically significant (Fields et al 1999:17). This is quite puzzling.

Oosthuizen (2006:9) calculates a simple output elasticity of non-agricultural formal employment from 1970, as follows:

1970-1980	0.76
1980-1990	0.49
1990-1996	-0.55
1997-2002	-1.29

These correspond with a detailed analysis of the Hodge results (but still interprets the 1990s as a declining trend rather than possibly a decade-long aberration that may have normalised after 2000).

He also calculates a simple output elasticity of *total* (formal *and* informal) employment of 0.76 for the period 1995 to 2004 (2006:10). Altman (2008:S143), presenting revisions to employment data and trends between 1995 and 2006, finds Oosthuizen’s value ‘extremely high by global standards’ in both developed and developing countries. From her revised formal-plus-informal employment data the simple employment elasticity is estimated to be in the interval 0.45-0.66, depending on the period and data source. She also notes separate elasticities for formal employment (0.66) and informal employment (0.24) for a time period with an overall elasticity of 0.5. (The relevant period is the same as Oosthuizen’s and shorter than that of Fedderke and of Moolman, below.)

Severe variation in sectoral estimates is common. From an estimated labour usage function, Fedderke and Mariotti (2002:860), using panel data, report a value of 0.86-1.0 for the output elasticity of employment for the manufacturing sector for 1970-97. In another exercise, Fedderke produces a manufacturing value of 1.18 (2004:87). For the three mining sub-sectors he gets values of 0.90, 0.31 and 2.26, and in a different exercise for the entire mining sector, a value of 3.02 (2004:73; 87).

Moolman (2003:11), using industry-level time-series analysis,<sup>37</sup> finds an average output elasticity for mining of 0.63 and 0.57 for manufacturing. Values for manufacturing subsectors are bunched around this average, but the lowest is 0.28 and the highest 0.86.

Output elasticities have also been estimated for different employee skills levels. Moolman (2003: 12-15) finds ascending values of 0.49, 0.87 and 1.19 for semi- and unskilled, skilled, and highly skilled respectively. Fedderke (2004:92) produces a sharp V-pattern with values of 2.1-3.1, 0.8-1.4, and 5.5 respectively.

*(c) On growth constraints, wage elasticity and employment*

Fedderke, aided by students and colleagues, has been a prolific researcher on aspects of growth. Some papers relate to explaining decreases in employment in the formal economy. It is worth perusing them to characterise the approach and distil insights relevant to the unemployment discourse.

Fedderke notes (2004:9-15) that formal sector employment expanded from 1970 to 1989 (though at a declining rate), and then started to fall in absolute terms at a growth rate of -1.15% in 1990-98.<sup>38</sup> In the latter period, employment in the mining sector shrank by -6.4% per annum; manufacturing, agriculture and services all shed labour at approximately -1% p.a.

Fedderke sets out to identify factors that constrain growth in South Africa. His concern is not unemployment as such, but that poor labour market performance may constitute a structural constraint on economic growth. He decomposes output growth in the 1990s (up to 1997) into the relative contributions of labour, capital and technology (based on a neoclassical production function and perfectly competitive factor markets).<sup>39</sup> This points to the labour market as a problem area, having contributed the least, and indeed negatively, to GDP growth (2004:19; 2002:626). This is true for all four principal sectors of the SA economy.

Fedderke asks: “What is it about the labour market that has led to the decline in employment creation, and hence to a virtual absence of labour as a positive contributor to output growth in South Africa?” (2004:22; also see 2006:15).<sup>40</sup> The presumed problem of labour markets is then handled under the heading of *market distortions and inefficiencies*, where “the lack of attention paid to the mispricing and hence resource misallocation, as well as the

---

<sup>37</sup> Moolman (2003:9) argues that the employment relationships are too heterogeneous to justify the use of panel data techniques. In particular, the occurrence of structural breaks in many of the series and relationships that are different in nature and timing implies that the cointegration vectors are different. This would make the use of panel data techniques, such as used by Fedderke and Mariotti (2002), inappropriate.

<sup>38</sup> See Hodge (2009) for an analysis of the recovery of employment after 1998.

<sup>39</sup> Fedderke (2002:618) recognises that the latter assumption “may be inappropriate particularly in South Africa”, and also note other limitations of the decomposition technique (2002:616-23; 642).

<sup>40</sup> Fedderke estimates the labour contribution to output growth in the 1990s at -0.58%. Other estimates for longer and shorter periods between 1980 and 2005, e.g. Arora (2005:15) and Du Plessis and Smit (2007:13), all show a consistently positive (though perhaps declining) contribution from labour to GDP growth of between 0.6 and 0.9 per cent (and sometimes higher than capital). Fedderke’s value for the 1980s is within this range, but his negative value for 1990-1997 is far outside it. The transition period around 1994 may have been an abnormal period, with formal sector employment quite unstable, as noted by Hodge (2009:497) when explaining the out-of-sorts employment coefficient in that same period. On these grounds there does not appear to be a general problem with the labour market, and his conclusion might have been premature.

labour market rigidities that characterise South African labour markets is astonishing” (2004:56; also see 2006:15).

A central fact is that the wage elasticity of employment in South Africa has time and again been found to be negative. Fedderke and associates set out to highlight that real wages matter in observed employment trends – in particular that excessive increases in real wages were a major cause of the decline in formal sector employment in the 1990s.<sup>41</sup>

The basic evidence shows, for example, that in the 1990s mining employment declined amidst growing output – but increasing real remuneration (2004:56-8; Fedderke and Pirouz 2002:13). Thus a plausible hypothesis is that rising real labour cost may have contributed to declining employment. Since “economic theory would anticipate that perfect labour markets would serve to equalize the marginal product of labour to the marginal cost of labour”, changes in labour productivity is another possible explanation for changing employment trends (Fedderke 2004:65). Improved skills levels may also be relevant.

Fedderke turns to econometric evidence, i.e. a labour requirements function derived by inverting a standard Cobb-Douglas production function. The results show wage elasticities for the three mining subsectors (coal, gold and uranium, diamond mining) of -0.44, -0.69 and -1.45 respectively. (These elasticities remain negative when they control for the skills ratio.) He concludes that the cost of labour has been a source of job loss (2004:75).

A slightly different labour usage equation for manufacturing, estimated from panel data<sup>42</sup> on the 28 subsectors (2004:80-1; Fedderke and Mariotti 2002:858-62), produces a real wage elasticity between -0.5 and -0.55. (These estimates do not control for changing skills composition.) These values are lower than other published estimates, -0.7 being the most quoted general wage elasticity.<sup>43</sup>

Whatever the exact elasticity may be, Fedderke and Mariotti (2002:848) point out that, wherever a subsector had a decline in employment, it also had a strong negative correlation between employment and real labour remuneration.

Wage elasticities show substantial variation across sectors. Some, like mining,<sup>44</sup> wholesale and retail trade, construction, community services, and domestic households, appear to have high elasticities (larger than -1). Agriculture, electricity and gas, and financial services have medium elasticities (-0.4 to -0.8). General government as well as transport appear to have low wage elasticities (below -0.15).<sup>45</sup>

---

<sup>41</sup> Mazumdar and Van Seventer (2002) provide a decomposition analysis that shows how the gains from output is distributed between real wage growth and employment growth. In contrast to the 1970s and 1980s, the 1990s show a clear trend favouring wage growth rather than employment expansion. This is an economy-wide phenomenon, e.g. for tradeable as well as non-tradeable, for labour- and capital-intensive manufacturing, etc. They do not, however, provide explanations for these trends.

<sup>42</sup> See footnote 37.

<sup>43</sup> Most calculations of employment elasticity in South Africa indicate that the labour demand curve is relatively elastic, with estimates typically ranging from -0.66 to -0.85 (Nattrass 2004:91; Fields et al 1999:5). This is higher than values for OECD countries of -0.2 to -0.5 (OECD 2007:132) or the range of -0.15 to -0.75 for most other studies noted by Hamermesh (1996:81-92; 135). Fields et al (1999:17) produce a best estimate of around -0.5.

<sup>44</sup> The estimated wage elasticity value for mining here (-2.20 seems very high given the values obtained for the mining subsectors earlier.

<sup>45</sup> In this particular labour requirements function, manufacturing has a value of -0.39, but it is not statistically significant. To solve this puzzle, Fedderke reports on a manufacturing sector labour requirements function that is more fully specified by including trade openness and capacity

Fedderke also finds a much higher wage elasticity for unskilled workers (approximately -2.0) than for skilled workers (-0.46) (2004:91). The very high value for unskilled workers falls far outside the ‘normal’ range for South Africa<sup>46</sup> – but was estimated at a high level of aggregation for the formal sector. Behar (2004), using firm-level data and translog cost functions, reports wage elasticities for skill groups in the manufacturing sector as follows:

Managerial/professional:	-0.56
Skilled/artisan	-0.56
Semi-skilled	-0.80
Unskilled	-0.65

These seem to confirm the conventional range of estimates.

Despite all the complexities and difficulties (including aggregation, data and methods) in estimating wage elasticities<sup>47</sup> and some perhaps suspect values, there is a clear pattern of relatively high negative real wage elasticities, with higher values for less-skilled labour likely. For Fedderke, the latter is crucial:

(T)he wage elasticity of unskilled labour in the formal sector of the economy is particularly dramatic. It remains an abiding puzzle why the SA Department of Labour has not recognized the wage rate as a means of alleviating poverty amongst population groups who stand to benefit most from real wage cuts (2004:93-4; also see 2006:17).

To find the culprit for the poor contribution to employment growth is not difficult: “Wage moderation has been insufficiently practiced” (2004:98; compare Rodrik below).

Another derived result comes from an analysis of a possible relationship between (a) the correlation between real remuneration and labour productivity, and (b) employment growth rates. Industries where the real wage is less closely linked to real labour productivity (correlation below 0.7) tend to have lower growth in employment. Only where there is a strong positive correlation between growth in real labour remuneration and growth in labour productivity (correlation above 0.8) do economic sectors in South Africa create jobs on a sustainable basis (Fedderke 2006:16). This suggests “the presence of a declining employment creating capacity in sectors as they conform less closely to the dictates of standard economic theory” (Fedderke and Mariotti 2002:853). From this they conclude:

“...‘well-functioning’ labour markets, defined as those that link factor rewards to factor productivity in accordance with economic theory, appear to be more likely to generate both employment, and sustained improvements in labour remuneration. In effect, to the extent that by labour market flexibility we mean the capacity of labour markets to adjust freely and

---

utilization. It uses the factor *price ratio* rather than the real wage and produces an estimated coefficient of -1.97, which is interpreted as the real wage elasticity (Fedderke, Shin and Vaze 2003:38; Fedderke 2005:22).

<sup>46</sup> It may be significant that in a later paper Fedderke himself (2010:16), when referring to elasticities that can be higher than -0.7 and even greater than -1, does not mention these higher values of around -2. Also see the previous footnote.

<sup>47</sup> By only estimating a labour demand function and not also a labour supply function, implicitly these approaches assume that labour supply is either perfectly elastic (or perfectly inelastic). Without such an assumption, labour demand would not be identified (see Hamermesh 1996:70-74). Both of these assumptions effectively assume the problem of unemployment away or restricts the ‘problem’ to voluntary unemployment. The input demand function also assumes profit maximising firms in perfectly competitive labour markets at a point where wages are market clearing. For a South African multi-equation model with both labour demand and labour supply, see Du Toit and Koekemoer (2003).

rapidly to the market clearing wage suggested by labour productivity, the evidence ... suggests that labour market flexibility is desirable.” (Fedderke and Mariotti 2002:854).<sup>48</sup> This illustrates the line of argument towards a conclusion on the desirability of labour market flexibility. In this view, labour markets are constrained because wage adjustments are inadequate in clearing the market (which would eliminate voluntary unemployment). The consequence is a continued high unemployment rate. Inappropriate pricing of labour is linked to rising levels of labour market rigidity (Fedderke 2010:26) – inter alia linked to an increasing propensity to substitute capital for labour (Fedderke and Hill 2006: 13) and especially labour market regulation – which has led to poor employment growth in the economy.

“It has also disadvantaged the large pool of unemployed who remain excluded from the benefits of the formal economy. ... It is time, therefore, to revisit labor market regulation ... (to) allow more flexible and faster labor absorption for small and medium-size firms. The objective must be to allow the poor ... access to employment under labor market regulation that is less onerous on the employer and offers more chances of employment to job seekers (Fedderke 2005:32).

A contrary finding on wage costs comes from Rodrik (2006), from the Harvard Centre for International Development (CID) and the ASGISA panel. He provides results that suggest that the decline in formal sector employment in the 1990s was *not* due to increasing real wages (i.e. wage-push). The deeper cause lies elsewhere (as discussed in subsection (d) below).

While the level of South African wages (in the formal sector) are quite high by the standards of countries at similar income levels, in general real wages have not risen much, if at all, since the transition to democracy (Rodrik 2006:2). The role of unions seems to have been mostly to prevent the real wages of their members from falling.

Rodrik analyses real remuneration per employee in manufacturing (which *has* increased steeply in the 1990s). He decomposes the increase into (a) a part due to skills-upgrading, i.e. changing skills composition due to an increasing proportion of skilled and highly skilled workers, and (b) a part due to wage-push. The latter component, i.e. skill-adjusted real labour costs, actually fell significantly during the 1990s (2006:15; 45). Therefore, excessive real wage increases cannot explain, or have caused, the decline in manufacturing employment.

Given his own estimate of the real wage elasticity of -0.6, Rodrik is not saying that employment would not react to real wage changes. His contrary finding compared to Fedderke is a factual one, based on a different calculation of changes in real labour costs in the 1990s. Nevertheless, Rodrik rejects real wages cuts as an option to reduce unemployment, given the social and political context (2006:10).

To complicate the empirical issues, Kingdon and Knight show that in 2003-7 employment grew (unemployment fell significantly) *while* real mean earnings of formal sector employees rose annually by 4%, and those of informal employees by 8.8% (2008:318-9). This could mean that real wages did not have much of an effect in that period, that the employment gain would have been larger had real wages not increased, or that other causal factors have dominated. Kingdon and Knight also argue that, given the estimated elasticities, greater wage flexibility would have been unable to prevent the increase in unemployment in the 1990s (2007:823).

---

<sup>48</sup> At a market-clearing equilibrium in a perfectly competitive labour market the real wage (marginal cost) equals the marginal product of labour.

Banerjee et al (2006: 24; 31-2) similarly notes a 10% decline in real wages for 1995-2005, and the absence of evidence that the increase in unemployment was driven by wage growth – despite a large and growing union wage premium. Related is the conclusion of Kingdon and Knight (2008:302) that the increased unemployment in late 1990s was not primarily due to wage rigidities, but due to abnormal increases in the labour force.

Linking employment and unemployment episodes in South Africa to real wage changes is, and has been, fraught with difficulties.<sup>49</sup> Du Plessis and Smit (2007:14) note that evidence on real wages remains ambiguous. Some researchers find both increases and decreases in real wages for 1995-2003 from different data sources, while others find that real wages were largely stagnant.

*(d) On sectoral shifts, employment and unemployment*

Rodrik (2006) also provides a sectoral analysis of shifts in formal sectoral employment patterns, e.g. manufacturing versus services, or tradeables versus non-tradeables – taking note of their unskilled-labour intensities.

Formal employment stagnated during the 1990s, with the share of semi- and low-skilled workers stable at approximately 42% of formal sector employment (2006:8). However, the relative constancy of total employment hides large structural changes. Employment in tradeable activities (mining, agriculture and manufacturing) has dropped from 45% to 30% of total formal employment from 1970 to 2004. In particular, the decline in agricultural and mining employment has not been compensated by an increase in manufacturing employment. South Africa has actually deindustrialized in the past thirty years (2006:5-6).<sup>50</sup> In contrast, employment in private non-tradeable activities (financial services, construction, trade, retail, transport, etc.) has increased from 25 to 37%, approximately. Manufacturing has lost ground to the tertiary sector.

This restructuring in macro-sectoral employment has had major implications for the employment of low- and unskilled workers – and thus for unemployment, which is heavily concentrated amongst the unskilled (also see Fedderke 2004:13). This is because the declining sectors – the tradeable sectors – have been the most *low-skill* intensive parts of the economy. By 2004 more than 70% (60% for manufacturing) of tradeable employees were low- and skilled workers, as against only 25% for private non-tradeable (2006:2-3; 8).

For all activities these percentages were much lower than in 1970 or even 1990. In addition, production techniques in manufacturing and the other tradeable sectors have become more capital-intensive (2006:10).<sup>51</sup>

---

<sup>49</sup> For an earlier dispute on this issue, see MERG (1993:152-4) which rejects IMF and World Bank views (e.g. Fallon 1992) that excessive increases in real wages have been the main cause of low employment growth. MERG attributes the latter to inadequate growth in aggregate demand and labour force education in previous decades: “International comparative evidence supports the MERG argument that in growing economies, real wages and employment are not inversely related ... employment is a function of aggregate demand and output, rather than of wage flexibility in the labour market” (1993:154). Of course, such an effect depends on the magnitude of the employment coefficient (see discussion above).

<sup>50</sup> In terms of employment as a *share* of the labour force, manufacturing’s share has declined from almost 15% in 1976 to approximately 7% in 2002. Manufactured exports as share of GDP has doubled in this period, but only to a still low level of 12%.

<sup>51</sup> The impact of trade liberalization on employment has received some attention in the South African trade literature. A SALDRU publication (2006) on its Trade and Poverty Project reflects most of the debate. A chapter by Dunne and Edwards (2006) provides evidence that the net impact of trade

The structural shift away from the most low-skills intensive parts, i.e. tradeable and especially manufacturing, is essential to understanding unemployment and employment trends. Using panel regressions of sectoral employment functions, Rodrik decomposes employment changes according to cause. The following emerges (2006:18; 48) for manufacturing employment for the decade since 1994:

- The decline in the average price index of manufacturing (relative to the other sectors) – causing a fall of approximately 30% in relative profitability – is the predominant cause of the decline in manufacturing employment. This factor alone accounts for more than 143% percent of the total employment reduction.
- Skill-biased technical change is the second most important contributor (78%).
- TFP (total factor productivity) growth have made a comparatively small contribution to the decline in employment (around 11%), while
- The drop in skill-adjusted remuneration costs (the wage-push element) has *prevented* manufacturing employment from falling even further (-113%). This underscores and quantifies the perhaps contra-intuitive finding noted above.

A decline in real wages for low-skilled workers is unlikely to be an feasible option to reduce unemployment, while the informal sector is unlikely to absorb significantly larger numbers of unskilled job seekers (2006:10-11). Manufacturing sector growth is the only option, with export-oriented and profitability-enhancing strategies indicated. Ironically, since manufacturing is relatively low-skill intensive, if such a strategy is successful the perceived problem of a skills shortage as a constraint on economic growth will largely disappear (2006:9).

Hausman (2008), in the final report of the ASGISA panel, recommends depreciation in the real exchange rate as the remedy for an ailing manufacturing sector. They conclude on an optimistic note: “the faster development of new high productivity tradeable activities will create jobs that can pay decent wages, so that full employment can be achieved without a major decline in wages at the bottom of the pay scale” (2008:11).

One needs to note that their analysis applies to the formal sector and to strictly defined unemployment. The reference to full employment suggests that no room in their frame of reference for discouraged workers and structural (i.e. non-frictional) long-term unemployment.

*(e) Comprehensive reports sponsored by international organizations*

International researchers sponsored by international organisations have also been active in researching the South African economy. They tend to focus on a range of issues simultaneously.

---

liberalization 1994-2003 was more-or-less zero (including only direct effects of changes in exports and imports) – although definite sectoral shifts occurred. Capital-intensive sectors were positively affected and labour-intensive sectors negatively. If indirect effects (e.g. backward linkages) are included, the net effect on aggregate employment appears to have been positive – but with relatively more skilled jobs created than semi- and unskilled jobs (2006:8). A CGE modelling exercise by Thurlow (2006) confirms employment increases for all skills groups if both direct and indirect effects are included – but with skilled employment expanding fastest (2006:9). The decline in manufacturing employment during the 1990s also is explained by trade liberalization (2006:11). In a separate project, Ngandu (2008), using a CGE analysis of the impact of exchange rate appreciation on employment, finds a positive net effect.

Lewis (2002) provides a synthesis from World Bank analyses of various aspects of the South African economy. Although not an official World Bank publication, it provides insight into the typical approach at this institution.

Noting the development goals of promoting sustainable livelihoods, improving social conditions and alleviating poverty (2002:325), his approach is characterised by three points of departure: (a) a focus on investment and job creation, with economic growth as key policy objective, (b) identifying constraints on growth, and (c) the legacy of apartheid as manifested in “pervasive distortions in factor markets”, including labour (2002:726). Thus there is a presumption that unemployment is the consequence of distortions in the labour market, and that these distortions are political-historical in nature.

Regarding the formal sector,<sup>52</sup> he considers labour market regulation and labour market flexibility. He quotes from a 1999 survey of CEOs of large firms regarding constraints on investment and growth. The impact of the new labour regulations was 4<sup>th</sup> on the list – following crime, the cost of capital and credit, and exchange rate volatility.

While 40% of firms said regulations caused them to employ fewer workers, 60% percent said the combined labour legislation had no cumulative impact on employment decisions (2002:748). Almost 30% said that labour relations had been improved, and 15% said the regulations helped raise labour productivity (2002:734). For SMMEs, the four main constraints on expansion did not include any labour issues (2002: 739-40). The ambivalent views show “how difficult it is to disentangle the effects of labour legislation and regulation from underlying economic and industry trends” (2002:734).

He concludes that the new labour legislation “does at least appear to contribute to an *impression* of inflexibility” (2002:747), and undoubtedly “along some margin, perhaps fairly wide, labour market institutions and regulations have constrained more rapid growth in employment” (2002:748). However, he finds it hard to imagine that inflexibility could account for African unemployment rates above 30%, or that greater flexibility would double African employment (2002:748-9).<sup>53</sup>

As for the impact of wage inflexibility, he presents a diagram showing broadly parallel upward trends of real remuneration and unemployment for lower-skilled labour from 1970–1999. The lower-skilled unemployment rate increased from approximately 12% to approximately 56%. Real remuneration per unskilled and semi-skilled worker grew by approximately 250%. The broadly parallel movement in the unemployment and wage data “supports the neo-classical conclusion that unskilled and semi-skilled labour has to a large extent been priced out of the market” (2002: 746).

Lewis qualifies his findings by noting that the evidence on the impact of labour market regulations is quite mixed, that a complex issue such as the relationship between real wages and unemployment cannot be analysed with visual patterns, and that wage inflexibility in any case cannot explain the *extent* of unemployment in South Africa (2002: 773-4).

Pollin et al (2006), in a report sponsored by the United Nations Development Programme, propose an employment-targeted economic programme. Although expressly

---

<sup>52</sup> Interesting is his view that having a ‘stunted’ informal sector and a relatively small agricultural sector means that South Africa is missing two standard labour ‘shock absorbers’ that operate in other economies (especially in Africa) during periods of adjustment (2002:728).

<sup>53</sup> Lewis also refers to the ILO review (Standing et al) which downplays the impact of regulations on employment, and an earlier World Bank document (Fallon and Lucas 1996) which had an opposite view.

policy-oriented, it provides contrasting perspectives on the causes of “the problem of mass unemployment”.

On the demand side, Pollin et al (2006:10) highlight two factors impacting on low employment growth. First, low GDP growth: at approximately 4% it is too low to be a major “engine of employment growth”. Secondly, and most importantly: a significant decline in labour intensity between 1994 and 2001 – a sudden decline of 4% p.a. in contrast to the long-term trend of -1% for 1967-2001. They provide the following numbers. In the entire period 1967-2001 there was a gradual drop from 8.2 formal economy workers per R1m output in 1967 to 4.9 in 2001 – a total of 40% in 44 years. However, in 1994-2001 there was a drop of 28%: “In just seven years, formal economy businesses in South Africa were hiring nearly 30 percent fewer people for a given amount of goods and services they produced” (2006:10). This occurred especially in mining and manufacturing, and mainly due to mechanisation and new labour-saving technology in the context of global competition.

On the supply side their focus is on labour costs. Here they differ strongly from the argument that excessive real wages, combined with a relatively high negative real wage elasticity of labour demand, are – together with labour market regulations – at the root of the unemployment problem.

Referring to work of Lewis as well as Fallon and Lucas (1996), they argue that the evidence linking mass unemployment to high labour costs, especially relative to countries that are South Africa’s trade competitors, is “not persuasive”. They point out that Lewis’s number of 250% real wage growth in 1970-1999 for semi- and unskilled workers (noted above) is based on extrapolation from an extremely small sample (2006:26). Referring to a Fallon and Lucas (1996) estimate of a -0.71 wage elasticity for black employees, they point out that the impact elasticity is only -0.156, implying that any adjustment of employment to wage changes is quite slow.<sup>54</sup>

On market rigidities due to unionization and labour regulation, they point to Lewis’s ambiguous findings in this regard (noted above), plus the fact that any rigidities imposed by unionization at most affects businesses employing roughly 10% of South Africa’s labour force (2006:29).

Therefore: “It is fair to conclude that, based on this evidence, the argument that excessive wages and labour market rigidities are one of the primary causes, if not *the* primary cause, of mass unemployment in South Africa, is based on a weak empirical foundation” (2006:32).

Moreover, even if increasing real wages were the cause of low employment growth, the fact that initially the wages of blacks were so low relative to whites implies that wage reduction can be no solution (2006:27), given initial discrimination and inequities in remuneration. (This issue seems to be their main concern.) The required real wage reduction to make a meaningful impact may also be very large. They estimate that to halve unemployment may require an average real wage reduction of almost 40% (2006:33).

---

<sup>54</sup> They also find conclusions of Edwards and Golub (2004) relating to exports and labour costs problematic. The latter show evidence of a strong downward trend in relative unit labour costs in manufacturing (relative to a large number of trade partner countries) for 1970-98, but also that these costs still end up above those of a subgroup of (competitor) developing countries. In the reading of Pollin et al (2006:25), Edwards and Golub (2004:1330;1336) downplay the former and highlight the latter, choosing to stress that high labour costs possibly still are contributing to slow export growth and thus low employment growth.

In explaining low employment growth in South Africa in the recent past, they also point to the constraining effect of GEAR-based macroeconomic policy stringency with regard to growth and employment creation. This view, like other focal points of their analysis, puts them at odds with most of the contributions in this cluster, including IMF and OECD official reports (see below).

(f) *Official reports from international and local organizations*

The public macroeconomics debate – dominated by private sector rather than academic economists – is strongly influenced by country reports from institutions such as the IMF and the OECD. Locally the CDE is a producer of similar reviews.

Being more policy oriented, the reports often provide less detail regarding theoretical framework and analysis. However, one can deduce the basic understanding of the nature and causes of unemployment (and poverty). Given their influence on the public debate, characterising these are important. They all belong to the growth-oriented macro-economics sub-discourse.

The official IMF and OECD country reports address unemployment and labour market issues as part of a package of largely macroeconomic findings and proposals. Often there is limited reporting of the research itself, but one can recognise typical themes (italicized below). In the 2007 IMF country report (IMF 2007), we find the following:

... with inflation risks on the upside, a *tightening of monetary policy* could be needed ... remaining committed to the *flexible exchange rate regime* ... maintaining a *neutral fiscal stance and lower rate of government expenditure growth* ... further *trade liberalization* ... the *revision of labour market regulations* and practices that limit job creation ... initiatives to address income and wealth disparities.

The 2008 OECD country report highlights the importance of growth in labour productivity, *labour market rigidities* in the form of high firing costs, the potentially negative labour demand consequences of *strong trade unions* (being mainly focused on employed workers), and *sectoral minimum wages*. Lastly, it notes the possible *disincentive effects of social grants* on labour supply. The 2010 report focuses on issues such as:

- *Wage determination mechanisms* (and *sectoral extension of wage bargains*, which cause *wage inflexibility*);
- Bottlenecks in *employment protection regulation*;
- *The regulatory environment and increasing competition*
- *Reducing direct government influence on the economy*;
- *Monetary stability* together with *fiscal sustainability* while
- Reducing the real exchange rate to facilitate export-led growth

The italicized phrases denote sentiments often identified as elements of the so-called Washington Consensus – and typify institutional advice given to the South African government after 1994.

Many of these sentiments also are echoed in the views of private sector economists. A related example is the Centre for Development and Enterprise (CDE), a business-oriented think tank which publishes reports on key issues, often in the context of the growth-versus-redistribution debate. It suffices to quote some statements from its 2010 Roundtable (CDE 2010:34-40):

- “The depth of poverty in South Africa is a major challenge. Poverty cannot be reduced without high and sustained rates of economic growth. ... Inequality in South Africa cannot be ignored, but it is not the same thing as reducing poverty. ... Rapid growth to address

poverty might increase inequality in the short term. ... Increased public spending on redistributive policies is not only unsustainable, it will have adverse effects on our growth potential. ...

- “(W)e should learn from the impressive performance of many countries in the developing world. This means we should focus as single-mindedly as possible on adopting and implementing policies that will maximise sustained economic growth. ‘Going for growth’ will pay off in far higher levels of national income and faster expansion of formal employment, with more and more people being drawn into the formal wage economy and the consequent lifting of millions of people out of poverty.
- “We are not saying that inequality and poverty should be ignored for the sake of growth. We are arguing that rapid economic growth has a proven capacity to address large-scale poverty and, in time, inequality. It is the only sustainable approach.
- “South Africa needs ... high and sustained economic growth, and a massive increase in the number of formal sector jobs. Nothing else will do.”

#### 6.4 *The macro discourse diagrammatically: filling in gaps*

The two sub-discourses of cluster 3 are depicted in the bottom half of figure 2. In contrast to clusters 1 and 2, there is limited overlap. What they share, is a singular focus on the formal sector. The boxes around the core themes in the bottom-left quadrant also show oft-encountered South African policy themes arranged around the bold-text themes to which they relate.

The bottom-right quadrant needs some explanation. A significant part of the international discourse on unemployment concerns macroeconomic models of aggregate supply and demand, macroeconomic equilibrium or disequilibrium. The behaviour of long-run aggregate supply and long-run unemployment – as contrasted with short-run aggregate supply and short-run or cyclical unemployment, in conjunction with aggregate demand behaviour – are central to this debate. Much work has gone into explaining diverse experiences across countries regarding unemployment, e.g. in OECD countries, using models that include elements such as sticky wages and prices, persistence and hysteresis, search and search frictions, matching problems, and so forth.<sup>55</sup>

In South Africa almost no such macroeconomic research has been done – a large empty space in unemployment research. Therefore, the spectrum of approaches in figure 2 is completed by showing the main theoretical approaches and their key unemployment-related propositions:

- New Keynesian macroeconomics (i.e. rigid wages, non-clearing labour markets; insider-outsider models<sup>56</sup>; slow adjustment back to NAIRU due to e.g. hysteresis; both cyclical and long-run unemployment recognised as problems; demand management can impact on cyclical unemployment);
- New Classical macroeconomics (i.e. flexible wages, clearing labour markets; rapid adjustment back to NAIRU; cyclical but not long-run unemployment recognized as a

---

<sup>55</sup> The 2010 Nobel prize for Economics was awarded for work by Mortenson and Pissarides (and Diamond) in this area, while Blanchard has published extensively on these topics (Blanchard 2005; Cahuc and Zylberberg 2004).

<sup>56</sup> Michie (2003:19-20) outlines how labour market segmentation is integral to the NAIRU approach.

problem; no systematic demand management to counter unemployment necessary or acceptable);

- Real Business Cycle theory (i.e. models of equilibrium unemployment; flexible wages and market clearing; no deviation from NAIRU; neither cyclical nor long-run unemployment recognized as a problem; all unemployment optimal; no stabilisation policy acceptable).

These approaches have very different views on the nature of unemployment – compare the generic views on whether unemployment is voluntary or involuntary (right-hand column) – and on the speed of return to NAIRU. They also differ substantively on macroeconomic policy regarding unemployment, inflation and the business cycle. All of these focus on a single (formal) sector.

The work found in cluster 3A relate to the New Keynesian paradigm. Much of cluster 3B is influenced by the paradigm of the New Classical Model and/or Real Business Cycle theory.

## 7. THE THREE DISCOURSES: AN ANALYSIS

### 7.1 *The complete unemployment discourse landscape*

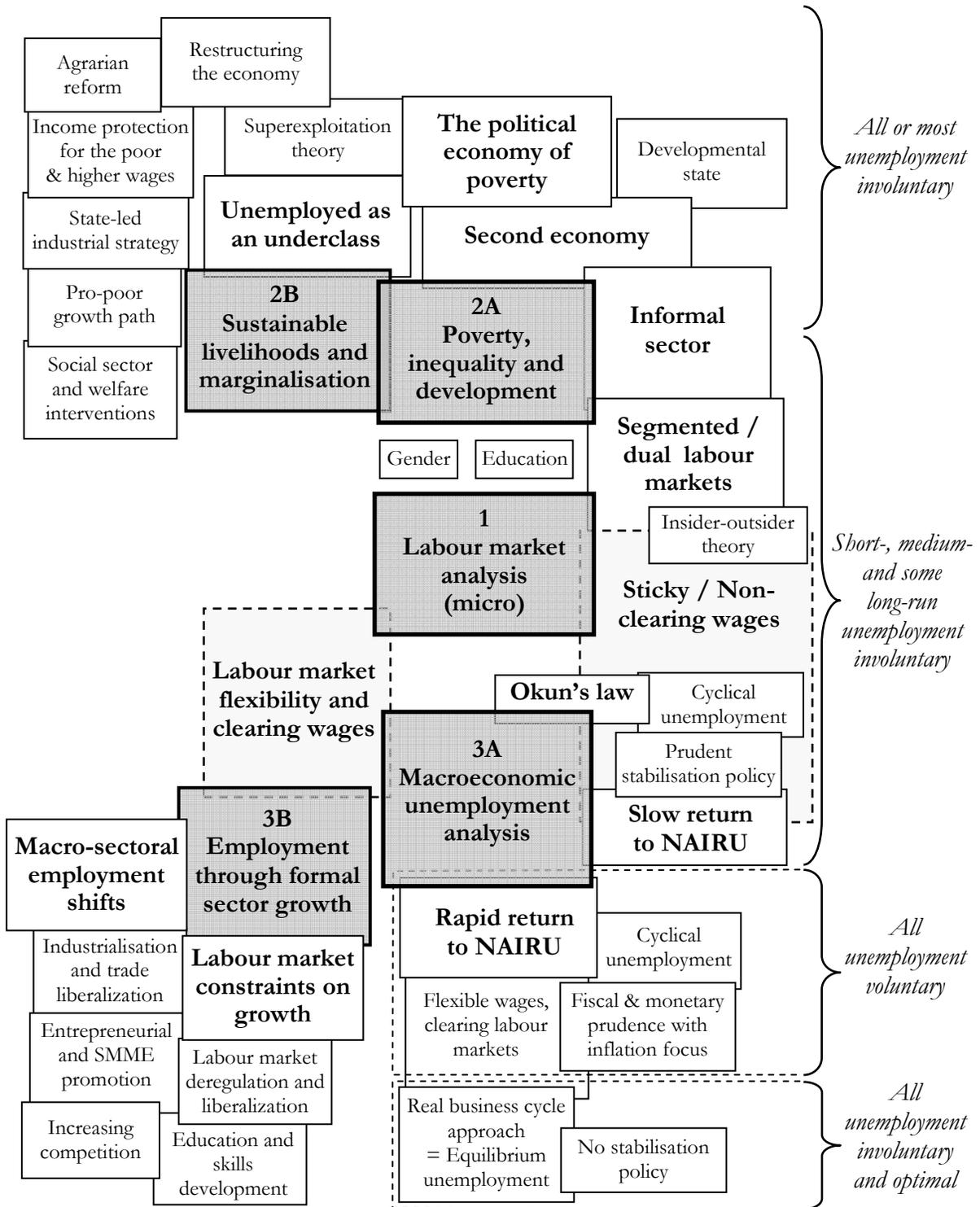
On the basis of the extensive literature survey and meta-analysis, we have argued that the various South African research contributions related to unemployment can be clustered into three main discourses, but also some sub-discourses – five in all:

- (1) A *labour market* discourse;
- (2) A *poverty and development* discourse, containing two sub-discourses:
  - (2A) poverty and inequality, and
  - (2B) livelihoods and marginalisation.
- (3) A *macro/macro-sectoral* cluster, containing two sub-discourses:
  - (3A) macroeconomic unemployment, and
  - (3B) economic growth and employment.

Diagrammatically the entire landscape is shown in figure 2. Shading and bold text indicate the main areas and topics discussed. The numbered boxes are the ‘mountains’ in the landscape.

The discourse landscape is very diverse. Various clusters, assumptions, themes and differences of emphasis constitute unmistakable features in the landscape, which also has significant divisions. Labour market analysis is the hub where all the discourses seem to come together – and where the distinction between flexible and sticky wages, or between clearing and non-clearing markets emerges as the fundamental basis for divergence. The generic views on the nature of unemployment (right-hand column) provide a quick guide to this divergence.

Figure 2  
The unemployment discourse landscape



## 7.2 *Fragmentation: three discourses, three worlds*

Our main questions were the following. Is there an integrated, cross-informed debate on unemployment and poverty, or do we have three worlds and three very different discourses – each with its own questions, paradigm, theoretical framework, techniques, language and body language? Is there communication between the different clusters, the different discourses – or are they analytically ‘polarized’,<sup>57</sup> closed to insights from another discourse, another world?

The meta-analysis suggests a significant degree of separation, although less in some cases. As noted in section 5 above, the two poverty-and-development sub-discourses (clusters 2A and 2B) are relatively close, and in turn are not too far from those in the labour market discourse (cluster 1) – although there are important differences relating to both content and methodology that separate them. However, there appears to be a significant divide between these two discourses and the macro discourse – which in itself is quite divided. Despite the micro-macro split, discourses 1 and 3A have similar views on the operation of markets.

The three discourses do not provide a coherent picture of unemployment. Three very different perspectives on unemployment prevail. The following *layered* characterization (somewhat over-simplified) of the dominant approaches is suggested:

### *Three analytical perspectives on unemployment:*

Macro: Looking across and down from the top, searching for aggregate patterns.

Labour: Busily trying to understand labour market mechanics and dynamics.

Poverty:

Poverty-inequality: Looking at the inequality between top and bottom.

Poverty-marginalisation: Looking *at* the bottom, and up from the bottom.

### *Three views of unemployment:*

Macro: Unemployment (and low employment growth) primarily is due to a lack of economic growth and perhaps some sectoral shifts – aggravated by labour market inflexibilities. (The focus is on the demand for labour at the aggregate or meso levels.)

Labour: Unemployment is the main problem as such, is a labour market problem and occurs primarily due to labour market factors, segmentation and worker characteristics. (The focus is on the supply of labour, at the micro level.)

Poverty: Unemployment is a serious problem, but part of a larger problem of inequality, structural and chronic poverty as well as powerlessness and underdevelopment – which also undermine access to labour markets. (The focus is much broader than labour demand or supply.)

In a sense the micro-macro divide merely results from a particular theoretical perspective – an aggregate, macro perspective cannot but lose some details, and a micro perspective must purposefully restrict sight of the macro picture. But there may be more to it. Some generalised impressions can be formulated, with the usual risks.

---

<sup>57</sup> Polaroid sunglasses filters unpolarized sunlight by only allowing light in one dimension to pass through, filtering out other dimensions.

Most macro-economists in South Africa do not bother with the implications of the messy details from labour, household and poverty studies – or with the significance of findings from such studies for macroeconomic analysis. At most they will mention a couple of empirical findings from labour market analysis. Their theme is: “High growth (and lower wages) will lead to higher welfare, more employment and more income for all, including the poor” ... as long as labour markets are flexible and so forth.

Most labour market analysts and inequality analysts are not bothered with either cyclical issues, shocks or long-term growth issues, or the impact of variables such as exchange rates, budget deficits and interest rates, or the importance of the wage elasticity of labour demand. “Whatever the growth rate or business cycle phase, the complex functioning of the labour market causes unemployment and inequality”. While they do focus on long-run unemployment, they are not much interested in the macro question of variations in the rate over time – or the issue of hysteresis. Neither do they overtly engage much with the details and implications of poverty and marginalisation analysis (although there are some exceptions).

Poverty-marginalisation analysts similarly are not interested much in labour market analysis or the wage elasticity of labour demand, or economic growth or economic cycles, apparently since none of these capture or recognise the powerlessness of the unemployed poor. “Whatever the growth rate or business cycle phase, the poor, marginalised, powerless and unemployed do not benefit much from the economy.”

The extent of the segregation, or even isolation, between discourses is nowhere more apparent than in the references. A scan of the references of the key papers in the various discourses reveals a virtually complete absence of cross-referencing between the macroeconomic discourse and the other two discourses – *and vice versa*.<sup>58</sup> Even between the labour market and development-poverty discourses cross-referencing is limited, although there is more of it – and it has been growing. Generally analysts prefer to engage with sources within a familiar sphere of knowledge, i.e. their own (comfortable?) discourse cluster and companions.

There is much ‘polarization’ in the unemployment discourse landscape. This constitutes a major limitation of the literature – not so much due to specific individual shortcomings, but as the net cumulative effect of discourse-confined analysis that restricts the range of questions, aspects and issues being considered in specialized research.

It must be added, though, that in some earlier comprehensive macro *policy* frameworks that were not reviewed explicitly, e.g. the MERG report (1993), there is an attempt to develop an integrated view – or at least a simultaneous treatment of issues. Similar comments apply to some of the early policy-oriented work of World Bank staffers such as Fallon and Lucas (1996) and Fallon and Pereira de Silva (1994).<sup>59</sup>

---

<sup>58</sup> An exception is the two macroeconomic contributions in cluster 3A, i.e. Schoeman et al (2008) and especially Marinkov and Geldenhuys (2007), who situate their macro analysis with reference to key labour research findings. Hodge (2009) in cluster 3B has one reference to Kingdon and Knight.

<sup>59</sup> Other exceptions are, for example, the SALDRU Trade and Poverty Project of 2006, notably the contributions of Dunne and Edwards (2006), Pauw et al (2006) and Thurlow (2006) that analyse the impact of trade liberalization and resultant import-export shifts on employment and on the poor.

### 7.3 *Limitations and gaps*

The limitations flowing from isolation extend to important topics. Several important instances of non-recognition between discourses can be listed.

1. An important gap lies in the treatment of the formal economy, and the distinction between the formal and informal sectors. South African macroeconomists don't seem to find informal sector employment – or linkages between the formal and informal sectors – relevant as a topic for theoretical or empirical analysis. The macroeconomic discourse focuses on the formal sector, with formal sector growth seen as the 'engine of employment growth', absorbing (or 'sucking in') the unemployed and poor into formal employment. The unemployment problem is implicitly equated to a lack of employment creation by the formal sector. Meanwhile 30% of the employed are in the informal sector and perhaps 60% of employment is created there. And while wage flexibility/moderation/reduction in the formal sector is seen as a solution for the unemployment and poverty problems, many of the unemployed poor cannot transition even into the informal sector. Indeed, other discourses show that the informal sector and the second economy may be key to understanding unemployment and poverty.
2. The exclusive macroeconomic focus on the formal sector also implies a denial of segmentation and dualism – another key limitation. Both labour market and poverty analyses highlight evidence of segmentation and dualism (including poverty traps, both rural and urban). They focus on access, *and* barriers, to employment opportunities – inter alia from a condition of poverty. Analysts of marginalisation point out that, whatever the growth rate, the poor, marginalised and unemployed do not benefit much from the formal economy and are powerless to change their position.
3. Segmentation also implies that forms of profit-enhancing non-marketclearing wage setting (e.g. efficiency wages) is common practice, precluding simple wage reduction (especially through government policy) as a solution. Ignoring these relegate some of the most important problems to the analytical backyard of macroeconomists. A search of the macroeconomic discourse indeed shows that the terms 'efficiency wages' or 'segmentation' do not appear in any of the macroeconomic contributions discussed.
4. A search of 'wage elasticity' in the labour and poverty/development discourses reveals a glaring absence of the term, even when reservation wages are discussed. This is surprising and an important limitation, although members of those discourses have been involved in estimating wage elasticities.<sup>60</sup> On the macroeconomic side, the estimations of wage elasticities suffer from inadequate recognition of the problems of identification and estimation, and large variability in results. Aggregation is a problem – and related to the complex implications of segmentation for elasticity estimation, yet another challenge to be tackled. The possible implications of an estimated value of -0.7 – e.g. that an almost 40% reduction in average real wages may be required to halve unemployment – also are not confronted

---

<sup>60</sup> A small exception occurs in later, policy-oriented papers of Kingdon and Knight (2005; 2007), which recognise the wage elasticity of labour demand as an issue – with reference to the impact of non-clearing wages in the formal sector – but only in a short reference to other studies. There is no own engagement between their own analyses and elasticity estimates. They do investigate a different elasticity, i.e. the wage elasticity of *un*employment, in relation to the so-called wage curve (1999; 2006b).

5. The significance of an output elasticity of employment (or employment coefficient) of only 0.5 (approximately) for the potential impact of an ‘employment through growth’ strategy on unemployment is not taken aboard in most macroeconomic and macro-sectoral analyses.<sup>61</sup> At the same time, such a coefficient is not insignificant and the importance of economic growth in (formal sector) employment creation cannot be ignored. More balance in the analytical and policy engagement with growth is required.
6. Given the ubiquitous role of the market paradigm in almost all the analyses, the uneven treatment of the supply and demand sides of issues is noticeable – and ironic. The labour and poverty discourses seem to focus only on supply-side restrictions in the labour market, with little attention to the labour demand side and aspects like absorption or wage elasticity. The unemployment-oriented macroeconomists (cluster 3A) consider both aggregate supply and aggregate demand. The growth-oriented macroeconomic cluster (3B) approaches issues from the production (function) side, i.e. the aggregate supply side, perhaps being wary of a role for aggregate demand in relation to employment/unemployment. However, when this cluster digs down to the labour market, it focuses on its labour demand side (e.g. wage elasticities) without much recognition of several supply-side constraints highlighted by the labour and poverty discourses – apart from skills differences, which everybody recognise in some way.
7. There is little shared understanding of overarching economic objectives. One finds deep differences in the conceptualisation of the objectives of economic growth, of development, and of inequality/redistribution. (a) The macroeconomic discourse narrowly tends to equate development with the growth of output and employment. Inequality is rarely mentioned. (b) The development and poverty discourses incorporate a broader concept of development, but even they do not engage deeply with the various dimensions of human development and empowerment. They focus on inequality and poverty (whether as monetary or multidimensional deprivation). Economic growth is rarely mentioned and is sometimes criticised as a ‘false objective’ that does not benefit the poor and exacerbates inequality. Also, much of the development literature gives limited attention to employment and unemployment.<sup>62</sup> (c) The labour market discourse does not refer much to either growth or development, but highlights earnings inequalities and such problems.<sup>63</sup>

#### 7.4 *Deeper issues that obscure and fragment*

Why is it so difficult to reach, or listen, across subdisciplines and paradigms? Why are the contributions clustered – and constrained – in the way they are?

Complex relationships exist between concepts and overlapping phenomena such as unemployment, poverty, inequality and (under)development. There is disagreement on how they relate and which problem is most important. Moreover, various sub-disciplines of economics as well as other social sciences (sociology, political science, anthropology) engage

---

<sup>61</sup> The same applies to the unemployment-growth elasticity value of -0.11 for 2001-2005, which implies that very high GDP growth rates would be required to decrease the rate of unemployment significantly, given labour force and productivity growth (Marinkov and Geldenhuys 2007).

<sup>62</sup> This is a general problem in the contemporary development debate: employment and unemployment is not given much attention, also internationally (cf Amsden 2010:57-9; also Wuyts 2001).

<sup>63</sup> An exception, again, is the later, policy-oriented papers of Kingdon and Knight which do note “the need above all else to pursue economic policies to help raise the economic growth rate” (2008:321).

with unemployment and poverty in different ways. The malady of silo thinking in the sciences is a well-known phenomenon. Different epistemological, methodological, theoretical and technical traditions in different (sub)disciplines also delineate and fragment the discourse.

One can imagine a number of grids that overlay the landscape and contributes to constrains and fragmentation. Two important ones are an epistemological grid and an ideological grid.

*(a) Epistemology and methodology*

The possibility of an epistemological grid is raised by an important question: Are there methodological or technical preferences in, or for, certain areas or approaches? For example, why is qualitative research only found in the poverty-marginalisation tradition? Do empirical techniques empower or constrain analysis? And what role do theoretical models play in the various discourses?

These questions must be considered against the backdrop of the age-old tension between Empiricism and Rationalism in the social sciences. Modern economic research, with sophisticated theory and equally sophisticated quantitative empirical techniques at its disposal, always has to steer an uneasy balancing act between these two methodological imperatives. Our survey is left with the following impressions:

- In the labour market and poverty-inequality discourses, the tendency is to stress quantitative empirical results, with theory playing a secondary role. Kingdon and Knight place the rigid-price segmentation theory of Layard et al (1991) up front, but generally the research in that discourse (1) displays a relatively empiricist orientation. The same applies to the poverty-inequality cluster (2A). Researchers in these clusters can be almost exasperating with their insistence on deducing seemingly obvious conclusions through a most rigorous analysis of quantitative microdata, informed by a detailed scrutiny of survey questionnaires, for example. In the process a rationale, theoretical model or larger paradigm often fades from view. Implicitly the work is situated within a general, if modified, neo-classical view of labour markets. But it is data that speak loudest – in very quantitative and sophisticated tones.
- In the poverty-marginalisation sub-discourse (2B), a different relationship between theory/paradigm and empirical evidence is evident. Firstly, there is much greater use of qualitative data. This allows difficult-to-measure dimensions such as social power relations and marginalisation to be integral to the analysis. Secondly, the theoretical paradigm is less mathematically specified than in modern neo-classical economics – there is less adherence to the precepts of High Theory. The approach also incorporates perspectives and insights from other disciplines such as sociology, history and political science. What matters for them, is a theoretical framework that can accommodate both the qualitative and quantitative realities of poverty and marginalisation. The *form* of a theoretical model or empirical technique does not dictate the *form* of data that is acceptable. Nonetheless, the broad theoretical paradigm is prominent (even dominant) in determining *which types* of data and phenomena are relevant for analysis. And the paradigm is not doubted.
- The macroeconomic discourse also relies strongly on quantitative empirical findings. Nevertheless, it appears to exhibit rationalist tendencies. There is an unqualified willingness to use standard neo-classical models of labour markets (and the assumptions inherent in those models) without considering their applicability to the South African as a developing country. In the dominant macro discourse (cluster 3B) much of the analysis is couched in a self-assured paradigm and ‘commonly accepted’ belief about economic growth and flexible

markets. The paradigm is not doubted or tested. The theoretical model – and its form – largely determines the type and form of data selected. In this sense it is less evidence-based than e.g. labour market and poverty-inequality analyses. A related tendency appears when the neo-classical model is given a normative (rather than explanatory) role as the benchmark for economic performance and behaviour. Rather than testing the model's explanatory power against the facts, the facts are tested against the model – an observation that 'well-performing behaviour' conforms with the 'dictates' (actually the equilibrium conditions) of a particular theoretical model becomes grounds for approval of the behaviour. This strengthens the impression of a rationalist tendency: it is the model that speaks loudest.

*(b) Ideology*

Employment and unemployment are at the heart of the deepest and most emotive ideological divisions in 20<sup>th</sup> and 21<sup>st</sup> century society. These are well-worn battle grounds between conservatives, liberals and neo-liberals, Marxists, neo-Marxists and post-Marxists, pro-business, pro-worker and pro-poor advocates, and of recurring market-versus-state debates. The mere choice of a particular term or topic of study may be read as the adoption of a particular philosophical, ideological or disciplinary and analytical paradigm. Some terms and expressions obtain strong 'code word' roles. Labelling – often intended to prevent thought – occur easily.

Such ideological differences similarly assert themselves in the South African unemployment discourse. What is surprising, is that certain topical areas seem to be associated with particular ideological orientations – the ideological spectrum is not present everywhere.

Those that engage with poverty and marginalisation (in the upper left-hand quadrant of the landscape diagram) generally are more sceptical of the optimality of market outcomes and growth, more sensitive to inequality and marginalisation, averse to the negative role of economic power, and more confident in the ability of government to rectify or restructure the economy to achieve better outcomes. With a few exceptions,<sup>64</sup> those engaging with employment growth (rather than unemployment) in the bottom half of the diagram generally are more optimistic about the optimality of market outcomes and the general benefits of growth, more concerned about growth and efficiency than inequality, less sensitive to a negative role of economic power, more sceptical of government intervention and averse to government restructuring of the economy. The bottom-right and top-left approaches are worlds apart in this ideological grid.

It is striking that there appears to be almost no 'market-sceptic' economic growth contributions (except Pollin et al 2006) and no 'state-sceptic' poverty-marginalisation contributions in the South African debate. This raises the question: do persons with certain ideological orientations gravitate towards, for example, either macroeconomic analysis or poverty-marginalisation analysis – and why would that be? Which comes first: a preference for a certain subdiscipline and problem area to be analysed (resulting in the adoption of the dominant paradigm of that discourse) – or a preference for a certain ideological orientation resulting in gravitation towards an area of analysis where the dominant discourse is 'comfortable'? What role do epistemological preferences play in these choices – or does ideology trump epistemology? The answers to these questions are beyond the scope of this paper – but one at least needs to be aware of them.

---

<sup>64</sup> For example, Pollin et al (2006) and some of the contributors of MERG (1993).

*(c) Other factors that divide*

Other dividing lines or ‘grids’ can be discussed briefly:

- An institutional grid: Research activity occurs at selected locations, i.e. a specific research units, academic departments and other institutions – each with their own history, focus, approach, skills, paradigm and research ‘territory’. Institutional factors can be powerful in shaping, and dividing an academic discourse, often unintentionally. Much of the labour, development and poverty research has emerged from a few university research institutes (SALDRU, DPRU, SDS, PLAAS and, internationally, the CSAE and CID) and perhaps the World Bank and ILO. On the macroeconomic side, no such institutes for research exist locally. Apart from a few CID inputs, the IMF and OECD set the tone. Some macroeconomic unemployment analysis is done by private sector economists.
- A publications grid: The location of published research outputs in different journals and working paper series displays a clear pattern. This raises the question of open academic discourse: Is there self-selection and/or editorial selection which confine certain discourses to certain journals or exclude certain contributions from certain journals? This question is complicated by journals that specialise in a sub-disciplinary area, e.g. labour economics or development economics – as against generalist journals which should be more open.
- A funding grid: The question is whether internal or external organizations and funding agencies that support research on South African issues such as unemployment have preferred approaches and research sites. Do their funding preferences direct, or constrain, the South African unemployment discourse? Which economists are consulted by the World Bank or the IMF? To what extent do such patterns shape, or constrain, the unemployment discourse?
- A policy grid: Different government departments deal separately with the various dimensions of poverty and unemployment. Each tend to have it own approach, programme, political leadership and territorial imperatives. Do the main economic government departments (Treasury, Trade and Industry, Economic Development, Labour, etc.) have preferred approaches and research units that they consult?

All these grids indicate that the question where the SA unemployment debate is, has three answers: a state-of-knowledge answer, an ‘in-several-discourses’ answer, and an ‘in-several-places’ answer.

## 8. CONCLUSION: FROM FRAGMENTATION TOWARDS AN INTEGRATED PERSPECTIVE?

A wealth of insights are to be found in the variety of research contributions from the different clusters, approaches and paradigms. We know much more than 15-20 years ago. Yet the unemployment and poverty problems in SA persist, with little impact from various policy initiatives using inputs from respected researchers and research units.

The three major discourse worlds with sub-discourses suggest researchers in one discourse not engaging much with research results from another discourses and being analytically ‘polarized’ by their home discourse. Debate occurs within the discourses, but not much between them. A reader or policy-maker who is restricted to one discourse is unlikely to garner a nuanced, encompassing diagnosis of the complex problem of unemployment.

To a large extent the insights produced by researchers in the different discourses are fragmentary, disconnected, insular, partial or inconsistent – no complete coherent analytical

picture is produced by the many findings. This constitutes a major limitation of the literature as a whole.

Is there a way to move from this fragmentation towards some kind of integrated understanding that is not inconsistent with the main thrust of analysis in the different discourses – barring impassable theoretical-ideological barriers?

### *8.1 What have we learnt: key analytical messages*

In searching for an integrated perspective, the following major analytical conclusions can be distilled from this survey and meta-analysis of all the discourses:

1. The South African labour market is characterised by segmentation, informal-formal and rural-urban dualisms and segmentation within the informal sector (alongside subsistence and survivalist segments).
2. The nature of such multi-segmentation and of the labour market linkages between segments – and factors enabling or disabling persons to transition to a better segment – may be critical to both unemployment and poverty.
3. A range of factors – information, entry and mobility barriers, inter alia due to the condition of poverty as well as marginalisation – structurally inhibit job searching and entry into labour markets both from a condition of poverty and from one segment to another, e.g. from the informal sector into the formal sector, or from rural to urban labour markets. These factors intrinsically limit the reach and smoothness of the functioning of labour markets.
4. The issues cannot be separated I: A deep analysis and understanding of South African unemployment requires the simultaneous consideration of segmentation, the informal sector, entry and mobility barriers, the impact of poverty conditions, and marginalisation. Likewise, one cannot consider marginalisation and chronic poverty without engaging with the role of labour markets and income-generating activities.
5. The issues cannot be separated II: Understanding of South African unemployment also requires dealing thoroughly with
  - (a) the real wage elasticity of the demand for labour (= approximately -0.7 being the most-quoted number), in particular the likely positive versus negative impact, on employment, of wage decreases and increases respectively, and
  - (b) the output-elasticity of employment, in particular the important though also constrained impact, on employment and unemployment, of formal sector growth, given a value of approximately 0.5.
6. Pensions and social grants constitute a critical nexus that links poverty-marginalisation, inequality, labour supply, (un)employment and macro-fiscal considerations. Complex incentive and disincentive effects may be present.
7. The impact of skills and education on poverty, inequality and unemployment respectively may be dissimilar and complex to unravel. Education only appears to have a significant impact on (un)employment once working-age persons have a matric qualification or higher.
8. Gender, race, age and generational aspects influence, in complex ways, the causal relationships surrounding issues such as vulnerability, job search, migrancy, grants and education. These aspects need careful, nuanced analysis.
9. There are indications of a bidirectional causality between unemployment and poverty. : unemployment causes poverty, but in turn the condition of poverty contributes to

unemployment and its persistence. The implications of such a causality for policy to facilitate access of poor people to labour markets can be very important.

10. This may contribute to the observed phenomenon of unemployment hysteresis in South Africa, i.e. that the long-run equilibrium level of unemployment is not stationary and mean-reverting, but may shift permanently when subject to structural shocks or relevant forces.

These are not meant to constitute a comprehensive integrated analytical picture, but they capture aspects central to such a picture. However, the many gaps and problems identified in this paper suggest a rich new agenda for unemployment research, informed by the perspectives gained from the meta-analysis. There is much to gain from learning from 'other' discourses.

## *8.2 Analytical and research challenges*

The findings on gaps and key messages above have pertinent implications for how one may wish to think about issues and questions such as the following:

- a) The nature of dualism and segmentation and the possibility of a spectrum of segments, e.g. a primary sector, a secondary sector and a third segment (survivalist and subsistence).
- b) How to view and model the secondary sector. Is it competitive and market clearing or not? Is it a problem sector – i.e. an aberration – or rather a promising sector and basis for people to be economically productive and generate income?
- c) How to understand wage flexibility in the context of multiple labour market segments? What role do, or can, wage levels, wage flexibility and optimal labour market regulation play in unemployment, given a spectrum of segments and mobility barriers?
- d) How, and how well, do labour markets function in South Africa, bearing multiple segments in mind? Can the concept of labour market clearing be applied in all, some or none of these labour market segments?
- e) How to analyse transitions between segments, or between employment states or livelihood states (subsistence, informal and formal), amidst segmentation and mobility barriers. Should one focus on segmentation or on mobility barriers? What is their relationship?
- f) How to integrate mobility and entry barriers into one's analysis, whether micro- or macroeconomic. Are barriers mostly on the labour supply side (i.e. personal, household and locational characteristics) or also on the labour demand side (employer and firm characteristics) – or in labour market functioning as such? Do these include only economic barriers or also social and power relations and psychological factors?
- g) How to model and integrate marginalisation, exclusion and powerlessness – and thus the related issues of human capabilities and empowerment – into the analysis of labour markets and unemployment.
- h) The nature and significance of the concept of poverty traps for unemployment analysis, whether such traps occur in both rural and urban settings, and how they differ between these contexts.
- i) The relationship between social grants and productive economic activity (including job search and self-employment initiatives) in the context of marginalisation and multiple segments.
- j) The relationship between education and productive economic activity given the condition of poverty, marginalisation and multiple segments. Which skills are most relevant to employment and transitions between livelihood states? What is the role of language skills,

search culture and capacity, inherited household skills, individual capabilities and experiential-cognitive preparedness in enabling transitions to improved livelihood and employment states (or between segments)? Which of these skills can be ‘taught’, and how and where?

k) The labour demand side of the unemployment picture, which has received limited attention at a micro-economic (firm or market) level compared to the labour supply side. And: how should one model, analyse and measure labour demand and firm behaviour given formal and informal sectors, urban and rural segments, etc.?

l) How to incorporate the information, search and access problems caused by poverty and various segmentations into a macroeconomic analysis of employment and unemployment. Or the broader implications of being in a developing country, of dealing with human and societal development?<sup>65</sup>

m) The implications of cyclical changes in the macroeconomy for employment in various segments. Are all segments equally affected?

n) The implications, of macroeconomic growth, for employment in various segments. Are all segments equally affected?

o) Can an analysis of growth, and constraints on growth, proceed without taking account of the implications of segmentation, poverty conditions and marginalisation for the assumed free flow of labour into a formal sector with flexible labour markets?

p) Can a growth-oriented employment analysis (or a growth strategy) proceed legitimately without dealing with the constrained employment-creation capacity of formal sector growth *and* the intrinsically-linked worlds of informal production and employment, various types of subsistence and survivalist activities and marginalised poor people?

q) Can a poverty-oriented or inequality-oriented analysis of unemployment and wages proceed legitimately without engaging with, or incorporating, the presence, nature and implications of a negative wage elasticity of the demand for labour (assuming that the relevant elasticities can be properly estimated, also in a segmented market context)? Or the relative importance of formal sector growth?

r) Can marginalisation analysts and anti-poverty policy designers – *and* inequality analysts *and* macroeconomists – continue to take little notice of the impact of cyclical or other ‘macroeconomic’ shocks and policy steps on the vulnerable and the poor – particularly if there is hysteresis, which could significantly prolong the impact of shocks on employment?<sup>66</sup>

s) Can labour unions continue to insist that macroeconomic policy measures – e.g. interest rate and exchange rate policy – should shoulder the burden of explaining and resolving unemployment (in conjunction with industrial strategies to promote labour-intensive formal-sector manufacturing) without any attention to e.g. insider-outsider dualisms and the informal and survivalist worlds?

If such questions are not addressed, the South African unemployment debate is likely to continue to be divided and intrinsically blinkered by separate discourses. It is highly unlikely that one discourse can provide the analytical insights and policy options necessary to devise measures and policies that could lead to a significant reduction of unemployment (and poverty) in South Africa.

---

<sup>65</sup> A South African macroeconomics textbook that is explicit in its attempt to integrate some realities of poverty, development, involuntary and structural unemployment into the supply side of its model, is Fourie and Burger (2009).

<sup>66</sup> Pauw et al (2006) is an example of how the impact, on the poor, of changes in imports and exports due to trade liberalization can be analysed (via impacts on employment).

Finally there is the overarching question whether we adequately integrate the developing-country context of South Africa into our analyses of unemployment and labour markets. While unemployment is the main challenge in the labour context, the relationship between labour market issues and broader human and societal development issues poses a much larger challenge, and may indeed be the biggest gap. In each and every discourse one can ask: does this analysis deal with the development context in a satisfactory way? While such a gap may be more visible in typical macroeconomic analysis, it may be true of the labour market analysis as well – and even of the development cluster. The point is not that researchers may be insensitive to developmental issues. It is that the kinds of questions asked, the theoretical models used, the modes of empirical analysis chosen and the data used/available are not necessarily suited to integrating the developing-country context.

Approximately ten years ago, Fields (2000:56) urged South African researchers to develop a labour market model that properly incorporates the main stylized facts of our situation:

“Clearly, the right model is not the competitive labor market model – wages are not set by supply and demand. Nor is it an integrated labor market model – there is much too much labor market segmentation for that. ... The least bad fit comes from the crowding model – those who cannot get formal sector jobs crowd into the informal sector, depressing earnings levels there – but that doesn’t fully fit either because of South Africa’s large volume of open unemployment. Thus an overall vision of how the South African labor market works and how the various components link together remains both a puzzle and a challenge.”

Despite much research and analysis, that challenge has not been overcome. This paper broadens that challenge to the achievement of real *integration* between such a labour market model and both macroeconomic and development/poverty/inequality/marginalisation analyses and insights, in the context of a developing country.

Such integration is of specific importance for policy making. While individual researchers or research institutes must have the academic freedom to focus on a specific angle, for the policy-maker there is no such luxury. No matter how much research work is available to dissect a problem, in the end the policy-maker must design and implement policy in a real world full of non-abstracted richness, complexity and messiness. This is particularly true for the fiscal authority (Treasury), where all government programmes come together in one budget – and of course the central government executive (Cabinet).

Tackling the challenge will require a willingness from economists and policy-makers to listen across divides, talk outside sub-disciplines, disciplines and comfortable discourses, and engage without ideological or epistemological prejudice, preconceived ideas or labelling. The intrinsic complexity of the phenomenon of unemployment, embedded as it is in so many societal relations, institutions and dynamics, demands nothing less.

## REFERENCES

- ALTMAN, M. (2008). Revisiting South African employment trends in the 1990s. *South African Journal of Economics*, 76(S2): S126-47.
- (2008b). *Formal-informal economy linkages*. Pretoria: HSRC.
- AMSDEN, A. (2010) Say's Law, Poverty Resistance, and Employment Neglect. *Journal of Human Development and Capabilities*. 11(1): 57-66.
- ARDINGTON, C., CASE, A. and HOSEGOOD, V. (2009). Labor Supply Responses to Large Social Transfers: Longitudinal Evidence from South Africa. *American Economic Journal: Applied Economics*. 1(1): 22-48.
- ARORA, V. (2005). Economic growth in Post-apartheid South Africa: A Growth Accounting Analysis. In: M. Nowak and L. A. Ricci (eds.). *Post-Apartheid South Africa: The First Ten Years*. Washington, International Monetary Fund.
- ARORA, V. and BHUNDIA, A. (2003). *Potential output and total factor productivity growth in post-apartheid South Africa*. Working paper 03/178, IMF Africa Department.
- BANERJEE, A., GALIANI, S., LEVINSOHN, J. and WOOLARD, I. (2006). *Why has unemployment risen in the new South Africa?* Working Paper 134, Centre for International Development (CID), Harvard University.
- BANERJEE, A., GALIANI, S., LEVINSOHN, J., McCLAREN, Z. and WOOLARD, I. (2008). Why has unemployment risen in the new South Africa? *Economics of Transition*, 16(4): 715-40.
- BEHAR, A. (2004). *Estimates of labour demand elasticities and elasticities of substitution using firm-level manufacturing data*. Working paper 98. CSSR, University of Cape Town.
- BELL, R.T. (1985). Issues in South African unemployment. *South African Journal of Economics*, 53(1): 24-38.
- BENGTSSON, N. (2010). *The marginal propensity to earn, consume and save out of unearned income in South Africa*. Working Paper 2010:4, Department of Economics, Uppsala University.
- BERTRAND, M. MULLAINATHAN, D. and MILLER, D. (2003). Public policy and extended families: evidence from pensions in South Africa. *World Bank Economic Review*. 17(1): 27–50.
- BHORAT, H. (1999). The October Household Survey, unemployment and the informal sector: a note. *South African Journal of Economics*, 67: 320-26.
- BHORAT, H., LEIBBRANDT, M., MAZIYA, M., VAN DER BERG, S. AND WOOLARD, I. (2001): *Fighting Poverty – labour markets and inequality in South Africa*. Cape Town: UCT Press.
- BHORAT, H. and CASSIM, R. (2004). The challenge of growth, employment and poverty in the South African economy since democracy. *Development Southern Africa*, 21(1): 7-31.
- BHORAT, H. and HODGE, J. (1999). Decomposing shifts in labour demand in South Africa. *South African Journal of Economics*, 67(3): 348-80.
- BHORAT, H. and LEIBBRANDT, M. (2001): Modelling vulnerability and low earnings in the South African labour market. In: H. Bhorat et al, *Fighting Poverty – labour markets and inequality in South Africa*. Cape Town: UCT Press.
- BHORAT, H. and OOSTHUIZEN, M. (2005). *The post-apartheid South African labour market*. Working Paper 05/93, Development Policy Research Unit (DPRU), University of Cape Town.
- BLANCHARD, O. (2005). *European unemployment: the evolution of facts and ideas*. Working paper 11750, National Bureau of Economic Research, Cambridge MA.
- CAHUC, P. and ZYLBERBERG, A. (2004). *Labor Economics*. Cambridge. MIT Press.
- CASALE, D., MULLER, C. and POSEL, D. (2004) ‘Two million net new jobs’: a reconsideration of the rise in employment in South Africa, 1995-2003. *South African Journal of Economics*, 72(5), 978-1002.
- CASALE, D. and POSEL, D. (2002). The feminisation of the labour force in South Africa: An analysis of recent data and trends. *South African Journal of Economics*, 70(1): 156-184.
- CASSIM, F. (1982). Labour market segmentation: the theoretical case. *South African Journal of Economics*, 50(4): 362-74.

- CDE. (2010). *Poverty and inequality: Facts, trends and hard choices*. Round Table 15. Centre for Development and Enterprise, Johannesburg.
- CHEN, M., VANEK J., LUND F. and HEINTZ J. (2005) *Women, work and poverty*. New York: UNIFEM.
- CICHELO, P.L., FIELDS, G.S. and LEIBBRANDT, M. (2005). Earnings and employment dynamics for Africans in post-apartheid South Africa: A panel study of KwaZulu-Natal, *Journal of African Economies*, 14(2): 143-90.
- DEVEY, D. and VALODIA I. (2009). *Formal-informal economy linkages: What implications for poverty in South Africa*. Working Paper 8, PLAAS, University of the Western Cape.
- DEVEY, D., LEBANI, I., SKINNER. and VALODIA (2008): The informal economy. In *Human Resources Review*. Pretoria: HSRC.
- DEVEY, D., SKINNER. and VALODIA (2006): Definitions, data and the informal economy in South Africa: a critical analysis. In V. Padayachee V. (ed). *The development decade? Economic and social change in South Africa, 1994-2004*. Cape Town: HSRC.
- DEVEY, R., VALODIA, E. and VELIA, M. (2005). *Constraints on growth and employment: Evidence from the Greater Durban Metropolitan Area*. Research Report 64. School of Development Studies, University of KwaZulu-Natal, Durban.
- DIAS, R., and POSEL, D. (2007). *Unemployment, education and skills constraints in post-apartheid South Africa*. Working Paper 07/120, DPRU, University of Cape Town.
- DINKELMAN, T. (2004). How household context affects search outcomes of the unemployed in Kwazulu-Natal, South Africa. *South African Journal of Economics*, 72(3), 484-521.
- DINKELMAN, T. & PIROUZ, F. (2002). Individual, household and regional determinants of labour force attachment in South Africa. *South African Journal of Economics*, 70(5), 865-91
- DUNNE, P. and EDWARDS, L. (2006). Trade and poverty in South Africa: Exploring the trade-labour linkages. In: SALDRU (2006), chapter 5.
- DU PLESSIS, S. and SMIT, B. (2007). *South Africa's growth revival after 1994*. Stellenbosch Economic Working Paper 01/2006, University of Stellenbosch.
- DU TOIT, C.B. and KOEKEMOER, R. (2003). A labour model for South Africa. *South African Journal of Economics*. 71(1):49-76.
- DU TOIT, A. (2005). *Chronic and structural poverty in South Africa: challenges for action and research*. Policy Paper 6, PLAAS, University of the Western Cape.
- (2007). *Poverty measurement blues: some reflections on the space for understanding 'chronic' and 'structural' poverty in South Africa*. Q-Squared Working Paper 33, Centre for International Studies, University of Toronto or PLAAS, University of the Western Cape.
- DU TOIT, A. and NEVES, D. (2007). *In search of South Africa's 'second economy': chronic poverty, economic marginalisation and adverse incorporation in Mt Frere and Khayelitsba*. Working Paper 102, Chronic Poverty Research Centre (CPRC), University of Manchester or PLAAS, University of the Western Cape. Also in *Africanus*, 37(2):145-74.
- EDWARDS, L. and GOLUB, S.S. (2004). South Africa's international cost competitiveness and exports in manufacturing. *World Development*. 32(8):1323-339.
- EDWARDS, L. and STERN, M. (2006). Trade and poverty research project in South Africa: lessons and policy recommendations. In: SALDRU (2006), chapter 1.
- ESSOP, A. and YU, D. (2008). *The South African informal sector (1997-2006)*. Stellenbosch Economic Working Paper 03/2008, University of Stellenbosch.
- EYAL, K and WOOLARD, I. (2011). *Throwing the book at the CSG*. Working Paper 53, SALDRU, University of Cape Town.
- FALLON, P. (1992). *An analysis of employment and wage behaviour in South Africa*. Informal discussion paper on aspects of the South African economy 3, Southern Africa department. World Bank, Washington DC.
- FALLON, P. and LUCAS, R. (1996). *South Africa: labour markets adjustments and inequalities*. Informal discussion paper on aspects of the South African economy 15, Southern Africa department. World Bank, Washington DC.

- FALLON, P. and PEREIRA DE SILVA, L.A. (1994). *South Africa: Economic performance and policies*. Informal discussion paper on aspects of the South African economy 7, Southern Africa department. World Bank, Washington DC.
- FEDDERKE, J. (2002). The structure of growth in the South African economy: factor accumulation and total factor productivity growth 1970-97. *South African Journal of Economics*. 70(4):611-46.
- (2004). *From Chimera to prospect: Towards an understanding of the South African growth absence*. Research Report, School of Economics, University of Cape Town.
- (2005). Sources and constraints of long-term growth 1970-2000. *Working paper 94*, Africa region, World Bank.
- (2006). *From Chimera to prospect: South African sources of and constraints on long-term growth 1970-2000*. Policy paper 1, School of Economics, University of Cape Town.
- (2010). *Sustainable growth in South Africa*. Policy paper 20. ERSA, Cape Town.
- FEDDERKE, J. and HILL, A. (2006). *Industry Structure and Labour Market Flexibility in the South African Manufacturing Sector: A Time Series and Panel Data Approach*. Working Paper 43, School of Economics, University of Cape Town.
- FEDDERKE, J. and MARIOTTI, M. (2002). Changing labour market conditions in South Africa: a sectoral analysis of the period 1970-1997. *South African Journal of Economics*. 70(5):830-864.
- FEDDERKE, J. and PIROUZ, F. (2002). The role of mining in the South African economy. *South African Journal of Economic and Management Sciences*. 5(1):1-34.
- FEDDERKE, J., SHIN, Y. and VAZE, P. (2003). *Trade and Labour Usage: An Examination of the South African Manufacturing Industry*, Econometric Research Southern Africa Working paper 15. University of the Witwatersrand.
- FIELDS, G.S. (2000). *The employment problem in South Africa*. Keynote address, TIPS annual forum, Johannesburg.
- (2011a). "Informality": *It's time to stop being Alice-in-Wonderland-ish*. Unpublished paper, Cornell University.
- (2011b). *Informality: A labor economics perspective*. WIEGO Conference on Informality. Cape Town, March.
- FIELDS, G., LEIBBRANDT, M. and WAKEFORD, J. (1999). *Key Labour Market Elasticities in South Africa*. Unpublished research report for the South African Department of Finance.
- FOURIE, F.C.v.N. (1989): Unemployment in conventional macroeconomics: a suggestion. *South African Journal of Economics*, 57(1): 69-78.
- FOURIE, F.C.v.N. and BURGER, P. (2009). *How to think and reason in macroeconomics*. 3<sup>rd</sup> edition. Cape Town: Juta.
- GERSON, J. (1981). The question of structural unemployment in South Africa. *South African Journal of Economics*, 49(1): 10-25.
- (1982). Reply to Mr Knight. *South African Journal of Economics*, 50(1): 65-69.
- HAMERMESH, D.S. (1996). *Labour Demand*. Princeton University Press.
- HAUSMAN, R. (2008). *Final recommendations of the international panel on ASGISA*. Working paper 161. CID, Harvard University.
- HEINTZ, J. and POSEL, D. (2008): Revisiting informal unemployment and segmentation in the South African labour market, *South African Journal of Economics*, 76(1): 26-44.
- HODGE, D. (2009). Growth, employment and unemployment in South Africa. *South African Journal of Economics*. 77(4):488-504.
- HOFMEYR, J.F. (2000). The changing pattern of labour market segmentation in South Africa, *Journal for Studies in Economics and Econometrics*, 24(3):109-28.
- IMF. (2007). *South Africa: 2007 Article IV Consultation*. Country report 07/274. International Monetary Fund, Washington DC.
- KINGDON, G.G. and KNIGHT, J. (1999). *Unemployment and wages in South Africa: a spatial approach*. Working Paper 99-12, Centre for the Study of African Economies (CSAE), University of Oxford.

- (2000). *Are searching and non-searching unemployment distinct states when unemployment is high? The case of South Africa*. Working Paper 2000-2, CSAE, University of Oxford. Published version: Kingdon and Knight (2006a).
- (2001). What have we learnt about unemployment from microdatasets in South Africa? *Social Dynamics*, 27(1): 79-95
- (2004a). Unemployment in South Africa: the nature of the beast. *World Development*, 32(3): 391-408.
- (2004b). Race and the incidence of unemployment in South Africa. *Review of Development Economics*, 8(2): 198-222.
- (2005). *Unemployment in South Africa, 1995–2003: causes, problems and policies*. Working Paper, Department of Economics, University of Oxford. Published version: Kingdon and Knight (2007).
- (2006a). The measurement of unemployment when unemployment is high. *Labour Economics*, 13: 291-315.
- (2006b). How flexible are wages in response to local unemployment in South Africa? *Industrial and Labour Relations Review*, 59(3): 471-95.
- (2007). Unemployment in South Africa, 1995–2003: causes, problems and policies. *Journal of African Economics*, 16(5): 813-48.
- (2008). Unemployment: South Africa's Achilles' heel. In J. Aron, B. Kahn and G. Kingdon. *South African Economic Policy under democracy*. Oxford: Oxford University Press.
- KLASEN, S. (2000). Measuring Poverty and Deprivation in South Africa. *Review of Income and Wealth*, 46(1): 33-58.
- KLASEN S. and WOOLARD I. (1999). Levels, trends and consistency of employment and unemployment figures in South Africa. *Development Southern Africa*, 16(1): 3-36
- (2005). Determinants of income mobility and household poverty dynamics in South Africa. *Journal of Development Studies*, 41(5): 865-97.
- (2008). Surviving unemployment without state support: unemployment and household formation in South Africa. *Journal of African Economics*, 18(1): 1-51. A 2005-version appeared as a working paper of the CSSR, University of Cape Town.
- KNIGHT, J.B. (1982). The nature of unemployment in South Africa. *South African Journal of Economics*, 50(1): 1-12.
- LAM, D., LEIBBRANDT, M. & MLATSHENI, C. (2008). *Education and youth unemployment in South Africa*. Working Paper 22, SALDRU, University of Cape Town.
- LAYARD, R., NICKELL, S. and JACKMAN, R. (1991). *Unemployment: macroeconomic performance and the labour market*. Oxford: Oxford University Press.
- LEIBBRANDT, M. and WOOLARD, I. (2001). Measuring poverty in South Africa. In H. Bhorat et al, *Fighting Poverty – labour markets and inequality in South Africa*. Cape Town: UCT Press.
- LEIBBRANDT M., BHORAT H. and WOOLARD I. (2001). Household inequality and the labor market in South Africa. *Contemporary Economic Policy*, 19(1): 73-86.
- LEIBBRANDT M., WOOLARD I. and BHORAT H. (2001). Understanding contemporary household inequality in South Africa. In H. Bhorat et al, *Fighting Poverty – labour markets and inequality in South Africa*. Cape Town: UCT Press. Also published in *Studies in Economics and Econometrics*, 24(3): 31-52.
- LEIBBRANDT M., WOOLARD I. and WOOLARD C. (2008). A long-run perspective on contemporary poverty and inequality dynamics. In J. Aron, B. Kahn and G. Kingdon, *South African Economic Policy under democracy*. Oxford: Oxford University Press.
- LEVINSOHN, J. (2008). Two policies to alleviate unemployment in South Africa. Working Paper 166. Centre for International Development. Harvard University, Cambridge.
- LEWIS, J.D. (2002). Promoting growth and employment in South Africa. *South African Journal of Economics*. 70(4):725-76.

- LOUW, M., VAN DER BERG S. and YU, D. (2007). Louw & Servaas Van der berg and Derek Yu, 2007. Convergence of a kind: educational attainment and intergenerational social mobility In South Africa, *South African Journal of Economics*, 75(3):548-571.
- LUTTRELL, C. and QUIROZ, S. (2009). *Understanding and operationalising empowerment*. Working Paper 308. Overseas Development Institute, London.
- MARINKOV, A. and GELDENHUYS, J.P. (2007). Cyclical unemployment and cyclical output: an estimation of Okun's coefficient for South Africa. *South African Journal of Economics*, 75(3), 373-90.
- MAY, J. and METH, C. (2007): Dualism or underdevelopment in South Africa: what does a quantitative assessment of poverty, inequality and employment reveal? *Development Southern Africa* 24(2): 271-87.
- MAZUMDAR, D. and VAN SEVENTER, D.E. (2002). A decomposition of growth of the real wage rate for South Africa: 1970-2000. *South African Journal of Economics*, 70(6), 1076-102.
- MERG (1993). *Making democracy work. A framework for macroeconomic policy in South Africa*. Bellville: Centre for Development Studies.
- METH, C. (2007). *Sticking to the facts: official and unofficial stories about poverty and unemployment in South Africa*. Working Paper 07/123, DPRU, University of Cape Town.
- (2009). *Unemployment and poverty halved by 2014?* Working Paper 56, SALDRU, University of Cape Town.
- MICHIE, J. (2003). The institutional underpinnings of the unemployment-inflation relationship. Pretoria: HSRC.
- MOLEKE, P. (2005) *Finding Work. Employment Experiences of South African Graduates*. Research Monograph. HSRC, Cape Town.
- MOLL, P.G. (1993). Black South African unions: relative wage effects in international perspective. *Industrial and Labor Relations Review*. 46(2): 245-61.
- MOOLMAN, E. (2003). *An Econometric Analysis of Labour Demand at an Industry Level in South Africa*, Working Paper 5-2003, TIPS, Pretoria.
- MOLL, P.G. (1993). Black South African unions: relative wage effects in international perspective. *Industrial and Labor Relations Review*. 46(2): 245-61.
- MULLER, C. (2003). *Measuring South Africa's informal sector: an analysis of national household surveys*. Working Paper 03/71. Development Policy Research Unit, University of Cape Town.
- MULLER, C. and POSEL, D. (2004). Concerns with measuring informal sector employment: an analysis of national household surveys in South Africa, 1993-2001. *Studies in Economics and Econometrics*, 28(1): 1-19.
- NATTRASS, N. (2000). The debate about unemployment in the 1990s. *Studies in Economics and Econometrics*, 24(3): 73-89.
- (2004). Unemployment and AIDS, the social-democratic challenge for South Africa. *Development Southern Africa*, 21(1).
- NATTRASS, N. and WALKER, R. (2005). Unemployment and reservation wages in working-class Cape Town. *South African Journal of Economics*, 73(3): 498-509.
- NGANDU, S. (2008): Exchange rates and employment. *South African Journal of Economics*, 76(S2).
- OECD. (2008). Economic assessment of South Africa, 2008. Policy brief. OECD, Paris.
- (2010). *Economic Surveys: South Africa*. OECD, Paris.
- OOSTHUIZEN, M. (2006). *The post-apartheid labour market: 1995-2004*. DPRU Working Paper 06/103.
- PAUW, K., LEIBBRANDT, M., DIEDEN, S. and EDWARDS, L. (2006). Trade and poverty in South Africa: Traded sector employment and vulnerability. In: SALDRU (2006), chapter 7.
- PAUW, K., OOSTHUIZEN, M and VAN DER WESTHUIZEN, C. (2008). Graduate unemployment in the face of skills shortages: a labour market paradox? *South African Journal of Economics*, 76(1): 45-57.
- PIORE, M.J. (1973). Notes for a theory of labor market segmentation. In R. Edwards, M. Reich and D. Gordon (eds), *Labor market segmentation*. Lexington: Heath.

- POLLIN, R., EPSTEIN, R., HEINTZ, J. and NDIKUMANA, L. 2006. *An employment-targeted economic program for South Africa*. New York, United Nations Development Programme.
- POSEL, D., FAIRBURN, J.A., and LUND, F. (2006). Labour migration and households: a reconsideration of the effects of the social pension on labour supply in South Africa. *Economic Modelling*, 23(5): 836–53.
- RANCCHOD, V. (2009). *Household responses to adverse income shocks: pensioner out-migration and mortality in South Africa*. Working Paper.35. SALDRU, University of Cape Town.
- RANCCHOD, V. and DINKELMAN, T. (2008). *Labour market transitions in South Africa: What can we learn from matched Labour Force Survey data?* Working Paper 14, SALDRU, University of Cape Town.
- RODRIG, D. (2006). *Understanding South Africa's economic puzzles*. Working Paper 130, CID, Harvard University.
- SALDRU. (2006). *South African Trade and Poverty Project*. South African Labour and Development Research Unit, University of Cape Town.
- SCHOEMAN, D., BLAAUW, D. and PRETORIUS A. (2008): An investigation into the determinants of the South African unemployment rate 1970-2002. *Acta Academica*. 40(3):67-84.
- SEEKINGS, J. (2003). *Do South Africa's unemployment constitute an underclass?* Working Paper 32, CSSR, University of Cape Town.
- SEEKINGS, J. and NATTRASS, N. (2005). *Class, race, and inequality in South Africa*. University of KwaZulu-Natal Press.
- SEN, A. (1992). *Inequality Re-examined*, Oxford. Clarendon Press.
- SIENAERT, A. (2008). *The labour supply effects of the South African State old age pension: theory, evidence and implications*. Working Paper 20, SALDRU, University of Cape Town.
- SIMKINS, C.E.W. (1978). Measuring and predicting unemployment in South Africa 1960-1977. In C.E.W. Simkins and D.G. Clarke, *Structural unemployment in Southern Africa*. Pietermaritzburg: Natal University Press.
- (2004). Employment and unemployment in South Africa. *Journal of Contemporary African Studies*, 22(2): 253-78.
- STANDING, G., SENDER, J. and WEEKS, J. (1996). *Restructuring the labour market: the South African challenge. An ILO country review*. Geneva. International Labour Organization.
- THURLOW, J. (2006). Trade liberalization and pro-poor growth in South Africa. In: SALDRU (2006), chapter 15.
- TORR, C.S.W. (1985). Involuntary unemployment and equilibrium. *South African Journal of Economics*, 53(1): 82-84.
- VALODIA, I. (2006). *Formal/informal linkages in South Africa: some considerations*. Pretoria, HSRC.
- (2007). *Informal employment in South Africa*. Pretoria, HSRC.
- VAN DER BERG, S. AND BURGER, R. (2003). Education and socio-economic differentials: A study of school performance in the Western Cape. *South African Journal of Economics*, 71(3): 496-522.
- VON BROEMBSEN, M. (2008). *SMMEs, the informal sector and the 'second economy'*. Working Paper 10, PLAAS, University of the Western Cape.
- WITTENBERG, M. (1999). *Job search and household structure in an era of mass unemployment: a semi-parametric analysis of the South African labour market*, Economic Research Southern Africa (ERSA) Working Paper 3, University of the Witwatersrand, Johannesburg.
- (2000). *Spatial dimensions of unemployment*. Paper presented at the CIU, Deputy President's Office: Spatial guidelines for infrastructure, investment and development..
- (2002). Job search in South Africa: a nonparametric analysis. *South African Journal of Economics*, 70(8): 1163-97.
- WUYTS, M. (2001). *Inequality and Poverty as the Condition of Labour*. Draft paper, United Nations Research Institute on Social Development (UNRISD) meeting on 'The Need to Rethink Development Economics'. 7-8 September 2001. Cape Town.
- YU, D. (2010a). *Defining and measuring informal employment in South Africa: A review of recent approaches*. Stellenbosch Economic Working Paper 09/2010, University of Stellenbosch.

----- (2010b). *Poverty and inequality trends in South Africa using different survey data*. Stellenbosch Economic Working Paper 04/2010, University of Stellenbosch.