

THE ROLE OF INFORMAL URBAN SETTLEMENTS IN UPWARD MOBILITY

IVAN TUROK
JOSH BUDLENDER
JUSTIN VISAGIE

DPRU WORKING PAPER 201701
FEBRUARY 2017



A DPRU Working Paper* commissioned for the



WORLD BANK GROUP
Jobs

**THE ROLE OF INFORMAL URBAN SETTLEMENTS
IN UPWARD MOBILITY**

IVAN TUROK

JOSH BUDLENDER

JUSTIN VISAGIE

Human Sciences Research Council

Working Paper 201701

ISBN 978-1-920633-39-4

February 2017

© DPRU, University of Cape Town 2017



This work is licenced under the Creative Commons Attribution-Non-Commercial-Share Alike 2.5 South Africa License. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-sa/2.5/za> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California 94105, USA.

Abstract:

Informal urban settlements have a major influence on the well-being of a large section of global humanity. Yet there has been very little research on their role in facilitating social mobility. In theory such settlements may foster human progress by linking rural-urban migrants to the services, contacts and livelihoods concentrated in cities. The paper uses longitudinal data for South Africa to explore the magnitude of social progression among people living within informal settlements compared with the residents of rural areas and formal urban areas. It finds that there may be some advantage from living in an informal settlement compared with a rural area, but the effect is not strong. The impact may be more substantial in the more prosperous Gauteng city-region than in other urban regions.

Keywords: Informal urban settlements; South Africa; social mobility; livelihoods; rural-urban migration

Acknowledgements:

The authors thank Haroon Bhorat for inviting this contribution for the World Bank's Network on Jobs for Development (NJD) programme.

Working Papers can be downloaded in PDF (Adobe Acrobat) format from www.dpru.uct.ac.za. A limited number of printed copies are available from the Communications Manager: DPRU, University of Cape Town, Private Bag X3, Rondebosch, Cape Town, 7700, South Africa. Tel: +27 (0)21 650 5701, email: sarah.marriott@uct.ac.za

Corresponding author

Ivan Turok

email: iturok@hsrc.ac.za

Recommended citation

Turok, I., Budlender, J. and Visagie, J. (2017). "The Role of Informal Urban Settlements in Upward Mobility". Development Policy Research Unit Working Paper 201505. DPRU, University of Cape Town.

Disclaimer

The Working Paper series is intended to catalyse policy debate. Views expressed in these papers are those of their respective authors and not necessarily those of the Development Policy Research Unit, the World Bank, or any associated organisation/s.

CONTENTS

1.	INTRODUCTION	1
2.	CONTRASTING PERSPECTIVES ON INFORMAL SETTLEMENTS AND SOCIAL MOBILITY OBJECTIVES AND TYPES OF LABOR MARKET REGULATION	2
3.	THE CONTEXT OF SOUTH AFRICA	3
4.	SOURCE OF DATA AND METHODS	5
5.	MAIN FINDINGS	8
5.1	Transitions between types of location	8
5.2	Transitions in poverty status	10
5.3	Transitions in employment status	12
5.4	Transitions in occupation	17
6.	THE SITUATION IN GAUTENG	20
7.	CONCLUSIONS	22
	REFERENCES	25
	APPENDIX	28

1. Introduction

The global urban population has increased by 1.1 billion in the last two decades and is expected to grow by a further two billion by 2045 (United Nations, 2014). Many countries in the South have been unable to accommodate this surge in decent living conditions, resulting in burgeoning squatter settlements. These currently house more than 900 million people, or nearly one in three urban residents. Global aspirations for ending poverty and ensuring adequate living standards for all, as set out in the Sustainable Development Goals, are intricately bound up with both the prevailing (static) conditions within informal settlements – their makeshift dwellings, deficient basic services and insecure tenure – and their *dynamic* impact on people's prospects for the future. Conditions which seem bleak at present may turn out to be more promising if a longer view is taken.

Whilst the static conditions within informal settlements are better documented than they were a decade ago (UN-Habitat, 2013, 2014), surprisingly little is known about their role within the broader functioning of cities and their rural hinterlands. The extent to which they help or hinder people's chances of getting on in life by providing affordable access to urban economic and social opportunities is a particular lacuna. This has potent implications for the stance of public policy towards these areas. One possibility is that they operate within market systems that are reasonably functional, where cheap rental dwellings absorb excess labour moving from the countryside. Supportive social networks within these communities may then help residents to get ahead and onto the first rung of the urban labour market ladder. Alternatively, urban slums may confine people to hardship and perpetuate social exclusion, because the debilitating living conditions and systemic barriers to progress retard human development.

South Africa is a pertinent case for investigation because of the striking social inequalities and spatial divisions within the country, and the stubborn ambivalence among policy-makers towards swelling informal settlements. These areas reflect the efforts of poor households to grasp scarce livelihood opportunities by sacrificing squalor and insecurity. Depending on their success, they could perform a useful function in narrowing socio-economic disparities. This paper uses longitudinal data to explore the magnitude of upward social mobility or progression among people moving to, and living within, informal urban areas. The objective is to assess whether shack settlements foster or frustrate human progress in the way they link people to the services, contacts and livelihoods concentrated in cities. To the authors' knowledge, this is the first paper that attempts to do this, and it should therefore be regarded as exploratory.

Section two of the paper elaborates these contrasting concepts of how informal settlements influence people's chances of experiencing a better life. The third section outlines the South African context of weak economic performance and continuing social and spatial inequalities. The methodology and dataset are discussed in the fourth section. The results follow in section five, exploring patterns of migration, poverty transitions and labour market dynamics. The final section draws together the main findings and offers reflections.

2. Contrasting perspectives on informal settlements and social mobility

The variables of people, place and economy are inexorably intertwined in determining the prospects for individual and community prosperity. The different ways in which informal settlements may influence human development can be encapsulated in two contrasting frameworks, described in more detail in Turok and Borel-Saladin (2016). On the one hand, informal settlements offer optimism and hope as low-cost gateways to urban economic possibilities for people determined to improve their circumstances by migrating from distressed rural areas ('pathways-out-of-poverty'). Alternatively, urban slums confine residents to enduring adversity, vulnerability and insecurity because the inhospitable environment stifles progress and holds people back from accessing the meagre opportunities available ('cul-de-sacs').

In the pathways idea, individual aspirations and market forces act as powerful mechanisms for economic progression. People moving into informal settlements bring their energy and tenacity to compete for available job vacancies, or use their ingenuity and resourcefulness to establish small-scale enterprises that serve local needs. This influx of eager job-seekers reinforces agglomeration economies and growth by boosting and continually refreshing the supply of low-cost, industrious labour and entrepreneurial skills. The growing concentration of population also enlarges consumer markets, lowers logistics costs for suppliers and improves the efficiency of production (Glaeser, 2011; Polese, 2009; World Bank, 2009). Shack settlements offer few barriers to entry for incomers. Instead they provide people seeking work with access to a readily available labour market and budding entrepreneurs with a customer base in the wider city.

Unconstrained by traditional kinship systems and rural social structures, informal settlements also facilitate new, more open social relationships which promote individual endeavour and furnish wider contacts (Cross, 2013; Turner, 1968). The low cost rental accommodation is well-located in relation to jobs and other livelihood opportunities. Over time, rising household incomes gather momentum and spur investment in local property renovation and upgrading (Turner, 1967; 1968). Informal settlements ultimately turn out to be temporary phenomena because residents gradually transform them into more liveable, normalised environments. Governments should play a limited, low-key role in these places by providing basic education and health services and giving shack dwellers some security of tenure. Comprehensive slum improvement programmes should be avoided because they will only raise living costs and displace poor families (De Soto, 2000; Payne, 2005; Turner, 1968; World Bank, 2013).

The contrary perspective is that informal settlements reflect constraints more than choice. People migrate from rural areas under duress and are forced into shack areas because of the absence of more salubrious places to stay. With little education or work experience, incomers offer little to the job market, so they are relegated to the lowest-paid, least desirable positions. Opportunities to start enterprises are limited because local consumer markets are already saturated and the newcomers lack the capital, social skills and business networks to get ahead (La Porta and Shleifer, 2014). Their dwellings are over-crowded, basic services are inadequate and they face ongoing risks from exposure to hazardous diseases, fires and flooding (Ezeh et al, 2016). They lack any tenure security, so live with the constant threat of

stigmatisation, discrimination and eviction. Negative externalities, or 'neighbourhood effects', compound the problems caused by malnutrition, mental stress, disaffection and frustration with their suffering.

Community stability and cohesion are also undermined by rival groups, gatekeepers and other undemocratic actors exerting control over the allocation of land and other scarce resources in the absence of formal legal safeguards and proper policing to limit crime and violence (Jansen et al, 2015; Fox, 2014). With no reassurance about the long-term future of these places, people behave as temporary residents and remit any spare money to their relatives in the countryside (Posel and Marx, 2013; Philip et al, 2014). Well-meaning governments have vital roles to play in establishing the foundations for all-round local development. Providing basic services, social safety-nets and connecting infrastructure are preconditions for meaningful progress. Creating confidence, stability and security are also important for people to start investing in their properties and consolidating their position in the city (Seeliger and Turok, 2014).

These divergent perspectives on how informal settlements influence the fate of shack dwellers give clues to the range of intersecting dynamics underway. There are multiple causes and mechanisms at work that need to be disentangled and measured in order to assess their magnitude and duration. The first step in assessing the significance of these processes is to interrogate their aggregate effects through empirical evidence of the lived experiences of informal settlement residents.

3. The context of South Africa

There have been several recent studies of socio-economic mobility in South Africa, with a focus on national patterns and processes (Woolard and Klasen, 2005; Finn and Leibbrandt, 2013; Ranchhod, 2013). To the author's knowledge, there has been no previous research on the mobility dynamics prevailing within informal settlements. South Africa is characterised by stark social and spatial inequalities. Racial and spatial divisions were deliberately engineered through punitive measures under the apartheid state. Since the advent of democracy in 1994, these inequalities have persisted and even appear to have increased (Ardington et al, 2005; Van der Berg, 2014). This is despite major changes in social policy, including the large-scale expansion of welfare grants, access to education, health facilities and basic services (Armstrong and Burger, 2009). The extension of the 'social wage' has lowered the incidence and intensity of poverty somewhat, although it has not altered the underlying structure or dynamics of income and wealth. The gulf in occupations and earnings between racial groups remains as wide as ever, including from one generation to the next (Keswell et al, 2013; Piraino, 2015).

The anaemic performance of the labour market has been the biggest obstacle to substantial reductions in poverty and inequality. Not enough jobs are being generated for new entrants to the labour market, and an increasing proportion of the jobs that exist require skill levels that are out of reach for most young and unemployed people. Consequently, unemployment is exceptionally high by international standards and exhibits many structural features, including a severe mismatch between the supply and demand for skills (Bhorat et al, 2016).

The performance of the education and vocational training systems also remains very poor, despite relatively high state spending (Spaull, 2013). The broad unemployment rate for the period analysed in this paper rose from 28.7% in 2008 to 35.1% in 2012 (Statistics South Africa, 2013). The narrow unemployment rate (excluding discouraged job seekers) rose from 21.5% in 2008 to 24.5% in 2012. This coincided with the global financial crisis and ensuing recession in South Africa. The overall level of employment in the country contracted from 14.8 million to 14.5 million over the same period, while the working age population increased from 32 million to 34.4 million (Statistics South Africa, 2013).

Most cities did not perform as badly as the rest of the country. For example, broad unemployment in Gauteng increased from 23.4% to 28.7% over this period, while unemployment in provinces with predominately rural areas, such as the Eastern Cape and Free State, increased from 35.8% to 45.8%, and from 29.9% to 39.6%, respectively. The cities outperformed the rest of the country despite the ongoing in-migration of people from the rural areas looking for work.

The cities remain deeply inscribed by the inherited patterns of racial segregation, with most poor communities living in peripheral townships and informal settlements. Access to basic services has improved greatly throughout the country since 1994, although it remains patchy in the shack areas (Turok and Borel-Saladin, 2014). National and municipal policies have been ambivalent about informal settlements, with widespread neglect, piecemeal upgrading in selected areas and occasional forced evictions elsewhere (Huchzermeyer, 2011; Hunter and Posel, 2012; Tissington et al., 2013; Cirolia et al, 2016). The policy incoherence reflects misgivings about the fractious nature of many of these communities, the unauthorised character of the settlements, and the fact that some occupy hazardous locations, such as flood plains, steep slopes or road reserves. There is little appreciation that shack areas may be the only way for poor migrants to enter the cities, in the absence of other affordable accommodation. Nearly one in five (18 per cent) of the metropolitan population live in shacks, so the problem is arguably more manageable than in most African countries (Turok and Borel-Saladin, 2016).

The government's main response to the growth of informal settlements, as well as to the issues of overcrowding and homelessness, has been an unprecedented programme of low-cost house-building. The Reconstruction and Development Programme (RDP) housing scheme has delivered about three million new housing units, and now houses about one in five citizens (National Treasury, 2013; Presidency, 2014). However, the programme has failed to keep pace with population growth, and faces escalating unit costs and a host of other implementation problems (Turok and Borel-Saladin, 2016). Perhaps most important, most RDP housing has been built on large tracts of land on the urban periphery, far from established centres of employment and amenities (Turok, 2015).

The South African context depicted above is not auspicious for sizeable numbers of shack dwellers to achieve a better life over timeframes in the order of four years. There are at least three reasons why one should not expect much advancement for this group of people during the recent period: the contracting labour market, persistent systemic barriers to social mobility, and limited government investment in informal settlements to reverse historic

neglect. Therefore, evidence of any progression would be noteworthy and potentially significant.

4. Source of data and methods

The analysis uses data from the National Income Dynamics Study (NIDS), South Africa's first nationally representative panel survey. This tracks the circumstances of individuals and their households every second year commencing in 2008. The focus here is on patterns of mobility between waves 1 (2008) and 3 (2012) to allow for the longest possible period of time to elapse for migration and social mobility to occur. Ideally, one would use the NIDS data to follow people as they moved between locations, such as from a rural area to an informal settlement and then to a formal urban area. One would examine whether these locational shifts coincided with improvements in their economic circumstances.¹ For example, did someone who was unemployed and living in a rural area in 2008 become an urban shack dweller with a part-time job in 2010, and then a resident of a formal urban area with a full-time job in 2012? Unfortunately, the four-year timeframe and the moderate sample size of the NIDS prevent the dataset being used in this way.² In order to thoroughly examine the changes associated with movements between locations, a longer timeframe would be needed and/or a bigger sample.

Therefore a different approach is necessary, which compares the extent of social mobility within each type of location. Samples were created of people who lived in each type of area in 2008 and 2012, i.e. for those who remained in these locations.³ The analysis compares the probability of those living in each type of location getting a job or a better job between 2008 and 2012. For example, were the chances of unemployed people living in informal settlements in 2008 getting a job by 2012 better or worse than the chances of unemployed people living in rural areas? One qualification of this approach is that it does not control for the different characteristics of people living in the different locations. In other words, it discounts the possibility that some kinds of people are more likely to move locations than others. Nevertheless, the approach enables a deeper understanding of the collective experiences of mobility and the probabilities of progression. This permits one to infer whether living in a particular kind of area coincides with people being more likely to become better-off, without suggesting that the area actually caused them to become better-off.

If the pathways-out-of-poverty hypothesis is correct, one would expect the chances of upward mobility to be greater in informal settlements than in the rural areas from which people had migrated in search of a better life. If the cul-de-sac idea is more accurate, one would expect informal settlements to show low probabilities of economic progression, on a

¹ This type of analysis would require some adjustments to be made to correct for sample selection bias.

² For example, there is not a single person in the NIDS sample who moved from a rural area in 2008 to an informal urban area in 2010 and a formal urban area in 2012. The number of people who moved from an informal settlement in 2008 to a formal urban area in 2012 was 75. This sub-sample is reduced further when observations with missing data on key labour market outcomes, such as employment status, are excluded.

³ An early iteration of the analysis included a specification which analysed people who started in informal settlements in wave 1 without any restriction on where they were in wave 3, but it added another layer of complexity to the interpretation and the results were very similar to those who stayed in informal settlements throughout, so it was removed.

par to the situation in rural areas. In this case the chances of advancement in formal urban areas would be much greater, because of the superior opportunities available there. If the pathways notion closer to the truth, one would expect a much smaller difference between the probabilities of economic progression in informal settlements compared with formal urban areas.

There is a small amount of sample attrition across successive waves of the NIDS, which is common in panel surveys. New individuals are also added to each NIDS wave through marriage or babies born. As a result, the analysis here uses a 'balanced panel', meaning that only those observations which appear in all three waves of the dataset are included. (Those where the balanced panel sample weight is missing are excluded). The same procedure has been followed in other studies of mobility using the NIDS (Ebrahim et al, 2013; Finn and Leibbrandt, 2013; Ranchhod, 2013). Children and elderly are also excluded from the analysis because most of them are not actively seeking work or livelihoods. The sample is therefore restricted to the working age population of 15-64 years, i.e. people who were aged 15-64 in wave 1. This reduces the total sample to 12 782 individuals. When the sample is spread across multiple categories and location types, the size becomes quite small and the margin of error can become awkward. This applies particularly to informal urban areas where the sample size is smallest. We highlight instances where the margin of error is problematic in the narrative. The 95% confidence intervals are also reported in the transition matrices in the appendix.⁴ Despite some limitations associated with the sample size, the analysis is still worthwhile and provides important insights.

⁴ The confidence intervals give an idea of the precision of a specific estimate. They can also be used to infer whether the differences in two point estimates are statistically significant. If the confidence intervals of two point estimates do not overlap, the difference between them can be said to be statistically significant. If one confidence interval falls largely within the bounds of another, the associated point estimates cannot be said to be significantly different. Where they partially overlap, further testing should be done to ascertain statistical significance. We make reference to the results of such analysis when necessary.

Table 1: Summary statistics, NIDS balanced panel

	Wave 1	Wave 3
Gender		
Male %	47.9 (46.7, 49.1)	
Female %	52.1 (50.9, 53.3)	
Race		
African %	79.6 (74.2, 84.1)	
Coloured %	8.9 (6.0, 13.0)	
Asian/Indian %	2.8 (1.1, 6.9)	
White %	8.7 (6.1, 12.3)	
Mean age in years	33.7 (33.3, 34.2)	38.0 (37.5, 38.5)
Mean years of education	9.0 (8.8, 9.2)	9.4 (9.2, 9.6)
Employment Status		
Not Economically Active %	34.4 (32.6, 36.2)	31.7 (30.1, 33.4)
Unemployed %	21.0 (19.4, 22.7)	19.7 (18.2, 21.3)
Employed %	44.6 (42.5, 46.8)	48.6 (46.7, 50.6)
Poverty Status		
Extremely Poor %	21.2 (19.0,23.6)	15.1 (13.7,16.7)
Poor %	38.9 (35.9,42.0)	36.4 (33.8,39.1)
Not in poverty %	39.9 (36.2,43.7)	48.5 (45.3,51.7)

Notes: 95% confidence intervals in parenthesis

Source: NIDS 2008 and 2012; own estimates

Summary statistics for the balanced panel are provided in table 1 which are weighted to be representative of the population. It is important when examining Table 1 to bear in mind the exclusion of children and older people. This explains why the average age and years of education are higher than might be expected for the South African population as a whole. It is noticeable that there are no major aggregate changes between waves 1 and 3, with two exceptions.⁵ Employment is slightly higher in wave 3, while poverty is lower.⁶ The upper-bound and food poverty lines presented in Budlender et al (2015) are used as the measures of non-extreme and extreme poverty respectively. The non-extreme poverty line is R857 per person per month (January 2008 prices), while the extreme line is R272 per person per month. These lines are used throughout the analysis, and are adjusted for inflation using Statistics SA's headline consumer price index. The welfare indicator used for the poverty analysis is per capita household income, calculated from the NIDS derived household income variable.⁷

⁵ Note that the "unemployed" category used in Table 1 includes discouraged work seekers. This broad measure of unemployment is used throughout the paper. The appropriateness of this measure is discussed in Kingdon and Knight (2006) and Posel et al (2013).

⁶ Finn and Leibbrandt (2013) also used a NIDS balanced panel and found that income poverty dropped significantly between waves 1 and 3.

⁷ The NIDS derived income variable aggregates individual income from numerous possible sources: labour market income, government grant income, other income from government, investment income, remittance

The use of transition matrices for the mobility analysis follows a well-worn path in the NIDS working papers and elsewhere (Formby et al, 2004; Adato et al, 2006; Ebrahim et al, 2013; Finn and Leibbrandt, 2013; Ranchhod, 2013). The main findings are presented in graphs and figures in the paper in order to make them easier to interpret. The transition matrices with their 95% confidence intervals are contained in the appendix.

5. Main findings

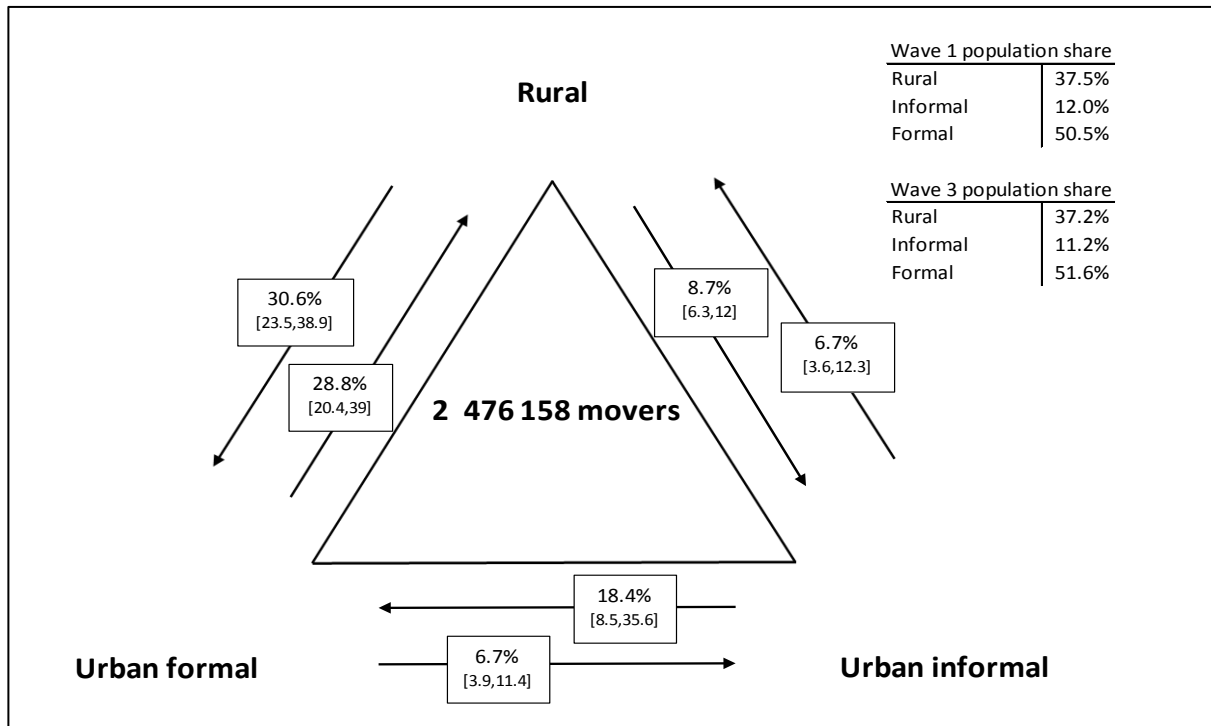
5.1 Transitions between types of location

In trying to understand the livelihood trajectories of individuals between different types of location, the analysis of progression is structured according to the expectation of advancement from 'rural' to 'urban informal' and then to 'urban formal'. There is no assumption that movement in this direction represents economic progression. This is simply to organise how the results are presented.

Figure 1 summarises the aggregate locational shifts of individuals in the NIDS between 2008 and 2012. There were 2.48 million movers in total amongst the population in the balanced panel. Most of the migration that occurred was between rural areas and formal urban areas, rather than between rural areas and informal settlements. This is surprising at first sight, but it is only to be expected because formal urban areas had a much larger population than informal settlements, so they were bound to dominate numerically. Interestingly, the migration flows between rural and formal urban areas were in both directions, with rural to urban flows only slightly larger than urban to rural. The extent of movement from informal settlements to formal urban areas was also quite substantial. This represents an apparent progression, although the 95% confidence intervals introduce a cautionary warning.

income, subsistence agriculture income, imputed rental income. For more information on this variable including dealing with non-response refer to NIDS Wave 3 User Manual.

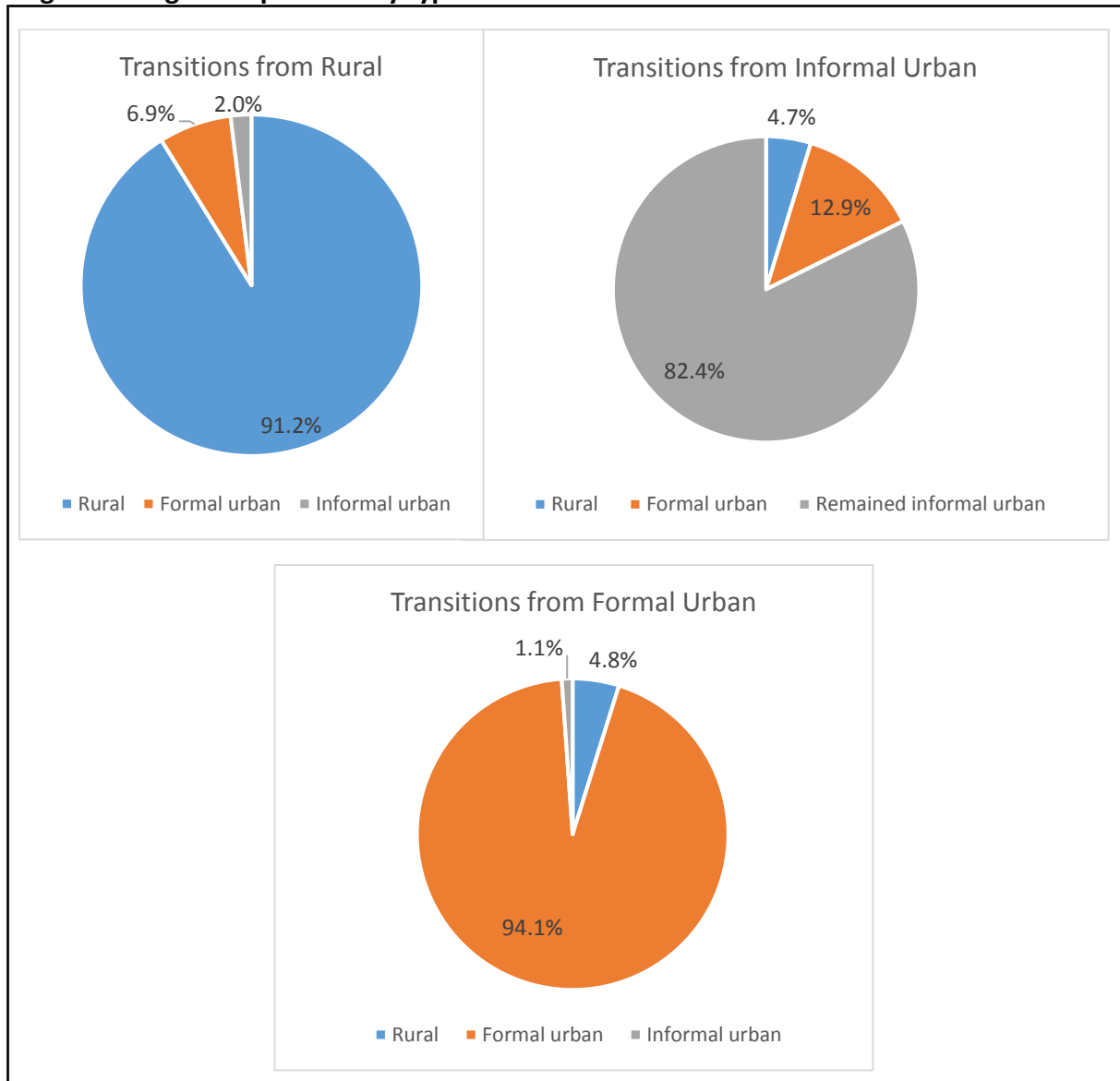
Figure 1: Distribution of movers by location type between 2008 and 2012



Source: NIDS 2008 and 2012; own estimates

Figure 2 shows the proportion of individuals in each type of location that moved after 2008. Formal urban areas were the most stable and informal settlements were the most transitory areas, with 18% of residents changing location subsequently, compared with 9% for rural areas and 6% for formal urban areas. Hence, shack dwellers were three times more likely to move than residents of formal urban areas and twice as likely to move as rural residents. This makes sense, since poor living conditions are likely to be strong push factors. Shack dwellers were also nearly three times more likely to move into formal urban areas than to rural areas (13% of transitions compared with 5%). This was despite the formal urban population being only 1.35 times larger than the rural population.

Figure 2: Migration patterns by type of location between 2008 and 2012



Notes: Refer to corresponding transition matrix in the appendix – table A1

Source: NIDS 2008, 2012; own estimates

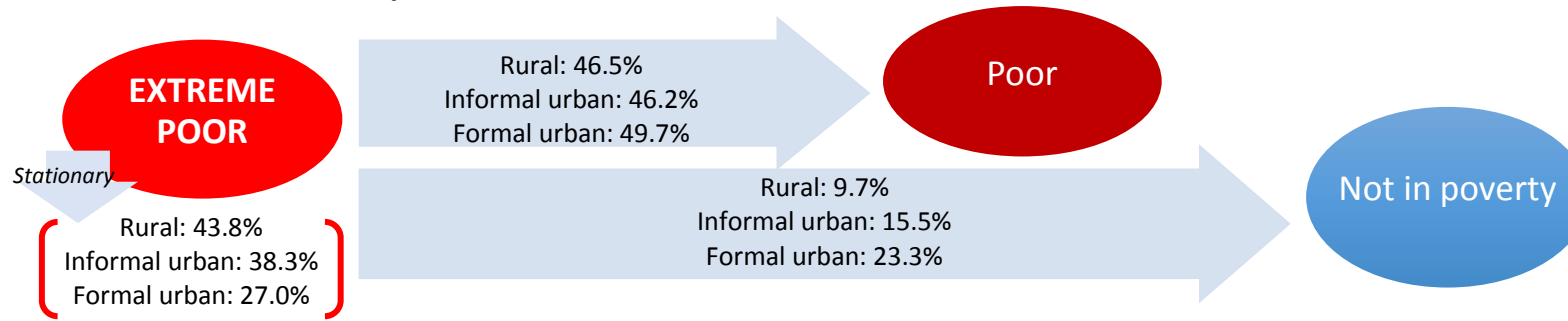
Summing up, whilst more people migrated from rural areas to formal urban areas, in proportionate terms informal urban residents were more likely than rural residents to move to formal urban areas. This means that not all shack dwellers face the prospect of a lifetime living in squalid conditions. In just four years, one in eight managed to move to a formal urban area. This evidence is insufficient to make the case for upward mobility compared to rural areas because it has not been established that they were better off as a result.

5.2 Transitions in poverty status

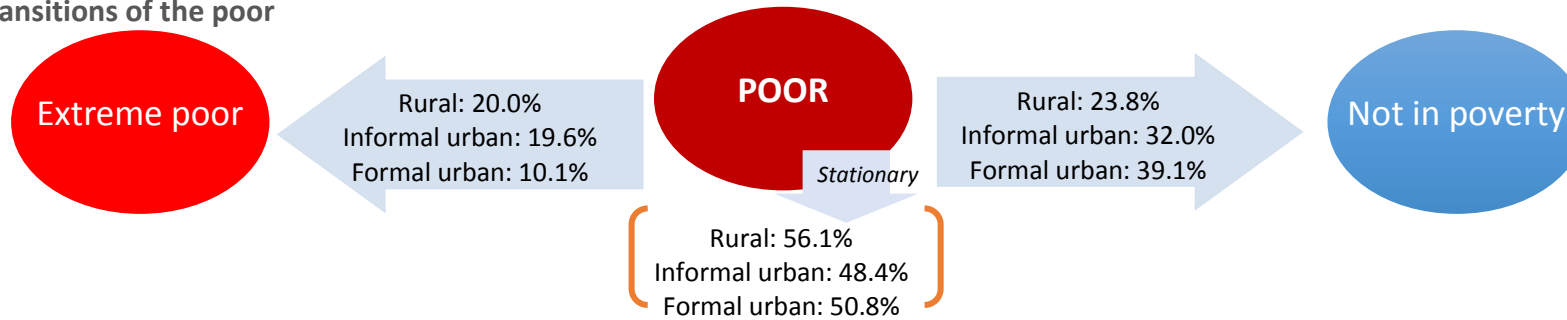
Living in a formal urban area is likely to mean better access to public services than living in an informal settlement, but this does not necessarily mean escaping from income poverty. To investigate whether people were better or worse off financially, transitions in and out of

Figure 3: Poverty dynamics between 2008 and 2012

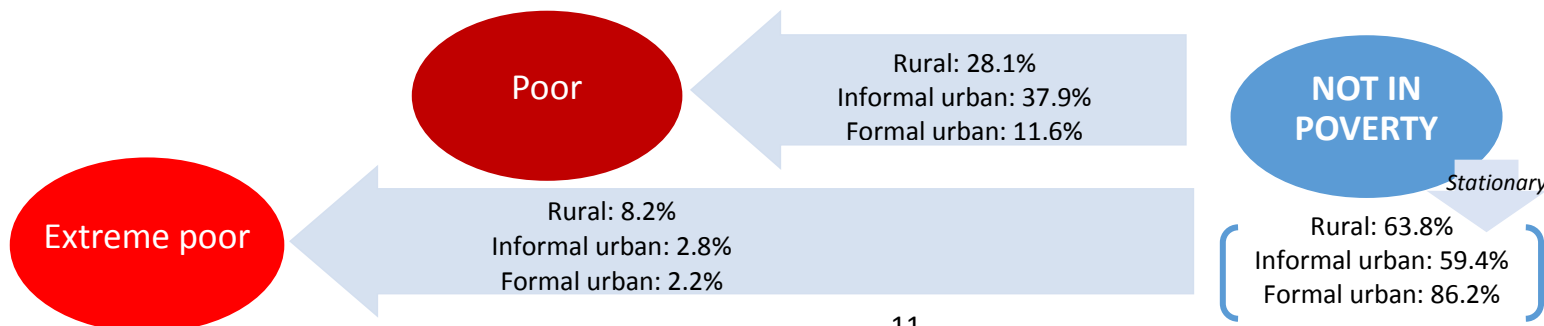
Transitions of the extreme poor



Transitions of the poor



Transitions of the non-poor



poverty are analysed directly. Poverty is defined here on the basis of per capita household income, adjusted for inflation, using the poverty lines introduced by Budlender et al (2015).

Figure 3 summarises the changes in poverty status between 2008 and 2012 for the three location types. The top diagram describes what happened to people in extreme poverty in 2008; the middle diagram shows what happened to people who were just poor in 2008, and the bottom diagram shows people who were above the poverty line in 2008. The margins of error cloud the analysis somewhat, particularly for informal settlements (see tables A2.1-A2.3 in the Appendix). Nevertheless, the main finding is that people were most likely to progress out of poverty or extreme poverty if they were living in a formal urban area. Nearly one in four people in extreme poverty in formal urban areas in 2008 managed to escape poverty by 2012. Conversely, people were least likely to progress out of poverty or extreme poverty if they were living in a rural area. Only one in ten people in extreme poverty in rural areas in 2008 managed to escape poverty by 2012. The prospects for people in informal settlements were in between. About one in seven people in extreme poverty in informal urban areas in 2008 managed to escape poverty by 2012.

Therefore, rural areas function more like poverty traps than informal settlements, and formal urban areas function more like pathways than informal settlements. In addition, the bottom diagram shows that people who were not in poverty were far more likely to fall back into poverty in rural areas or informal settlements than in formal urban areas. Formal urban residents tended to stay out of poverty, presumably because they had less precarious livelihoods.

These transitions all refer to dynamic movements in and out of poverty. From a static viewpoint formal urban areas had a much larger proportion of their population as non-poor, while informal and rural areas had similar proportions of people in poverty (see tables A2.1-A2.3). Combining these insights suggests that informal settlements may have played a modest role in helping some people to move out of poverty, as the odds were slightly in favour of this transition, even though the levels of deprivation were similar from a static point of view. The position of people who were not poor was equally precarious between rural and informal urban areas, with more than a third of residents falling into poverty over the period. This is compatible with the pathways concept in that an informal market economy would be fluid and imply greater dynamism, but also greater instability.

The poverty analysis presented in this section provides some support for the pathways proposition. Informal settlements seem to function slightly more like pathways-out-of-poverty than rural areas, which function most like cul-de-sacs. Nevertheless, formal urban areas appear to function most like pathways-out-of-poverty. Therefore informal settlements seem to occupy an intermediary position, between formal urban and rural areas.

5.3 Transitions in employment status

Transitions into and out of poverty are closely related to changes in people's position in the labour market. A summary statement of people's employment status is shown in the column totals in italics for tables A3.1-A3.3 in the appendix. The proportion of the working-age population in rural areas who were in employment in 2008 was 36%. The equivalent figure

for informal urban areas was 43% and for formal urban areas it was 54%. (The difference between the rural areas and informal urban areas is not statistically significant, so we cannot be sure that shack dwellers were more likely to be in work than rural residents). Nevertheless, adults in formal urban areas were 50% more likely to have a job than rural residents. This is a big difference, and a very important one too, because having more people in work implies higher household incomes and less poverty.

The proportion of rural residents who were unemployed in 2008 was 20% and a further 44% were not economically active. The equivalent figures for informal settlements were 29% and 28% respectively. The clear implication is that shack dwellers were more likely to be looking for work, perhaps because the prospects of getting a job in urban areas were better than in rural areas. Summing up, the employment status of people in informal settlements was different to that in rural areas, particularly in the sense that more of them were actively searching for jobs.

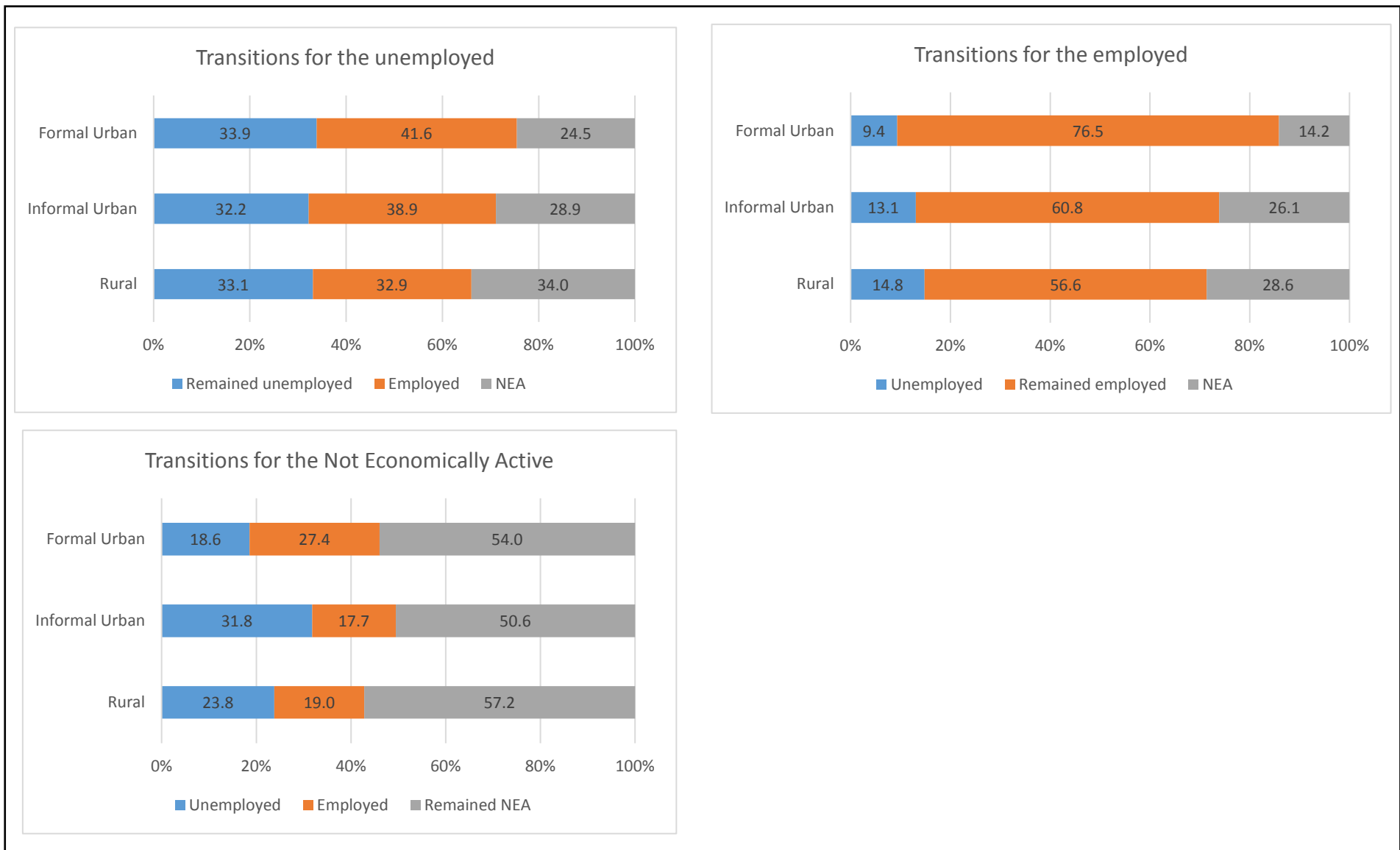
Figure 4 turns to consider the dynamism in the labour market, i.e. what happened to different groups between 2008 and 2012. The main finding is that people in formal urban areas consistently became or remained better-off than people in informal urban areas and rural areas. Unemployed and economically inactive residents of formal urban areas were more likely to move into employment than people in other areas, and employed residents of formal urban areas were more likely to retain their jobs than people in other areas. Unemployed people in rural areas were least likely to move into employment, and employed residents of rural areas were least likely to retain their jobs than people in urban areas. The changes affecting shack dwellers were roughly mid-way between rural and formal urban residents, although the apparent differences between shack dwellers and rural residents are not statistically significant at the 95% level. Another point of interest is that there was far more dynamism among unemployed people in all three types of area than among employed or inactive groups. Only about a third of unemployed people in all three locations remained unemployed over the four year period. This may reflect a high level of 'churn' in and out of work among this segment of the workforce and the unstable nature of the bottom end of the labour market.

It is possible to delve more deeply into the different types of employment which may account for differences in earnings, such as regular jobs, casual work and self-employment.⁸ However, the analysis is constrained by large margins of error. In particular, the sample sizes for shack dwellers who are self-employed or casually employed are very small and must be handled with particular care. Figure 5 shows that a much higher proportion of regular workers in formal urban areas (77%) retained this type of employment than in rural (65%) or informal urban areas (61%). Very few became casually employed or self-employed. People in informal urban areas appeared to be in more transitory positions than in both formal urban and rural areas, although the differences between rural and informal urban areas are not statistically

⁸ Regular work is generally considered to be the most secure and best-paid type of employment, followed by self-employment and then casual work.

significant. Upward mobility is much higher for people in formal urban areas who transition from casual employment into regular work (46%) compared with people in

Figure 4: Labour force transitions between 2008 and 2012



informal urban (29%) and rural areas (25%) (see tables A4.1-A4.3). Self-employment as a category is too small to make any meaningful comparisons.

To summarise, the labour market analysis presented in this section does not provide strong support for either the pathways proposition or the cul-de-sac idea. Formal urban areas seem to function most like pathways-out-of-poverty and rural areas function most like cul-de-sacs. Informal settlements seem to occupy an intermediary position, and perhaps function slightly more like rural areas than formal urban areas. Hence there is little support for the pathways notion here.

Figure 5: Transitions by type of employment between 2008 and 2012



Notes: Refer to corresponding transition matrices in the appendix – tables A4.1-A4.3

Transitions from casual and self-employment are not reported due to their small sample size

Source: NIDS 2008, 2012; own estimates

5.4 Transitions in occupation

The final dimension of socio-economic mobility examined is change in occupation. According to the pathways concept, informal settlements provide access to better paid jobs in cities. In section 5.2 there was evidence of progression among shack dwellers escaping from poverty. The employment status analysis in section 5.3 was inconclusive about the role of informal settlements. Change in occupation may provide clearer insights into why earnings in informal settlements improved over time.

Figure 6 shows the data on occupational mobility for those who retained their jobs between 2008 and 2012.⁹ Unfortunately, the sample size is restricted, which is further compounded by subdividing the sample into three occupational categories. The analysis presented in this section should therefore be regarded as suggestive.

It is immediately apparent from figure 6 that informal settlement residents employed in managerial/professional occupations were far less likely to retain these jobs (39%) compared with residents of formal urban areas (75%) or rural areas (76%). Shack dwellers were more likely shift to lower occupational categories. Although this difference is statistically significant, informal settlements did not accommodate many 'managers' or 'professionals' (only 8% in 2008), whereas 30% of all people with jobs in formal urban areas were managers or professionals.

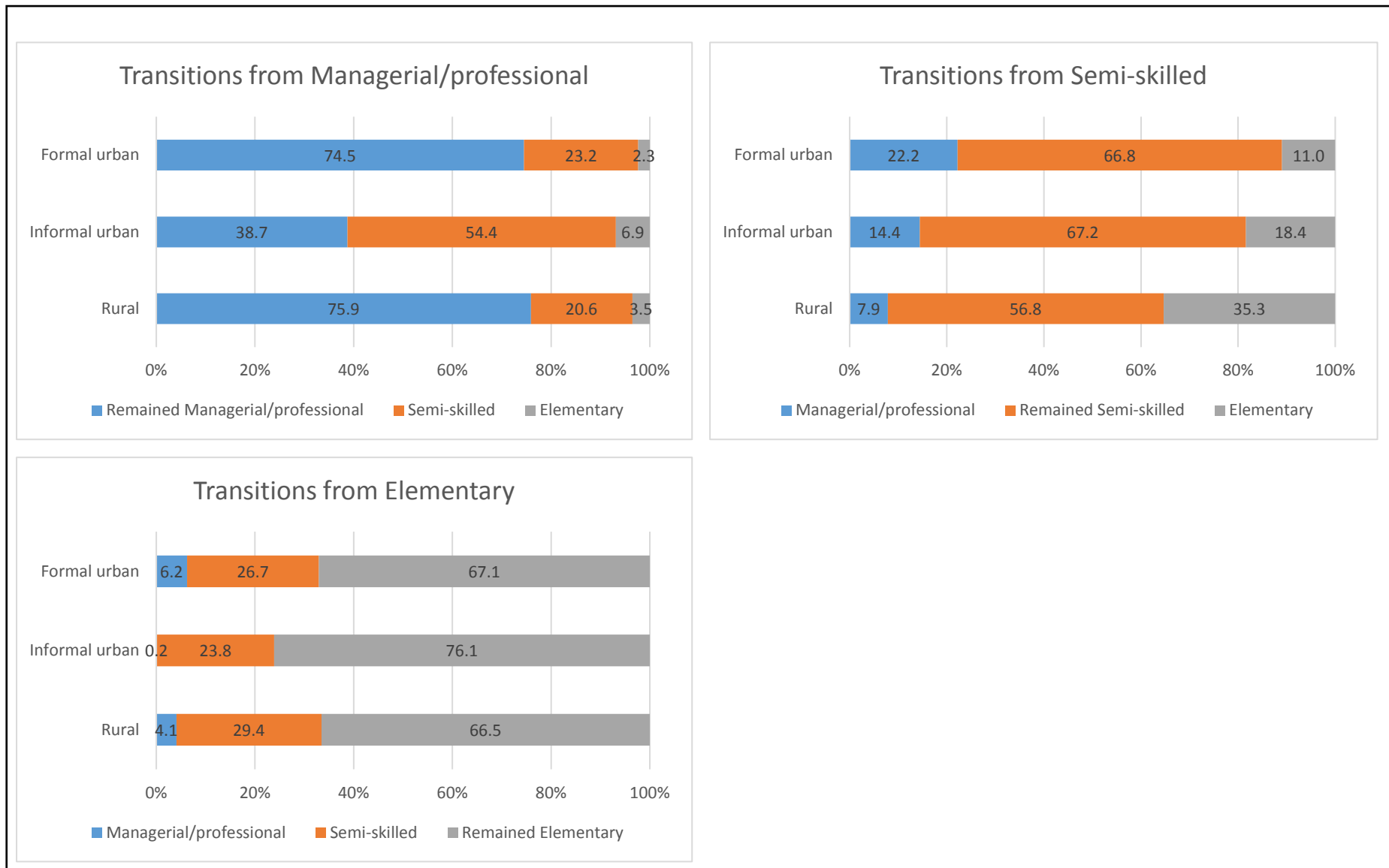
The fate of semi-skilled workers is more important because they were the most numerous group in informal urban areas (57% in 2008). They were also the largest group in rural areas and formal urban areas (57% and 52% in 2008 respectively). Semi-skilled workers were more likely to avoid regression into elementary occupations in informal settlements and formal urban areas (18% and 11% respectively) compared with rural areas (35%). Conversely, semi-skilled workers in both types of urban area were more likely to progress into professional/managerial jobs than in rural areas (the difference between informal and formal urban areas is not statistically significant). There is little evidence of differential outcomes for people employed in elementary occupations. This may be because the prospects for elementary workers were similar across all three locations, or because of the small sample sizes.

Summing up, people living in informal settlements were slightly more likely to progress into managerial or professional occupations than people in rural areas. They were also less likely to regress into elementary occupations. This offers some modest support for the pathways concept. However, the residents of formal urban areas were distinctly better-off in terms of

⁹ The occupational profiles reported here are made up of the following NIDS categories: Managerial/professional workers include "managers", "professionals", and "technicians and associate professionals". Semi-skilled workers include "clerical support workers", "service and sales workers", "skilled agricultural, forestry and fishery workers", "craft and related trades workers", and "plant and machine operators, and assemblers". Elementary workers are equivalent to the NIDS "elementary occupations" category, which includes domestic work and various types of "unskilled" work. For a more detailed breakdown of the NIDS categories, see Statistics SA's South African Standard Classification of Occupations (SASCO).

the extent of progression and stability. Therefore, the gains for shack dwellers need to be kept in perspective.

Figure 6: Occupational transitions between 2008 and 2012

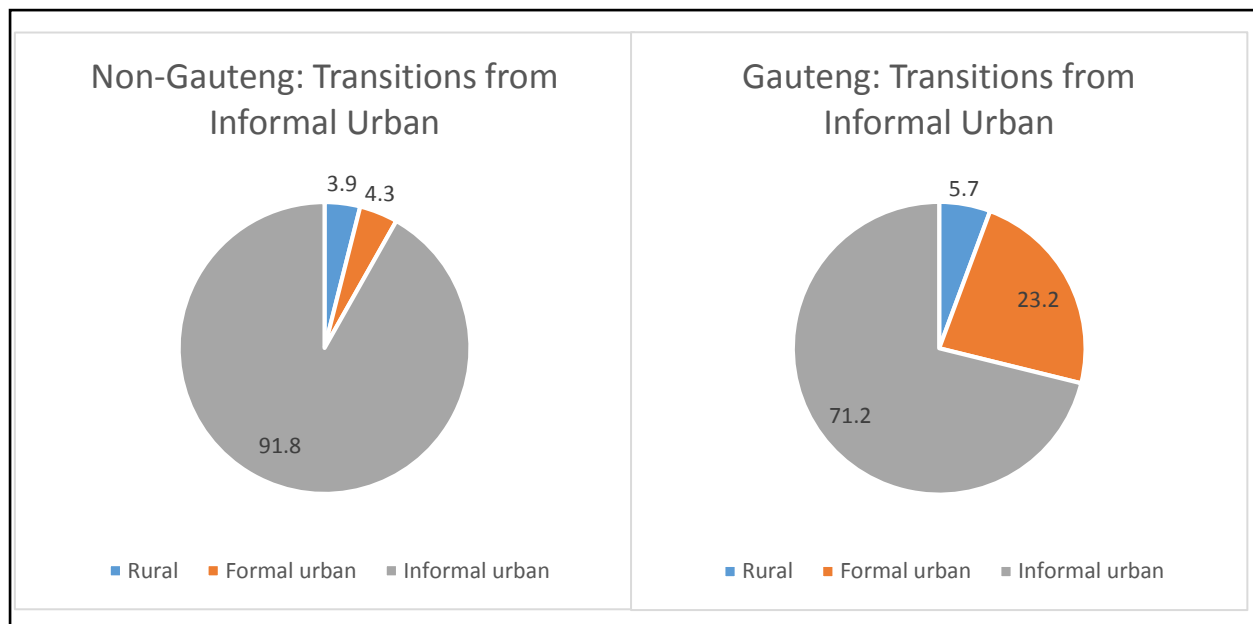


6. The situation in Gauteng

Gauteng is the most prosperous and populous province in the country. It is the economic heart of South Africa and a magnet for domestic and international migration. Therefore, this city-region may experience different socio-economic dynamics than the aggregate picture presented above. In particular, one might expect informal settlements to function more like pathways-out-of-poverty than in the other urban regions because the economic opportunities are greater. Unfortunately, it was not feasible to undertake a comprehensive mobility analysis for Gauteng because of restrictions on the sample size. Nevertheless, it was possible to identify some stylised differences between Gauteng and the other urban regions (the transition matrices are provided in appendices A6.1-6.2 and A7.1-7.2). It should be noted that the samples were constructed slightly differently in this analysis from the analysis described above in that they were not restricted to people who lived in each type of area both in 2008 and 2012. The samples were based solely on where they lived in 2008. This is more logical bearing in mind the lack of rural areas in Gauteng and the likelihood that many of the migrants living outside Gauteng in 2008 might have moved to Gauteng (rather than to other urban areas) in 2012 because of its dominance in South Africa’s urban system.

Figure 7 shows that the pattern of movement between areas in Gauteng was quite different from other urban regions. In particular, there was a much higher level of movement from informal settlements to formal urban areas. Outside Gauteng the probability of moving from an informal settlement to a formal urban area was 4%, compared with 23% in Gauteng.

Figure 7: Migration patterns for Gauteng and other urban regions from informal urban areas between 2008 and 2012



Notes: Refer to corresponding transition matrices in the appendix – tables A6.1-6.2

Source: NIDS 2008 and 2012, own estimates

Figure 8: Labour force transitions for Gauteng and other urban regions between 2008 and 2012



Another important difference between Gauteng and other urban regions was in the probability of labour market progression. Figure 8 shows that people in Gauteng who were unemployed or economically inactive were both more likely to get jobs than people in other urban regions. Furthermore, people in Gauteng who were employed were more likely to remain employed than people in other regions.

This analysis cannot be pursued further to compare differences in economic outcomes between informal settlements in Gauteng and other regions because of the sample size constraint. Nevertheless one can surmise that there are contrasting locational dynamics being experienced in the different city-regions. It appears that regional economic conditions exert an important influence on the extent of social and spatial mobility. This implies that informal settlements may function more like pathways-out-of-poverty in relatively buoyant regions, and more like cul-de-sacs in more depressed regions. These distinctive outcomes may also help to explain the somewhat inconclusive nature of the aggregate analysis presented earlier.

7. Conclusion

Informal settlements occupy an increasingly important position in the landscape of possibilities facing poor populations around the world. Their numerical significance means they have a crucial influence on the future well-being of a large section of global humanity. Surprisingly little empirical research has been undertaken to understand their role in shaping the life chances of their residents and of incoming households. The prevailing characteristics of urban slums are miserable living conditions and human vulnerability. However, in a more dynamic sense they may also provide access to opportunities which, over time, help to foster human progress by linking people to the facilities, contacts and livelihoods typically concentrated in cities. In other words, circumstances which appear stagnant in the short term may transpire to be more promising if a longer view is taken.

Alternative perspectives anticipate different socio-economic outcomes. The influential 'pathways-out-of-poverty' theory highlights the social vibrancy and dynamism of informal urban areas which facilitates affordable access to economic possibilities and good chances of personal development for determined and resourceful people migrating from rural areas. The contrasting 'cul-de-sacs' theory emphasises the enduring burden of concentrated poverty and the debilitating conditions suffered by slum dwellers in unsafe and unsanitary environments, which hold back human advancement and perpetuate social marginalisation.

The NIDS panel survey provides a valuable information resource to investigate the relevance of these propositions by following the locational and socio-economic trajectories of people over time. South Africa is an interesting case for analysis because of the stark social and spatial inequalities and policy ambivalence towards shack settlements. Transition matrices were the technique used to explore key indicators of socio-economic mobility for residents in different types of location.

There were several notable findings, which need to be considered in the round. First, a sizeable proportion of residents in informal settlements were not physically trapped in these areas. Nearly one in five (18%) shack dwellers in 2008 had migrated to an alternative location types by 2012. This is not a trivial proportion over a relatively short period. Three-quarters of

this movement was into formal urban areas. Even assuming no automatic personal advancement occurred as a result, the point is that the urban system seems to offer scope for people to be absorbed into formal, established residential areas.

Second, people living in informal settlements were slightly more likely to progress out of poverty than rural residents. This is consistent with the pathways proposition. Against this, a similar proportion of shack dwellers regressed into poverty compared with rural residents. In other words, there is 'churning' going on, with some people moving out of poverty and others falling back. Poor people living in formal urban areas were much more likely to escape poverty than people living in informal urban and rural areas.

Third, the analysis of labour market dynamics yielded inconclusive results, partly clouded by the small size of the sample. Informal settlements appeared to function in a similar way to rural areas, with unemployed residents making little progress towards regular employment. Meanwhile, formal urban areas offered much greater chances of upward mobility in terms of employment and occupation.

Overall, the evidence suggests that there may be some locational advantage for informal settlements in support of the pathways theory, even if the effect is quite small. In a country with very high levels of inequality, mass unemployment and low social mobility, this may be significant. The analysis could not shed much light on the underlying forces and mechanisms involved. A longer timeframe for tracking progress and a larger sample size would undoubtedly assist. The strongest finding was that people living in formal urban areas were most likely to experience upward mobility across all socio-economic indicators, and rural residents were the least likely to experience upward mobility.

An important subtlety identified in the analysis was the distinctive dynamic experienced in the Gauteng city-region. Informal settlements appear to perform a more progressive function in Gauteng than in other urban regions. This could be linked to the more dynamic economy of the region and the superior opportunities to enter jobs and advance upwards. The point is that the magnitude and timescale of social progression or regression may be quite specific to each city-region, reflecting the distinctive demographic profile and economic performance of the region. This is a topic for further investigation.

The analysis presented here is exploratory and suggestive. Additional data and scrutiny are required to document the differences in social mobility between locations more precisely, and to disentangle the underlying mechanisms more carefully. These differences cannot be causally attributed to characteristics of the areas without further methodological sophistication. This would require a larger sample size and/or a longer time frame for changes to have occurred. There are various factors that could confound causal connections, such as a distinctive social composition of the samples in the different types of location. Differential changes in the samples over time could also affect the conclusions.

The fundamental point is that there is an urgent need for further investigation of the social and spatial dynamics of informal settlements. This is crucial to better understand the impact on household economic trajectories of burgeoning urban slums in the global South. Improved

knowledge of the role of informal settlements in urban housing systems and labour markets is also vital for more appropriate policy responses than forced evictions and displacement.

References

- Adato, M., Carter, M. and May, J. 2006. Exploring poverty traps and social exclusion in SA using qualitative and quantitative data. *Journal of Development Studies*, Vol. 42, No. 2, 226–247
- Ardington, C., Lam, D., Leibbrandt, M. and Welch, M. 2005. The sensitivity of estimates of post-apartheid changes in South African poverty and inequality to key data imputations. CSSR Working Paper No. 106, Southern Africa Labour and Development Research Unit, Centre for Social Science Research, Cape Town.
- Armstrong, P. & Burger, C. 2009. Poverty, inequality and the role of social grants: An Analysis using Decomposition Techniques. Working Papers 15/2009, Stellenbosch University, Department of Economics.
- Bhorat, H., Naidoo, K., Oosthuizen, M. and Pillay, K. 2016. Demographic, employment, and wage trends in South Africa. UNU-WIDER Working Paper: WP/2015/141
- Budlender, J., Leibbrandt, M. and Woolard, I. 2015 South African poverty lines: a review and two new money-metric thresholds. SALDRU Working Paper, 151. Cape Town: Southern Africa Labour and Development Research Unit.
- Cross, C. 2013. Delivering human settlements as an anti-poverty strategy: Spatial paradigms. In Pillay U., Hagg G., Nyamnjoh F. (eds) *State of the Nation: South Africa 2012–13*. Cape Town: HSRC Press, pp. 239–272.
- De Soto, H. 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books.
- Ebrahim, A., Woolard, I. and Leibbrandt, M. 2013. Unemployment and Household Formation. SALDRU Working Paper, 126/ NIDS Discussion Paper 2013/8. Cape Town: Southern Africa Labour and Development Research Unit.
- Ezeh, A. et al (2016) 'The health of people who live in slums 1', *The Lancet*, October 16, [http://dx.doi.org/10.1016/S0140-6736\(16\)31650-6](http://dx.doi.org/10.1016/S0140-6736(16)31650-6)
- Finn, A. and Leibbrandt, M. 2013. The Dynamics of Poverty in the First Three Waves of NIDS. SALDRU Working Paper, 119/ NIDS Discussion Paper 2013/1. Cape Town: Southern Africa Labour and Development Research Unit.
- Formby, P., James Smith, W. and Zheng, B. 2004. Mobility measurement, transition matrices and statistical inference. *Journal of Econometrics* 120 (1): 181-205.
- Fox, S. 2014. The political economy of slums: Theory and evidence from Sub-Saharan Africa. *World Development* 54: 191–203
- Glaeser, E. 2011. *Triumph of the City: How our Greatest Invention makes us Richer, Smarter, Greener, Healthier, and Happier*. London: Macmillan.

Huchzermeyer, M. 2011. *Cities with 'Slums': From Informal Settlement Eradication to a Right to the City in Africa*. Cape Town: UCT Press.

Hunter M. and Posel D. 2012. Here to work: The socioeconomic characteristics of informal dwellers in post-apartheid South Africa. *Environment and Urbanization* 24(1): 285–304.

Jansen, A., Moses, M. and Mujita, S. 2015. Measurements and determinants of multifaceted poverty in South Africa. *Development Southern Africa* 32(2): 151–169.

Keswell, M., Girdwood, S. and Leibbrandt, M. 2013. Educational Inheritance and the Distribution of Occupations: Evidence from South Africa, *The Review of Income and Wealth*, 59(S1): S111-S137.

Kingdon, G. and Knight, J. 2006. The measurement of unemployment when unemployment is high. *Labour Economics*, 13(3): 291-315.

La Porta, R. and Shleifer, A. 2014. Informality and development. *Journal of Economic Perspectives* 28(3): 109–126.

National Treasury, 2013. Budget 2013: Budget Review. Available at: www.treasury.gov.za (accessed 3 January 2014).

Payne, G. 2005. Getting ahead of the game: A twin-track approach to improving existing slums and reducing the need for future slums. *Environment and Urbanisation* 17(1): 135–145.

Philip, K., Tsedu, M. and Zwane, M. 2014. *The Impacts of Social and Economic Inequality on Economic Development in South Africa*. Johannesburg: UNDP.

Piraino, P. 2015. Intergenerational Earnings Mobility and Equality of Opportunity in South Africa. *World Development*. 67: pp.396-405.

Polese, M. 2009. *The Wealth and Poverty of Regions: Why Cities Matter*. Chicago, IL: University of Chicago Press.

Posel, D. and Marx, C. 2013. Circular migration: A view from destination households in two urban informal settlements in South Africa. *The Journal of Development Studies* 49(6): 819–831.

Posel, D., Casale, D. and Vermaak, C. 2013. Job Search and the Measurement of Unemployment in South Africa. *South African Journal of Economics*, 82(1): 66-80.

Presidency, 2014. *Twenty Year Review, South Africa, 1994–2014*. Department of Performance Monitoring and Evaluation. Available at: <http://www.20yearsoffreedom.org.za/20YearReview.pdf> (accessed 3 June 2014).

Ranchhod, V. 2013. *Earnings Volatility in South Africa*. SALDRU Working Paper, 121/ NIDS Discussion Paper 2013/3. Cape Town: Southern Africa Labour and Development Research Unit.

- Seeliger, L. and Turok, I. 2014. Averting a downward spiral: Building resilience in informal urban settlements through adaptive governance. *Environment and Urbanisation* 26(1): 184–199.
- Spaull, N., 2013. South Africa's Education Crisis: The Quality of Education in South Africa 1994–2011. Report commissioned by the Centre for Enterprise and Development.
- Statistics South Africa, 2013. Quarterly Labour Force Survey 2014 Q4: Statistical Release P0211. www.statssa.gov.za
- Tissington, K., Munshi, N., and Mirugi-Mukundi, G. 2013. Jumping the Queue. Waiting Lists and other Myths: Perceptions and Practice around Housing Demand and Allocation in South Africa. Cape Town: Community Law Centre, University of the Western Cape.
- Turner, JC. 1967. Barriers and channels for housing development in modernising countries. *Journal of the American Institute of Planners* 33: 167–181.
- Turner, JC. 1968. Housing priorities, settlement patterns, and urban development in modernising countries. *Journal of the American Institute of Planners* 34: 354–363.
- Turok, I. 2015. South Africa's new urban agenda: transformation or compensation? *Local Economy*, pp. 1-9. DOI: 10.1177/0269094215614259
- Turok, I. and Borel-Saladin, J. 2016. The theory and reality of urban slums: pathways-out-of-poverty or cul-de-sacs? *Urban Studies*, 1-22. DOI: 10.1177/0042098016671109
- United Nations, 2015. World Urbanization Prospects: The 2012 Revision. Department of Economic and Social Affairs, Population Division (UNDESA) (2015) (ST/ESA/SER.A/ 366). New York: UNDESA.
- United Nations, 2014. The Millennium Development Goals Report 2012.
- UN-Habitat, 2013. Planning and Design for Sustainable Urban Mobility: Global Report on Human Settlements 2013, Abingdon: Routledge.
- UN-Habitat, 2014. *State of African Cities 2014*, Nairobi: UN-Habitat.
- Van der Berg, S. 2014. Inequality, poverty and prospects for redistribution. *Development Southern Africa* 31(2): 197–218.
- Woolard, I. and Klasen, S. 2005. Determinants of Income Mobility and Household Poverty Dynamics in South Africa. *The Journal of Development Studies*, Vol.41, No.5, July 2005, pp.865 – 897.

Appendix: Transition Matrices

The transition matrices are derived as ‘augmented’ transition matrices in terms of representing row or column percentages. For example, table A.1a shows movements across location type between wave 1 and wave 3. The rows represent the location in wave 1, while the columns represent the location in wave 3. The estimates presented in the table show what proportion of people who were in a specific location in wave 1 corresponding with the row, moved to the relevant location corresponding with the column in wave 3, which sums to 100 per cent. Further to this, the row and column totals are presented in italics, and they represent the share of the total population associated with each outcome, in wave 1 and wave 3 respectively.

Table A1.1: Migration patterns by type of location from wave 1 to wave 3

WAVE 3 GEOTYPE					
WAVE 1 GEOTYPE	Rural	Formal urban	Informal urban	Total	<i>Wave 1 Total %</i>
RURAL %	91.16	6.88	1.96	100	37.48
95% CI	[89.83,92.32]	[5.92,7.99]	[1.52,2.52]		<i>[32.68,42.55]</i>
FORMAL URBAN %	4.82	94.06	1.12	100	50.48
95% CI	[3.63,6.36]	[92.32,95.42]	[0.67,1.87]		<i>[44.53,56.41]</i>
INFORMAL URBAN %	4.73	12.92	82.35	100	12.04
95% CI	[2.60,8.43]	[7.20,22.12]	[73.38,88.76]		<i>[7.21,19.44]</i>
WAVE 3 TOTAL %	37.17	51.62	11.22		100
95% CI	<i>[32.93,41.61]</i>	<i>[46.81,56.39]</i>	<i>[7.28,16.90]</i>		

Source: NIDS 2008 and 2012; own estimates; n = 12,764

Table A2.1: Transitions for rural areas by poverty status from wave 1 to wave 3

WAVE 3 POVERTY STATUS					
WAVE 1 POVERTY STATUS	Extreme poor	Non-extreme poor	Non-poor	Total	<i>Wave 1 Total %</i>
EXTREME POOR %	43.78	46.54	9.68	100	35.95
95% CI	[39.58,48.07]	[41.72,51.43]	[7.34,12.67]		<i>[31.83,40.28]</i>
NON-EXTREME POOR %	20.03	56.13	23.84	100	44.06
95% CI	[17.23,23.17]	[51.87,60.30]	[20.25,27.84]		<i>[40.60,47.58]</i>
NON-POOR %	8.17	28.07	63.76	100	20
95% CI	[5.14,12.75]	[23.74,32.84]	[57.77,69.36]		<i>[15.45,25.47]</i>
WAVE 3 TOTAL %	26.2	47.07	26.73		100
95% CI	<i>[23.22,29.41]</i>	<i>[43.76,50.41]</i>	<i>[22.67,31.22]</i>		

Source: NIDS 2008 and 2012; own estimates; n = 5,913

Table A2.2: Transitions for informal urban areas by poverty status from wave 1 to wave 3

WAVE 3 POVERTY STATUS					
WAVE 1 POVERTY STATUS	Extreme poor	Non-extreme poor	Non-poor	Total	Wave 1 Total %
EXTREME POOR %	38.27	46.19	15.54	100	20.94
95% CI	[29.56,47.79]	[36.62,56.04]	[9.09,25.30]		[13.99,30.13]
NON-EXTREME POOR %	19.56	48.43	32	100	55.18
95% CI	[15.17,24.86]	[40.93,56.00]	[25.24,39.62]		[49.20,61.01]
NON-POOR %	2.77	37.87	59.37	100	23.88
95% CI	[0.81,9.05]	[21.90,56.99]	[40.30,75.97]		[17.53,31.65]
WAVE 3 TOTAL %	19.47	45.44	35.09		100
95% CI	[14.79,25.19]	[37.80,53.30]	[27.04,44.10]		

Source: NIDS 2008 and 2012; own estimates; n = 769

Table A2.3: Transitions for formal urban areas by poverty status from wave 1 to wave 3

WAVE 3 POVERTY STATUS					
WAVE 1 POVERTY STATUS	Extreme poor	Non-extreme poor	Non-poor	Total	Wave 1 Total %
EXTREME POOR %	26.99	49.69	23.32	100	10.35
95% CI	[16.80,40.35]	[40.65,58.74]	[17.17,30.87]		[7.73,13.73]
NON-EXTREME POOR %	10.12	50.81	39.07	100	31.01
95% CI	[7.61,13.33]	[45.68,55.93]	[34.27,44.09]		[26.53,35.88]
NON-POOR %	2.2	11.57	86.23	100	58.64
95% CI	[1.30,3.70]	[8.94,14.85]	[82.64,89.18]		[52.82,64.23]
WAVE 3 TOTAL %	7.22	27.68	65.1		100
95% CI	[5.50,9.43]	[23.63,32.14]	[59.82,70.02]		

Source: NIDS 2008 and 2012; own estimates; n = 5,023

Table A3.1: Transitions for rural areas by employment status from wave 1 to wave 3

WAVE 1 EMPLOYMENT STATUS	WAVE 3 EMPLOYMENT STATUS				Wave 1 Total %
	NEA	Unemployed	Employed	Total	
NEA %	57.21	23.83	18.96	100	44.34
95% CI	[53.91,60.45]	[21.23,26.65]	[16.87,21.24]		[41.31,47.42]
UNEMPLOYED %	34	33.09	32.92	100	19.94
95% CI	[30.09,38.13]	[29.45,36.94]	[28.83,37.27]		[17.98,22.05]
EMPLOYED %	28.61	14.83	56.56	100	35.72
95% CI	[25.24,32.24]	[12.21,17.89]	[52.28,60.74]		[32.97,38.57]
WAVE 3 TOTAL %	42.37	22.46	35.17		100
95% CI	[39.87,44.91]	[20.42,24.64]	[32.90,37.51]		

Source: NIDS 2008 and 2012; own estimates; n = 5,096

Table A3.2: Transitions for informal urban areas by employment status from wave 1 to wave 3

WAVE 1 EMPLOYMENT STATUS	WAVE 3 EMPLOYMENT STATUS				Wave 1 Total %
	NEA	Unemployed	Employed	Total	
NEA %	50.55	31.8	17.65	100	28.37
95% CI	[44.64,56.44]	[23.39,41.60]	[10.46,28.23]		[22.27,35.39]
UNEMPLOYED %	28.9	32.23	38.87	100	28.61
95% CI	[22.87,35.78]	[23.55,42.33]	[31.14,47.21]		[23.45,34.40]
EMPLOYED %	26.11	13.06	60.82	100	43.02
95% CI	[18.39,35.67]	[9.13,18.34]	[49.28,71.27]		[33.76,52.79]
WAVE 3 TOTAL %	33.84	23.86	42.29		100
95% CI	[27.47,40.86]	[18.28,30.52]	[33.40,51.72]		

Source: NIDS 2008 and 2012; own estimates; n = 613

Table A3.3: Transitions for formal urban areas by employment status from wave 1 to wave 3

WAVE 1 EMPLOYMENT STATUS	WAVE 3 EMPLOYMENT STATUS				Wave 1 Total %
	NEA	Unemployed	Employed	Total	
NEA %	53.97	18.59	27.43	100	26.5
95% CI	[49.04,58.83]	[15.43,22.24]	[23.69,31.53]		[24.11,29.04]
UNEMPLOYED %	24.53	33.88	41.59	100	19.18
95% CI	[20.27,29.36]	[28.82,39.34]	[36.04,47.35]		[16.75,21.89]
EMPLOYED %	14.16	9.35	76.49	100	54.32
95% CI	[11.68,17.07]	[7.42,11.70]	[72.95,79.70]		[50.73,57.86]
WAVE 3 TOTAL %	26.7	16.5	56.8		100
95% CI	[24.29,29.26]	[14.21,19.08]	[53.33,60.20]		

Source: NIDS 2008 and 2012; own estimates; n = 4,093

Table A4.1: Transitions for rural areas by employment type from wave 1 to wave 3

WAVE 1 EMPLOYMENT	WAVE 3 EMPLOYMENT					Wave 1 Total %
	Not working	Regular	Casual	Self	Total	
NOT WORKING %	80.63	11.95	4.51	2.91	100	69.8
95% CI	[78.65,82.46]	[10.29,13.84]	[3.53,5.75]	[2.22,3.81]		[66.64,72.77]
REGULAR %	29.28	64.9	3.02	2.8	100	20.46
95% CI	[25.07,33.88]	[59.94,69.55]	[1.92,4.71]	[1.73,4.51]		[17.68,23.56]
CASUAL %	60.64	25.42	3.3	10.64	100	4.09
95% CI	[49.85,70.48]	[17.33,35.66]	[1.69,6.34]	[5.52,19.54]		[3.35,4.97]
SELF %	55.03	9.01	6.55	29.42	100	5.65
95% CI	[46.87,62.92]	[4.53,17.10]	[3.66,11.46]	[22.44,37.52]		[4.73,6.75]
WAVE 3 TOTAL %	67.86	23.17	4.27	4.7		100
95% CI	[65.31,70.30]	[20.65,25.89]	[3.54,5.15]	[3.89,5.67]		

Source: NIDS 2008 and 2012; own estimates; n = 4,416

Table A4.2: Transitions for informal urban areas by employment type from wave 1 to wave 3

WAVE 3 EMPLOYMENT						
WAVE 1 EMPLOYMENT	Not working	Regular	Casual	Self	Total	Wave 1 Total %
NOT WORKING %	73.27	16.9	7.89	1.93	100	<i>59.58</i>
95% CI	<i>[64.03,80.85]</i>	<i>[12.02,23.23]</i>	<i>[3.86,15.47]</i>	<i>[0.67,5.42]</i>		<i>[50.09,68.40]</i>
REGULAR %	29.92	61.01	7.26	1.8	100	<i>24.32</i>
95% CI	<i>[19.52,42.92]</i>	<i>[49.30,71.59]</i>	<i>[2.65,18.39]</i>	<i>[0.24,12.41]</i>		<i>[19.14,30.38]</i>
CASUAL %	61.81	29.33	5.67	3.19	100	<i>8.7</i>
95% CI	<i>[43.45,77.31]</i>	<i>[18.66,42.89]</i>	<i>[0.97,26.92]</i>	<i>[0.53,16.84]</i>		<i>[6.03,12.40]</i>
SELF %	40.59	20.49	15.11	23.8	100	<i>7.4</i>
95% CI	<i>[26.32,56.65]</i>	<i>[8.19,42.69]</i>	<i>[6.85,30.14]</i>	<i>[10.44,45.56]</i>		<i>[4.62,11.66]</i>
WAVE 3 TOTAL %	<i>59.31</i>	<i>28.98</i>	<i>8.08</i>	<i>3.63</i>		<i>100</i>
95% CI	<i>[50.07,67.94]</i>	<i>[23.17,35.56]</i>	<i>[3.83,16.26]</i>	<i>[1.67,7.70]</i>		

Source: NIDS 2008 and 2012; own estimates; n = 572

Table A4.3: Transitions for formal urban areas by employment type from wave 1 to wave 3

WAVE 1 EMPLOYMENT	WAVE 3 EMPLOYMENT					Wave 1 Total %
	Not working	Regular	Casual	Self	Total	
NOT WORKING %	70.69	20.19	4.81	4.3	100	46.48
95% CI	[66.98,74.15]	[17.53,23.15]	[3.52,6.54]	[2.92,6.30]		[42.83,50.17]
REGULAR %	19.18	76.81	1.57	2.44	100	41.96
95% CI	[15.91,22.95]	[72.77,80.40]	[0.88,2.79]	[1.45,4.08]		[38.03,45.99]
CASUAL %	46.09	46.31	3.38	4.22	100	4.88
95% CI	[35.85,56.67]	[37.20,55.67]	[0.97,11.11]	[1.99,8.72]		[3.84,6.20]
SELF %	37.16	18.84	2.75	41.25	100	6.68
95% CI	[28.61,46.60]	[11.28,29.75]	[0.95,7.74]	[31.42,51.83]		[5.42,8.21]
WAVE 3 TOTAL %	45.64	45.13	3.24	5.99		100
95% CI	[42.18,49.14]	[41.68,48.63]	[2.49,4.22]	[4.75,7.52]		

Source: NIDS 2008 and 2012; own estimates; n = 3,823

Table A5.1: Transitions for rural areas by occupation from wave 1 to wave 3

WAVE 1 OCCUPATION	WAVE 3 OCCUPATION				Wave 1 Total %
	Manager/Prof	Semi-skilled	Elementary	Total	
MANAGER/PROF%	75.91	20.56	3.53	100	17.5
95% CI	[67.47,82.72]	[13.97,29.20]	[1.38,8.73]		[13.70,22.08]
SEMI-SKILLED %	7.85	56.82	35.33	100	56.56
95% CI	[4.95,12.24]	[48.72,64.58]	[27.91,43.53]		[51.25,61.72]
ELEMENTARY %	4.08	29.4	66.52	100	25.95
95% CI	[2.30,7.13]	[21.51,38.76]	[57.59,74.40]		[21.93,30.41]
WAVE 3 TOTAL %	18.78	43.36	37.86		100
95% CI	[15.21,22.97]	[38.12,48.76]	[32.34,43.71]		

Source: NIDS 2008 and 2012; own estimates; n = 902

Table A5.2: Transitions for informal urban areas by occupation from wave 1 to wave 3

WAVE 1 OCCUPATION	WAVE 3 OCCUPATION				Wave 1 Total %
	Manager/Prof	Semi-skilled	Elementary	Total	
MANAGERIAL/PROF%	38.74	54.4	6.86	100	7.62
95% CI	[15.19,69.07]	[23.71,82.07]	[2.26,19.03]		[3.33,16.52]
SEMI-SKILLED %	14.44	67.18	18.38	100	56.51
95% CI	[7.26,26.68]	[56.10,76.63]	[11.18,28.71]		[49.64,63.15]
ELEMENTARY %	0.15	23.75	76.1	100	35.86
95% CI	[0.02,1.14]	[10.36,45.64]	[54.23,89.54]		[30.54,41.56]
WAVE 3 TOTAL %	11.17	50.63	38.2		100
95% CI	[6.51,18.49]	[40.52,60.69]	[29.49,47.74]		

Source: NIDS 2008 and 2012; own estimates; n = 170

Table A5.3: Transitions for formal urban areas by occupation from wave 1 to wave 3

WAVE 1 OCCUPATION	WAVE 3 OCCUPATION				Wave 1 Total %
	Manager/Prof	Semi-skilled	Elementary	Total	
MANAGER/PROF%	74.51	23.16	2.33	100	30.04
95% CI	[67.19,80.67]	[17.33,30.23]	[1.27,4.23]		[23.97,36.89]
SEMI-SKILLED %	22.22	66.83	10.95	100	52.18
95% CI	[18.11,26.96]	[62.20,71.15]	[8.16,14.54]		[46.53,57.78]
ELEMENTARY %	6.24	26.71	67.05	100	17.78
95% CI	[3.68,10.39]	[18.94,36.25]	[57.15,75.64]		[13.20,23.53]
WAVE 3 TOTAL %	35.08	46.58	18.34		100
95% CI	[29.11,41.56]	[41.28,51.96]	[14.21,23.35]		

Source: NIDS 2008 and 2012; own estimates; n = 1,390

Table A6.1: Non-Gauteng migration patterns by type of location from wave 1 to wave 3*

WAVE 1 GEOTYPE	WAVE 3 GEOTYPE			
	Rural	Formal urban	Informal urban	Total
RURAL %	91.25	6.87	1.88	100
95% CI	[93.78,95.48]	[3.54,5.00]	[0.79,1.51]	
FORMAL URBAN %	4.58	94.49	0.94	100
95% CI	[3.02,6.88]	[92.14,96.16]	[0.56,1.57]	
INFORMAL URBAN %	3.99	2.85	93.15	100
95% CI	[2.53,6.24]	[1.49,5.40]	[90.31,95.21]	
TOTAL %	48.49	42.21	9.3	100
95% CI	[43.07,53.94]	[36.82,47.79]	[5.40,15.55]	

Source: NIDS 2008 and 2012; own estimates; n = 11,448

Note: * The sample allows for an individual who starts as non-Gauteng in wave 1, to have transitioned to Gauteng by wave 3

Table A6.2: Gauteng migration patterns by type of location from wave 1 to wave 3*

WAVE 1 GEOTYPE	WAVE 3 GEOTYPE			
	Rural	Formal urban	Informal urban	Total
RURAL %	87.54	7.38	5.08	100
95% CI	[84.75,89.88]	[4.94,10.89]	[3.38,7.56]	
FORMAL URBAN %	5.26	93.52	1.22	100
95% CI	[3.59,7.67]	[90.67,95.54]	[0.44,3.30]	
INFORMAL URBAN %	5.66	23.19	71.15	100
95% CI	[1.94,15.38]	[16.29,31.91]	[61.59,79.14]	
TOTAL %	8.37	75.48	16.16	100
95% CI	[4.63,14.65]	[61.40,85.62]	[7.39,31.76]	

Source: NIDS 2008 and 2012; own estimates; n = 1,298

Note: * The sample allows for an individual who starts as Gauteng in wave 1, to have transitioned to non-Gauteng by wave 3

Table A7.1: Non-Gauteng labour market transitions from wave 1 to wave 3*

WAVE 1 EMPLOYMENT STATUS	WAVE 3 EMPLOYMENT STATUS			
	NEA	Unemployed	Employed	Total
NEA %	55.04	22.86	22.1	100
95% CI	[52.26,57.78]	[20.81,25.05]	[20.17,24.15]	
UNEMPLOYED %	29.12	33.3	37.57	100
95% CI	[26.38,32.03]	[30.15,36.61]	[34.09,41.20]	
EMPLOYED %	22.65	11.89	65.47	100
95% CI	[20.47,24.98]	[10.25,13.75]	[62.60,68.23]	
TOTAL %	36.23	20.48	43.29	100
95% CI	[34.46,38.04]	[18.91,22.13]	[41.25,45.35]	

Source: NIDS 2008 and 2012; own estimates; n = 9,602

Note: * The sample allows for an individual who starts as non-Gauteng in wave 1, to have transitioned to Gauteng by wave 3

Table A7.2: Gauteng labour market transitions from wave 1 to wave 3*

WAVE 1 EMPLOYMENT STATUS	WAVE 3 EMPLOYMENT STATUS			
	NEA	Unemployed	Employed	Total
NEA %	47.02	25.4	27.58	100
95% CI	[39.46,54.73]	[19.13,32.88]	[20.73,35.67]	
UNEMPLOYED %	25.74	30.07	44.19	100
95% CI	[19.24,33.52]	[22.94,38.31]	[37.95,50.63]	
EMPLOYED %	12.37	10.3	77.34	100
95% CI	[8.69,17.31]	[7.29,14.34]	[71.67,82.15]	
TOTAL %	23.81	18.31	57.88	100
95% CI	[19.10,29.25]	[14.66,22.62]	[51.72,63.81]	

Source: NIDS 2008 and 2012; own estimates; n = 1,080

* Note: The sample allows for an individual who starts as non-Gauteng in wave 1, to have transitioned to Gauteng by wave 3



Development Policy Research Unit
University of Cape Town
Private Bag
Rondebosch 7701
Cape Town
South Africa

Tel: +27 21 650 5705
Fax: +27 21 650 5711

www.dpru.uct.ac.za



Like us at www.facebook.com/DevelopmentPolicyResearchUnit