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Urban "slums" and social mobility

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Abstract

Informal urban settlements determine the wellbeing of a large section of global humanity. Yet there has been 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 article uses longitudinal data for South Africa to explore the magnitude of social progression among people living within informal settlements compared with 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 larger in the more prosperous Gauteng city-region than in other urban regions.

KEYWORDS

informal settlements, poverty dynamics, social mobility, South Africa, urban livelihoods

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 (UN, 2014). Many countries in the Global South have been unable to accommodate their burgeoning urban populations in decent living conditions, resulting in a proliferation of informal 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.

While 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 incoming 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 hinder human development.

South Africa (SA) is a pertinent case for investigation because of the striking social inequalities and spatial divisions within the country, and the stubborn ambivalence of policy-makers towards swelling informal settlements. These areas reflect the efforts of poor households to grasp scarce livelihood opportunities by making sacrifices to their quality of life through occupying insecure and unserviced locations. Depending on their success, these areas could perform a useful function in narrowing socioeconomic disparities. This article uses longitudinal data to explore the magnitude of upward social mobility 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 connect people to the services, contacts and livelihoods concentrated in cities. To the authors' knowledge, this is the first article that attempts to do this, and it should therefore be regarded as exploratory.

Section two elaborates these contrasting concepts of how informal settlements influence people's chances of experiencing a better life. The third section outlines the SA 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 brief 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 economic opportunities 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 whatever options are 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 jobs 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, normalized 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 in the absence of more salubrious places to stay. With little education or work experience, incomers offer little to the labour 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 & 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). Without any tenure security, they live with the constant threat of stigmatization, discrimination and eviction. Negative "neighbourhood effects" compound the problems caused by malnutrition, psychological stress, disaffection and frustration with their suffering.

Community cohesion is 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 proper legal safeguards and policing to limit crime (Jansen, Moses, & Mujita, 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 relatives in the countryside (Posel & Marx, 2013; Philip, Tsedu, & Zwane, 2014). Well-meaning governments have vital roles to play in establishing the foundations for 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 & Turok, 2014).

These divergent perspectives on how informal settlements influence the fate of residents allude to the range of intersecting mechanisms underway. There are many causal processes at work that need to be disentangled and measured in order to assess their magnitude and duration. The first step 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 socioeconomic mobility in SA, generally focused on national patterns and processes (Woolard & Klasen, 2005; Finn & Leibbrandt, 2013; Ranchhod, 2013).

To the authors' knowledge, there has been no previous research on the mobility dynamics prevailing within informal settlements. The country is scarred 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 may even have increased (Ardington, Lam, Leibbrandt, & Welch, 2006; van der Berg, 2014). This is despite major changes in social policy, including the expansion of welfare grants and wider access to education, healthcare and basic services (Armstrong & Burger, 2009). The extension of the "social wage" has lowered the incidence of extreme poverty, 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, Girdwood, & Leibbrandt, 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 have been 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 adults. 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, Naidoo, Oosthuizen, & Pillay, 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 analyzed in this article rose from 28.7% in 2008 to 35.1% in 2012 (Statistics SA, 2016). 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 SA. 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 SA, 2016).

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 in terms of unemployment rates, despite the ongoing in-migration of people from 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 informal settlements (Turok & Borel-Saladin, 2014). National and municipal policies have been ambivalent about these areas, with widespread neglect, piecemeal upgrading in selected places and occasional forced evictions elsewhere (Huchzermeyer, 2011; Hunter & Posel, 2012; Tissington, Munshi, Mirugi-Mukundi, & Durojaye, 2013; Cirolia et al., 2017). The indecision reflects misgivings about the fractious nature of some of these communities, the unauthorized character of squatter settlements, and the fact that some occupy hazardous locations, such as flood plains, steep slopes or road reserves. There is little appreciation that they may be the only way for poor migrants to enter the cities, in the absence of other affordable accommodation. Nearly one in five (18%) of the metropolitan population live in shacks, so the problem is arguably more manageable than in most African countries (Turok & Borel-Saladin, 2016).

The government's main response to informal housing, overcrowding and homelessness has been a massive programme of low-cost house-building. The Reconstruction and Development Programme (RDP) housing scheme has delivered about three million new units, which now accommodate 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 & Borel-Saladin, 2016). Most RDP housing has been built on large tracts of land on the urban periphery, far from established centres of employment and amenities (Turok, 2016).

The context depicted above is not auspicious for many shack dwellers to achieve a better life over timeframes of only 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 (such as low skills), and limited state 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), SA'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,[1] and then to a formal urban area. One would examine whether these locational shifts coincided with improvements in their economic circumstances. For example, how likely was someone who was unemployed and living in a rural area in 2008 to 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 from being used in this way.[2] In order to thoroughly examine the changes associated with movements between locations, a longer timeframe would be needed or a bigger sample.

A different approach is necessary, therefore. One 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 people 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? This approach does not control for the different characteristics of people living in the different locations. In other words, it ignores 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.

[1]Informal settlements are defined according to geographic boundaries used in the 2001 Census conducted by Statistics SA. The "informal urban" category is made up of areas classified as informal settlements or "squatter camps" which occur on land which has not been surveyed or proclaimed as residential, and the structures are usually informal (Statistics SA, 2003). This definition emphasizes both the lack of development rights and the poor quality of the dwellings.

[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 analyzed 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.

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	NEA %	**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, 2012); authors' estimates.

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 par with 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 is closer to the truth, one would expect a much smaller difference between the probabilities of progress 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. The analysis here uses a "balanced panel," meaning that only 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 mobility studies using the NIDS (Ebrahim, Woolard, & Leibbrandt, 2013; Finn & Leibbrandt, 2013; Ranchhod, 2013). Children and the elderly are also excluded because most of them are not actively seeking work or livelihoods. The sample is restricted to the working-age population age between 15 and 64, i.e. people between the ages of 15 and 64 in wave 1. This reduces the total sample to 12,782 individuals. When this is spread across multiple categories and location types, the sample size becomes quite small and the margin of error can become awkward. The sample size is relatively small in informal urban areas. 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] These show that 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. The Appendix for this article can be found in the online version.

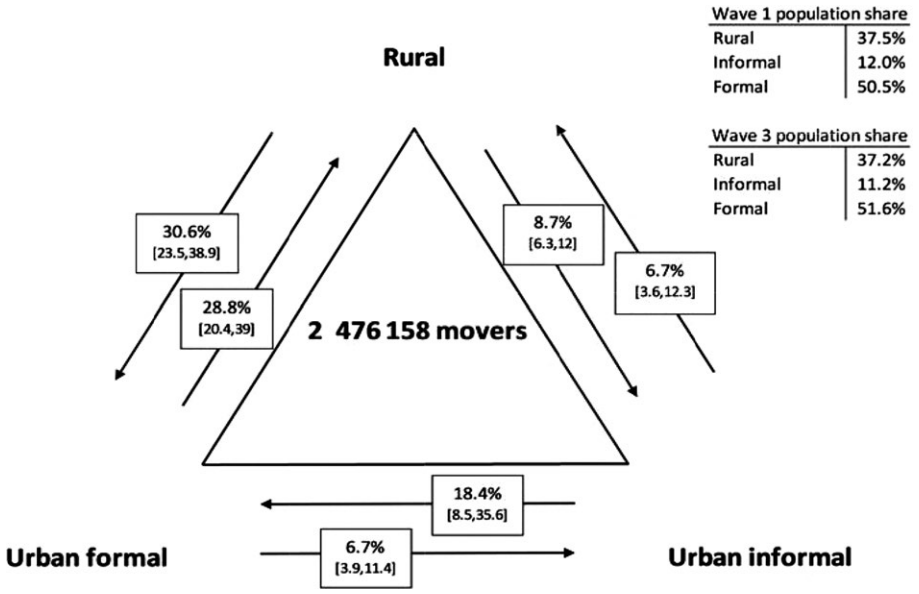

FIGURE 1 Distribution of Movers by Location Type Between 2008 and 2012
Source: NIDS, 2008, 2012; own estimates

Summary statistics for the balanced panel are provided in Table 1 and are weighted to be representative of the population. When examining Table 1 it is important 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 SA 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, Leibbrandt, and Woolard (2015) are used as the measures of non-extreme and extreme poverty respectively. The non-extreme poverty line is 857 rand (R) per person per month (at 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]

The use of transition matrices for the mobility analysis follows a well-worn path in the NIDS working papers and elsewhere (Formby, Smith, & Zheng, 2004; Adato, Carter, & May, 2006; Ebrahim et al., 2013; Finn & Leibbrandt, 2013; Ranchhod, 2013). The main findings are presented in graphs

[5]Note that the "unemployed" category used in Table 1 includes discouraged work seekers. This broad measure of unemployment is used throughout the article. The appropriateness of this measure is discussed in Kingdon and Knight (2006) and Posel, Casale, and Vermaak (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 income, subsistence agriculture income, imputed rental income. For more information on this variable, including dealing with non-response, refer to de Villiers, Brown, Woolard, Daniels, and Leibbrandt (2014).

TABLE 2 Migration Patterns by Type of Location from Wave 1 to Wave 3

	Wave 3 Geotype				
Wave 1 Geotype	Rural	Formal urban	Informal urban	Total	***Wave 1 Total*** **%**
Rural %	**91.16**	**6.88**	**1.96**	100	*37.48*
95% CI	**[89.83,92.32]**	**[5.92,7.99]**	**[1.52,2.52]**		*[32.68,42.55]*
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]**		*[44.53,56.41]*
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]**		*[7.21,19.44]*
Wave 3 Total %	*37.17*	*51.62*	*11.22*		*100*
95% CI	*[32.93,41.61]*	*[46.81,56.39]*	*[7.28,16.90]*		

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

and figures in the article 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 is structured according to the possibility that movement occurs from "rural" to "urban informal" and then to "urban formal." There is no assumption that physical mobility in this direction represents economic progression. This is simply to organize how the results are presented.

Figure 1 summarizes the aggregate locational shifts of individuals in the NIDS between 2008 and 2012. There were 2.48 million movers in total among 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 may appear 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 potential progression, although the 95% confidence intervals introduce a cautionary warning.

Table 2 shows the proportion of individuals in each type of location that moved after 2008 using a transition matrix.[8] 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 apparent sense, since adverse living conditions are likely to be strong push factors. Shack dwellers were also

[8]Table 2 reproduces an "augmented" transition matrix in terms of representing row or column percentages. The rows represent the location in wave 1, while the columns represent the location in wave 3. The estimates presented in the Table show the proportion of people in a specific location in wave 1 corresponding with the row who moved to the relevant location corresponding with the column in wave 3, which amounts to 100%. 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.

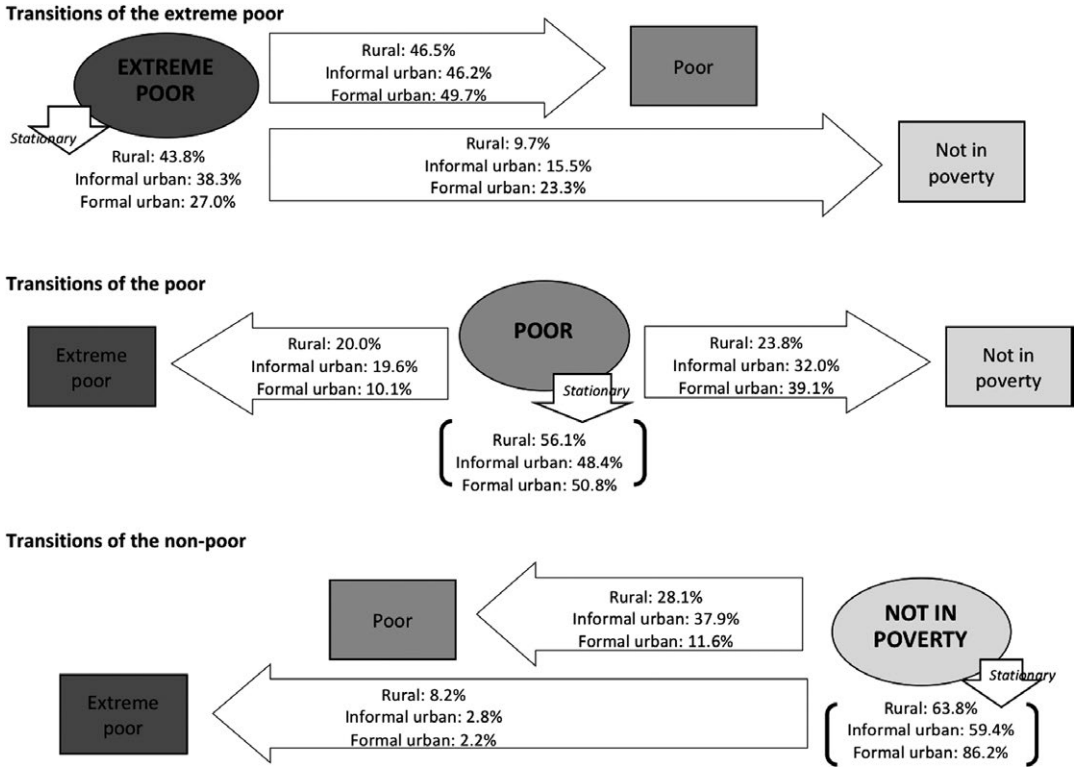

FIGURE 2 Poverty Dynamics Between 2008 and 2012

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.

To sum up, while 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 indicates that shack dwellers are not trapped in their locations. Over a period of four years, one in eight managed to move to a formal urban area. This evidence is not sufficient 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 of moving.

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 is not equivalent to escaping from income poverty. To investigate whether people were better or worse off financially, transitions in and out of poverty are analyzed 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 2 summarizes 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 A1.1–A1.3 in the Appendix). Nevertheless, the main

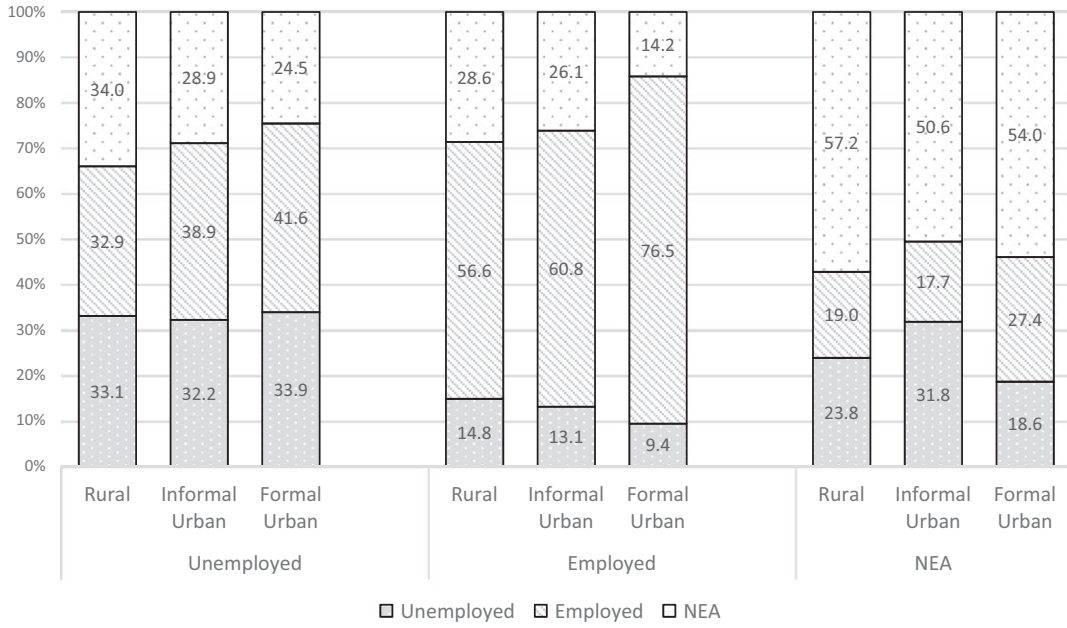

FIGURE 3 Labour Force Transitions Between 2008 and 2012
Notes: Refer to corresponding transition matrices in the Appendix – Tables A2.1-A2.3
Source: NIDS, 2008, 2012; own estimates

finding is that people were most likely to progress out of 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 if they were living in a rural area. Only one in 10 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.

The implication appears to be that 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 their jobs and livelihoods were less precarious.

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 the column totals in italics in tables A1.1–A1.3). 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 (and unregulated) market economy would imply greater fluidity and more rapid change, but also greater instability.

The poverty analysis presented in this section provides some support for the pathways notion. Informal settlements seem to function slightly more like pathways-out-of-poverty than rural areas, which function more like cul-de-sacs. Nevertheless, formal urban areas appear to offer the best

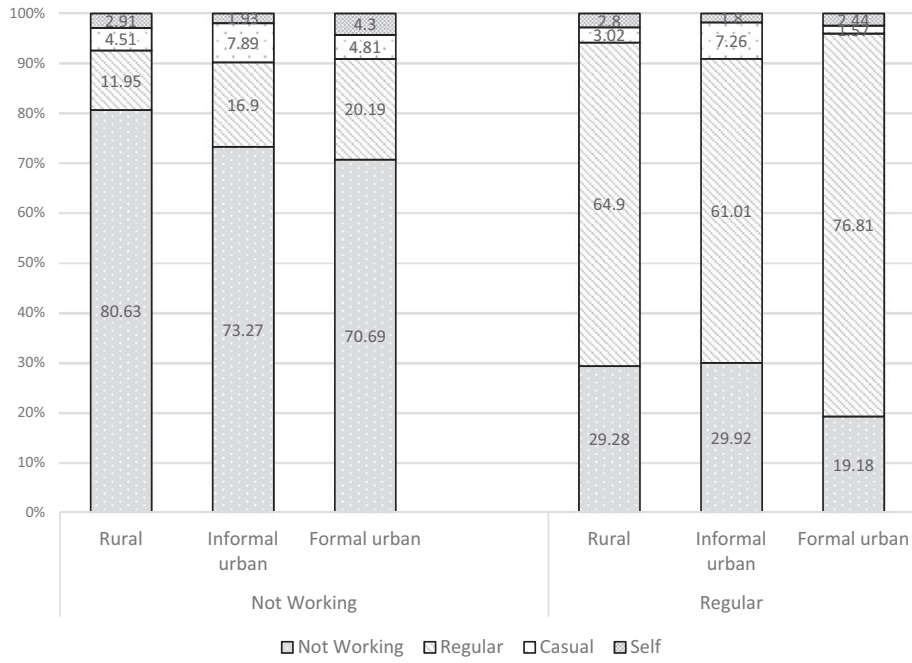

FIGURE 4 Transitions by Type of Employment Between 2008 and 2012
Notes: Refer to corresponding transition matrices in the Appendix – Tables A3.1–A3.3
Transitions from casual and self-employment are not reported due to their small sample size
Source: NIDS, 2008, 2012; own estimates

chances of upward progression. 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 A2.1–A2.3 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 sizeable and very important difference, 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. This suggests 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. To sum up, the employment status of people in informal settlements was different to that in rural areas, particularly since more of them were actively searching for jobs.

Figure 3 turns to consider the dynamism of 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

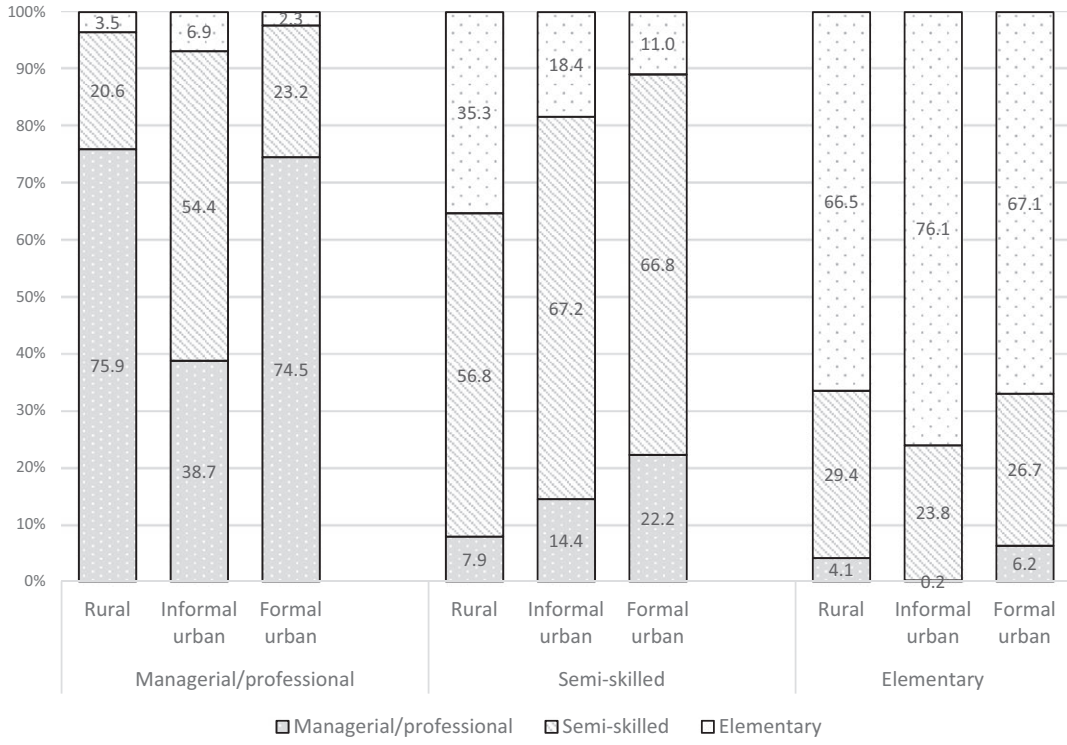

FIGURE 5 Occupational Transitions Between 2008 and 2012

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

Source: NIDS, 2008, 2012; own estimates

became or remained better off than people in informal urban and rural areas. Unemployed and economically inactive residents of formal urban areas were more likely to move into employment than people elsewhere and employed residents of formal urban areas were more likely to retain their jobs than people elsewhere. 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. 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 that can account for differences in earnings, such as regular work, casual work and self-employment.[9] 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 4 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

[9]Regular work is generally considered to be the most secure and best-paid category of employment, followed by self-employment and then casual work.

than in both formal urban and rural areas, although the differences between rural and informal urban areas are not statistically 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 informal urban (29%) and rural areas (25%) (see Tables A3.1–A3.3). Self-employment as a category is too small to allow meaningful comparison.

To summarize, the labour market analysis in this section does not provide strong support for either the pathways or the cul-de-sac propositions. Formal urban areas seem to function most like pathways and rural areas 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.

5.4 | Transitions in occupation

The final dimension of socioeconomic mobility examined is change in occupation. According to the pathways concept, informal settlements should 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 why this was. Change in occupation may provide clearer insights into why earnings in informal settlements may have improved over time.

Figure 5 shows the data on occupational mobility for those who retained their jobs between 2008 and 2012.[10] Unfortunately, the sample size is restricted, which is further compounded by subdividing the sample into three occupational categories. The analysis in this section should therefore be regarded as suggestive.

It is immediately apparent from Figure 5 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.

To sum up, people living in informal settlements were slightly more likely to progress into managerial/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

[10]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 the South African standard classification of occupations (SASCO) (Statistics SA, 2012).

residents of formal urban areas were distinctly better off in terms of the extent of progression and stability. Therefore, the gains for shack dwellers need to be kept in perspective.

6 | THE SITUATION IN GAUTENG

Gauteng is the most prosperous and populous province in SA. It is the economic heart of the country and a magnet for domestic and international migration. Therefore, this city-region may experience different socioeconomic dynamics than those presented in the aggregate picture above. In particular, one might expect informal settlements in Gauteng to function more like pathways than elsewhere because the economic opportunities are greater. Unfortunately, it was not feasible to undertake a comprehensive mobility analysis because of restrictions on the sample size. Nevertheless, it was possible to identify some stylized differences between Gauteng and the other urban regions. It should be noted that the samples were constructed slightly differently in this analysis from that 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 absence 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 cities) in 2012 because of its dominance in SA's urban system.

Tables 3 and 4 show that the pattern of movement between areas in Gauteng was quite different from other urban regions. In particular, there was much more 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.

Another important difference between Gauteng and other cities was in the probability of labour market progression. Figure 6 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 elsewhere.

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 in the different city-regions. It appears that regional economic conditions exert a noticeable influence on the extent of social and spatial mobility. Informal settlements may function more like pathways in relatively buoyant regions, and more

TABLE 3 Non-Gauteng Migration Patterns by Type of Location from Wave 1 to Wave 3*

	Wave 3 Geotype			
Wave 1 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]**	

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

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

TABLE 4 Gauteng Migration Patterns by Type of Location from Wave 1 to Wave 3*

	Wave 3 Geotype			
Wave 1 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]**	

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

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

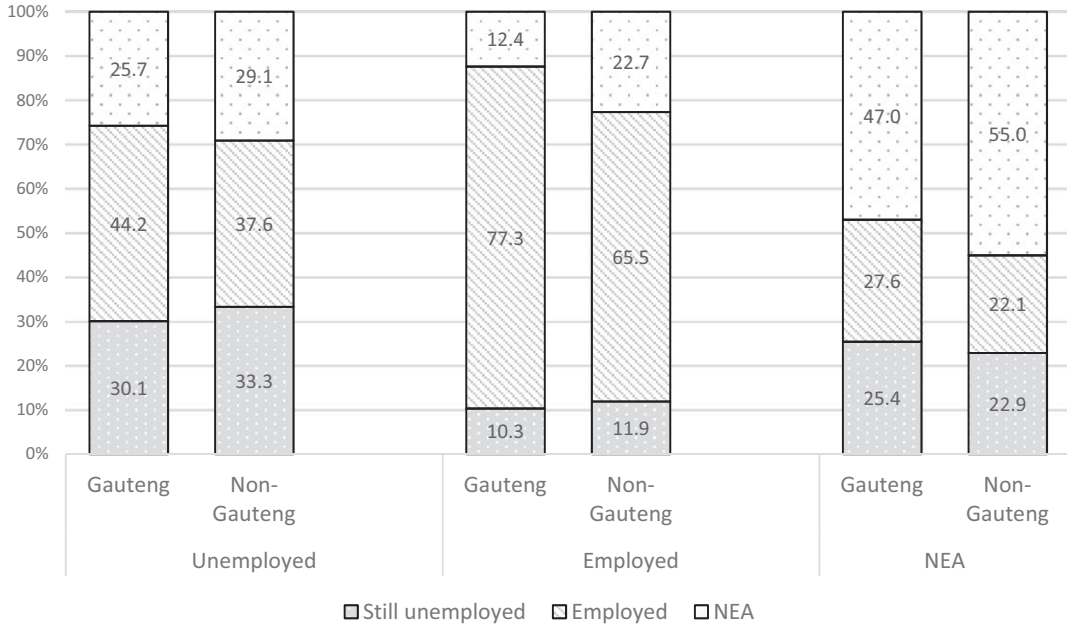

FIGURE 6 Labour Force Transitions for Gauteng and Other Urban Regions Between 2008 and 2012*

Notes: Refer to corresponding transition matrices in the Appendix – Tables A5.1–A5.2

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

Source: NIDS, 2008, 2012; own estimates

like cul-de-sacs in more depressed regions. These differences in outcome may also contribute to the somewhat inconclusive nature of the aggregate analysis presented earlier.

7 | CONCLUSION

The growth of informal settlements around the world makes it important to understand whether they improve residents' life chances. Prevailing living conditions are generally very poor. However, they

may provide routes out of poverty by linking determined rural migrants to the facilities, networks and livelihoods concentrated in cities. Alternatively, the debilitating and unsafe environments may hold back human progress and perpetuate social marginalization.

The NIDS panel survey enables these propositions to be explored by following the trajectories of people over time. Transition matrices help to disentangle key indicators of socioeconomic mobility for residents in different types of location. There were several notable findings, which should be considered in the round.

First, a proportion of residents in informal settlements were not physically trapped in these areas. Nearly one in five (18%) shack dwellers in 2008 had moved to another type of location by 2012. This is not trivial over what is a fairly short period. Three-quarters of this movement was into formal urban areas. Even assuming that no personal advancement resulted from this movement, the point is that the urban system seems to offer some 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 some "churning" going on, with some people moving out of poverty and others falling back. This finding needs to be put into perspective in that 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 because of 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 idea, even if the effect is quite small. In a country with mass unemployment, extreme inequality and low social mobility, this may be noteworthy. 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 assist. The strongest finding was that people living in formal urban areas were most likely to experience upward mobility across all indicators. Rural residents were the least likely to progress.

An important subtlety identified was the distinctive situation in Gauteng. Informal settlements appeared to perform a more positive function here than in other city-regions. This could stem from the more dynamic economy of this region and the superior opportunities to enter jobs and advance upwards. The broader implication is that the magnitude and timescale of social progression is specific to each city-region, reflecting its distinctive demographic profile and economic conditions. This topic warrants 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 identify the underlying mechanisms more carefully. These differences cannot be causally attributed to locational characteristics without more sophisticated analytical methods. This would probably require a larger sample size and/or a longer timeframe for changes to have occurred. There are several factors that could confound causal connections, such as variations in the social composition of the population in different types of location.

Finally, the research calls out for further investigation of the social and spatial dynamics of informal settlements. A better understanding of their impact on household trajectories could transform perceptions of these areas in the minds of decision-makers and other groups in society. Improved knowledge of their function in urban housing systems and labour markets could also inform more supportive policy responses than forced evictions and displacement.

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APPENDIX

Transition matrices

TABLE A1.1 Transitions from 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	***Wave 1 Total %***
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]**		*[31.83,40.28]*
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]**		*[40.60,47.58]*
Non-poor %	**8.17**	**28.07**	**63.76**	100	*20*
95% CI	**[5.14,12.75]**	**[23.74,32.84]**	**[57.77,69.36]**		*[15.45,25.47]*
Wave 3 Total %	*26.2*	*47.07*	*26.73*		*100*
95% CI	*[23.22,29.41]*	*[43.76,50.41]*	*[22.67,31.22]*		

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

TABLE A1.2 Transitions from 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, 2012; own estimates; n = 769.

TABLE A1.3 Transitions from 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, 2012; own estimates; n = 5,023.

TABLE A2.1 Transitions from Rural Areas by Employment Status from Wave 1 to Wave 3

	Wave 3 Employment Status				
Wave 1 Employment Status	NEA	Unemployed	Employed	Total	***Wave 1 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, 2012; own estimates; n = 5,096.

TABLE A2.2 Transitions from Informal Urban Areas by Employment Status from Wave 1 to Wave 3

	Wave 3 Employment Status				
Wave 1 Employment Status	NEA	Unemployed	Employed	Total	***Wave 1 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, 2012; own estimates; n = 613.

TABLE A2.3 Transitions from Formal Urban Areas by Employment Status from Wave 1 to Wave 3

	Wave 3 Employment Status				
Wave 1 Employment Status	NEA	Unemployed	Employed	Total	***Wave 1 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, 2012; own estimates; n = 4,093.

TABLE A3.1 Transitions from Rural 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 %	**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, 2012; own estimates; n = 4,416.

TABLE A3.2 Transitions from 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	*59.58*
95% CI	**[64.03,80.85]**	**[12.02,23.23]**	**[3.86,15.47]**	**[0.67,5.42]**		*[50.09,68.40]*
Regular %	**29.92**	**61.01**	**7.26**	**1.8**	100	*24.32*
95% CI	**[19.52,42.92]**	**[49.30,71.59]**	**[2.65,18.39]**	**[0.24,12.41]**		*[19.14,30.38]*
Casual %	**61.81**	**29.33**	**5.67**	**3.19**	100	*8.7*
95% CI	**[43.45,77.31]**	**[18.66,42.89]**	**[0.97,26.92]**	**[0.53,16.84]**		*[6.03,12.40]*
Self %	**40.59**	**20.49**	**15.11**	**23.8**	100	*7.4*
95% CI	**[26.32,56.65]**	**[8.19,42.69]**	**[6.85,30.14]**	**[10.44,45.56]**		*[4.62,11.66]*
Wave 3 Total %	*59.31*	*28.98*	*8.08*	*3.63*		*100*
95% CI	*[50.07,67.94]*	*[23.17,35.56]*	*[3.83,16.26]*	*[1.67,7.70]*		

Source: NIDS, 2008, 2012; own estimates; n = 572.

TABLE A3.3 Transitions from Formal 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 %	**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, 2012; own estimates; n = 3,823.

TABLE A4.1 Transitions from Rural Areas by Occupation from Wave 1 to Wave 3

	Wave 3 Occupation				
Wave 1 Occupation	Manager/Prof	Semi-skilled	Elementary	Total	***Wave 1 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, 2012; own estimates; n = 902.

TABLE A4.2 Transitions from Informal Urban Areas by Occupation from Wave 1 to Wave 3

	Wave 3 Occupation				
Wave 1 Occupation	Manager/Prof	Semi-skilled	Elementary	Total	***Wave 1 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, 2012; own estimates; n = 170.

TABLE A4.3 Transitions from Formal Urban Areas by Occupation from Wave 1 to Wave 3

	Wave 3 Occupation				
Wave 1 Occupation	Manager/Prof	Semi-skilled	Elementary	Total	***Wave 1 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, 2012; own estimates; n = 1,390.

TABLE A5.1 Non-Gauteng Labour Market Transitions from Wave 1 to Wave 3*

	Wave 3 Employment Status			
Wave 1 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]**	

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

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

TABLE A5.2 Gauteng Labour Market Transitions from Wave 1 to Wave 3*

	Wave 3 Employment Status			
Wave 1 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]**	

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

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