



UNITED NATIONS
UNIVERSITY

UNU-WIDER

World Institute for Development
Economics Research

WIDER Working Paper No. 2013/003

Who's the alien?

Xenophobia in post-apartheid South Africa

Marguerite Duponchel*

January 2013

Abstract

In May 2008, South Africa became the theatre of widespread violent attacks against undesirable 'outsiders'. Over 60 were killed, hundreds wounded, and tens of thousands displaced. This analysis aims at identifying the characteristics of the victims in an attempt to portray the 'alien' using household data collected in February 2009 in the Johannesburg inner city and in Alexandra township. Results confirm that foreigners face a higher probability of being victimized on the ground of xenophobia. Relative poverty appears to have a positive impact on the probability of being attacked, especially in Alexandra township. Zimbabweans .../

Keywords: xenophobia, violence, South Africa
JEL 012, 055

Copyright © UNU-WIDER 2013

*International Growth Centre, Uganda; email: marguerite.duponchel@theigc.org

This study has been prepared within the UNU-WIDER project on Africa Development: Myths and Realities, directed by Augustin Fosu.

UNU-WIDER gratefully acknowledges the financial contributions to the research programme from the governments of Denmark, Finland, Sweden, and the United Kingdom.

ISSN 1798-7237

ISBN 978-92-9230580-2



do also face a lower chance of victimization than other foreign nationals. Finally, the characteristics of the location, in particular high unemployment rate, influence the probability of attacks.

Acknowledgements

The author thanks UNDP South Africa, UNOCHA-ROSA, the South African Red Cross and the Forced Migration Studies Programme at Wits University as well as Lopa Barjenee, Laura Brown, Veronique Gindrey, Pete Manfield, J. P. Misago, Loren Landau, Pinky Vilakazi, Hein Zeelie and all the volunteers of the Red Cross. The author is also grateful to Jean-Claude Berthelemy, Paul Collier, Fabrizio Coricelli, Patrick Guillaumont and Eliana La Ferrara for useful comments on earlier drafts.

The World Institute for Development Economics Research (WIDER) was established by the United Nations University (UNU) as its first research and training centre and started work in Helsinki, Finland in 1985. The Institute undertakes applied research and policy analysis on structural changes affecting the developing and transitional economies, provides a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and promotes capacity strengthening and training in the field of economic and social policy making. Work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.

www.wider.unu.edu

publications@wider.unu.edu

UNU World Institute for Development Economics Research (UNU-WIDER)
Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Typescript prepared by Lisa Winkler at UNU-WIDER.

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the United Nations University, nor by the programme/project sponsors, of any of the views expressed.

1 Introduction

On 11 May 2008, Alexandra township witnessed the start of violent attacks against outsiders who some perceived were not South African enough. The extreme violence quickly spread to other provinces and eventually lasted until the end of that month. Those events are remembered as the May 2008 xenophobic riots. Hundreds of homes and shops were looted and burnt. 62 people died across the country, among which 21 were South African citizens. Many were injured. An estimated 100,000 fled their homes and found refuge wherever they could.

My colleague at the United Nations Development Programme (UNDP) recalled her story. When the xenophobic violence erupted in May 2008 and started to spread around the country, she got worried that Mike, her Mozambican gardener, might be in danger. Mike, who had previously stayed in Pretoria, had moved to Thembisa three years before to live with his South African girlfriend. As the violence quickly reached the township¹, she phoned to make sure that he was alright. Mike confirmed that there had been violent attacks against migrants around the neighbourhood. When he was asked if he was safe his answer was: ‘Yes, they would not attack me’. Mike’s story raised questions. Why, in the same communities, some foreigners were attacked and some were not? What made some residents South African enough in the eyes of the community when some became aliens that needed to be chased away at any cost? What made someone a likely target? The violence might not have been as randomly conducted as it seemed after all. Yet, to my knowledge, these questions had not been investigated at the start of this research. For a good reason: the absence of data. Nevertheless, finding answers is essential for the design of policies and programmes targeting the reintegration of victims in the short term, and the issue of xenophobia in the longer run. The South African Red Cross (SARC) underwent a data collection exercise on vulnerabilities in February 2009. Some minor additions to the questionnaire enabled them to capture experiences of violence at the household level. While I believe that quantitative analysis has the potential to reveal important features and draw new lines of research, qualitative research should not be ignored. Xenophobia is a multi-dimensional complex phenomenon and pluri-disciplinary analysis is necessary for a wider understanding of xenophobia in South Africa, its roots, its consequences and the way forward.

Section 2 recounts the xenophobic attacks of May 2008, the origins and aftermath and presents a short literature review of the subsequent analysis on the causes of the events. Section 3 describes the database, the econometric model and the explanatory variables. Section 4 reports the results and Section 5 concludes.

2 Xenophobia in South Africa: facts and analysis

South Africa, and more particularly the Gauteng province hosting Johannesburg and Pretoria, has become today’s economic centre of Sub-Saharan Africa. Its success has attracted a wide range of domestic and international migrants seeking economic opportunities or refuge from oppression as well as a better life. Expected to be large, the exact number of immigrants is unknown, with a significant number of them crossing the border illegally. Gindrey and

¹ Thembisa is located in the Gauteng province. It is one of the townships most affected during the riots.

Landau (2008) estimate an annual net gain of approximately 78,000 migrants per year in the province. Their results also show that the Gauteng Province hosts 46 per cent of the country's total foreign population. 11 May 2008 will be remembered by all of them. Violent attacks on people considered as outsiders started in Alexandra township, on the outskirts of Johannesburg. The levels of violence observed during this month of attacks shattered Mandela's dream of a rainbow nation.

2.1 Facts and figures

The events of May 2008 cannot be analysed without understanding the global post-apartheid context of xenophobia. Xenophobic violence can be traced to as early as a few months after the first democratic elections in April 1994. In December 1994, in Alexandra, 'armed youth gangs destroy foreign-owned property and demand that foreigners be removed from the area' (Misago et al. 2009). Evictions, looting of property and even killings were reported elsewhere in the country. The frequency of such events gradually increased, with an unprecedented level of violence reached in May 2008.² In the months leading to the May 2008 riots, at least 13 foreigners were killed, a large number of shops burnt down, many people made homeless. Violence was reported in the Eastern Cape, in the Western Cape, in Gauteng, in Kwazulu-Natal and in the Free State.

On 11 May, an armed mob attacked foreigners in Alexandra, Gauteng. Two people were killed and two women raped, 60 people injured. Shops and homes were looted and self-appropriated by the perpetrators. Violence in Alexandra will be continued for several days. Hundreds of people fled their homes and found refuge at the police station. Meanwhile, the violence spread across the province, reaching several townships including Diepsloot, Thembisa and Soweto. By 16 May, attacks reached Cape Town, where one Somali shopkeeper was killed. On 17 May, violence gripped Jeppestown in downtown Johannesburg and the following day, the inner city neighbourhood of Hillbrow. Violence and forced evictions continued in most places. Durban was shaken on 17 May. Attacks were reported in Maukasi, Dukhatole, Zandspruit, Ramaphosa, Primrose, Reiger Park, Kya Sands, Jerusalem, Zamimplo, Joe Slovo informal settlement, Mayfair among other places. On 21 May clashes were again reported in Durban, Mpumalanga, the Free State and the North West province. On the same day, President Mbeki involved the army to stop the violence. Violence in Gauteng gradually scaled down, but incidents were still reported in the other provinces. Meanwhile, thousands marched against xenophobia in different parts of the country.³ By May 26, the violence was declared under control: 1384 suspects had been arrested, 342 shops looted and 213 burnt down. Hundreds had been wounded. 62 lost their lives, among which 21 South Africans. Thousands were made homeless, forced to seek shelter with friends, in the government administered camps or in churches. The last official shelters closed in October, five months after the riots started.

Among those displaced, some victims were reintegrated into their communities with assurance from the residents that they will be safe. In some neighbourhoods, return was

² See Misago et al. (2009) for details on the violent incidents recorded since the end of the apartheid era and during the May/June 2008 episode.

³ These facts are gathered from different sources including BBC News, Mail & Guardian and UNOCHA.

impossible. Those victims either resettled elsewhere in South Africa or simply decided to return to their countries of origin. For some however, going home was just not an option. Unfortunately, these post-crisis movements were not extensively monitored. One year after the event, it had become hard to locate the victims of the attacks. Foreign nationals living in South Africa stay as quiet and invisible as possible, fearing more violence. As the data collection shows, outsiders are still harassed. Xenophobic violent acts did not cease on 26 May 2008. In September 2008, a Somali mother was murdered with her three children in her shop in Queenstown, Eastern Cape. In Alexandra, shacks inhabited by foreigners were burnt down around Christmas. In May 2009, two Somalis were found burnt in their shops. In late November 2009, 3,000 Zimbabweans farm workers were forcibly chased from a farm in the Western Cape, marking the first event of this kind in a rural setting.

2.2 Literature review on xenophobia and ethnic violence

Xenophobia is a complex phenomenon, widely under-researched. Nevertheless in the aftermath of violence that shook South Africa in May 2008, sociologists, anthropologists and political scientists produced a variety of research materials trying to explain the outburst of violence at different levels of analysis. Two types of explanations can be identified: political and socio-economic, which most certainly worked alongside.

Sociologist Neocosmos (2006) links the outbreak of violence to a widespread xenophobic feeling among South Africans, a sentiment widely fed by the South African elite who wants to protect its interests and wealth by pointing a finger at the 'other' (also in Sharp 2008). This strategy to retain power can also be identified in other nations. Tadjó (2008) draws the comparison between the xenophobic violence in South Africa and the rise of the concept of 'Ivoirité' in Côte d'Ivoire. The author points out that 'Ivoirité' was re-conceptualized from colonialism by the Ivorian elite in order to define national legitimacy by stigmatizing foreigners. In the recent history of Côte d'Ivoire, the concept of identity has been manipulated to refer to local territory as opposed to national territory. Outsiders became those who did not come from the locality. A clear parallel can be drawn in the South African context where outsiders are not only foreign-born, but also migrants coming from the poorer North. Xenophobic violence can be seen as a competition between the richest and the poorest. The poorest are manipulated by the elite to turn against outsiders the elite itself created so that the richest can retain power and wealth. Uvin (1999) also underlines the role of the elite in deepening the Hutu-Tutsi ethnic divisions in Rwandan post-colonial history. The author states that, when threatened, the elite fuelled ethnic divisions to impede democratization and power sharing. In 1991-92, the Hutu regime was under threat from all sides and the most radical factions used the revival of ethnicity as a strategy. Anti-Tutsi propaganda incited to mass murder, verbal attacks, listings of Tutsis and threats against those having relations with Tutsis. In Yugoslavia, Gagnon (1994) states that threats of economic crisis and strong demand for reforms led the coalition of leaders to provoke violent ethnic confrontation.

Illustrating a national phenomenon using Alexandra context, South African historian Nieftagodien (2008) recalls that the distinction between insiders and outsiders has long been defined by politics. The laws of apartheid were purposely designed to create division between groups, and rural migrants were considered as outsiders. Yet the freedom struggle helped create a sense of community. The common enemy now defeated, the threat of outsiders has re-emerged since the end of the apartheid regime. Along the same lines underlying the cultural determinants of xenophobia, anthropologist Banton (1996) draws a parallel between

xenophobia in France and Britain and explains xenophobic attitudes by differentialism. Where brothers have been raised with the presumption of equality, xenophobia will be less widespread. Indeed, children learn unconsciously whether brothers are equal and then project this. In South Africa, the institutionalization of differentialism by the apartheid system could only have exacerbated the organization of the society around values of inequalities, at the extreme, resulting in violence against 'others'.

Misago et al. (2009) attempt to identify the causes of violence while comparing seven sites: five where xenophobic violence was reported and two where the presence of foreigners did not lead to attacks. Through qualitative interviews with a wide range of respondents, the study identifies four factors that triggered the violence: (1) the presence of 'institutionalized practices that exclude foreigners from political participation and justice'; (2) the absence of conflict resolution mechanisms; (3) the presence of 'political vacuums or competition in community leadership that encourages the emergence of unofficial, illegitimate and often violent forms of local leadership'; and (4) a culture of impunity, particularly with regard to xenophobic violence. The latter point is also highlighted in Rwanda, where the culture of impunity vis-à-vis violence towards Tutsis allowed killings without fear (Uvin 1999).

The complexity of the phenomenon is titanic, and cannot be clearly separated from the broader reality of inequality and poverty in South Africa. Sociologist Pillay (2008) suggests that huge socio-economic inequalities between the poorest and the richest of the population lie at the root of the violence. South Africa's Gini coefficient has kept on rising since 1994 (CIA factbook). Victims of this 'market violence' as the author refers, are unable to recognize or reach the real perpetrators, i.e. the richest that hold power. As a consequence, violence is directed towards those living the closest, i.e. outsiders, whether they are foreign nationals or coming from the northern provinces (Pillay 2008). Neocosmos (2008b) and Allport (1954) confirm that it is a common phenomenon for the powerless to regularly take out their frustrations on the weakest.

Gelb (2008) explains the xenophobic attacks as manifestation of hostility towards those perceived to be better off – whether true or not. This sentiment translated into the interviews of South Africans in the aftermath of the crisis (HSRC 2008; Misago et al. 2009). Unequal job opportunities, among others, were regularly cited as a reason for the attacks. According to Pillay (2008), the violence was mainly directed at foreign nationals who own houses, and have jobs or small businesses. Yet this needs to be scientifically proven. At this stage, there is no evidence that better-off foreigners were the principal targets.

Similarly, a few years before the outbreak of violence, Dodson and Oelofse (2000), in a study of the causes of xenophobia in Cape Town find that, in a context of extreme poverty and very high unemployment, competition for jobs, mainly in the local fishing industry, was the main factor driving the division among the communities between indigenes and foreigners. Misago et al. (2009) also identify necessary, but not sufficient, pre-conditions for the violence, among which are high unemployment and poor service delivery. Confirming the theory of relative deprivation, psychologists Sherif et al. (1961) suggest that competition for access to limited resources results in a conflict between groups. Competition for limited resources between groups leads to prejudices against the out-group, whose members are viewed by the in-group as a source of competition, such as jobs being given to the members of the out-group.

In addition, one of the explanations for the outbreak of violence was that the influx of Zimbabweans exacerbated tensions between communities as competition for services tightened. In northern America, Esses et al. (2001) found that large scale migration can result in a feeling of threat for the host community either because of perceptions of economic strain or as a result of cultural dissimilarity'. Yet Misago et al. (2009) conclude that inadequate border control and the supposedly mass influx of Zimbabweans were not a valid explanation for the xenophobic riots in South Africa. The results indeed underlined that outsiders who were attacked had been living there for years and the places where the violence occurred were not necessarily the ones with the highest proportion of foreign nationals. If the mass influx of migrants into South African cities increased the competition for already scarce resources, testing whether Zimbabweans are more at risk than other foreigners would invalidate the assumption that the recent influx of Zimbabwean migrants was not a direct cause of the outbreak of violence.

In the only existing quantitative analysis on the subject, Fauvelle-Aymar and Wa Kwabe-Segatti (2012) attempt to identify all factors potentially at the roots of the May 2008 xenophobic violence. Using a database covering 839 wards⁴ in 21 municipalities, they compared the characteristics of the wards where xenophobic violence was reported during the xenophobic episode of May 2008. The results show that the ratio of black men under 60 has a positive and significant impact on the occurrence of violence at the ward level. Similarly, they identify a significant effect of the diversity of groups among foreign nationals. The quality of housing in the ward also seems to significantly impact on whether or not violence erupted in a ward. Interestingly, and contrarily to what this analysis suggests, they found no significant impact of the level of unemployment.

This study opts for a different approach, which aims at portraying the outsiders and focuses at the household level. It attempts at identifying the characteristics that played a significant role in defining the victims of May 2008.

3 Data

The data was collected in February 2009. Two places were chosen in the Gauteng province where the violence started: Alexandra township and the Johannesburg inner city. But before going into the data description, it is essential to give some historical background about these two surveyed sites. The apartheid era has undoubtedly left deep scars both in the minds of South Africans and in the geography of the territory. Not taking into account history in post-apartheid South Africa will certainly lower the accuracy of the analysis. Because Alexandra and the Johannesburg city centre are so particular, results, at this stage, cannot be generalized to the whole country. More data is needed and townships in Kwa Zulu-Natal, Eastern Cape and Western Cape provinces, in particular, need ideally to be surveyed.

⁴ Wards constitute demarcation area delimited by the Demarcation Board after consulting the Electoral Commission. Each has approximately the same number of voters. The number of registered voters in each ward may not vary by more than fifteen per cent from the norm, where the norm is determined by dividing the total number of registered voters on the municipality's segment of the national common voters roll by the number of wards in the municipality. The delimitation also takes into account the need to avoid, as far as possible, the fragmentation of communities.

3.1 ‘Alexandra is, and has always been, a special place’⁵

Reminder of the apartheid regime and also one of the strongholds of the struggle for freedom during the war years, Alexandra is a striking illustration of urban poverty and inequalities in the new South Africa. Established in 1904, the overcrowded ghetto spreads on 2 km² of houses and shacks, north east of Johannesburg. On the horizon, one can stare at the shining towers of the wealthy Sandton neighbourhood only a few blocks away, where billions of Rands trade daily. Back in its early days, its location, along with the ease for new arrivals to secure a pass to work in the city, often made it the first stop for rural black people seeking jobs in the semi-industrial suburbs.

Its tumultuous history has left its traces. The township struggled to survive apartheid, going from intense threats of removals to numerous failures of upgrading plans, mainly as a result of a clear lack of interest on the side of the government. The last in date, the Alexandra Renewal Plan launched by President Mbeki in 2001 has improved the neighbourhood despite a very difficult first period of implementation. The R1.3 billion seven-year development plan brought new infrastructures and housing, roads upgrade and other improvements to Alexandrians’ daily lives. But the highly cosmopolitan and ethno-fractionalized township is still gravely overcrowded. Alexandra, once constructed to host 30,000 black workers, has reached a population estimated at half a million. Since the end of apartheid, the number of its residents has nearly quintupled exacerbating the intense pressure for already scarce service delivery. Poverty is striking⁶ and the level of criminality remains tremendously high.⁷

Meanwhile, Alexandra has always been a place whose people have been strongly politically engaged, leading the fight for freedom from its very early days through multiple ways, such as infamous bus-boycotts and demonstrations. The residents played a central role in the fight against the Bantu Education Act—imposing black students to be taught through the medium of Afrikaans—in 1976, alongside the Soweto students. Alexandra has always been on the front-line of social movements. It is by no means a surprise that it stands at the epicentre of the xenophobic events that broke out on 11 May 2008.

3.2 Johannesburg inner city

When arriving in Johannesburg, one can distinguish the city centre from a distance. Wherever ones come from, by land or by air, you can see the famous television tower and the 53 floor Ponte Tower from far away. At the time of its construction, the Ponte Tower was the highest building in Africa. The price of a square meter was unaffordable to most South Africans. By the 1990s it had become a symbol of crime, drugs and decay. The story of this once highly coveted building is a perfect illustration of Johannesburg inner city.

⁵ Bonner and Nieftagodien (2008).

⁶ In our sample, 87 per cent of the respondents in Alexandra report not having access to running water in their dwelling; 4 out of 10 households interviewed do not have electricity in their dwelling.

⁷ SAPS reports an average of four murders per month.

In 1955, the Native Amendment Act urged the removal of black residents from the city centre. The inner city was declared a 'Whites Only Area' and the government removed illegal tenants, mainly coloured and Indian families. It was the economic and cultural centre of Johannesburg, hosting many firms' headquarters. Its sky-scrapers were the pride of South Africa. Between 1978 and 1982, the grand apartheid project started to erode, and a large influx of coloureds and Indians moving back into the neighbourhood was recorded. The main reason was the shortage of flats in some areas and the oversupply in Hillbrow (Morris 1994). Black people also started to illegally penetrate the forbidden area. White families who could afford it, started to migrate to the wealthy suburbs of the north. By the end of the apartheid era, Hillbrow and Joubert Park had switched from an essentially white population of all classes to an 'overcrowded crime ridden black ghetto' (Olufemi 1998), hosting among its residents notorious gangs and drug dealers.

With the upcoming 2010 FIFA World Cup, in 2008 the City of Johannesburg launched a R171 million uplifting programme for the inner city. The place has gradually been cleared, but remains one of Johannesburg's most feared areas. Its population is essentially black and includes migrants who were not attracted by township life, creating an intensely cosmopolitan place.

3.3 The data collection

The sampling strategy was designed to gather a sample with 50 per cent foreign nationals. Among the national population, targets were set to 50 per cent South Africans who have lived in the locations of interview for at least ten years (i.e. long-term residents), and 50 per cent recent migrants who arrived in the location less than ten years ago. Constraints not allowing to conducting a proper listing exercise, interviewers were assigned enumeration areas randomly chosen from Statistics South Africa framework, and knocked on every fourth door. Respondents were restricted to adults with the exception of over 16-year olds if they were heads of the household.

In total, 2028 people were interviewed over the course of a month. In Alexandra, the sampling strategy was switched to snowballing as the quota of foreign nationals proved impossible to reach. First, foreign nationals constitute a minority of Alexandra's residents⁸. Second, foreign nationals refuse to answer or try to mask their identity, underlying the accuracy of the assumption that the situation of foreign nationals was still tense at the time of enumeration. Using snowballing methods, 277 foreign nationals were interviewed in Alexandra, constituting 28 per cent of the location's total sample. 385 interviewees were long-term residents and 326 recent internal migrants. In the Johannesburg inner city, three neighbourhoods were surveyed: Hillbrow, Berea and Yeoville. There, the 50 per cent target of foreign nationals was meant without issues, which confirmed the initial intuition that the location was hosting a large proportion of foreigners. Using the 'every fourth door' sampling strategy, 548 foreign nationals were interviewed along with 470 South Africans. 160 of the latter were long-term residents⁹ and 310 recent migrants. Overall, the data is composed of 59 per cent South Africans, 25 per cent Zimbabweans, 6 per cent Mozambicans, 3 per cent

⁸ No more than 3 per cent according to the Alexandra Renewal Project survey.

⁹ The inner city happens to be mainly a place of transit.

Congolese (DRC) and other less represented foreign nationals, including Malawians, Nigerians and Zambians.

Information was collected on a wide range of issues: demographics, migration patterns, livelihoods, access to health and education services, social participation, but also on violence linked to the May attacks. Respondents were asked whether they had been threatened or attacked because of their ethnic/tribal/national identity before May, during May/June 2008 and after the xenophobic events. Further enquiries were made about the length of displacement, the relocation site, etc. Respondents were also asked whether they returned to the place from which they had been chased away, and the reason for this decision.

As mentioned earlier, the survey covered two particular places. Consequently the data is not representative of the country. Table 4.6 in the Appendix compares the descriptive statistics of the sample to some key variables of the most recent Census (2001). Although the 2001 Census data is out-dated, it is useful to benchmark the data used in this paper to some national and provincial household data. The key statistics show no striking difference between our data and the Gauteng province data. Yet living conditions (type of dwelling, access to flush or chemical toilet) appear slightly worse than in the 2001 provincial data, while the percentage of respondents who completed secondary school is much higher in our sample than in the 2001 Census (63.4 per cent vs. 28 per cent in Gauteng in 2001). This could be partly explained by the eight years' gap between the two exercises of data collection. In terms of unemployment, however, almost 60 per cent of the persons interviewed report to be unemployed, about twice as much as in the 2001 Census data. Clearly the locations surveyed count among the places the most affected by unemployment in the country.¹⁰

4 The econometric model

4.1 Potential selection biases

The data suffers from two potential selection biases. First, people who fled their homes and never came back are completely absent from our sample. Very little is known about the victims who decided to leave, as there had been no adequate monitoring.

The United Nations High Commissioner for Refugees (UNHCR) assisted the displaced refugees but very few went home. Quickly, the agency decided that resettlements would not be awarded on the basis of xenophobic violence. Meanwhile, the United Nations Children's Fund (UNICEF) gave grants to support movements home. The International Organization for Migration (IOM) also assisted vulnerable individuals who expressed the desire to return to their country of origin. In two successive phases, IOM assisted 578 individuals who resigned themselves to go back home, mostly originating from the Great Lakes Region.¹¹ The

¹⁰ The dynamism of the Gauteng province attracts a lot of migrants seeking work in Johannesburg. Alexandra and the inner city are both places where those migrants would settle in while looking for employment. As a result, it is not surprising that the unemployment rate is relatively higher there than elsewhere.

¹¹ Phase 1: 170 Burundians, 137 Congolese (DRC), 44 Tanzanians, 15 Somalis (who went back to Ethiopia), five Kenyans, one Congolese, one Sudanese, and one Rwandese. Such details are not available for phase 2.

Mozambican government provided its citizens with a bus ticket to Maputo. A majority returned home by their own means which makes it even more difficult to track movements.

What is even less sure is how many of these people who first left, came back when the storm had settled; probably a majority. Numerous stories from the camps suggested that some individuals used the repatriation process to go home and then came back. The border-crossing statistics from the Department of Home Affairs give a vague idea on movements out and back to the country. Figure 2 shows the different trends of arrivals (of African nationals) and departures (by road)¹² between 2007 and 2008. The cycles correspond to South African holidays. At the exception of Zimbabweans, trends should be following approximately the same path from one year to the other; the only difference should be in scale. The first graphic shows very few differences between the two years, apart from a decline in both arrivals and departures in August/September 2008. Looking at the breakdown in arrivals by nationalities, the only main difference is an increase, relative to the preceding year, in the rate of arrivals of Mozambicans, Namibians and Zimbabweans in July 2008. Possibly, it can be explained by those who were returning to South Africa after the violence. This is yet just a hypothesis but the proximity of those countries would have made it easy to leave and return. Out of a large number of displaced persons, we can assume that the ones who decided to leave South Africa for good constitute a clear minority. IOM, which assisted many of them, seems to believe that the foreigners who left were the ones who had lost everything and greatly feared for their lives. Meanwhile, most of the interviews carried out with humanitarian staff present in the camps at the time of the crisis revealed the same observation: when it was announced that resettlements would not occur, people started to leave and return to their communities. While it is important to keep in mind that we do not observe the characteristics of individuals who left, it can assume that this will not result in a significant bias in the analysis.

Second, another potential and more problematic source of selection bias resides in the fact that Alexandra was where it all started, and people who could afford not to come back might have preferred to resettle somewhere else. The main reason mentioned for returning to Alexandra was ‘we had no choice’, suggesting that if targeted respondents had had the means to do so, they would not have come back. If indeed only the poorest victims came back, the results at least on the Alexandra sub-sample would over-estimate the poverty factor.

Overall, these two selection biases could affect the results. Precise information on the characteristics of those who fled during the violence and never came back is needed: whether they resettled in their home countries or in other neighbourhood of South Africa. Yet this information does not exist and one can only speculate. In the data, only 16 individuals were displaced during the violence and did not go back to their neighbourhood, which is too small a sub-sample to even conclude on descriptive statistics. Potentially, there is more than one profile of foreigners who did not return: (1) those who had less to lose relocated, including the newly arrived as well as those whose property was burnt and looted; (2) those who could afford to move somewhere else, i.e. those who either had money or family elsewhere in South Africa. In both cases we can assume that those individuals were well-established as they had

¹² For departures Home Affairs only gives a breakdown by means of transport and not by nationalities (see Figure 4.1 in the Appendix). Presumably, most victims would have returned home by road. However, those statistics also include departures of tourists travelling in the region.

either jobs or strong social networks; (3) the more vulnerable who stayed at shelters might have received help from UNHCR and IOM to resettle or go home, in which case the effect of poverty on the probability of being attacked would be underestimated; (4) refugees who could not afford to go back to their homeland, however, they could have received particular assistance from UNHCR to resettle. As a result of this variety of profiles of the missing population, coefficients of both the poverty variables and the length of stay could be under- or over-estimated and interpretation should remain careful.

The analysis also suffers from potential reporting errors resulting from the way the data was collected. Indeed, by asking the respondents whether they, or a household member, were attacked on xenophobic grounds during the May 2008 events, there were given the opportunity, in particular for foreigners, to classify any crime as xenophobic. However, the high levels of crime observed in the survey area justify differentiating between the types of crime¹³. In order to reduce misreporting to a minimum, the questionnaire was designed for detailed questions on general crime to be asked before questions on xenophobic crime. 27 per cent of the sample reported to have been a victim of crime (or a household member) since moving to the location of survey. A lower 15 per cent report xenophobic crimes. The two variables are correlated at 47 per cent. Only 10 per cent of the sample, and 20 per cent of foreigners interviewed, report to have been attacked or threatened on xenophobic grounds during May/June 2008. Looking at the extent of the violence, even if over-reporting cannot be completely ruled out, it does not seem unlikely that one out of five foreigners were victimized. Confirming this hypothesis, two thirds of the victims of xenophobia live in Alexandra, which was more affected during the attack than the city centre.

4.2 Model

The dependent variable is constructed using the answer to the question: ‘Were you, or anyone in your household, threatened or attacked because of your ethnic group, your tribe or your nationality during May/June 2008?’¹⁴ A probit model was chosen to deal with the binary character of the dependent variable. The following equation is estimated:

$$Violence_{ij}^* = \alpha' + \beta'X_i + \theta'W_j + \varepsilon_{ij} \quad (1)$$

$$\text{where } Violence = \begin{cases} 1 & \text{if } Violence^* > 0 \\ 0 & \text{if } Violence^* \leq 0 \end{cases}$$

where X_i is a vector of characteristics for the household i and W_j control for characteristics of the ward j . The analysis is clustered by enumeration area to allow correlation of covariance within locations. When ward level characteristics are introduced as controls, the standard errors are corrected for a potential Moulton bias (1990) while clustering at the ward level.

¹³ Alexandra and Hillbrow’s reputation make them rank amongst the most dangerous places in South Africa. Theft and mugging are a daily routine there.

¹⁴ We decide to focus on the May 2008 attacks as opposed to a larger period of coverage, mainly because the responses are believed to be more accurate: it is possible that attacks before or after May are remembered as xenophobic when they were not.

4.3 The variables

Demographic and migration history variables

The size of the household describes the number of persons, including children, sharing the same shelter and budget. Single migrants, especially young men, can potentially be perceived as outsiders in the sense that they come to work and do not struggle for their families –at least present with them- like most in the community.

A dummy variable is used whether the respondent was born in South Africa. For the in-depth analysis of the characteristics of foreigners in relation to victimization, the data allows to break down would be made by country of origin. Foreigners are expected to face a higher chance of threat.

A binary variable is used to capture whether the household is composed of both South Africans and foreigners. On the one hand, it can be assumed that foreigners living with South Africans would be assimilated to insiders. For instance, it is assumed that these foreigners would have easier access to the community life through their partners. On the other hand, foreigners who have South African partners can be perceived as competitors. In the aftermath of the violence, interviews with South Africans in the zones affected by violence revealed that foreigners were blamed for stealing women. In this case, mixed households would be more at risk than non-mixed households. A priori, the effect is unknown.

A binary variable captures whether the respondent speaks IsiZulu. This stands as a proxy for the household. Speaking IsiZulu, the dominant African street language, is expected to decrease the probability of being attacked or threatened for being an outsider. Potentially speaking the language facilitates integration and reduces recognisability.

The time since arrival in South Africa/in the location provides information on the level of integration. Long-term migrants should be more integrated in their host communities than new arrivals that have less little time to settle and be involved in community activities. The former should therefore face a lower risk of been attacked. If the hypothesis were verified, it would corroborate the hypothesis that the recent influx of migrants could have been a major cause of the May 2008 attacks. Yet the length of time since arrival, particularly in Alexandra, could be correlated to the level of poverty of the household. The poorer the household, the longer it takes to afford moving to a safer neighbourhood (Richards et al. 2007). Meanwhile, we control for the different aspects of poverty. Both durations are de facto highly correlated. Therefore the time in the current location is preferred for the analysis. The impact of the time spent in South Africa is also considered for foreigners.

A binary variable is used to identify rural migrants. Under apartheid rules, rural migrants were perceived as ‘outsiders’ in Alexandra (Nieftagodien 2008). The regime purposely created preferences towards residents. Migrants from rural areas in the country were consistently stigmatized into an out-group. Moreover, rural migrants are expected to have more difficulties in adapting to a new urban environment than migrants coming from urban centres, whether they originate from cities in South Africa, or elsewhere in Africa.

The data also capture the main purpose of migration, among which economic reasons, educational reasons, to escape conflict or political oppression and for the purpose of familial

reunion are the most often cited. We can expect that different types of migrants face different degrees of vulnerability and victimization.

Socio-economic variables

The level of education of the respondents serves as a proxy for the level of education of the head of household. In the case of a validation of the relative deprivation theory, the level of education should be positively correlated to the probability of victimization.

The wealth index is created using a principal component analysis. It computes different aspects of poverty such as access to water, electricity, and schooling as well as the employment status of the respondents. If victims are systematically richer, then the May 2008 xenophobic violence was a struggle of classes: perpetrators chasing those whom they regard as privileged. If on the other hand, the poorest are more likely to be victims, the hypothesis under which people lashed out their frustration on the more vulnerable, those competing for the same scarce resources, would be validated

A dummy capturing the perceived level of relative poverty equals one if the respondent affirms to be poorer than average compared with others in the area where he/she lives, which is the case for 35 per cent of respondents consider their household poorer than average, 50 per cent about average and 15 per cent richer than average. The assumption is the same as for the relationship between the level of absolute probability and the risk of being victimized.

Legal variables

Criminal activity is estimated using the respondent self-reported record of arrest by the police, either as part of a criminal investigation or related to participation in criminal activity. Although the information is not collected at the household level it constitutes a proxy and most likely an underestimation. In the data, only 3 per cent of respondents report a crime record. Yet for those who reported a criminal record, it surely shattered the image of the whole household, which then is associated with criminal activities. Crush and Ramachandran (2009) report that a common belief is that migrants are the cause of the increased level of crime. Following this assumption, households whose members have criminal records should be more at risk of violence than others. If this is not the case, it will confirm that those perceptions are divorced from reality.

The dummy for whether or not the respondents have legal documentation takes the value of 1 if a foreign respondent reports to not possess neither an asylum seeker nor a refugee permit, nor a valid visa to be in South Africa. Defined as such, 453 respondents are classified as illegal. Again, this individual information is a proxy for the status of other household members. We observe little difference between residents of Alexandra and the inner city. Crush and Ramachandran (2009) identify that irregular migrants are much more prone to victimization than others. If this is true, the coefficient should be positive and significant.

Location controls

The ward variables allow controlling for the characteristics of the location of survey and are constructed using the 2001 Statistics South Africa Census¹⁵.

We control for the proportion of black males aged 15 to 60. Assuming that women are equally represented across age and ethnicity, the variable is constructed by multiplying the proportion of black inhabitants by the proportion of males and by the proportion of people aged between 15 and 60. It varies between 37 and 44 per cent. We expect that the higher the proportion of black males, the higher the chance of being victimized *ceteris paribus*. Indeed, Wa Kwabe-Segatti and Fauvelle-Aymar's (2012) results suggest a positive impact on the risk of violence at the ward level. However, as our data was collected in areas where the proportion of black people exceeds 90 per cent, the introduction of this variable is for control rather than explanation purposes.

In addition we control for the percentage of foreigners in the ward. A large percentage of foreigners in the location can create a safer environment for foreigners. Conversely, numbers can exacerbate the resentment of the adoptive community.

The diversity index of the foreign population is constructed the same way as the ethnolinguistic fractionalization index (ELF) (Bossert et al. 2011). The ELF is a decreasing transformation of the Herfindhal concentration index. For a ward composed $N \geq 2$ nationalities (excluding South Africans) and p_n indicates the share of the group of nationality n in the foreign population, the diversity index is given by $1 - \sum_{n=1}^N p_n^2$.

The diversity index of the foreign population in a given ward varies from 60 to 77. Overall the foreign population is heterogeneous. Again no systematic differentiation between Alexandra and the inner city is observable. Wa Kwabe-Segatti and Fauvelle-Aymar (2012) find that the more heterogeneous the foreign population, the lower the probability of violence in the ward.

Due to high correlation between these last two variables, it was preferred to introduce an interactive term between the percentage of foreigners and the diversity of the foreign population. The expected combined impact on the probability of victimization is negative.

The rate of unemployment is constructed as the percentage of the population who reported either to be unemployed or seasonal workers but not working at the time of interview, or who answered that they could not find a job. In the surveyed wards, the unemployment rate varies 26.5 per cent and 38.5 per cent. The effect of the rate of unemployment in the ward on the probability of being a victim of xenophobia cannot be identified *ex ante*. It is expected to positively impact the probability of victimization. Nevertheless, Wa Kwabe-Segatti and Fauvelle-Aymar (2012) find no significant impact of the location unemployment rate on the probability that a given ward experienced violence in May 2008.

¹⁵ Overall, the core sample covers eight distinct wards. Enumeration Areas (EAs) were arbitrarily attached to the adjacent wards in case they originally belonged to another large ward which did not allow us to capture the living conditions in the EA. In particular, due to Alexandra's proximity to the wealthy Sandton suburbs, some EAs in Alexandra originally belonging to Sandton wards are reattached to adjacent wards capturing the living conditions in the area.

5 Results

5.1 Step 1: Which characteristics influence the probability of being victimized?

The results are reported in the first three columns of Table 1.

The main result is that foreigners face a higher probability of being victims of attacks than South Africans. In reality, their chances of victimization are 20 per cent higher than the rest of the population, everything else being held constant. This is particularly high compared to the average predicted probability of 11 per cent. Not surprisingly, foreigners were the primary target of the May 2008 aggressors. The results of columns (2) and (3) show a striking difference between Alexandra and the inner city: foreigners living in Alexandra face a 32 per cent higher chance of having been attacked or threatened, while it is only 9 per cent higher in the city centre.

Looking at the demographic variables, only the coefficient of the size of the household is significant. Although its effect is relatively small, it confirms the hypothesis that larger households are perceived more as insiders than as competitors. A single person household is more at risk than a family of five whose members would face a 4 per cent lesser chance of being victimized on the grounds of xenophobic hatred. This effect is magnified by the fact that the analysis investigates the probability of someone from the household being attacked or threatened. Mathematically, more people can be at risk in a larger household, yet single households appear to face a higher probability of victimization. Against the odds, mixed households are not significantly more or less at risk than others. Similarly speaking IsiZulu does not seem to matter.

The coefficients of the migration variables give some complementary answers on the characteristics of the victims. First of all, the impact of the time spent in the current location of survey is positive, following a U-inverted pattern. The probability of attacks or threats rises to reach a maximum at the end of the first decade living in the location. The results are robust when introducing the time since arrival in South Africa for foreigners, and in Gauteng, for local migrants. The results are reported in Table 8, column (2). This can be interpreted as contradicting the hypothesis that the recent influx of migrants from Zimbabwe fleeing the political and economic crisis is one of the underlying causes of the May 2008 attacks. Indeed, if the growing number of migrants exacerbated resentment and competition for resources in the host community, the ones who are most at risk would have been the newly arrived, not the long time neighbours. An alternative explanation is that the xenophobic attacks were more an explosion of a long lasting resentment. For many years, inhabitants lived with and competed with those perceived as outsiders and collective frustrations would have arisen against those frustrating agents. Knowing who they were, they became an easy target once the violence started. By contrast, the newcomers were harder to identify and locate. However, as mentioned earlier, results should be taken with caution as the selection bias might result in an over-estimation of the effect of the length of stay in the location, as newcomers might have been less likely come back to the neighbourhood once peace was restored.

The poverty indicators are significant but their coefficients appear contradictory. Indeed, absolute wealth, as calculated using the PCA, has a positive impact on the risk of attack. The possibility of a non-linear relationship is ruled out. The richest one per cent in the sample, face a risk of attacks 10 per cent higher than the poorest percentile. Households at the median

face a 5 per cent higher risk. This tends to validate the hypothesis that, everything else constant, richer households were the primary target. Nevertheless, the result is not robust when using a wealth index constructed with only two components. Indeed, Table 8 column (4) reports a positive but not significant effect of the alternative absolute poverty measure. On the contrary, the coefficient of the relative poverty variable suggests that households who perceived themselves as ‘on average poorer’ face a higher risk of being attacked. In fact, half of those who responded to be on average poorer are situated in the 30 per cent poorer of the sample. Column (2) and (3) show that relative poverty is mainly a factor of victimization in Alexandra. Indeed the coefficient loses significance when the regression is run on the inner city sub-sample. Yet it is acknowledged that relative poverty could be endogenous to xenophobic victimization, as victims might enter this parameter in their self-evaluation of relative poverty. In order to correct for this possible bias in the coefficients, the relative poverty binary variable is instrumented using the level of education (and has no effect on the probability of being threatened or attacked), and whether the respondent states to have nowhere to go to borrow 500 ZAR¹⁶ if in need. Contrary to expectations, it seems that, when corrected for endogeneity, the relative poverty variable has a large positive effect on the probability of victimization. Relatively poorer households face a 50 per cent higher chance of victimization than other residents of the community, everything else held constant.

The absolute impact of each poverty dimension suggests that perpetrators of the attacks turned against the most vulnerable in the community rather than the richest. If this result is not dependent on the selection bias of the sample, then it can rightly be assumed that more than a fight built up on frustrations against wealthier outsiders, the May 2008 violence was a violent reaction against a failing service delivery system. Unable to attack the source of poverty and frustrations, desperate people turned against the easiest target they could reach, the most vulnerable individuals.

Whether the respondent reports having a criminal record in the country does not impact the probability of being attacked. This suggests that the May 2008 attacks were not orchestrated against criminals, or if it was, there was a clear misperception of whom to evict.

The core regression controls for some of the characteristics of the ward: the percentage of black males between 15 and 60; the unemployment rate; and the percentage of foreigners interacted with the heterogeneity of the foreign population. All coefficients are significant. The results suggest that a percentage point higher in the proportion of black males decreases the probability of attacks by one percentage point. Similarly, the sign of the interacted term suggests that the higher the proportion of foreigners and the more heterogeneous the foreign population in the location of survey, the lower the chances of attacks for the respondent household. This finding confirms Wa Kwabe-Segatti and Fauvelle-Aymar (2012) that the heterogeneity of the foreign group negatively impacts the probability of violence in the ward.

The rate of unemployment in the location seems to increase the probability of victimization. The coefficient of the ward unemployment rate is positive and significant at a 1 per cent threshold in all regressions. This result is all the more important as very little variation is observed among wards (Min: 26.5 per cent; Max: 38.5 per cent). This can potentially be an explanation for the observed higher probability of victimization in Alexandra. Indeed, 68 per

¹⁶ About US\$60 at the time of the survey.

cent of respondents reported to be unemployed versus 52 per cent in the inner city Johannesburg. Similarly, twice as many report to be employed full time in the inner city compared to in Alexandra (26 per cent versus 13 per cent). This result contradicts the findings of Wa Kwabe-Segatti and Fauvelle-Aymar (2012) that conclude for a non-significant impact of the employment rate on the likelihood of violence at the ward level. There could be two distinct explanations for the observed difference between the two analyses. First, the result could be the direct consequence of a likely high correlation rate between the unemployment variable and the very low level of income used as another explanatory factor for the occurrence of violence. Consequently, both coefficients would be biased. Alternatively, one can assume that if employment conditions do not determine the places where the violence erupted in May 2008, higher unemployment rate implies higher probabilities of victimization at the household level. In other words, unemployment conditions in the areas affected by attacks result in a larger scale of violence. If unemployment is not a trigger it certainly is an aggravating factor. Inhabitants of more deprived areas are more at risk of attacks or threats.

All the above results are robust to the inclusion of ward-fixed effects (which leads to the drop of the ward characteristic variables). The results are reported in Table 7.

5.2 Step 2: What characteristics make a foreigner an outsider?

Column (1) of Step 2 is similar to column (1) of Step 1, the difference being that the sample is reduced to foreign nationals only. The legal status of the responding migrant is introduced as an explanatory variable. It is expected that undocumented migrants will face higher levels of resentment linked to their illegal status in the country; but the community members might not necessarily know the exact legal status of foreign neighbours. The variable capturing criminal record is dropped as no foreigners in the sample report to having been arrested for criminal activities. The predicted probability of victimisation rises to 0.18.

The demographic and migration history variables follow the same pattern as previously observed. Household size has a negative and significant effect. The probability of being victimized increases with the length of stay in the location, following a U-inverted shape. This calls for cautious interpretation as the coefficients might be upward biased as a result of the sample selection. Absolute poverty has a positive impact on the probability of attack, while relative poverty has the inverse effect. The result is robust to the use of an alternative measure of absolute poverty based on two components only (Table 8 column (5)). Once corrected for potential endogeneity using education level, the relative poverty effect is large and significant, suggesting that poorer foreigners were more at risk than relatively richer ones. A few differences can nevertheless be observed in Step 2. Foreigners with urban backgrounds are more at risk than those coming from rural areas, a highly unexpected result as one could assume that rural migrants would have more trouble integrating into Johannesburg life.

Column (2) and (3) of Step 1 illustrates that Alexandrians are significantly less safe than inhabitants of the inner city, suggesting that township environments lead to more resentment towards foreigners. The descriptive statistics of the population which has been victimized confirms a striking difference between Alexandra and Johannesburg inner city. In the township, 38 per cent of foreign nationals reported having been victims of violence in May/June 2008, as opposed to only 12 per cent in the inner city. One reason could be that foreign-born constitute a minority of township inhabitants (about 2-3 per cent according to

the estimation of the latest Alexandra Renewal Project's study). Hence, as a small proportion, they become an easy target.

A major assumption to verify, once controlling for demographics, wealth, migration and location characteristics, is whether all nationalities face the same probability of threats or whether some are more at risk than others. In order to do so, binary variables for the main foreign nationalities in the sample were introduced to the core regression, while controlling for South Africans, i.e. Zimbabweans (62 per cent of the total foreign population in the sample), Mozambicans (16 per cent), Congolese-DRC (8 per cent). The results are reported in columns (2), (3) and (4) and suggest that Zimbabweans are less at risk of xenophobic violence than others. Once again this tends to confirm the findings of Misago et al. (2009) that the influx of Zimbabweans was not one of the reasons for the eruption of violence in May 2008. Indeed, if it was the case, we would expect Zimbabweans to face higher probabilities of threats. On the contrary, Zimbabweans are relatively less victimized in our sample. Congolese, on the other hand, face a 10 per cent higher probability of victimization. There could be many explanations for this phenomenon. Not coming from neighbouring countries they might have more problems integrating into the South African society. It could also be a language barrier. It could simply be that they are more recognisable among the population. There is also a possibility that they associate aggression with xenophobia more easily.

Finally, migrants do move to South Africa for the different reasons. Some escape political oppression or conflict in their home countries. Some migrate for economic opportunities, hoping that the receiving country will give them a better life. Some reunite with family members already living in the host country. Some come to South Africa from all over the continent to study (South Africa has a wide range of educational institutions of high quality). Some migrate for a combination of those reasons and others. Integration in the new community can prove more or less successful depending on why one left home in the first place. To verify this, binary variables capturing the reasons for migrating¹⁷ are introduced in the core regression. Results are reported in column (5). Migration reasons do not seem to influence the probability of being a target of violence, at the exception of migrants who came to South Africa for familial reunion who face a 5 per cent lower chance of having been attacked during the xenophobic violence. A simple explanation can be that existing family networks facilitate integration into the host society.

The results of the analysis confirm that the violence was not purely conducted at random. Mike's story was not the exception. Some foreigners were and are more at risk of being threatened or attacked. So who, in our sample, faces the highest chance of being attacked or threatened? Who is the 'alien'? According to the results of Table 1, the 'perfect outsider' is a single migrant that has lived in South Africa for about a decade. He/she come from an urban environment in the DRC and is relatively poorer than his/her neighbours. Finally, he/she lives in a place with high unemployment and few foreigners.

¹⁷ Respondents were asked to give the two main reasons for coming to Gauteng/South Africa.

6 Conclusion

If the data suffers from an important bias, and the results cannot be generalized to the whole of South Africa, yet some interesting conclusions can be drawn on what makes people more likely victims of xenophobia. More data collection in different areas across the country is definitely needed.

During the May 2008 xenophobic attacks, not every migrant was attacked. This was the observation at the root of this analysis. Who is the alien? Is it possible to identify what makes some individuals the targets? Or was violence directed at random? Using a household data collected in Alexandra township and Johannesburg inner city, the results show that particular characteristics of the household significantly affect the probability of victimization on the grounds of xenophobia.

First and not surprisingly, foreign nationals are more at risk. Second, nationality does matter. Third, the alien is not newly arrived; it is someone who has been living in the location of survey for about a decade. However, the quality of the data does not rule out the potential bias resulting from a specific sample selection. It is indeed likely that those who fled from their neighbourhood were the least established individuals. Fourth, relative poverty has a positive effect on the probability of victimization and this is particularly true for the Alexandra residents. It confirms that the violent attacks were targeted towards the more vulnerable, the closest.

Frustrations do not seem to emanate from the fact that foreigners do better. More likely, xenophobic violence is the outcome of the rising inequalities between the poorest and the richest classes of the society. Violence is then targeted at the ones the frustrated can harm although they might not be the intrinsic source of frustrations. Confirming this previous result, controlling for household characteristics, Alexandra appears more dangerous than the inner city, in particular for foreigners. Similarly, households living in areas with high unemployment face a higher probability of xenophobic violence. If high unemployment rate might not trigger violence, it increases the scale of violence, with residents of those areas with high unemployment facing higher chances of xenophobic attacks. In this context, South Africa's tensions cannot be solved without tackling poverty.

References

- Allport, G. (1954). *The Nature of Prejudice*. Cambridge, MA: Addison-Wesley.
- Banton, M. (1996). 'The Cultural Determinants of Xenophobia'. *Anthropology Today*, 12 (2): 8–12.
- Bonner, P., and Nieftagodien, N. (2008). *Alexandra: A History*. Johannesburg: Witwatersrand University Press.
- Bossert, W., D'Ambrosio, C., and Ferrara, E. L. (2011). 'A Generalized Index of Ethno-Linguistic Fractionalization'. *Economica*, 78 (312): 723–50.
- Central Intelligence Agency (CIA). *The World Fact Book: Distribution of Family Income, Gini Index*.

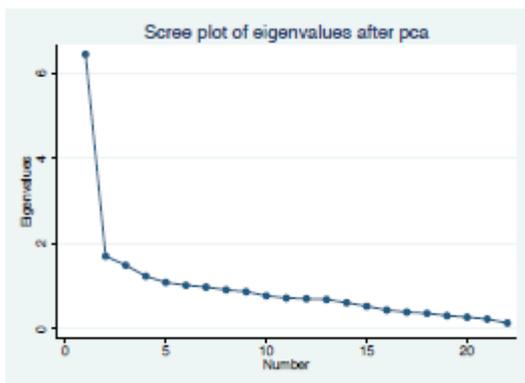
- Crush, J., and Ramachandran, S. (2009). 'Xenophobia, International Migration and Human Development. Research Paper 2009/47. New York: United Nations Development Programme.
- Dodson, B., and Oelofse, C. (2000). 'Shades of Xenophobia: In-migrants and Immigrants in Mizamoyethu, Cape Town'. *Canadian Journal of African Studies*, Special Issue: Transnationalism, African Immigration, and New Migrant Spaces in South Africa, 34 (1): 125–48.
- Esses, V. M., Dovidio, J. F., Jackson, L. M., and Armstrong, T. L. (2001). 'The Immigration Dilemma: The Role of Perceived Group Competition, Ethnic Prejudice, and National Identity'. *Journal of Social Issues*, 57 (3): 389–412.
- Gelb, S. (2008). 'Behind Xenophobia in South Africa-Poverty or Inequality? In S. Hassim, T. Kupe, and E. Worby (eds), *Come Home or Die Here: Violence, Xenophobia and the Reinvention of Differences in South Africa*. Johannesburg: Wits University Press.
- Gindrey, V., and Landau, L. (2008). 'Migration and Population Trends in Gauteng Province 1996-2055'. Working Paper 42. Johannesburg: African Centre for Migration and Society.
- Gurr, T. (1968). 'Psychological Factors in Civil Violence'. *World Politics*, 20 (2): 245–78.
- Human Sciences Research Council (2008). 'Violence and Xenophobia in South Africa: Developing Consensus, Moving to Action'. Pretoria: Human Sciences Research Council.
- Gagnon V. P. (1994). 'Ethnic Nationalism and International Conflict: the Case of Serbia'. *International Security*, 19 (3): 130–66.
- Misago, J. P., Landau, L., and Monson, T. (2009). 'Towards Tolerance, Law and Dignity: Addressing Violence against Foreign Nationals in South Africa'. Arcadia: IOM, Regional Office for Southern Africa.
- Morris, A. (1994). 'The Desegregation of Hillbrow, Johannesburg, 1978–82'. *Urban Studies*, 31 (6): 821–34.
- Moulton, B. R. (1990). 'An Illustration of a Pitfall in Estimating the Effects of Aggregate Variables on Micro Units'. *The Review of Economics and Statistics*, 72 (2): 334–38.
- Neocosmos, M. (2008). 'The Politics of Fear and the Fear of Politics: Reflections on Xenophobic Violence in South Africa'. *Journal of Asian and African Studies*, 43 (6): 586–94.
- Nieftagodien, N. (2008). 'Xenophobia in Alexandra'. In S. Hassim, T. Kupe, and E. Worby (eds), *Come Home or Die Here: Violence, Xenophobia and the Reinvention of Differences in South Africa*. Johannesburg: Wits University Press.
- Olumefi, O. (1998). 'Street Homelessness in Johannesburg Inner-city: a Preliminary Survey'. *Environment and Urbanization*, 10 (2): 223–34.
- Pillay, D. (2008). 'Relative Deprivation, Social Instability and Cultures of Entitlements. In S. Hassim, T. Kupe, and E. Worby (eds), *Come Home or Die Here: Violence, Xenophobia and the Reinvention of Differences in South Africa*. Johannesburg: Wits University Press.
- Richards, R., O'Leary, B., and Mutsonziwa, K. (2007). 'Measuring the Quality of Life in Informal Settlements in South Africa'. *Social Indicators Research*, 81: 375–88.
- Sharp, J. (2008). 'Fortress SA: Xenophobic Violence in South Africa'. *Anthropology Today*, 24 (4): 1–3.

- Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., and Sherif, C. W. (1961). *Intergroup Cooperation and Competition: The Robbers Cave Experiment*. Norman, OK: University Book Exchange.
- Statistics South Africa (2004). 'Primary Tables Gauteng: Census '96 and 2001 compared. Pretoria: Statistics South Africa.
- (2004). Primary Tables South Africa: Census '96 and 2001 compared. Pretoria: Statistics South Africa.
- (2008). Tourism and Migration. Tech. Rep. P0351. Pretoria: Statistics South Africa.
- Tadjo, V. (2008). 'Construction the other Learning from the Ivorian Example' in '. In S. Hassim, T. Kupe, and E. Worby (eds), *Gome Home or Die Here: Violence, Xenophobia and the Reinvention of Differences in South Africa*. Johannesburg: Wits University Press.
- Uvin, P. (1999). 'Ethnicity and Power in Burundi and Rwanda: Different Paths to Mass Violence'. *Comparative Politics* 31 (3): 253–71.
- Wa Kwabe-Segatti, A., and Fauvelle-Aymar, C. (2012). 'People, Space and Politics: An Exploration of Factors Explaining the 2008 Anti-Foreigner Violence in South Africa'. In L. B. Landau (ed.), *Exorcising the Demons Within, Xenophobia, Violence and Statecraft in Contemporary South Africa*. Johannesburg: Wits University Press

Appendix

Appendix: Creating an indicator of wealth

The principal component analysis method identifies important poverty indicators and calculates the weight related to each variable suspected to have an impact on poverty. It isolates and measures the poverty component embedded in the various poverty indicators, and creates a household specific poverty index that can be then introduced in the core analysis as a dependent variable. The principal component technique slices information contained in the set of indicators into several components. Each component is constructed as a unique index, based on the values of all the indicators. The main idea is to formulate a new variable that is the linear combination of the original indicators, such that it accounts for the maximum of the total variance in the original indicators. In order to choose the number of components to retain, two techniques can be used. The first is to keep the components with an Eigenvalue superior to 1 (Kaiser criterion). In this case, the first six components are used to create the aggregate value of poverty. The second method is to observe the slope of the Eigenvalue (see the graphic below). The number of components to retain, corresponds to the change in the slope (scree test). Using this method, only two components are retained. The first method is preferred as it gives a more precise estimation of poverty, while the second method serves as a robustness check.



Source: author's own calculations.

The indicator is then constructed as the sum of the component. It has a zero mean and a standard deviation equal to one. In this analysis, the indicator is then rescaled by quintile. The poverty index thus defined then varies from 0 to 1 depending on the value of the indicator.

Table 1: Characteristics of the victims, probit (marginal effects)

	(1)	(2)	(3)	(1)	(2)	(3)	(4)	(5)
<i>Demographics</i>								
Household size	-0.008 (0.003)**	-0.015 (0.006)**	-0.004 (0.003)	-0.015 (0.007)**	-0.008 (0.003)**	-0.008 (0.003)**	-0.008 (0.003)**	-0.015 (0.008)**
Mixed household=1	0.003 (0.014)	0.011 (0.030)	-0.004 (0.016)	-0.016 (0.015)	0.003 (0.014)	0.003 (0.014)	0.006 (0.014)	-0.023 (0.011)**
Speak Izizulu=1	0.010 (0.012)	0.036 (0.019)*	-0.015 (0.018)	0.009 (0.028)	0.021 (0.007)***	0.011 (0.012)	0.020 (0.007)***	0.017 (0.021)
<i>Poverty</i>								
Secondary school=1	-0.009 (0.009)	-0.009 (0.019)	-0.002 (0.019)	-0.014 (0.035)	-0.007 (0.008)	-0.006 (0.009)	-0.011 (0.009)	-0.023 (0.036)
Absolute poverty index	0.001 (0.000)***	0.001 (0.000)**	0.000 (0.000)	0.002 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Relative poverty index	0.034 (0.006)***	0.042 (0.020)**	0.038 (0.024)	0.064 (0.034)*	0.034 (0.006)***	0.034 (0.006)***	0.033 (0.006)***	0.052 (0.033)
<i>Migration History</i>								
Length in current location	-0.044 (0.018)**	0.048 (0.018)***	0.039 (0.012)***	0.099 (0.046)**	0.043 (0.018)**	0.044 (0.018)**	0.043 (0.019)**	0.097 (0.048)**
Length in current location, sq	-0.002 (0.001)**	-0.002 (0.001)***	-0.002 (0.001)***	-0.005 (0.002)**	-0.002 (0.001)**	-0.002 (0.001)**	-0.002 (0.001)**	-0.005 (0.002)**
Rural origin=1	-0.003 (0.016)	0.019 (0.019)	-0.022 (0.015)	-0.067 (0.031)**	-0.005 (0.016)	-0.005 (0.016)	-0.001 (0.015)	-0.066 (0.029)**
Foreign born=1	0.203 (0.025)***	0.322 (0.036)***	0.091 (0.016)***					
Economic migrant								-0.042 (0.060)
Education migrant								0.042 (0.058)
Conflict migrant								0.040 (0.024)*
Familial reunion migrant								-0.050 (0.028)*
<i>Legal characteristics</i>								
Criminal record=1	0.000 (0.042)	0.015 (0.066)	-0.009 (0.052)		0.002 (0.042)	0.001 (0.043)	0.002 (0.041)	
Illegal status=1				0.023 (0.035)				0.030 (0.033)
<i>Nationality</i>								
SA					-0.235 (0.022)***	-0.191 (0.030)***	-0.197 (0.026)***	
ZIM					-0.038 (0.019)**			
MOZ						0.032 (0.039)		
DRC							0.101 (0.020)***	
<i>Ward characteristics</i>								
% of black males (15-60)	-0.997 (0.181)***			-3.759 (1.041)***	-0.848 (0.213)***	-0.958 (0.174)***	-0.881 (0.178)***	-3.568 (0.990)***
% of unemployed	0.605 (0.233)***			2.645 (0.877)***	0.510 (0.221)**	0.590 (0.210)***	0.543 (0.230)**	2.558 (0.787)***
% of foreigners x Diversity of the foreigners' population	-0.293 (0.138)**			-0.305 (0.523)	-0.342 (0.138)**	-0.260 (0.151)*	-0.380 (0.133)***	-0.421 (0.524)
Pseudo R ²	0.187	0.242	0.112	0.123	0.192	0.188	0.191	0.133
ll	-485.5	-277.9	-220.5	-316.9	-482.4	-484.7	-483.0	-317.8
Predicted p at xbar	0.071	0.089	0.056	0.181	0.183	0.071	0.069	0.180
Observations	1715	902	898	696	1715	1715	1715	704

Note: Robust standard errors in parentheses. Significant at (*) 10%, at (**) 5%, at (***) 1%

Source: author's own calculations.

Table 2: Principal component analysis - six selected components

	Eigenvalue	Difference	Proportion	Cumulative
Comp1	6.4347	4.72803	0.2925	0.2925
Comp2	1.70667	.211419	0.0776	0.3701
Comp3	1.49525	.257404	0.0680	0.4380
Comp4	1.23785	.147286	0.0563	0.4943
Comp5	1.09056	.0656347	0.0496	0.5439
Comp6	1.02493	.0417156	0.0466	0.5905

Kaiser-Meyer-Okin (sampling adequacy)= 0.9170

Source: author's own calculations.

Table 3: Eigenvectors for the first six components

	Comp1	Comp2	Comp3	Comp4	Comp5	Comp6
Household size	0.1512	0.5231	-0.0796	0.1553	-0.1661	0.0969
Ratio of children	0.0655	0.4022	0.3310	0.0914	0.0752	-0.1018
Decent accommodation	0.3245	0.0699	-0.3256	0.0347	0.0103	-0.0518
Nb of rooms	-0.0271	0.5728	0.2249	0.0966	-0.2183	0.2088
Rent	0.2789	0.0444	-0.2820	0.0505	-0.0312	-0.0508
Electricity in the dwelling	0.2673	0.0050	0.0574	-0.2376	0.0103	0.1053
Running water in the dwelling	0.3234	0.0677	-0.3178	0.0571	0.0220	-0.0592
Hot water	0.3046	0.0207	-0.2615	0.1124	-0.0185	-0.1061
Toilets in the dwelling	0.3091	0.0455	-0.1694	-0.0891	0.0282	0.0554
Difficulty to access to health	-0.0084	0.1020	0.0009	-0.1860	0.5261	-0.2888
Difficulty to access to schooling	0.0110	0.2871	0.0064	-0.0675	0.5336	-0.1403
Malnutrition	-0.1253	0.0887	-0.0567	-0.2021	0.1536	-0.3027
Owes a radio	0.2105	-0.1206	0.2708	-0.1645	0.0482	0.0023
Owes a refrigerator	0.2811	-0.0706	0.2764	-0.1308	-0.0415	-0.0747
Owes a television	0.2938	-0.0461	0.2649	-0.1991	-0.0052	0.0434
Owes a cellphone	0.1749	-0.0491	0.2542	-0.1263	0.0821	0.2373
Owes a dvd player	0.2909	-0.0604	0.2444	-0.1130	-0.0052	0.0315
Owes a Microwave	0.2406	-0.1389	0.1352	0.1599	-0.0372	-0.1548
Owes a bicycle	0.0680	-0.1186	0.1793	0.5715	0.0533	-0.1039
Owes a car	0.1314	-0.1650	0.1998	0.4727	0.0391	-0.3182
Works	0.0643	-0.1797	-0.0922	0.0943	0.2470	0.6220
Has other sources of income	-0.0020	0.0353	0.0146	0.3117	0.5035	0.3466

Source: author's own calculations.

Table 4: Violence patterns: Have you ever been, or someone from your household, a victim of threat because of your nationality, ethnicity or tribe?

Alexandra	National born and long term resident	6%
	National born and recent migrant (less than 10 years)	8%
	Foreign-born	47%
Johannesburg inner-city	National born and long term resident	4%
	National born and recent migrant (less than 10 years)	5 %
	Foreign-born	15%
Country of birth, % of population threatened	South Africa	6%
	Zimbabwe	21%
	Mozambique	49%
	DRC	26%
	Malawi	32%

Source: author's own calculations.

Table 5: Descriptive statistics: differences between sub-samples

	Total	foreigners vs. nationals	Alex vs. inner-city
Household size	3.99	-1.60 (.22)***	5.25 (.21)***
Mixed household	0.23		0.18 (.02)***
Speak IsiZulu	0.72	0.05 (.02)**	0.04 (.02)**
Length in current location	10.49	2.64 (.18)***	-2.28 (.18)***
Length in South Africa / Gauteng	11.69	3.03 (.16)***	-1.64 (.17)***
Rural background	0.46	0.15 (.02)***	-0.29 (.02)***
Secondary school education	0.63	-0.02 (.02)	0.24 (.02)***
Wealth index	50.48	-9.50 (1.35)***	28.09 (1.17)***
Relative poverty dummy	0.35	0.04 (.02)**	-0.31 (.02)***
Criminal record	0.03	0.03 (.01)***	-0.02 (.01)*

Standard errors reported. *, **, ***: difference significant at 1%, 5% and 10%.

Source: author's own calculations.

Table 6: Descriptive statistics: benchmark

Variable	2009 Data	Census 2001 (National)	Census 2001 (Gauteng only)
Living in informal dwelling	39.9	20.4% of black population	32.2% of black population
Access to electricity	79.9	62.0% of black population	74.3% of black population
Flush or chemical toilets	69.0	41.9% of black population	77.2% of black population
Unemployed (15-65 years old)	59.8	28.1% of black population	32.2% of black population
Some secondary school		30.8	34.3
Completed grade 12	63.4	20.4	28.0
Sample size	2,028	44,819,778	8,837,178

Note: the census statistics come from 'Census 2001: primary tables South Africa' (Statistics South Africa, 2001)

Source: author's own calculations.

Table 7: Characteristics of the victims with ward fixed effects, probit (marginal effects)

	(1)	(2)	(3)	(1)	(2)	(3)	(4)	(5)
Demographics								
Household size	-0.010 (0.003)***	-0.019 (0.006)***	-0.004 (0.003)	-0.015 (0.003)***	-0.009 (0.003)**	-0.009 (0.003)***	-0.010 (0.003)***	-0.014 (0.003)***
Mixed household=1	0.007 (0.014)	0.018 (0.030)	-0.006 (0.015)	-0.006 (0.004)	0.007 (0.014)	0.007 (0.014)	0.011 (0.014)	-0.013 (0.003)***
Speack IsiZulu=1	0.014 (0.013)	0.046 (0.023)*	-0.017 (0.015)	0.007 (0.010)	0.024 (0.009)***	0.014 (0.013)	0.025 (0.008)***	0.014 (0.008)
Poverty								
Secondary school=1	-0.009 (0.008)	-0.016 (0.019)	-0.001 (0.017)	-0.014 (0.012)	-0.008 (0.008)	-0.008 (0.009)	-0.012 (0.008)	-0.023 (0.012)*
Absolute poverty index	0.001 (0.000)***	0.002 (0.000)***	0.000 (0.000)	0.002 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Relative poverty index	0.038 (0.007)***	0.052 (0.022)**	0.032 (0.022)	0.066 (0.013)***	0.037 (0.007)**	0.038 (0.007)***	0.037 (0.007)***	0.054 (0.013)***
Migration History								
Length in current location	0.051 (0.019)***	0.052 (0.017)***	0.043 (0.013)***	0.095 (0.015)***	0.049 (0.018)**	0.050 (0.019)***	0.050 (0.020)***	0.093 (0.015)***
Length in current location, sq	-0.002 (0.001)***	-0.003 (0.001)***	-0.002 (0.001)***	-0.005 (0.001)***	-0.002 (0.001)**	-0.002 (0.001)***	-0.002 (0.001)***	-0.005 (0.001)***
Rural origin=1	-0.005 (0.014)	0.015 (0.021)	-0.025 (0.012)**	-0.057 (0.009)***	-0.006 (0.014)	-0.006 (0.015)	-0.003 (0.014)	-0.056 (0.008)***
Foreign born=1	0.276 (0.028)***	0.338 (0.036)***	0.160 (0.037)***					
Economic migrant								-0.039 (0.018)*
Education migrant								0.034 (0.020)
Conflict migrant								0.033 (0.008)***
Familial reunion migrant								-0.051 (0.008)***
Legal characteristics								
Criminal record=1	-0.003 (0.040)	0.012 (0.060)	-0.009 (0.050)		-0.001 (0.039)	-0.003 (0.041)	-0.002 (0.039)	
Illegal status=1				0.019 (0.012)				0.025 (0.012)**
Nationality								
SA					-0.099 (0.003)***	-0.094 (0.005)***	-0.094 (0.004)***	
ZIM					-0.038 (0.017)**			
MOZ						0.019 (0.029)		
DRC							0.109 (0.016)***	
Ward fixed effects	x	x	x	x	x	x	x	x
Pseudo R ²	0.193	0.253	0.112	0.139	0.198	0.194	0.198	0.141
ll	-481.6	-258.6	-215.8	-313.4	-479.1	-481.3	-478.8	-314.8
Predicted p at xbar	0.071	0.086	0.058	0.182	0.071	0.071	0.070	0.178
Observations	1715	851	864	696	1715	1715	1715	706

Note: Robust standard errors in parentheses. Significant at (*) 10%, at (**) 5%, at (***) 1%

Source: author's own calculations.

Table 8: Robustness checks, probit (marginal effects)

	(1)	(2)	(3)	(4)	(5)
<i>Demographics</i>					
Household size	-0.009 (0.003)***	-0.009 (0.003)***	-0.013 (0.002)***	-0.008 (0.002)***	-0.015 (0.001)***
Mixed household=1	0.005 (0.014)	0.000 (0.013)	-0.025 (0.005)***	0.003 (0.014)	-0.019 (0.005)***
Speack IsiZulu=1	0.015 (0.012)	0.012 (0.010)	0.010 (0.008)	0.013 (0.013)	0.012 (0.011)
<i>Poverty</i>					
Secondary school=1	-0.006 (0.009)	-0.011 (0.009)	-0.015 (0.009)	-0.009 (0.008)	-0.013 (0.011)
Absolute poverty index	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***		
Absolute poverty index (PCA 2 comp)				0.000 (0.000)***	0.001 (0.000)***
Relative poverty index	0.042 (0.006)***	0.042 (0.006)***	0.062 (0.013)***	0.030 (0.004)***	0.043 (0.011)***
<i>Migration History</i>					
Length in current location				0.051 (0.019)***	0.091 (0.014)***
Length in current location ²				-0.002 (0.001)***	-0.004 (0.001)***
Ln length in current location	0.032 (0.011)***				
Length in GP/SA		0.056 (0.023)**	0.102 (0.017)***		
Length in GP/SA, sq		-0.003 (0.001)**	-0.005 (0.001)***		
Rural origin=1	-0.003 (0.014)	-0.004 (0.014)	-0.060 (0.009)***	-0.004 (0.014)	-0.058 (0.008)***
Foreign born=1	0.321 (0.034)***	0.309 (0.031)***		0.314 (0.033)***	
<i>Legal characteristics</i>					
Criminal record=1	0.006 (0.038)	0.003 (0.040)		0.005 (0.042)	
Illegal status=1			0.015 (0.010)		0.018 (0.011)*
<i>Ward characteristics</i>					
% of black males (15-60)	-1.121 (0.151)***	-1.096 (0.207)***	-3.386 (0.371)***	-1.099 (0.188)***	-3.746 (0.368)***
% of unemployed	0.646 (0.223)***	0.687 (0.231)***	2.360 (0.283)***	0.659 (0.216)***	2.565 (0.304)***
% of foreigners x diversity of the foreign population	-0.274 (0.123)**	-0.322 (0.133)**	-0.345 (0.170)**	-0.356 (0.135)***	-0.442 (0.184)**
Pseudo R ²	0.17	0.18	0.12	0.18	0.12
ll	-493.142	-490.144	-320.993	-488.600	-321.649
Predicted p at xbar	0.073	0.073	0.182	0.072	0.183
Observations	1715	1708	707	1715	706

Note: Robust standard errors in parentheses. Significant at (*) 10%, at(**) 5%, at (***) 1%

Source: author's own calculations.

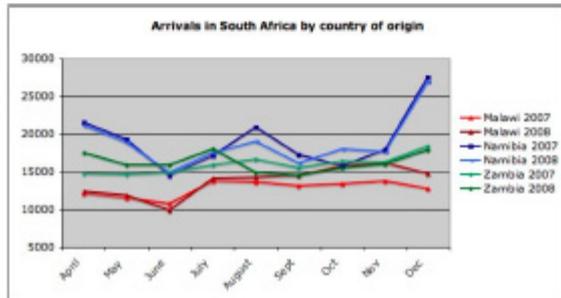
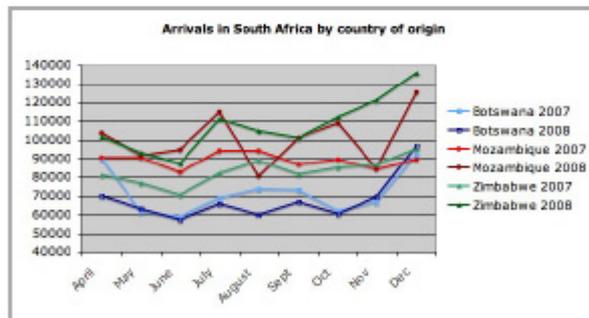
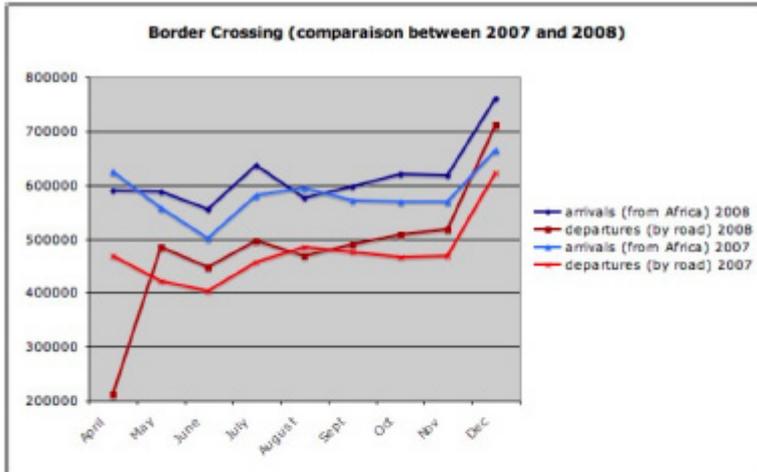
Table 9: Instrumentation: relative poverty

	(1)	(2)
	IV- all sample	IV- foreigners only
<i>Demographics</i>		
Household size	-0.066 (0.024)***	-0.065 (0.028)**
Mixed household=1	0.015 (0.104)	-0.070 (0.062)
Speack IsiZulu=1	0.092 (0.089)	0.057 (0.106)
<i>Poverty</i>		
Absolute poverty index	0.006 (0.002)***	0.007 (0.002)***
Relative poverty index	0.559 (0.242)**	0.733 (0.284)***
<i>Migration History</i>		
Length in current location	0.311 (0.140)**	0.333 (0.179)*
Length in current location ²	-0.015 (0.007)**	-0.016 (0.009)*
Rural origin=1	-0.020 (0.118)	-0.275 (0.099)***
Foreign born=1	1.218 (0.149)***	
<i>Legal characteristics</i>		
Criminal record=1	0.024 (0.310)	
<i>Ward characteristics</i>		
% of black males (15-60)	-6.429 (1.235)***	-12.563 (4.575)***
% of unemployed	4.078 (1.792)**	9.495 (3.780)**
% of foreigners x diversity of the foreign population	-1.835 (0.998)*	-0.491 (2.294)
<i>First stage instrumentation: relative poverty</i>		
First stage Secondary school=1	-0.061 (0.024)***	-0.039 (0.038)
No where to borrow 500R=1	0.189 (0.028)***	0.191 (0.029)***
athrho	-0.145 (0.104)	-0.217 (0.126)*
insigma	-0.852 (0.051)***	-0.924 (0.062)***
ll	-1457.806	-661.183
Observations	1715	696

Note: Robust standard errors in parentheses. Significant at(*) 10%, at(**) 5%, at(***) 1%

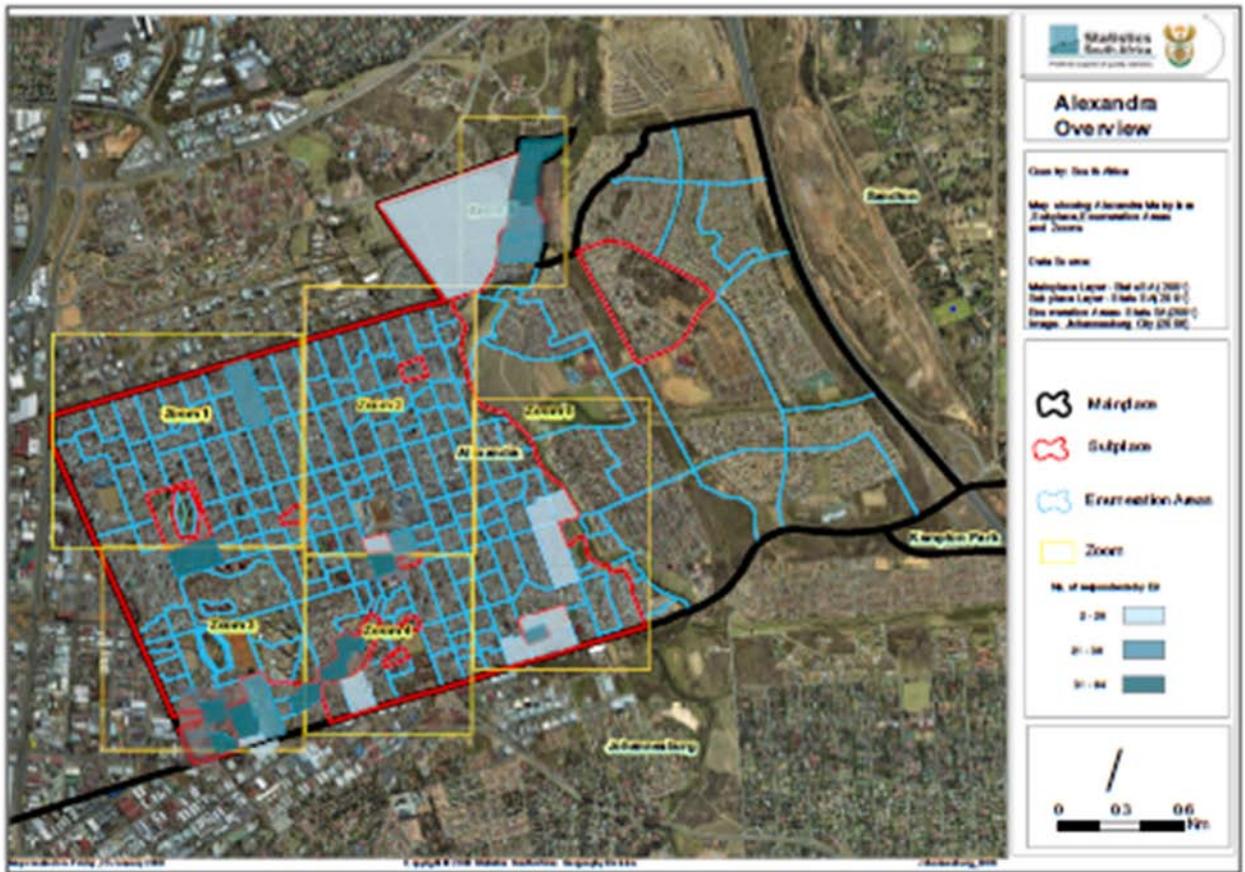
Source: author's own calculations.

Figure 1: Border-crossing



source: Statistics South Africa

Figure 2 Sampling: Alexandra



Source: Statistics South Africa.

Figure 3: Sampling: Berea



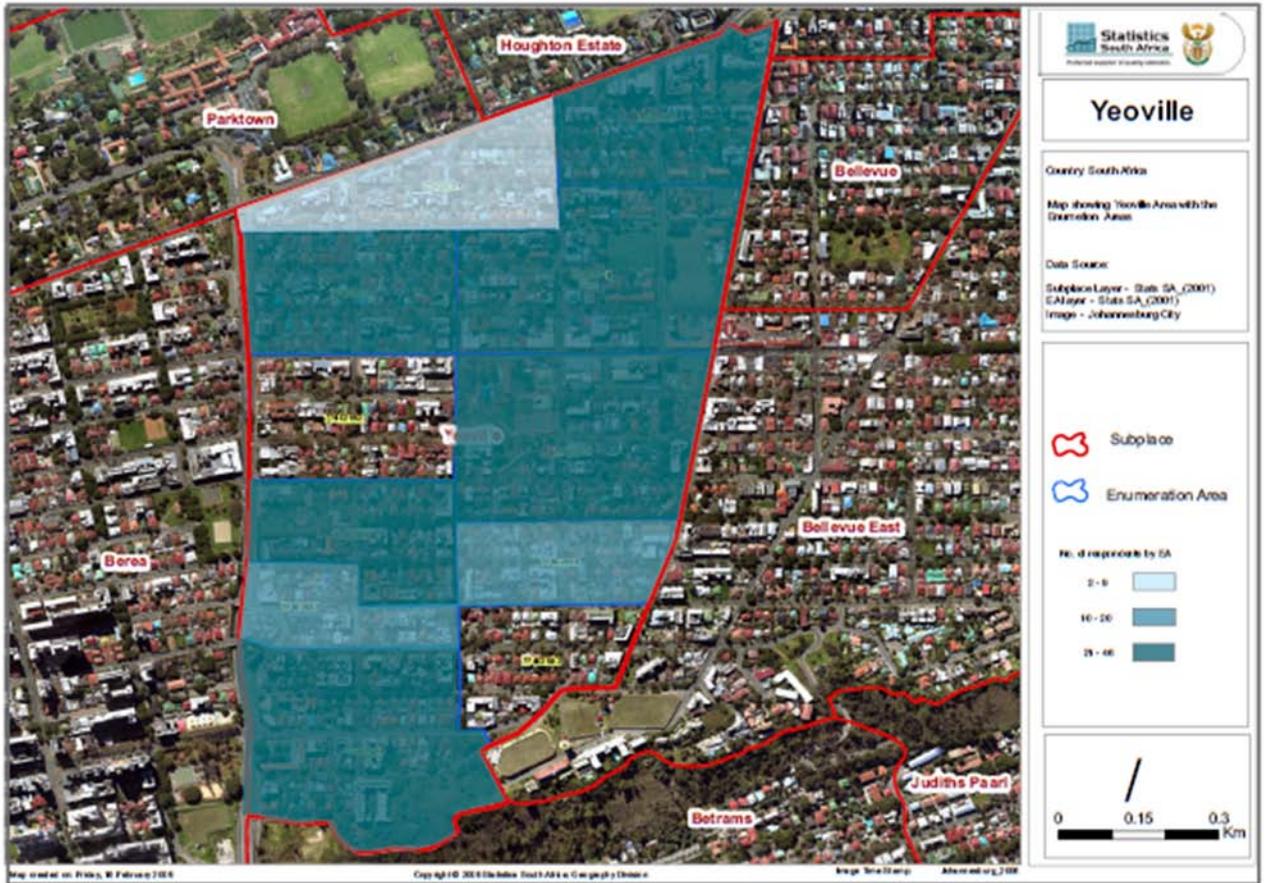
Source: Statistics South Africa.

Figure 4: Sampling Hillbrow



Source: Statistics South Africa.

Figure 5: Sampling: Yeoville



Source: Statistics South Africa.