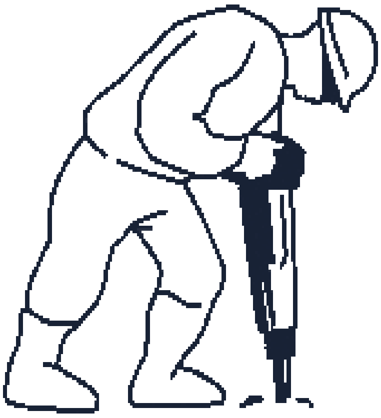
# Southern Africa Labour & Development Research Unit



# Economics and Transformation: Measurement, Models, Maths and Myths

*by*
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DataFirst

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About the Author(s) and Acknowledgments

Martin Wittenberg: School of Economics, SALDRU and DataFirst

Martin Wittenberg's 2012 inaugural lecture is being published as a SALDRU working paper due to its important examination of "big picture" trends in poverty and inequality, which remain consistent five years later. The lecture draws on comprehensive research undertaken by SALDRU and DataFirst

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# Economics and Transformation: Measurements, Models, Myths and Maths

Martin Wittenberg

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## Preface

SALDRU and DataFirst have been at the forefront of measuring poverty and inequality in South Africa. We don't however often enough try to sketch out the "big picture" as to why we do this and what we may have learned. Five years ago I tried to do this in my inaugural lecture. It turns out that everything said in that lecture is still relevant, if not more so. At the time of the lecture there were still some people who were under the impression that the warnings about the problems of unemployment and inequality were overblown. Eight days later the massacre at Marikana happened. I can't claim to have foreseen it; nor did I have an inkling that my warning that we were sitting on a powder keg would be confirmed so rapidly.

Although the material is still relevant, the text was designed for a public performance, one which connects to the old rituals and traditions of Universities. One way of reflecting on that was to structure the text like a classical symphony: after the tune-up (in the preamble), a fast movement, followed by a slow one, then a dance and a finale that goes back to themes raised in the intro. While traditions may shape what we do, I was trying to show that one can also innovate on them and given them new content. Furthermore drawing on the strengths in some of these traditions, in my case the memory of my father, is important in moving forward. At the time none of us knew that he was suffering from pancreatic cancer and that my inaugural would be his last major public engagement.

While a record of the "performance" has been available for some time (it can be viewed on YouTube[1]) the text was never released, partially because I had intended to polish and expand on it.

September 2017

[1] https://www.youtube.com/playlist?list=PL7_Si_1bBhRaHhysrzF-TOC31f9B6b8km It is worth watching if only for the animated version of Pen's Parade

## Economics and Transformation: Measurement, Models, Maths and Myths

Inaugural Lecture, 8 August 2012 by Martin Wittenberg

## Preamble: The sounds of silence

Deputy Vice-Chancellors, Mr Dean, Professor Wilson, colleagues, students, my family, friends and guests – I feel deeply honoured to stand here tonight. I am particularly honoured that you came tonight, the night before a public holiday and long weekend to listen to me talk about "Economics and Transformation". Indeed it may seem presumptuous that I, as a pale male, have chosen to talk about this on the eve of National Women's Day in a post-Apartheid South Africa. According to Samantha Vice (2010) the appropriate emotion for White South Africans should be **shame** and the fitting response, **silence**:

> "Making pronouncements about a situation in which one is so deeply implicated seems a moral mistake—it assumes one matters politically and morally beyond the ways in which everyone matters equally. One needs to learn that one does not. One would live as quietly and decently as possible, refraining from airing one's view on the political situation in the public realm, realizing that it is not one's place to offer diagnoses and analyses that blacks must be left to remake the country in their own way. Whites have too long had influence and a public voice; now they should in humility step back from expressing their thoughts or managing others." (2010, p.335)

I could try to deliver a silent lecture, perhaps in the spirit of John Cage's ***4'33''***[2]. That would certainly be innovative, deeply unsettling, memorable in all sorts of ways – but it would also not be much of a fun **performance** and as such would violate the implicit contract in terms of which many of you arrived here tonight: it is my **job** to speak.

Before I do so, however, I want to acknowledge that the ability of some people to speak can be based on the silencing of others. Many of those whom we remember in National Women's Day tomorrow ended up being banned, house arrested, jailed or even killed. One of the formative moments in my development as a young student activist was the shock I felt when I learned about the Women's March on the Union buildings – a huge event that had been completely written out of the history books that I was given at school. And of course Mandela, the ANC and the defiance campaign were equally missing from those narratives. We should note that Mandela's period of enforced silence began fifty years ago this week: he was arrested on 5 August 1962.

I do want to talk therefore, but do so in a spirit of some humility – acknowledging that my path to this lectern has been influenced by many South Africans who are not in such a position and that many of my insights derive from my engagement with others. In my talk I want to touch on three issues: the economic transformation (or sometimes lack of it) in South Africa; the economics of transformation – that is the economic processes underpinning the type of transformation that we are observing; and the transformation of economics both as a discipline and as academic department within the University. In order to get there, however, I want to take a slightly rambling

[2] Given that it is his centenary year, that tribute might be entirely appropriate.

road, touching on a number of other issues which may appear tangential at first; it is a meander through the disciplines not unlike the one that got me to this podium tonight.

## First movement: The centre cannot hold

The story begins twenty-five years ago in August 1987. South Africa is under a state of emergency. The police have done a national swoop and arrested thousands of anti-apartheid activists, including more or less the entire national leadership of the United Democratic Front (UDF) and placed them in indefinite detention without trial. They have sent the army into various townships around the country to "re-establish order". Reporting on any of these activities is effectively prohibited. Nevertheless Pietermaritzburg is sitting on a powder keg which is about to explode.

Personally, I am in hiding from the security police as one of the few UDF leaders that managed to avoid the drag net. I am also a student in the Political Science department of the University of Natal doing a Masters on local governance and local politics. One of the issues that fascinates me as a political scientist is how dysfunctional the state is. One of the hallmarks of a modern state is that it centralises authority and maintains control over its space – it has a monopoly on the use of violence. The South African state at this stage is doing the opposite – fragmenting authority. A schematic picture of the structure of governance is given in Figure 1. What is worse is that with the exception of the "independent state" option, **all** of these types of government operate in the relatively small geographical area of Pietermaritzburg (see Figure 2).

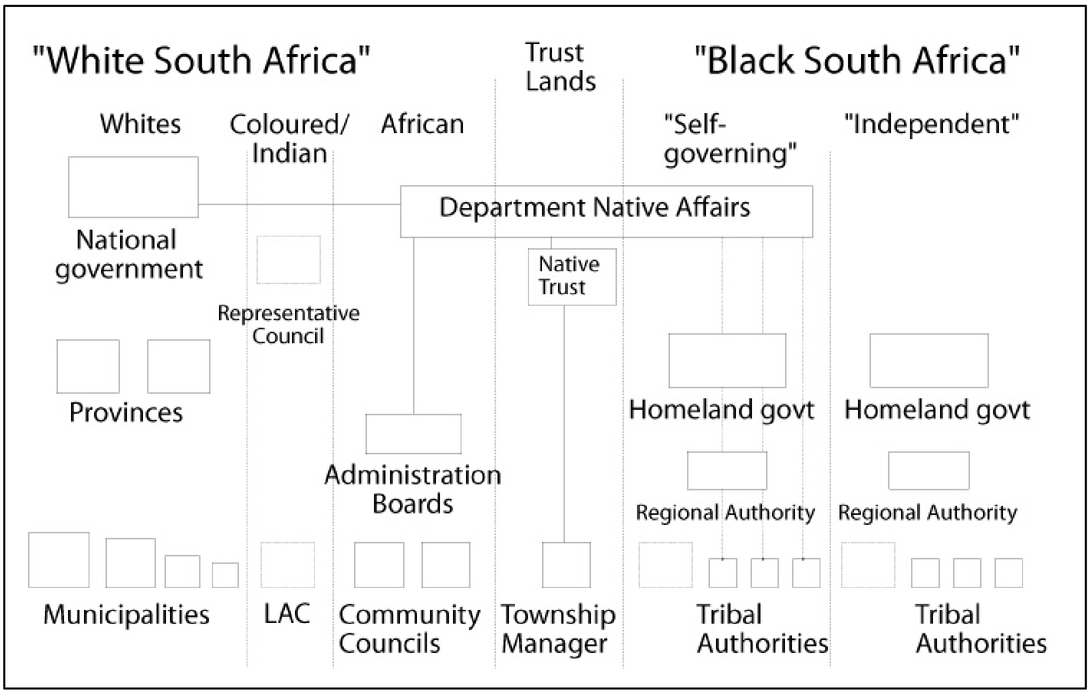


**Figure 1: The structure of governance in the 1980s**

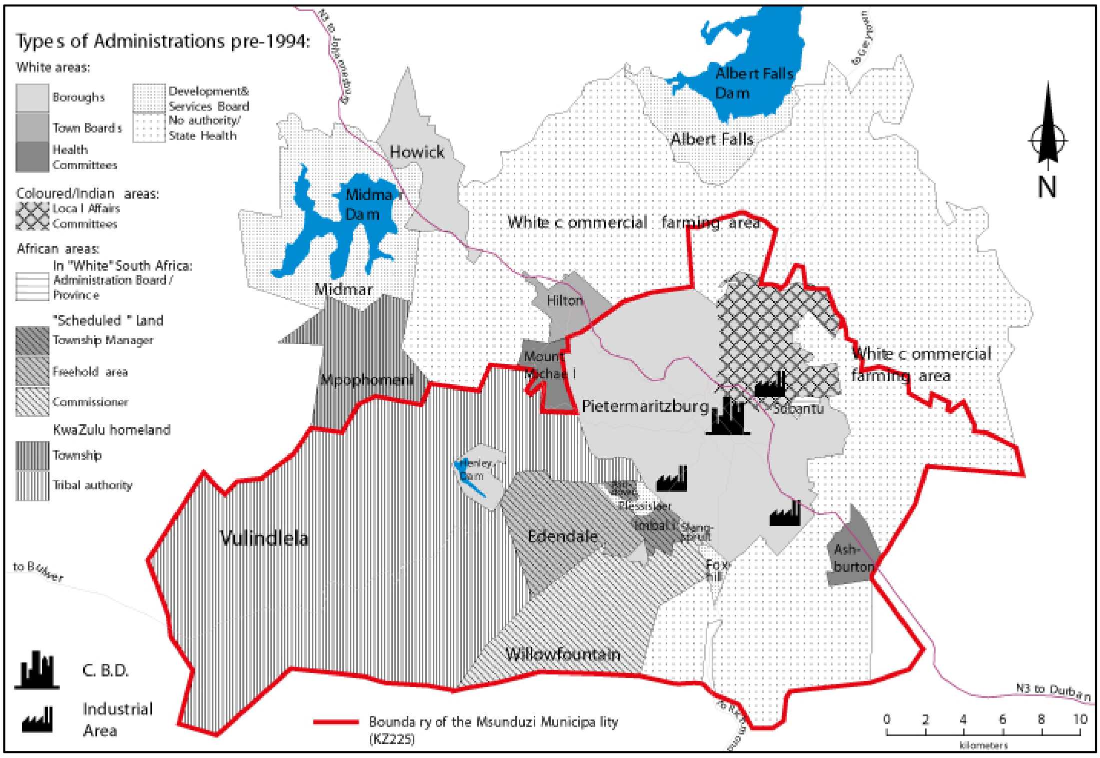


**Figure 2: Administrative areas in Pietermaritzburg.**
(Source: Wittenberg 2003)

One needs to understand that the different administrative structures have huge implications for access to services even within the African areas: people in the formal township of Sobantu are supposed to come first in the job queue; their schools are administered by the DET (Department of Education and Training) which is better resourced than the schools that fall under the DEC (Department of Education and Culture) of the KwaZulu Bantustan. A major difference is that in the KwaZulu area people live under the authority of headmen and chiefs. In order to get access to housing and land they end up paying a tax to their local "traditional leader". Edendale, by contrast, is still an old freehold area where people can rent land from a landlord and chiefs have no say whatsoever. The boundary between KwaZulu and Edendale separates two very different systems, but people are not simply free to live where they want to.

As a result the institutions that enforce the barriers have become very corrupt – in order to get a permit to live in one of the better resourced areas one ends up bribing the local officials. Another effect is that the institutions that are supposed to provide services to the African areas are basically bankrupt – the rates and taxes paid by businesses go to improving infrastructure and services in the "White" areas. Furthermore the shortage of land in the "Indian and Coloured" areas means that the price of land and housing there is much higher, despite the fact that the services are inferior. In the "African" areas those parts where there are still landowners are under the threat of being expropriated and removed into KwaZulu. The lack of services and poverty in all these areas is a major ingredient that has led to the emergence of open anti-Apartheid activities and the series of protests and revolts which prompted the government to declare the state of emergency in June 1986.

The Apartheid state understands that simply arresting political leaders is not going to solve the long-run problem. It needs to fill the gap by creating loyal local clients – people within the Black areas that will have an incentive to maintain the existing structures. It recruits local thugs in the Edendale area and starts arming them. These thugs start to target young activists on the basis that they show no respect for tradition and their elders. One way of identifying potential trouble makers is to go door to door and force people to join Inkatha. Individuals and families that refuse are attacked and driven out. The trickle of refugees into adjoining areas leads to the creation of "defence committees" and by August 1987 the Edendale valley has been transformed into a series of armed encampments – some Inkatha strongholds but many more UDF areas and a civil war between these areas breaks out. Within a short space of time the body count rises. Despite arming Inkatha and arresting hundreds of young UDF militants the police's strategy doesn't work – the Inkatha warlords in the Edendale area lose ground very rapidly.

And then something unexpected happens: the youth in the adjoining KwaZulu homeland areas (who have not been organised by the UDF thus far) start rebelling against their traditional leaders and headmen. They ask why they should be subject to "traditional rule" when people down in the Edendale valley manage to get by without it. By the end of 1987 the traditional local authority system is in collapse across the entire region. The South African government responds by sending in the army. By February 1988 over 1000 UDF aligned youth are sitting in New Prison. This restores a temporary calm but does not quell the revolt. The peak of the conflict is reached in March 1990 when an Inkatha headman David Ntombela marches an impi of several thousand people from the Taylor's Halt area to the outskirts of Edendale. In the process he burns down entire settlements in the Gezubuso and Vulisaka areas creating over 10 000 refugees which flood down into the Edendale valley. The impi then launches a two-pronged attack down into the Edendale valley (see Figure 3) in full view of the army and police which just stands by and watches. The invasion fails, but during that "seven day war" around 180 people are killed (Kentridge 1990, pp.242-3). As Kentridge remarks (1990, p.15), in the period of a few months more people die in Pietermaritzburg than were killed during twenty years of the Northern Ireland conflict. Peace in the entire region is restored only when Jacob Zuma, the ANC leader and traditionalist, brokers a truce with Inkatha and the Zulu royal house.

There are three points which I want to pull out of this narrative. The first is that it is simply a myth that at the dawn of democracy we had a functioning modern state. We had a state that was busy dismembering itself – even voluntarily relinquishing control over the use of violence to armed local groups. The first task of the new democratic state was not to transform an existing, functioning state – it was to rebuild a unified state from all the different fragments. Some of those – particularly the ones operating in the "White" South Africa functioned reasonably well. Others were thoroughly corrupt. As a whole the system was simply bizarre. The second point is that institutions and boundaries matter. Where you are and how you are ruled makes a difference to your life and affects how you behave. Finally, from the perspective of August 1987, the place we have reached in 2012 looks almost miraculous. We, of course, are unhappy with where we are because we think we could have done better. But given where we came from, we wouldn't seriously want to go back to the society of 25 years ago.

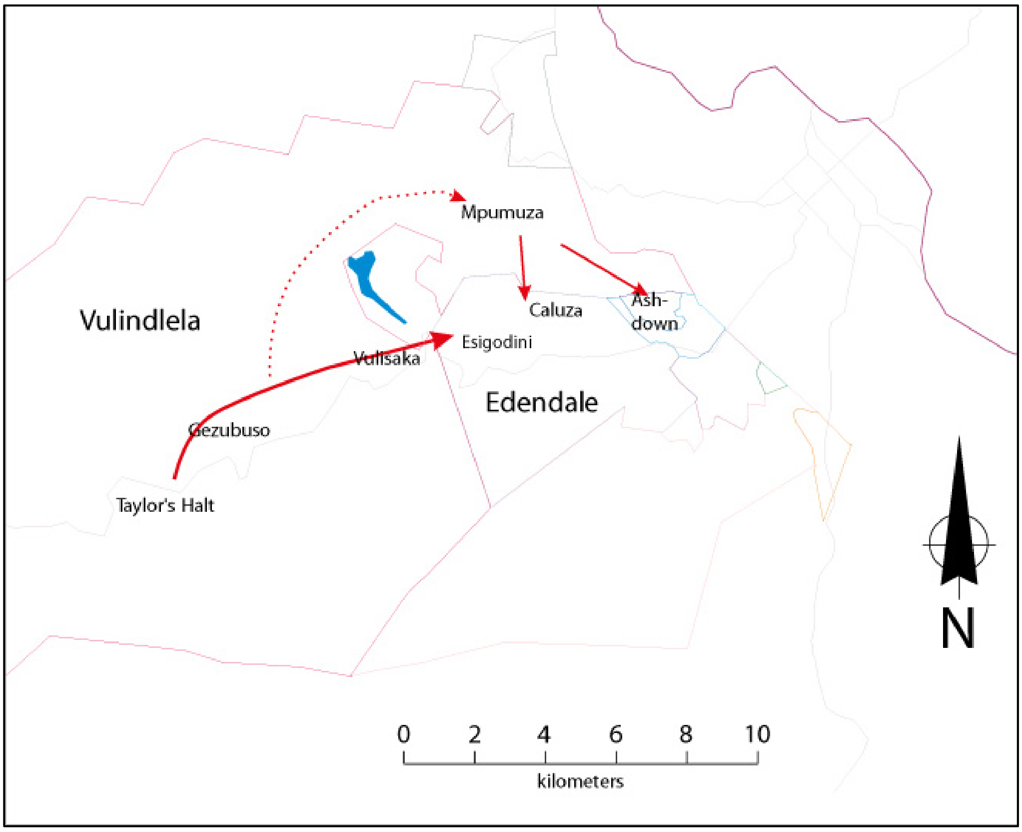


**Figure 3: Pietermaritzburg's seven day war, March 1990**

## Second movement: The slow march of progress

I want to pause a minute to consider what South Africa looks like at the dawn of democracy. I will do so by means of the Project for Statistics on Living Standards and Development (PSLSD) a household survey collected under the direction of Francis Wilson of SALDRU here at the University of Cape Town. We all have heard that South Africa was (and is) one of the most unequal societies in the world. We have little sense, however, quite what that means. In order to illustrate this I will use a device introduced by a Dutch economist, Jan Pen, in 1971 (Pen 1971, pp.48ff ). We organise a parade of all South Africans, but we line them up from poorest to richest. Furthermore we do a bit of stretching and shrinking so that each individual has a height proportional to their income, so that the person with average income has a typical height – say my height, which is 179 cm according to one recent measurement. Because we don't have forever, we get them to do this march past in double-quick time, so that the entire parade is over in an hour.

What does this parade look like in 1993[3]? After a minute, we have already seen 650 000 people streaming by, but we might not have noticed anything: that is because these people are all really tiny, hardly visible at all – after the first minute the height of the dwarf scooting by is only 1.4 cm. After 2 minutes and a total of 1.3 million people later, the height is still only 4cm; after a full 10 minutes we see dwarves of 20 cm. After 30 minutes and half way through our parade we still don't look the marchers in the face; they don't even reach up to my belt, as they are 60 cm in height. At

[3] See Figure 4, where we have plotted incomes and not height on the y-axis. Own calculations using Stata module "alorenz" (Azevedo 2012).

the three quarters of an hour mark we have individuals who are of recognisably adult stature, although they still don't measure up to me yet. Their height is 156cm. Two minutes later, however, an individual of my height has shot past and we are suddenly among giants. At the fifty minute mark we have a 2.6m individual and five minutes later it is a 5m giant. One minute before the end of the parade we have 650 000 people still to come, but they are now around the height of a four story building at 11m. In the last few seconds we have individuals taller than Table Mountain and some perhaps even poking out of the atmosphere. I can't tell because the super-super-rich are not properly represented in our surveys.

What does this picture look like in 2008? For that I will use the information contained in the first wave of the National Income Dynamics Survey (NIDS), another survey conducted by SALDRU, under direction of Murray Leibbrandt and Ingrid Woolard. The first thing we notice when we compare the two parades is that everyone is slightly taller in the 2008 period. The average (in real terms) has gone up around 30%, so the benchmark height is now 2.33m. The second point is that the beginning of the parade, while still tiny, is not quite so minuscule. The government's grant programmes are making a difference. Nevertheless after 10 minutes of this parade, the height is only 29 cm and at the half-way mark we are only up to 74 cm, which is still not up to my waist. My height is eventually reached in the 44th minute, but the 2008 average is hit 30 seconds later than in 1993, just after 47 minutes. The giants at the end are even more gigantic – at the 58 minute mark we are already up to 12m.

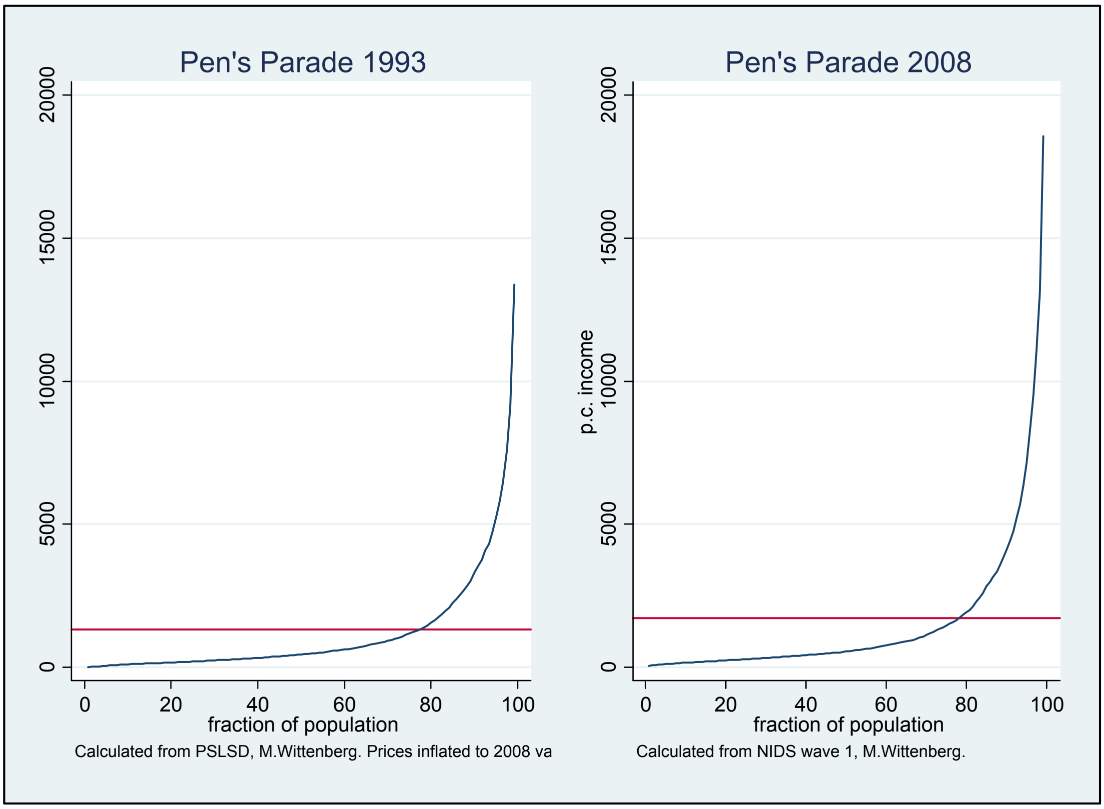


**Figure 4: Per capita income plotted against fraction of population**

Qualitatively the picture of inequality is very similar between the two surveys. Indeed the Gini coefficient, which is the most common measure of inequality, shows an **increase** in inequality between 1993 and 2008 (Leibbrandt and Finn, 2012). One difference between the two parades is that there are more Black faces among the giants in 2008, but that doesn't seem a major cause for complacency.

Where do we fit in? Although I made myself the "typical" individual this is, in fact, far from the truth. University Professors, even if they have to share their income with three kids, rank in the top three and a half percent. I would only have marched past in the last two minutes. The mistaken impression that we are "typical" rather than extraordinarily privileged is quite widespread: Posel and Casale (2011) note that

> "only 6% of all individuals ranked in the richest third of South Africans, in terms of actual per capita household income, perceive that they are among the richest third. The majority (almost 63%) perceive that they are ranked in the middle of the distribution and 32% think that they are among the poorest third of South Africans. "(2011, p.205)

Figure 5, using the same data, i.e. NIDS wave 1 looks at where people place themselves on average on a six-step income ladder when compared to where they actually sit. Two things are striking about this picture: firstly there are many people right at the bottom of the income distribution who think of themselves as poor – but not the poorest; secondly, the majority of people in the top half of the income distribution have no clue how privileged they are.

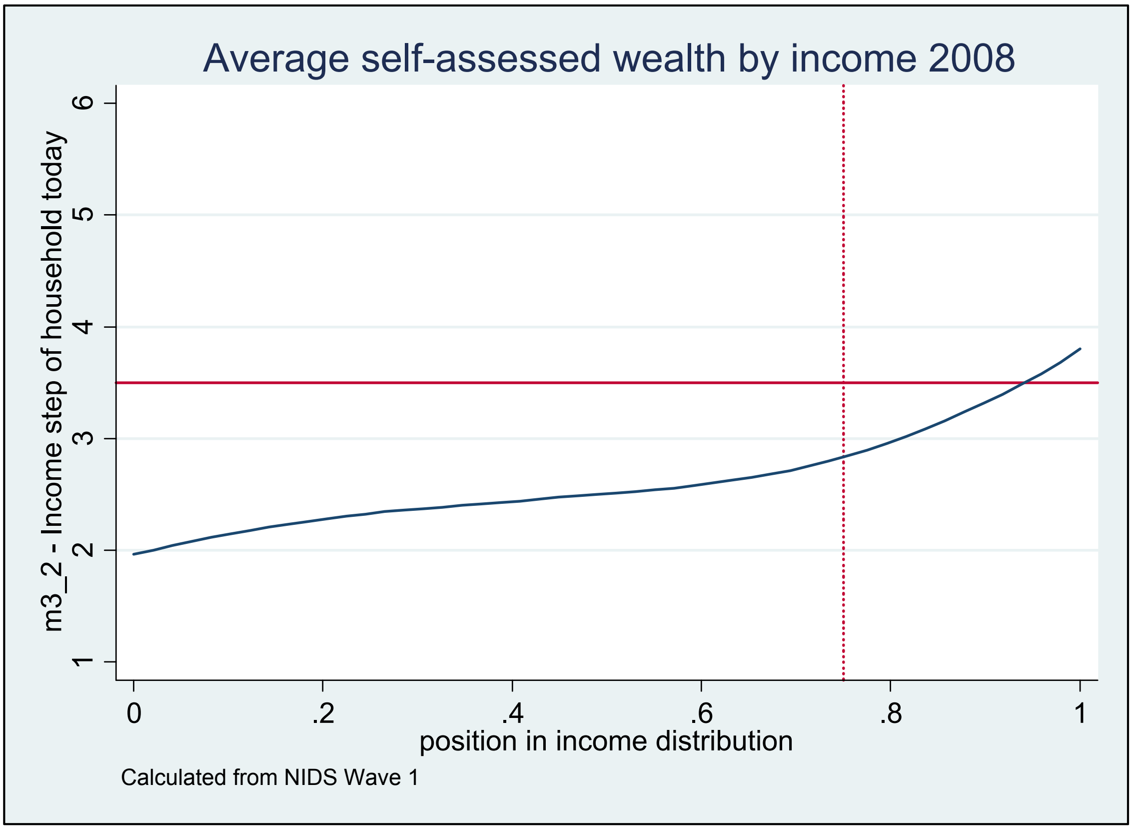


**Figure 5: Relationship between self-assessed and actual income**

How do we explain this blindness? Daniel Kahneman (2011) argues that many of our judgements about how common certain characteristics are in the population derive from their "availability" to us on reflection. If we can immediately call to mind many people who drive fancier cars than us, who seem to be able to travel abroad every holiday, but we can't as quickly recall many people who are obviously poorer than us, then we come to the conclusion that we are somewhere below the middle of the income distribution. Our judgements about our place in society often reveal more about where we sit and who we interact with than they do about that place itself.

And of course poverty in South Africa has been made less visible by the fact that it has been geographically concentrated in out-of-the-way areas. Even when we see evidence of poverty in front of us – the beggars at the street corners – we have stories that make their poverty less visible: they are illegals – they shouldn't even be here in the first place; their apparent poverty is a prop to extract more money – they actually make a fairly decent living out of begging; and so on.

One of the main reasons why we do social surveys is that they permit us a view of what is happening in society which is not so biased by our own interactions and experiences. Since that 1993 Project for Statistics on Living Standards and Development there has been a flood of information. Statistics South Africa ran an annual "October Household Survey" between 1993 and 1999. It was replaced by the biannual Labour Force Survey after 2000 and the annual General Household Survey (since 2002). There have been several Income and Expenditure Surveys, two Time Use Surveys and some Victims of Crime Surveys. Academics have collected data too – such as the Cape Area Panel Study, here at UCT collected by the Centre for Social Science Research, SALDRU and the University of Michigan, the Afrobarometer study on political attitudes and the National Income Dynamics Study which I have already mentioned.

This deluge of information is, however, useful only if it is available and properly analysed. In the 1990s Matthew Welch and Lynn Woolfrey began archiving and disseminating survey data. Eleven years ago Francis Wilson and Nicoli Nattrass set up DataFirst within the Centre for Social Science Research (CSSR) specifically as a resource for making the data more accessible. The team under Lynn Woolfrey has thus far put 119 different surveys into the public domain through our web catalogue. We have also run numerous training programmes to help researchers to analyse these datasets. And the number of academic studies that have used this information has increased exponentially since the 1990s.

And what do these studies show? The overall picture is remarkably consistent. It shows a society characterised by persistent poverty (although ameliorated significantly by the social grants), high levels of unemployment and continuing inequality. Nevertheless "consistent picture" does not mean one devoid of anomalies. In Figure 6 we show the estimates of the number of searching unemployed in South Africa as estimated from the big national surveys conducted by Statistics South Africa. It is clear that the level is high – many millions of South Africans. However the figure also suggests that unemployment has become worse, not better over the post-Apartheid period. Most markedly it suggests that there was an uptick in unemployment around 2000 – the period when the new Labour Force Survey was introduced.

Anomalies like these have called the entire project of measuring economic conditions by means of surveys into question. There are at least three "denialist" arguments about unemployment in South Africa. The first, enunciated even by some Cabinet Ministers, is that respondents are simply lying to the enumerators of the surveys. People are actually busy doing things, but don't think of it as "proper work", so report themselves as unemployed. The second, advanced by some economists, is that the surveys do not measure true unemployment, because the reason why people are not working is that they are too picky – they are refusing to take up the jobs which are available to them. The third, and most conspiratorial, theme is that Statistics South Africa, and academics like me that make a living out of analysing their datasets, have a political interest in exaggerating the prevalence of unemployment and poverty. In effect we are manufacturing these large numbers. A key argument for such a conspiracy is that the numbers can't be true: if they were, we would be facing a revolution. My view is that we are already seeing signs of that incipient revolt. The "service delivery protests", the mobilisation of the youth league, are all signs which are uncomfortably reminiscent of Pietermaritzburg twenty-five years ago.

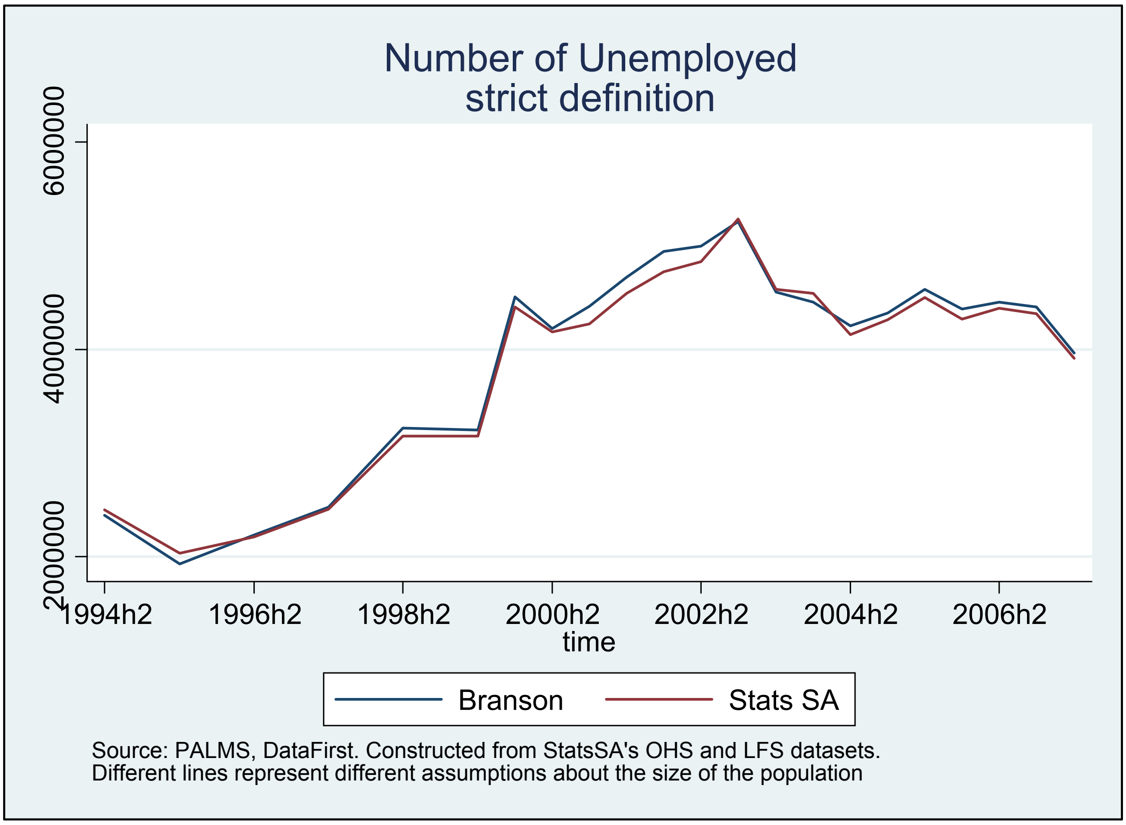


**Figure 6: The unemployment crisis in post-Apartheid SA**

I don't think that we can afford to stick our heads in the sand. We need to take on the denialists[4]. The first strand in the response is to confront the measurement issues head on. You can't simply smash surveys done in different ways together and hope to construct a coherent series from them. Surveys done in the earlier period were done differently, with slightly different definitions. Trying to make sense of this requires a real research programme, one that we are currently busy with within DataFirst.

Secondly we need to triangulate our findings against other information. There is a lot of corroborating evidence that unemployment is a real social phenomenon. Studies of household level

[4] We need to "hit back" as some scientists are doing in their fight with the AIDS denialists (Nattrass 2012).

poverty consistently find that there is a strong relationship between lack of employment (as measured on the surveys) and poverty (Leibbrandt, Bhorat and Woolard 2001). Consistent with this view I have found that the unemployed are measurably lighter than the employed, suggesting that they are behind in the food queues (Wittenberg 2011). Information from the Time Use Survey suggests that the unemployed spend much of their day sleeping or "doing nothing". Finally, people who record themselves as unemployed also record themselves as unhappier (Kingdon and Knight 2006). In short, it is simply a myth that South Africa does not have an unemployment crisis.

If we accept that eighteen years after the advent of democracy South Africa is still characterised by high levels of inequality, high levels of poverty and high unemployment we are entitled to ask what may be the underlying mechanisms that produce these outcomes.

## Third movement: Reeling, Writhing, Ambition and Distraction

Why are some people so rich and others so poor? Economists recognise perhaps three types of explanations:

**a) The earnings gap reflects differences in productivity**
People with a rare skill find themselves in high demand and so will earn more. This type of earnings difference is generally thought to be unproblematic as it is a simple reflection of market forces. Trying to eliminate these differences will reduce the incentive for people to acquire them and will persuade people who have them to direct their energy elsewhere. Empirically there is a strong relationship between earnings and qualifications in South Africa. In particular, qualifications beyond a matric are associated with huge earnings premia. Nevertheless the "wage regressions" which we estimate typically explain only about half of the overall variation in earnings, so there is clearly more at play.

**b) Some people get rich off a surplus produced by others**
The polite economic term for this is "extraction of monopoly rents". Basically people who have a monopoly (or near monopoly) on certain products that other people want to consume (such as beer) can charge a premium. South Africa's market structure is highly concentrated and on some calculations (Fedderke and Szalontai 2006) there are a lot of rents being extracted. These rents are, of course, contestable and unions, management and shareholders all want their slice. This underpins the "union premium" found in South African labour market studies.

**c) Some people gamble and get lucky**
Besides the Lotto millionaires, economists also recognise playing the stock market and other types of financial speculation in this category. On the whole economists assume that this type of activity "greases the market" which allows people with non-speculative motives to transact more efficiently. This of course is based on the idea that the professional traders are not manipulating the market to their end, something which has recently been called into question. It is also assumes that speculative bubbles can't destabilise the entire market.

The recent financial crises have highlighted the fact that some of the models that economists have used to think about these gambles are likely to be wrong. A key issue is how to think about the distribution of chance events. The standard work horse for economic and statistical models is the normal distribution. This is the “bell curve” that has entered popular discourse. The normal distribution is a very good approximation for any outcome which is shaped by myriads of small influences. A very good example of this is height (i.e. physical height, not income!) which is the outcome of many thousands of small nutrition shocks, childhood diseases, hormonal triggers and so on. When one looks at the distribution of heights in the South African population, the normal distribution does a fantastic job of summarising the data.

However, as Mandelbrot and his student Fama pointed out many years ago, financial earnings are not like this – overall returns are much more likely to be influenced by one or two really big events than the myriad small little movements (Mandelbrot 1960, Fama 1963, Mandelbrot and Hudson 2004). Mandelbrot produced statistical arguments why a Pareto-like distribution was much more likely to be appropriate for the distribution of financial earnings and of changes in these earnings.

The key characteristic of the Pareto distribution is that extreme outcomes (such as the 2008 financial meltdown) have a much higher probability of occurring than they would do in terms of the normal distribution. In the case of earnings, an income distribution that is Pareto would also show extreme values more frequently than would be the case with the normal.

Empirically the Pareto distribution seems to fit the top tail of the South African wage distribution reasonably well. The easiest way of understanding this is to imagine the Pen’s Parade as shown earlier, but instead of plotting the income against the fraction that have **preceded** it (i.e. that are poorer), we look at the fraction that is still to come; we then flip the axes and take logarithms of both. If the distribution is Pareto it should be approximately a straight line.

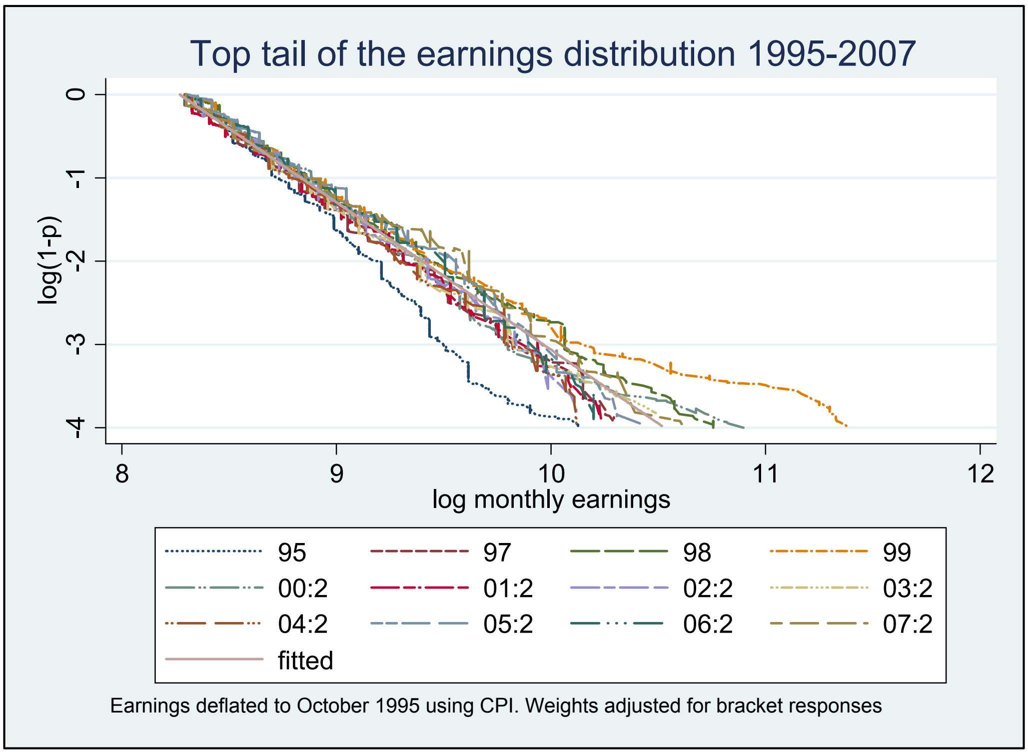


**Figure 7: Fitting a Pareto distribution to SA wage data**

I have done this for many surveys in Figure 7. With one or two exceptions the lines look remarkably straight. Even more remarkable is that the underlying distribution looks fairly stable. This exercise shows that even in the **wage** distribution, which should not be subject to "luck" like financial incomes, the Pareto distribution seems to hold.

There is an argument due to Lydall (1959) that the wage distribution would be Pareto, if supervisory labour is paid proportional to the span of its control, i.e. the total value of the labour under the supervisor's control. In labour markets with hierarchies it is the **promotions** which are the big "shocks" that influence earnings. To the extent to which promotions depend on actual skills, some of that supervisory premium might be thought of as recompense for skill. Consider, however, the case where two equally skilled individuals compete for a promotion (not that unusual I would imagine) and only one gets the increase, then the actual wage distribution will reflect luck as much as skill. I wager that most of us do not think that luck had any hand in getting us the wage that we currently do.

In short the existing income distribution in South Africa reflects differences in skill, premiums offered to individuals working in places where they can extract rent, supervisory premiums and some luck. It is a myth that where one sits in this distribution is purely a function of one's skill or the pure "operation of market forces". To compound matters these factors are also likely to interact in some rather unfortunate ways.

Two of my colleagues, Miquel Pellicer and Vimal Ranchhod (2012), have drawn attention to "inequality traps" that can exist in societies. A simple example will suffice. Assume that we have a society which is split into two groups – a big unskilled group and a small highly skilled one. Because the skilled group is small and therefore in demand, it will earn very high salaries. The problem is that to pass this skill on to the next generation becomes very expensive, because you need skilled teachers. And of course these are also in short supply, because of the overall lack of skills. As a result only the rich, high skilled people can afford to buy education for their children. This reproduces the inequality in the next generation. This sort of vicious circle is likely to be exacerbated if the skilled people are required to supervise the rest and even more so, if they are smart enough to spot the opportunities to extract rents.

There is one additional element that is important in explaining the persisting pattern of inequality. In a recent influential book Daron Acemoglu and James Robinson (2012) investigate what makes certain nations rich and others poor. Their argument is that inclusive institutions – institutions that give the majority of the population a stake in their country and give them secure property rights – make for successful societies; while extractive institutions – institutions based on extracting rents – lead to failure. They also, however, make the point that extractive institutions are hard to replace, because new rulers are sorely tempted to simply use the machinery to their ends.

And there lies part of the problem – it is much easier to squeeze the existing corporations for lucrative deals, or to diddle them out of their mining rights (as seems to have occurred in the Kumba/Imperial Crown Trading case) than it is to break open opportunities for the broader population. On top of that the lifestyle of the elite sets the benchmark for what people aspire to. In fact it is worse than this: as we saw earlier, even the elite thinks that they could be doing better. We seem to be a society of rampant greed. As Joel Netshitenzhe recently noted (2012) this leads to a very short-term focus by some individuals that make it into political and state structures. The political process provides big windfall gains, but it can just as quickly wipe them out. Better make hay while the sun shines. And of course this process just perpetuates rampant inequality.

What are the options in this context? Given the huge disparities shown by the Pen's Parade it is tempting to go for the Procrustean option – chop all those giants down to size and redistribute to the dwarfs. This radical approach is unlikely to work, as Zimbabweans found out to their cost during Mugabe's land reform process. While some smallholders gained, the big beneficiaries were linked to the new elite. And the outcome, as my student Obert Pimhidzai showed (2011), was a food crisis which led to a marked increase in child stunting in the rural areas. The problem is that the privileged White elite possesses not only significant capital resources, but also much of the skill to use it.

The polar opposite of the economic nationalism of the Youth League is a free market fundamentalism among certain sections of the White community. The argument is that all that we need to do is to secure property rights (a la Acemoglu and Robinson) and the market will do the rest. There are two problematic elements with this argument. Firstly, we cannot simply assume the past away. The history of dispossession in terms of the Group Areas Act and other Apartheid legislation is real. We can't endorse that dispossession by now sanctifying those property rights. Compensation and restitution are essential. One of the aims of the Apartheid state was to smash up the Black middle class. One of the reasons why our income distribution looks so unequal is that it is missing that middle. The second reason why I don't believe that the market will cure South Africa's ills by itself is that there are many impediments to competitive behaviour. Firms and workers with existing market power will definitely use it.

What should we in the Universities do? Many of our graduates will enter positions of influence and privilege. I don't think that it is inevitable that they will narrowly feather their own nests. Ideas matter. We need to communicate the insight that long-run success can only be based on inclusive institutions. We need graduates that are willing to take the longer view, that have a moral compass beyond short-term expediency. Furthermore we have essential skills that are in short supply. We can sit on that monopoly or we can find ways of spreading those skills. Teaching is an undervalued profession. But inequality will be broken only if the next generation is better taught.

We also need to spend some energy on developing appropriate models for our context. Economists have been thoroughly implicated in the huge financial crash that has dumped many millions into poverty. We have to look at what we did wrong and do better.

Finally we have a duty to hold up a mirror to our society. We have the time and the skills to extract information from the data at our disposal. One of the gifts of the new South Africa is that we have this information. Pictures like Figure 6 begin with the advent of democracy precisely because the Apartheid state was profoundly suspicious of information. We are fairly sure that unemployment became a problem already in the 1970s (Wilson and Ramphele 1989), but we do not have the equivalent surveys. Murray Leibbrandt, in a study of development in the "homelands" notes that the available state information is actually unusable because it is so erratic and poorly collected (Leibbrandt 2011, p.106). Statistics South Africa may be guilty of many things (not least getting the inflation rate spectacularly wrong), but the quality of its public release surveys has increased immeasurably over the years. We owe it to this society to make use of this resource.

## Fourth movement: Back to the beginning…

I started this lecture off twenty-five years ago in August 1987 at the height of the State of Emergency, one of the darkest moments in South Africa's history and with Pietermaritzburg starting to explode. I want to return to that moment of time to pay tribute to my dad. Indeed I would not be in academia if he had not sparked my intellectual curiosity from an early age. On the 19th August 1987 he gave his inaugural lecture at the University of Natal in the gown that I'm wearing today. My father is an Old Testament scholar and the topic that he chose was "King Solomon and the theologians" (Wittenberg 2007). In his lecture he described how the process of building the kingdom of Solomon led to intense struggle within that society. The tribes of Israel had historically been fairly egalitarian. But in order to undertake the grand projects of building the temple, the king's palace and various fortifications, forced labour was required. The grandeur of the empire was built on increasingly sharp inequalities within it. There were two responses which are both visible in the biblical texts. On the one hand there were the royal praise singers, who extolled the wisdom and magnificence of the king. On the other, however, there was also a strand of resistance – accounts which spoke of the importance of the exodus from slavery and that God's covenant had been with the people. Indeed there is evidence that the story of the exodus was written in its final form during this period as an implicit criticism of the extractive institutions of that kingdom.

I think that as a piece of scholarship but also as a statement of the choices facing academics (the secular theologians of the modern era) at a dark moment in history that inaugural lecture is hard to surpass. South Africa is no longer in the Land of Bondage, but nor have we reached the Promised Land. The choices for academics are less pressured and stark. Nonetheless we too are being pushed to be praise singers of the new order or to shut up. I believe we have a right and a duty to speak critically – not as apologists for the old order or as flag bearers for a free market utopia – but as advocates for a more humane and equal society.

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## Data Sets

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# southern africa labour and development research unit

The Southern Africa Labour and Development Research Unit (SALDRU) conducts research directed at improving the well-being of South Africa's poor. It was established in 1975. Over the next two decades the unit's research played a central role in documenting the human costs of apartheid. Key projects from this period included the Farm Labour Conference (1976), the Economics of Health Care Conference (1978), and the Second Carnegie Enquiry into Poverty and Development in South Africa (1983-86). At the urging of the African National Congress, from 1992-1994 SALDRU and the World Bank coordinated the Project for Statistics on Living Standards and Development (PSLSD). This project provide baseline data for the implementation of post-apartheid socio-economic policies through South Africa's first non-racial national sample survey.

In the post-apartheid period, SALDRU has continued to gather data and conduct research directed at informing and assessing anti-poverty policy. In line with its historical contribution, SALDRU's researchers continue to conduct research detailing changing patterns of well-being in South Africa and assessing the impact of government policy on the poor. Current research work falls into the following research themes: post-apartheid poverty; employment and migration dynamics; family support structures in an era of rapid social change; public works and public infrastructure programmes, financial strategies of the poor; common property resources and the poor. Key survey projects include the Langeberg Integrated Family Survey (1999), the Khayelitsha/Mitchell's Plain Survey (2000), the ongoing Cape Area Panel Study (2001-) and the Financial Diaries Project.

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