Food expenditure patterns in South Africa: Evidence from the NIDS

by

Vukile Mhlongo and Reza C. Daniels
About the Author(s) and Acknowledgments

Vukile Mhlongo - Southern Africa Labour & Development Research Unit, UCT
Reza C. Daniels - School of Economics and Southern Africa Labour & Development Research Unit, University of Cape Town.

Recommended citation


ISBN: 978-1-920517-64-9

© Southern Africa Labour and Development Research Unit, UCT, 2013

Working Papers can be downloaded in Adobe Acrobat format from www.saldru.uct.ac.za. Printed copies of Working Papers are available for R15.00 each plus vat and postage charges.

Orders may be directed to:
The Administrative Officer, SALDRU, University of Cape Town, Private Bag, Rondebosch, 7701, Tel: (021) 650 5696, Fax: (021) 650 5697, Email: brenda.adams@uct.ac.za
Food expenditure patterns in South Africa: Evidence from the NIDS

Vukile Mhlongo¹ & Reza C. Daniels²

Abstract

This study evaluates food expenditure patterns in South Africa using the Engel framework which states that proportions spent on food fall with income. Non-parametric methods are used to estimate Engel curves, and regression analysis to evaluate the effects of several variables on shares of total expenditure on food using the Working-Leser model. Pooled OLS is used to compare the exposure and sensitivity to changing expenditure capacity between waves. We find that households were spending proportionally less on food in 2008 compared to 2010 and 2012 and that food is the most important item of expenditure in most households by looking at budget shares. The sensitivity of the share of total expenditure dedicated to food varies with expenditure capacity. The effect of food price inflation on all households in South Africa is conjectured to contribute markedly to this trend, though we cannot confirm that hypothesis with NIDS data alone. The implications for food security is fertile ground for further research on this issue.

¹ Southern Africa Labour & Development Research Unit (SALDRU), University of Cape Town (UCT)
² School of Economics & SALDRU, UCT
Introduction

Households have varying degrees of spending capacity which influences their spending patterns. Patterns of expenditure have been found to depend on household income or resources, therefore some elements of patterns can be accounted for as purely economic decisions. These decisions are made under constraints and the importance of an item in welfare determination influences these decisions (Sulgham, 2006).

If the most basic physiological need can be satisfied, then other secondary factors can be tackled in trying to achieve increased welfare. Because food expenditure is an integral part of every household, it has the highest scope and implications for wellbeing out of all expenditure categories. It is evaluated because of its importance in welfare, and poverty alleviation which is probably the most central objective for most countries (Anker, 2011).

Previous studies that have evaluated household expenditure also concluded that food is important in household expenditure because of the amount of income dedicated to food expenditure. For most households spending on food is the largest expense followed by housing (rent, mortgage payments, opportunity cost or implied rent), but for richer households in South Africa, it comes second after housing expenditure. Households with less income tend to spend higher percentages of income on food and this leaves less for education, housing and transportation.

This paper examines food expenditure patterns in South Africa following Engel’s law. Firstly the importance of food relative to other expenditure categories will be investigated by looking at how much income shares households dedicate to food expenditure by looking at total budget shares by total expenditure per capita deciles. Secondly, a National Engel curve will be estimated to investigate how households vary the proportion of income they spend on food for each wave. Further on, in an attempt to obtain more comparable results, a pooled
OLS regression will be estimated to investigate the sensitivity and exposure of food shares to changes in total expenditure.

**Literature review**

A great deal of work has been done in evaluating the relationship between income and expenditure patterns. Most of these studies follow from the pioneering work by a German statistician, Ernst Engel (1821-1896). Engel studied the expenditure patterns of Belgian households in Germany in the year 1857. He found a highly consistent relationship between the share of consumption expenditure on food and income across households (Kaus, 2007).

The relationship he found is that while food expenditure is an increasing function of income, the share of income spent on food decreases with income (Kaus, 2007). This relationship between food expenditure and income (or total expenditure) is known as Engel’s law. Subsequent studies have confirmed Engel’s law to hold in most countries at the household level and across countries (Anker, 2011).

The Engel curve describes the expansion path of commodity demands as the household’s budget increases with fixed prices (Varian, 1992). To estimate the simplest Engel curve (Working-Lesser model) the natural log of expenditure is plotted against the budget share spent on a commodity. A negative linear relationship is usually observed in accordance with Engel’s law when this parametric relation is estimated for food (Chern et al, 2003).

An explanation for the negative relationship is that in consumer theory food is known to be a necessity; its demand increases with income, although less than one-to-one which means its elasticity of income is between zero and one. Income rises faster than food expenditure (Kaus, 2007). Food is a physiological need, therefore people need just about the same amount, and this causes the proportional amount of income the poor spend on food to be higher because they have less money to start with, all else unchanged. However in absolute terms, well-off people tend to spend more because of the quality and type of food they consume (Kumar, 2008).
An opposite relationship to Engel’s law is however observed for some food insecure countries and for people living below or near subsistence levels as evident from a study on Ethiopian urban households by Kedir (2007). For these people the share spent of food increases until a threshold value and then they start to follow Engel’s law, this contradiction is regarded as an exception (Kedir, 2007). In this case Engel curves were used for welfare analysis to influence policy to target food accessibility to the food insecure (Kedir, 2007).

In other cases the effects of taxes on welfare are investigated using Engel curves as in Banks (1997). Engel’s law is used by some countries in welfare analysis to measure wellbeing and set poverty lines. The cost of a nutritionally adequate diet is divided by the Engel coefficient to determine national poverty lines (Pope, 2012). Some countries like China use Engel coefficients as proxies for welfare to study changes in welfare over time. A falling Engel coefficient is interpreted as an improvement in living standards because the share spent on food becomes low and less sensitive to changes in income (Pope, 2012).

The Engel relationship is not linear and some papers have recognised this and opted not to impose any relationship between the log of total expenditure and the share spent on food through nonparametric estimation (Blundell, 1997). Non-parametric methods are more flexible because they are shaped by data (Atkinson et al. 1990). With parametric methods, there are two other common forms other than the log-linear model of Working and Lesser that the Engel relation could be derived from, the Almost Ideal Demand System (AIDS) of Deaton and Mauellbauer and the Quadratic AIDS of Banks (De Luca et al, 2010).

Cross-country studies have validated the Engel relationship at the national level. A recent study by Anker (2011) which used GDP per capita and national food share expenditure of 207 countries showed that the relationship is observed across countries. Figure 1 shows an Engel curve for the 207 countries in Anker’s study. A clearly negative nonlinear relationship exists between aggregate food share expenditure and GDP.
Figure 1: Food share of household expenditure as a function of income per capita in PPP, 207 countries or territories.

Graph reproduced from Anker’s paper “Engel around the world”, 2011.

Econometric issues

Econometric issues of measurement error and endogeneity arise in the estimation of the Engel relationship. The former is due to the interview process and is less of a concern if error is uncorrelated with expenditure. When there is measurement error correlated with expenditure it can account for more than 27% of the variation in total expenditure as Aasness et al. (1993) found from estimating an Engel curve for Norwegian households. Instrumental
variables could be used where measurement error is a problem (Kedir, 2007). Atkinson (1990) in a similar study found measurement error that accounted for about 35% of the variation in total expenditure. Instrumental variables could be used where measurement error is a problem (Kedir, 2007).

The second concern is that of the endogeneity of expenditure in Engel curve estimates. Household expenditure is an outcome of the utility maximization problem faced by the household because it reflects choices, such as labour and saving decisions by its members, which are jointly made with consumption expenditure decisions (Blundell et al. 2007). Some papers have used income as an instrumental variable for expenditure with the assumption that income is exogenous (Bopape, 2007). However income is likely to be an inadequate measure of how much a poor household can afford to spend on food, especially when there is no consistent flow of income (Kedir, 2007). More variables influence expenditure and some of them are not easy to control for e.g. the power each member has on influencing the total expenditure of a household (Anker, 2011).

Although household size and composition explain much of the variation in total expenditure, only controlling for household size is not sufficient because it assumes homogeneity of individuals. The homogeneity assumption implies that income per capita determines expenditure and that all household members are equivalent. However household members have varying degrees of decision making power, expenditure, consumption and that is what the use of equivalence scales tries to capture by assigning different weights to household members (Deaton, 1997). Although using equivalence scales improves results, it also generalizes the influence a particular category of members has on household decisions.

When estimating Engel curves, heteroscedasticity arises because families with different incomes tend to spend on different food types and most importantly taste differs between and within families (Pope, 2012). For instance families that are well off are likely to spend some of their money on treats and restaurant meals, also the quality of products consumed varies. The variation in food expenditure caused by these consumables and the unobservable quality and taste is related to income (Kumar, 2008)

Data
The data is from a nationally representative panel survey with 7305 South African households. It is called the National Income Dynamics Study (N.I.D.S) and it was initiated to investigate the livelihoods of South Africans over time with the waves in 2008, 2010 and 2012 which are called Wave 1, Wave 2 and Wave 3 respectively.

The total expenditure data was collected by asking how much a household spent on a particular item for each expenditure category (i.e. food, transport, healthcare), rather than a single question asking about total monthly expenditure. For instance in the food expenditure category the interviewer would ask how much a household spent on rice, chicken and pasta in the last 30 days. Totals from all categories were then aggregated to find the total monthly expenditure. This method was observed to give more accurate estimates of monthly expenditure than asking a single question about total expenditure in the past month (Finn et al, 2009).

For households that reported spending on an item but with missing monetary values, imputed amounts were used to provide a monetary value. The imputed values were found by estimating a regression with family income and a multiple of demographic factors (Finn et al, 2009). Further information on expenditure in NIDS is given in the appendix under the “Questionnaires” section that details issues interview methods in all the waves.

Interviews were conducted in different months (and over different years in the case of Wave 2 which spanned over 2010 and 2011) therefore constant values must be used for the data to be comparable because inflation varies over the months and years covered by the panel. Figure 1 in the appendix provides budget shares by interview month to visually study the effects of seasonality in household expenditure. The data is deflated to June 2012 as the base period. Deflators were computed from CPI data provided by Statistics South Africa (Stats SA, 2013).

**Graphical support for Engel’s law**

A depiction of the relationship between food and total expenditure, figure 2 in the appendix, shows the proportion of food relative to other categories of expenditure by total monthly expenditure per capita deciles for all the first three waves of NIDS separately. This depiction shows the importance of food relative to other expenditure categories out of total expenditure.
Food is the largest expense for households in almost all deciles but the highest decile where it comes second after transport. The proportion of food expenditure seems to vary negatively with expenditure as Engel’s law states. In Wave 2 shares on food are higher than in the other waves in most of the deciles. This result is consistent with Engel’s law because average income was lowest in Wave 2.

Another depiction of the relationship between the proportion of food expenditure and total expenditure is shown below in a national Engel curve for South Africa (separated by wave). The scatter plot shows actual data points of the natural log of total monthly expenditure against the share spent on food monthly. The nonparametric fitted line is shaped by the data and allows for a more accurate analysis of the relationship between the two variables. The nonparametric regression fit is based on a locally weighted regression and is conducted so that the data determines the shape of the Engel curve without confining it to any predetermined functional form (Sulgham, 2006). A disadvantage of this graph is that it assumes that all other factors that determine food expenditure along with total expenditure are constant.

*Figure 2: National Engel curve by wave.*
The curve above shows the Engel relationship, proportions spent on food fall with increasing total expenditure (income) for the most part of the graph. Households with low expenditure in...
Wave 1 and Wave 2 seem to increase proportions dedicated to food expenditure with an increase in expenditure. Kedir found similar results in his study of Ethiopian households in 2007 and concluded that households that followed this pattern were living near subsistence levels and possibly food insecure. However this could be the result of outliers distorting the graph. In Wave 3 this pattern is missing, the curve does not resemble a quadratic form.

At high levels of total expenditure there is proportionally less income dedicated to food which means there is less exposure to price changes. In addition the slopes of the all the curves at high levels of total expenditure are less steep, suggesting that there is less sensitivity of food expenditure to changes in income. High income households have low food elasticities. For households with low incomes, shares on food expenditure are higher and with steeper slopes as reflected in the graphs. High slopes mean that households have high food elasticities, shares on food are highly sensitive to changes in income. This means that changes in income have a larger effect on the share dedicated to food in low income households.

**Working-Leser model**

This model was originally proposed by Working (1943) and elaborated by Leser (1963) and that is why it is known as the Working-Leser model. It relates commodity budget shares linearly to the natural log of total expenditure.

\[ w_i = a_i + b_i \ln y \]  

Equation 1 above is the Working-Leser model where \( w_i \) is the share of total expenditure on food and \( \ln y \) is the natural log of total monthly expenditure. Other explanatory variables such as a dummy for presence of a pensioner and adult equivalents in a household are added to increase the explanatory power of the model.

This model has a functional form consistent with observed consumer behaviour and it can represent luxuries, necessities and inferior goods in a single graph (Wan, 1996). It also allows the same commodity to be a necessity for the rich and a luxury for the poor; it allows income elasticity to vary with income levels. However a setback is that necessities and luxuries are
represented by different curves and this requires estimating curves for different income levels (Wan, 1996). This setback can be eliminated by estimating a more complicated model that includes a quadratic term of the natural log of expenditure or a nonparametric curve (Binswanger, 1983).

Another advantage of this model is that it satisfies the adding-up condition and represents consumer behaviour closely. The adding up condition states that the sum of all total expenditure elasticities weighted by budget shares must add up to one. The latter is due to that it is derivable from a utility maximizing framework underlying a utility function of the form of the AIDS model by Deaton and Muellbauer (Wan, 1996). Other variables are added in the models that are thought of having an effect on the share of income dedicated to food expenditure. These are number of adult equivalents in a household and a dummy for whether the household has a pensioner.

Household composition and size are represented by the adult equivalent variable. This variable was created by giving all individuals below the age of 15 years a weighting of 0.5 and everyone above 15 years old a weighting of 1 to reflect their relative differences in consumption. These were added for each household and raised to the power 0.9 as suggested by Deaton in his 1997 lecture presentation in South Africa (quoted from Woolard, 1999). Equivalence scales take into account that children eat less than adults and that some expenditure is on public goods within households. Expenditure data is per adult equivalent to control for household size and composition.
Table 1: Regression of the share spent on food on various variables for each wave and for a pooled sample.

<table>
<thead>
<tr>
<th>Monthly share of total expenditure on food</th>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Wave 3</th>
<th>Pooled OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural log of total expenditure per capita</td>
<td>-0.057** (0.025)</td>
<td>0.019 (0.031)</td>
<td>-0.137* (0.024)</td>
<td>-0.040* (0.008)</td>
</tr>
<tr>
<td>Square of natural log of total expenditure per capita</td>
<td>-0.003 (0.002)</td>
<td>-0.008* (0.002)</td>
<td>0.002 (0.002)</td>
<td>-0.004* (0.001)</td>
</tr>
<tr>
<td>HH. has a pensioner</td>
<td>0.012 (0.006)</td>
<td>0.019** (0.008)</td>
<td>-0.009 (0.006)</td>
<td>0.023* (0.003)</td>
</tr>
<tr>
<td>Wave 2</td>
<td>0.006** (0.003)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wave 3</td>
<td>0.011* (0.003)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy for change in composition</td>
<td>-0.008* (0.002)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>7301</td>
<td>6419</td>
<td>8040</td>
<td>17825</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.428</td>
<td>0.37</td>
<td>0.387</td>
<td>0.358</td>
</tr>
<tr>
<td>F-stat</td>
<td>1212.28</td>
<td>495.58</td>
<td>725.28</td>
<td>1655.39</td>
</tr>
</tbody>
</table>

Source: NIDS

The variable “HH has a pensioner” records the presence of a state old age pension recipient in a household. Pensions provide external sources of income and it would be interesting to evaluate how they affect proportions dedicated to food expenditure. All the regressions in table 1 above are statistically significant models and the smallest sample size is 6419 household observations.
How a variable affects the proportion spent on food determines its effect in making a household more vulnerable to real income changes caused by changes in amounts dedicated to food expenditure. If a variable has a positive effect on food share, then it makes households more exposed to changes in food expenditure and therefore is likely to contribute to poverty.

Large coefficients on the natural log of total monthly expenditure mean greater exposure and sensitivity to changes in income. They are associated with steeper parts of the Engel curve. The sign of the natural log of total monthly expenditure in all the specifications above, but the Wave 3 specification, is negative which is consistent with Engel’s law. The negative sign means proportions spent on food fall with increases in income. All the coefficients on this variable have significant economic impact. However, only Wave 1 and Wave 3 coefficients are statistically significant. The smallest change in the share of expenditure spent on food for a 1% increase in total expenditure is -5.7% in Wave 1. Wave 3 has the second smallest coefficient and Wave 2 has the biggest and the only positive coefficient on the natural log of monthly per adult equivalent expenditure. A positive coefficient means that the exposure and sensitivity of the share of expenditure dedicated to food rises with income. The coefficients on the natural log of total monthly per adult equivalent expenditure mean that households were better-off in Wave 1, than in the latest two waves. Wave 3 has less exposure to changing spending capacity than Wave 2, suggesting that Wave 3 was relatively better than Wave 2, although not as good as Wave 1. The dummies for Wave 1 & 2 suggest similar results; the Wave 2 dummy has a larger coefficient and confirms that Wave 2 had more exposure to changing expenditure capacity which is associated with poverty.

Lower sensitivity to changes in total expenditure is linked to high income as shown in the national Engel curve in figure 2; the curve is less steep at higher levels of income. On the other hand, large coefficients on the natural log of total expenditure are associated with poverty because they mean that households spend large proportions of income on food as shown in figure 2. This is characteristic of poor households by Engel’s law as demonstrated in figure 2 in the appendix which shows shares of each expenditure category out of total expenditure by expenditure deciles. This means that the wave of NIDS with the largest coefficient is the most exposed to changes in food prices. In this study Wave 2 has the largest coefficient on the natural log of total monthly expenditure per capita, 0.190.
A quadratic form Engel curve suggests that for some households, budget shares on food increase with income until a certain point then they start falling as Engel’s law states. In figure 2 it seems like Wave 1 & 2 have a quadratic shape. From the regression table, the coefficients on the square of the natural log of total monthly expenditure per capita are only statistically significant in the Wave 2 and the pooled OLS specification.

In the pooled OLS specification, the coefficient on the natural log of total monthly expenditure per capita is negative and economically significant. It is however statistically insignificant. The square of this variable in the pooled OLS variable is significant which means that the relationship is quadratic and the proportions dedicated to food expenditure increase with income for some households, increasing their exposure to changing spending ability.

A dummy that records whether the composition of the household changed at all during the three waves is included in the pooled OLS specification. This variable shows that 32.59% of households had a change in the number of household members. This variable however does not give us an indication of why household size changed during the three waves of NIDS, it includes deaths, births and migration. The dummy variable in the regression in table 1 says that households that somehow changed composition spent approximately 0.8% less on food and this is statistically significant.

The last variable records the presence of a pensioner in a household; it is economically significant in all specifications. The positive coefficients mean that households with pensioners tend to spend larger shares of their incomes on food and thus are more exposed to changes in food prices. This result could be due to selection bias, perhaps seniors that are from poor households are more likely to apply for the state old-age pension.

**Conclusion**

This paper has looked at the effect of various variables on the share of total expenditure spent on food. It provides some evidence for Engel’s law in South Africa. Changes in expenditure/income affect budget shares and poor households have more sensitive budget shares. Moreover, households were doing better in Wave 1 because they were less exposed
and less sensitive to changing food prices than in the last two waves, suggesting a reduction in welfare, all else equal.

The Engle curves in all three waves show similar broad trends, but differences in the what was happening at key points in the distribution. In Wave 1 there was less variation about the overall downward trajectory in food expenditure, while in Waves 2 and 3 there is increasing variation about the trend. In Wave 2, far more high-expenditure households also spend close to all of their expenditure on food. The trend persisted in Wave 3, suggesting that middle-class households also shifted spending away from other essential goods and services towards food. This is likely a reflection of the high levels of food-price inflation in South Africa (and, indeed, globally) over the past few years.

The trend above is fertile ground for further research using NIDS data, for it might also be due to the effect of outliers or measurement error (even though the robustness of the finding across both Waves 2 and 3 would seem to suggest otherwise).
Appendix

Questionnaires

The information on expenditure is from the household questionnaire, the oldest women in the household and/or another member thought to be knowledgeable about living arrangements and spending patterns in the household was asked to provide information for this part of the questionnaire (Finn, et al, 2009). This method was used in all 3 waves. However, capturing information changed from using pen and paper to using a tablet computer specifically design for this task. A concern that arises is that the data may be already slightly incomplete from the interview process; the most knowledgeable person might provide useful information on items that the household shares like food, but they might have less insight on personal expenditure.

The expenditure section of the questionnaire is separated into two subsections; the first section contains information on food expenditure and the second on non-food expenditure. The food section contains 32 items and the non-food has 52 items. Categories under the non-food section contain expenditure on transport, rent, personal items, education, energy, clothing, healthcare and miscellaneous. The approach to asking questions varies between the waves, in Wave 1 & 3 it was asked “Did you spend on X?” and “How much was spent on X?” if answered “yes” to the first question, but in Wave 2 only the later was asked. This change in the way of sourcing household expenditure data could have influenced respondents’ behaviour and the way they answered these questions.

Where a household indicated spending on an item but could not give any monetary value, imputed expenditure was created in Wave 1. But in Wave 2 the one-shot expenditure response was used instead. In Wave 1 imputation regression was run with the log of income as the dependent variable and demographic variables as explanatory variables. Imputing
using regression was chosen over the cell-median technique for consistency because the income section in the survey was also imputed this way. This procedure was also adopted for households that reported no expenditure at all or completely omitted the expenditure section.

Out of all the non-food categories, rent proved to be the most problematic when computing graphs in figure 1 in the appendix. The first issue is that some people do not pay rent because they own their dwellings. This group includes people still paying and with fully paid mortgages. The second group includes people who do not own dwellings and hence pay rent, but there is a group that for some reason does not pay for housing. For all these groups that do not pay rent, whether because they have fully paid mortgages or just not paying, implied rent was created to get a rental value these people would collect for the case of fully paid mortgages or pay for the nonpayers respectively. Using implied rent to obtain rent/housing expenditure is standard practice in survey analysis.
Figure 1a: Wave 2 budget shares by month of interview. Numbers correspond to months of the year. Number 13 represents missings.

Figure 1b: Wave 2 budget shares by month of interview.
Figure 1c: Wave 3 budget shares by month of interview. Interviews started in April.

Figure 2a: Wave 1 budget shares by total expenditure per capita deciles
Figure 2b: Wave 2 budget shares by total expenditure per capita decile.

Figure 2c: Wave 3 budget shares by total expenditure per capita deciles.
This figure illustrates the importance of food expenditure relative to other expenditure categories by total expenditure per quintile. The y-axis shows the share of each category out of total expenditure by expenditure per capita quintiles in the x-axis. Source: NIDS (2008)

Figure 3: Income per capita for all three waves.

Income per capita by Wave

Wave 1 income per capita Wave 2 income per capita Wave 3 income per capita
Figure 3: Consumption schedule, mean expenditure on items by total expenditure deciles. First column represents Wave 1 respectively under each category.
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.