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Families, Relationships and Societies

Social assets, low income and child social and emotional and behavioural wellbeing --Manuscript Draft--

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Abstract:	<p>This paper examines the association between mothers' social assets and child social, emotional and behavioural (SEB) wellbeing for children living in persistently low income. The dependent variable (SEB) is measured by the Stress and Difficulties Questionnaire, carried out at age 4/5 years. The independent variables comprise a categorical exploratory factor analysis (EFA) of social assets, five-year averaged income divided into quintiles (the lowest income quintile is conceptualised as 'persistently low income' and 100% of families with income below 60% median equivalised income fall into this category) and control variables generated from the literature review. The results show that low income is associated with lower social assets and lower SEB wellbeing in children; however, mothers living in persistently low income but who have high social assets are significantly associated with higher levels of SEB wellbeing in their children, an interaction that is not significant for any other income quintile. Additionally, many of the socio-demographic variables assumed to be important for child SEB wellbeing in the literature, such as family composition, young motherhood and maternal ethnicity, reduce in significance once income and mothers' social assets are taken into account in the model.</p>
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Social assets, low income and child social and emotional and behavioural wellbeing

1. Introduction

This paper focuses on the concept of social assets on child social, emotional and behavioural (SEB) wellbeing across the income spectrum, with a particular focus on those living in persistently high and persistently low income. This paper quantifies the qualitative concept of ‘social assets’ as set out in the Sustainable Livelihoods Approach to test the theory that having high social assets while living in persistently low income attenuates the negative effects of the low income. Social assets are similar to, but not synonymous with, social capital. The concept captured by the term ‘social assets’ in this paper can be likened to social support received from close social ties and is discussed more fully in the following section.

There is substantial evidence that persistently low income leads to poorer outcomes for children. This paper uses longitudinal data to explore the relationship between child SEB wellbeing, mothers’ social assets and persistently low income. In so doing it tests whether maternal social assets have a differential impact on child SEB wellbeing based on income.

This paper is organised as follows: the next section discusses the theoretical background and relevant literature. Section three describes the Growing Up in Scotland (GUS) dataset and dependent and independent variables. Section four describes the methods used. Section five presents summary statistics and the analysis. The final section discusses the results and concludes the paper.

2. Context: theory and literature

2.1 The impacts of poverty on children’s lives

There is substantial evidence that poverty is linked to poorer social, emotional and behavioural wellbeing for children, the consequences of which are felt in childhood, through adolescence and into adulthood (*inter alia* Duncan and BrooksGunn, 1997, Harris et al., 2009, Holscher, 2008, Ridge, 2002a, Bradshaw, 2002, Bradshaw et al., 2007). Positive social, emotional and behavioural skills in early childhood are thought to support higher educational attainment via the strong base they provide for positive adaptation to the classroom environment (Entwisle et al., 2005, Rimm-Kaufman et al., 2000). These skills have been shown to have a direct impact on future labour market outcomes (Heckman et al., 2006, Feinstein, 2000) and an indirect impact on future labour market outcomes via their effect on

education (Blanden et al., 2008). The effects of child poverty on children's outcomes in relation to future adult educational and labour market outcomes is of primary policy interest; however, this has drawn criticism for not focusing on the effects of poverty in childhood itself (Ridge, 2002a: 2).

Although the evidence is clear on the negative effects of poverty on children's present and future outcomes not all children growing up in poverty will necessarily have poor outcomes in adulthood. Children's experiences of poverty are complex. Protective factors that can mediate the negative impact of childhood poverty are children's social relationships within their families and their inclusion in their peer group (Ridge and Wright, 2008). It is these social relationships conceptualised as social assets that this paper addresses.

2.2 *Theoretical overview*

The Sustainable Livelihoods Approach (SLA) was developed by organisations working within the Global south. It owes much to Robert Chambers' work on the 'wealth of the poor' and is defined thus:

'A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and manage to enhance its capabilities and assets both now and in the future' Chambers & Conway (1991: 1).

The approach has recently been adapted by Oxfam GB and applied to poverty research in a UK context. The SLA in the UK aims to measure the 'assets' of those living in poverty by assessing their strengths and capabilities and exploring how these different assets combine to ameliorate or exacerbate the experience of poverty. Its central tenet is that people's assets, and their antithesis, vulnerabilities, have a cumulative positive or negative effect on people's ability to sustain a livelihood (May et al., 2009). The SLA framework comprises five asset categories; financial, human, social, physical and public. This article focuses on 'social' assets; specifically, mothers' social assets.

Social assets in the SLA correspond to broader concepts of social *capital*. Social capital is reported as being '*an elusive concept*' (Morrow, 1999: 745) and a '*diversely theorized*

concept' (Kritsotakis et al., 2011: 1654), with multiple definitions that apply to the individual, family, groups, communities and beyond to wider society (Blaxter and Hughes, 2000). It covers such diverse areas as trust, social cohesion, social networks, social support, reciprocity, exchange of information, social leverage and participation (Webber et al., 2011, Kritsotakis et al., 2011). In the SLA in the Global South, aspects of civic participation, access and community networks are prominent; however, in its adaptation for the Global North, there is less emphasis on this element of social capital. Instead, focus is placed on the links and ties between family and friends in the local community (May et al., 2009). Social assets, or social capital, within family and friendships groups, pertain to the work of two social capital theorists in particular: Bourdieu (1986, 1990, 1993) and Coleman (1988, 1990a, 2000).

According to Morrow (1999: 760), the strength of Bourdieu's concept of social capital is that his is *'essentially a theory of privilege rather than a theory of inadequacy'*. She posits that there is a danger that the application of social capital to research social phenomena, especially for the socioeconomically disadvantaged, becomes *'a kind of deficit theory syndrome'* (Morrow, 2001: 57), which would assume that those with low socioeconomic status are deficient in their levels and use of social capital. In this paper, the social assets of families are explored across the income spectrum, from those living in persistently low to persistently high income. The hypotheses of this paper postulate that low socioeconomic families do have social capital, or social assets, available to them and, these social assets are hypothesised to have beneficial impacts on the SEB wellbeing of their children.

A point of synergy between the concept of social assets in this paper and the social capital of Bourdieu is that he sees the family as the main locus for the *'accumulation and transmission of social capital'* (Blaxter and Hughes, 2000: 83). Further, Bourdieu's concept of social capital is especially useful for research with children, because it is concerned with the social and personal networks *'for individual or group wellbeing'* (Morrow, 1999: 761). It is to these ideas that this paper's concept of social assets aligns.

The second social capital theorist of relevance to the concept of social assets in this paper is that of Coleman (1988: S100-S101). For him, social capital is an intangible concept that *'exists in the relations among persons'*. He explains that individuals employ social

relationships to maximise the utility of their existing individual resources (Coleman, 1990b). Thus, social capital is defined by its function rather than its composition (1988, Coleman, 1990b). In particular, Coleman's social capital focuses on the relations between family members and the effects of familial interactions on the wellbeing of children and young people (Ferguson, 2006), with the direction of influence of the relationship running from parent to child. Coleman strongly asserts that family social capital depends on the physical presence of parents, on the attention they give a child, and on the strength of the parent/child relationship (Coleman, 1988).

The strength of Coleman's concept of social capital is that it provides a link with families and their immediate social contexts; however, it has been argued to be a narrow concept *'premised on a model of the nuclear family norm and narrow definitions of family that ignore wider kin relationships'* (Morrow, 1999: 752). This aspect of Coleman's social capital will be countered here as the concept of social assets employed in this paper pertains to the milieu of extended family and friends, is postulated to exist among those in low as well as high income, and is hypothesised to be associated with higher levels of SEB wellbeing in children. It most definitely is not, therefore, a theory of deficit for those of low socioeconomic status.

When used in Oxfam's qualitative research in the UK, social assets measure qualities of social support and activities. The questions are:

- Who are the people who you depend on for support?
- What activities do you do for fun? Who do you do these activities with?
- Who are the people that you rely on in life?
- What groups/networks/formal organisations are you part of?

Source: reproduced from May et al's research guidance on using the sustainable livelihoods approach in the UK (2009: 33).

These questions are mapped onto the GUS data in section five in order to derive a quantitative measure of social assets for use in the analysis.

2.3 *The impacts of social assets on mothers*

A synthesis of the qualitative evidence suggests that the social support provided by friends and family can act as a buffer against the adverse effects of living in poverty (Attree, 2005).

In this synthesis, the types of social support provided by friends and family is described as: material help, such as buying children's clothing; help with childcare; company and conversation; and help in getting through moments of emotional distress (Attree, 2005). How supported mothers feel is related to the '*physical proximity and emotional connectedness*' of friends and family who support them, with geographical co-location being an important factor of social support (Ghate and Hazel, 2002: 119). When friends and family are not geographically co-located, levels of support are lower for those living in disadvantage as they are not able to afford the necessary transport costs for visiting (Ghate and Hazel, 2002).

2.4 *The impacts of social assets on children*

A study that explores the effects of social capital within the family, at school and in the local neighbourhood on children's health outcomes, concludes that social capital generated from each of these three milieux lowers children's health complaints and is associated with higher levels of children's subjective wellbeing, with the positive effect from each milieu being additive. Of the three social capital milieux the one generated within the family was found to be the most substantial (Eriksson et al., 2012).

A systematic review of social capital on child wellbeing by Ferguson (2006) identifies 22 peer reviewed studies within its inclusion criteria. One of the selection criteria is whether each study has an element of 'family social capital', as defined by Coleman (2000). The review finds that this type of social capital is associated with improved outcomes for children and that parents with greater educational and financial resources are able to mobilise greater social capital for children (Ferguson, 2006: 4). This study concludes that social capital is the second best predictor of child wellbeing next to poverty (Ferguson, 2006).

The hypotheses for this paper are:

- H1: maternal social assets are lower/higher for those living with lower/higher incomes;
- H2: higher maternal social assets are associated with higher (better) social, emotional and behavioural scores in children as measured by the Stress and Difficulties Questionnaire (SDQ); and
- H3: mothers living in persistently low income with high social assets have children with higher (better) levels of SEB wellbeing.

3. Data

The analysis is conducted using data from the Growing Up in Scotland (GUS) study, a longitudinal birth and child cohort study initiated in 2003 to record the characteristics, circumstances, health and behaviours of children in the early years (Anderson et al., 2007). A stratified, clustered sampling frame was used, from which a named sample of approximately 12,930 children was selected on the basis of the children's dates of birth using UK Child Benefit records, then a universal benefit to which all families in the UK were entitled. This sampling frame was chosen because 97% of all eligible families were registered to receive this benefit (Corbett et al., 2005, 2005 , 2006a, 2006b, 2007a, 2007b) giving almost universal coverage of children in the UK. The final sample of 10,143 went to the field with a final achieved sample of 8,075 babies and children, a response rate of 80% of all in-scope children and 62% of all children originally eligible (Anderson et al., 2007: 196). The 8,075 respondents constitute 5,217 babies and 2,858 toddlers, which comprise the birth and child cohorts respectively. The main carer is the respondent in GUS: this is usually the mother (approximately 98%). The achieved sample for the birth cohort used in this article is 5217 children at sweep one reducing to 3833 children at sweep 5; see table 1 for more details on survey response rates. The analysis is undertaken using Stata 13 and the 'surveyset' procedure is tested to take account of the complex sampling, i.e. strata, clustering, sample selection weights and longitudinal weights are applied to counteract the effects of attrition.

Insert table 1 here

3.1 The dependent variable – Social, emotional and behavioural (SEB) wellbeing

The dependent variable, social, emotional and behavioural (SEB) wellbeing, is measured by the SDQ, a behavioural screening questionnaire applicable to children and young people from 4 to 17 years old. For children aged 4 to 5 years old, the SDQ can be filled in by parents or teachers - in GUS they have been completed by parents. There are 5 dimensions to the SDQ questionnaire: conduct problems, emotional symptoms, hyperactivity, peer relationships, and pro-social behaviour (Goodman, 1997: 581). The first four of these are summed to provide a total difficulties score, which is then reversed and standardised, giving a mean of zero and a standard deviation of one. Positive scores denote higher than average SEB wellbeing and negative scores denote lower SEB wellbeing.

3.2 *Deriving income inequality*

To compare those on a persistently low income with those on a persistently high income while capturing the economic gradations in between, a measure of income inequality has been calculated using five years of OECD modified equivalised income, averaged and divided into 5 equally sized groups (quintiles), giving longitudinal income from the lowest to the highest in increments of 20%. The current measure of poverty used by the UK government is having less than 60% median equivalised income. One hundred per cent of those living in income poverty using this measure are located in the lowest income quintile (Q1). Thus, the lowest 20% of income is referred to in the rest of this paper as ‘persistently low income’ and is comparable to income poverty. Income inequality as opposed to the binary 60% median poverty line is preferred in this paper in order to perform analysis across the income distribution to show the effects of income inequality and persistently low income separately. This also removes the issue of ‘poverty plus a pound’ argued to be a result of the arbitrary 60% threshold of poverty while allowing for those in the highest quintiles to be analysed in their own right.

3.3 *Control variables*

Certain factors may confound the effects of socioeconomic disadvantage on child SEB wellbeing and ought to be controlled for in the analysis. A review of the literature in this field indicates that child’s gender, family composition, maternal education, maternal employment, ethnicity of mother, birth order of the child, and the age of the mother at the birth of her first child have an independent effect on child SEB wellbeing and need to be controlled for (Kiernan and Huerta, 2008; Kiernan and Mensah, 2009; Schoon et al., 2010; Schoon et al., 2012). These control variables are briefly described below.

Child’s gender

The literature highlights several aspects in relation to gender that may be associated with SEB wellbeing with boys reported as having lower SEB scores than girls (Blair et al., 2004). Reasons given for this are that boys are more physical and active than girls and are reluctant

to sit still for long (King and Gurian, 2006) and that they mature more slowly than girls (Cohn, 1991; De Bellis et al., 2001). In this dataset, gender is a straightforward binary girl/boy variable.

Family composition

Family composition, in particular the presence or absence of a father in a household, is a demographic characteristic commonly used and misused in the public discourse in relation to poverty and child wellbeing. In academic studies the focus has been on family *instability* (Waldfogel et al., 2010) and parental *absence* (McLanahan, 1997), while the current political terminology in the UK prefers family *breakdown* (DfE, 2012). The evidence for the effect of family composition on child SEB wellbeing is varied. Additionally, family composition, notably parental separation, is a big risk factor for poverty and persistently poverty (Barnes et al, 2010), which may have a confounding effect on child SEB wellbeing. Using data on mothers' partnership status at each of the five sweeps of the data this paper derives the variable family *transitions*, i.e. moving from a couple to a lone parent family or vice versa. The variable is categorical with 'stable couple family' as the reference category. The categories are:

- 'stable couple family', where a couple has been together since the start of the study;
- 'stable lone parent family', where the respondent (usually the mother) reports having been single and living alone each of the five years of the study;
- 'lone parents who have re-partnered' – there is no distinction in the measure on the point at which the respondent re-partners;
- 'couple families who have separated' – the same caveat applies as before; and

- ‘separation(s) and re-partnering(s)’ – this category does not differentiate between those who may be separating and re-partnering with the same or with different partners.

Ethnicity of mother

The literature shows that maternal ethnicity is associated with both the socioeconomic position of a family and with child outcomes (Hansen et al., 2010). In the GUS study, the maternal ethnicity variable is a binary white/non-white variable as the percentage of those who are non-white in this study is so low (2%, see table 2).

Study child's birth order

The order in which a child is born has been associated with varying levels of child wellbeing (Bradshaw, 2011). The birth order variable is a simple binary first born/not first born measure.

Age of mother at first child's birth

Having a child as a younger mother is associated both with lower child SEB wellbeing (Bradshaw and Tipping, 2010; Bromley, 2009) and with living in persistently poverty (Barnes et al., 2010). The age of the mother at the birth of her first child in this paper is a categorical variable: aged 40 or over (reference category); aged 30-39; aged 20-29 and aged under 20 years old. The descriptive statistics for all variables can be found in table 2.

Table 2 here

4. Methods

There are two strands to the analysis. The first derives social assets from the 8 social support from family and friends variables using Exploratory Factor Analysis (EFA) for categorical variables. The factor analysis results in one factor on which an analysis of variance (ANOVA) is carried out to determine whether there are significant differences in the means of social assets across income quintiles. The next part of the analysis examines whether social assets have a significant, and/or moderating, impact on child SEB wellbeing for children living in persistently low income and income inequality. To do so it uses OLS multiple regression with interaction terms, consistent with other researchers of capital (Sullivan, 2002) and with other researchers of SEB wellbeing (Sullivan et al., 2010, Schoon et al., 2012).

5. Analysis

5.1 Deriving Social Assets

GUS collects data in sweeps 2 and 4 on closeness and support between the respondent (mother) and her family and friends (Corbett et al., 2006a, Scotcen, 2008). The questions are designed in order to capture maternal social assets as measured by closeness and support. What these measures do not capture is the *quality* of these assets. The strength and quality of social capital is not well addressed and not widely measured. Bourdieu (1986) does indicate that social capital connections require continuous maintenance, but one cannot assume that frequency of contact is a measure of the strength of the connection nor of the quality of the relationship. The questions used to measure social assets, as measured by closeness and support of family and friends at sweeps 2 and 4, are:

- How many people respondent close to
 - 0. I don't have any close relationships
 - 1. I have close relationships with 1 or
 - 2. I have close relationships with some
 - 3. I have close relationships with lots

- Respondent close to most of family
 - 0. I don't have any family
 - 1. Disagree strongly
 - 2. Disagree
 - 3. Neither Agree or Disagree
 - 4. Agree
 - 5. Agree strongly

- Respondent friends take notice of opinion
 - 0. I don't have any friends
 - 1. Disagree strongly
 - 2. Disagree

- 3. Neither Agree or Disagree
- 4. Agree
- 5. Agree strongly
- Respondent support from family/friends
 - 0. I don't need any help
 - 1. I don't get any help
 - 2. I don't get enough help
 - 3. I get enough help

To carry out the factor analysis polychoric correlations are used due to the ordinal nature of the variables and factor scores are retained for the regression analysis. Factor scores are equal to Z scores and have a mean of zero and a standard deviation of one. A negative score denotes lower than average social assets and a positive score denotes higher than average social assets. Table 3 gives the correlation matrix used in the factor analysis.

Insert table 3 here

The factor analysis results in a one factor solution for social assets. The eigenvalue is 3.36 and accounts for 87% of variance explained. All eight variables load onto the single factor with factor loadings above the 0.4 threshold recommended by Stevens (2002). What is interesting about this factor is that as it is derived from ordinal variables which measure the extent or strength of closeness and support of friends and family and so gives a measure of the *quality* of the social assets held by mothers in the GUS study. A higher score on this factor means a higher level and a greater quality of closeness and support from family and friends. The summary statistics for this factor, social assets, can be found in table 2.

In further analysis social assets are statistically significantly different across the income spectrum.

5.2 How do social assets differ by income?

An ANOVA is carried out to determine whether and how the social assets of the five income quintiles are significantly different from each other. The results show that income inequality is significantly associated with social assets ($F=21.60$, $p<0.001$), which means that mothers living in different income quintiles have different levels of social assets.

Insert table 4 here

Further post hoc analysis (using Tamhane's T2, due to the variances within each of the categories being unequal) shows the difference in the means of social assets between each of the income quintiles (table 4). The mean of social assets for the bottom two income quintiles are not significantly different from each other but are significantly different from the top three income quintiles. The mean of social assets for income quintiles three and four are not significantly different from each other. However, those living in persistently high income (Q5) have much higher social assets than those in every other income quintile, significant at the 0.001 level. Hypotheses one is accepted, that those with low income have lower social assets and that those with high incomes have higher social assets.

5.3 *What impact do maternal social assets have on child SEB wellbeing?*

An OLS multiple regression with interaction terms between social assets and income quintiles explores the relationship between social assets and income, taking the control variables into consideration, on child SEB wellbeing.

Insert table 5 here

Model one in table 5 presents the base model which comprises only the control variables. From this, we see that almost all of the control variables are significantly associated with SEB wellbeing with the exception of birth order. In this base model, the control variables account for 9% of the variance in child SEB wellbeing.

In model two, income quintiles are introduced which increase the variance explained by almost 50% (R square increases from 0.090 to 0.133). While the r square is not exceedingly high, reflecting the complexity of the dependent variable, an increase of 50% with the significance at the 0.1% level ($p < 0.001$) shows that income is highly significantly associated with child SEB wellbeing. The introduction of income inequality into the model also removes the significance of maternal ethnicity, being a stable lone parent family, being a lone parent who re-partnered and maternal age at first birth, showing that the negative effects on child SEB wellbeing that have been associated with these variables disappear when low income is accounted for.

When social assets are entered into the analysis at model three, they are highly significantly associated with SEB wellbeing, with a coefficient of 0.190, accounting for almost 20% of a standard deviation increase in SEB wellbeing across all children in the study. Social assets also attenuate the relationship between child SEB wellbeing and income: the sizes of the coefficients for income quintiles reduce. Income inequality, however, still remains highly significant with each income quintile being statistically significant at the 0.001 level and with coefficients that are incrementally stronger the lower the level of income. Having social assets in the model removes the significance of the negative relationship between a couple who separate and child SEB wellbeing. This means that when social assets are controlled for, being a couple who separate has no negative impact on child SEB wellbeing. This indicates that it is the reduced level of social assets of couples who separate, rather than the fact of their separation per se, that is associated with a negative impact on child SEB wellbeing. What this analysis does not show is the impact of low or reduced social assets on maternal outcomes, e.g. maternal stress or depression, which may concur with a couple separating.

In model four, interaction terms between the income quintiles and social assets are added to the model. This shows that for the lowest income quintile, persistently low income, having social assets is significantly associated with an increased level of SEB wellbeing in children. Social assets, therefore, do have a differential impact on SEB wellbeing depending on income quintile. The coefficient of the interaction term for income quintile one, persistently low income, compared to income quintile five, persistently high income, is positive at 0.150, which when added to the main coefficient for social assets (0.190), gives an accumulative increase in SEB wellbeing for those in persistently low income of 0.340, more than a third of a standard deviation increase. This positive impact acts counter to the negative one associated with persistently low income per se; thus, a mother living in persistently low income with high social assets is associated with her child having significantly higher SEB wellbeing. This association is consistent with the theory put forward in this paper, that maternal social assets can moderate the negative effect of persistently low income on child SEB wellbeing, and provides support to the final hypothesis that those living in persistently low income with high social assets have higher levels of SEB wellbeing.

Insert figure 1 here

This relationship is best demonstrated by the interaction graph in figure 1, which shows the effect of maternal social assets on child SEB wellbeing for the highest and lowest income quintiles. The steeper line for the lower income quintile shows the stronger effect for social assets on child SEB wellbeing than that for the higher income quintile. To test this relationship further, and to examine whether different levels of social assets for those living in persistently low income are associated with higher or lower SEB wellbeing, social assets are split into low, medium and high categories. The category splits are made according to the method set out by Cohen (2003), with levels corresponding to the mean, one standard deviation above and one standard deviation below the mean of the factor. These are known as medium, high and low levels of social assets respectively. Interaction terms with income quintile 1 and high/low levels of social assets are then calculated to examine to what extent high or low social assets have a differential impact on child SEB wellbeing for those living in persistently low income.

Insert figure 2 here

This relationship is best demonstrated in figure two, which shows only those living in the lowest income quintile across the five years of the study. It shows that those with persistently low income and high social assets have children whose SEB wellbeing extends beyond the mean for all children. Those with low social assets who live with persistently low income have a line which goes in the opposite direction, showing a strong negative relationship with child SEB wellbeing. This is quite a stark contrast between those with the highest and those with the lowest social assets in the lowest income quintile. This shows that the high levels of social assets from family and friends that some people enjoy have a positive impact on child social, emotional and behavioural wellbeing. By contrast those who are living in poverty with low levels of social assets from friends and family have children with the lowest SEB wellbeing, which suggests that this is a combination that makes children living in persistently low income particularly vulnerable.

6. Discussion/Conclusion

The sustainable livelihoods approach posits that social assets have an attenuating effect on the negative impacts of poverty and can help enable people sustain a livelihood. Social assets as defined by the SLA, and adapted for use in the UK, are shown qualitatively to have a considerable advantageous effect on the lives of people living in poverty and are considered valuable for supporting individuals' livelihood strategies.

Social assets in the literature are shown to have a positive effect on adult psychosocial wellbeing. In the qualitative literature, there is the suggestion that child social assets have a positive effect on their wellbeing. This paper succeeded in quantifying a qualitative concept and examined whether it could be statistically associated with children's social, emotional and behavioural (SEB) wellbeing for children living in persistently low income.

The analysis in this paper shows that the impact of social assets on child SEB wellbeing is statistically significant and accounts for approximately 20% variance explained. Other socio-demographic variables that had been important in the literature cease to be significant once social assets and/or persistently low income are added into the model. The most striking example of this is a couple who separate, which becomes insignificant altogether, showing that whatever effect had been attributed to parental separation is entirely accounted for by living in persistently low income and having low social assets. The interaction terms between income quintiles and social assets shows that for mothers in the lowest income quintile having high social assets moderates the negative effect of living in persistently low income on child SEB wellbeing. This is consistent with the theory proffered in this paper and the evidence in the qualitative literature.

The mechanisms through which maternal closeness and support from family and friends has a positive effect on child SEB wellbeing has not been modelled in this analysis. From the qualitative literature, there are various pathways through which the closeness and support of family and friends are suggested to operate. One is that the support that is received may ease the financial strain of families. The literature shows that often friends and family of those living in poverty help with costs such as school uniform, shoes, school trips, birthday and Christmas presents (Harris et al., 2009). This can have a direct effect on child wellbeing as well as a possible indirect effect due to the easing of the financial stress on the parent. The

second causal pathway suggested by the literature is that positive maternal wellbeing and mental health have a positive effect on the parent child relationship and thus a positive effect on child SEB wellbeing (Schoon et al., 2010), it is possible that the support and closeness afforded by the relationships in this paper have a positive impact on maternal wellbeing and mental health. Another possible pathway is that if the mother has close and supportive relationships with family and friends, then the possibility is that this closeness and support extends to the child directly, thus possibly having a positive direct impact on child wellbeing and development. It is possible too that the closeness and support provided by family and friends has a direct and/or indirect effect on parenting. These pathways have not been modelled in this study.

From a policy perspective, people living in poverty do have social assets, close ties to family/friends that are shown to have a small association with increased naming vocabulary, but a large and strong association with increased SEB wellbeing. This is of relevance to local and national policymakers on two fronts: (1) it suggests that geographical proximity is a key component of being close to and supported by extended family and friends; (2) it suggests that child SEB wellbeing is pliable and can be improved by closeness/support from others. This first point, geographical proximity, suggests that those who most benefit from this closeness/support should be enabled to stay close to extended family and friends.

I would like to emphasise how responsive child SEB wellbeing in this study are to the social assets and financial vulnerabilities of their mothers. The fact that children of such a young age are displaying lower SEB wellbeing when maternal social assets are low or their financial vulnerabilities are high, is a central finding of this paper, which raises three points: (1) child SEB wellbeing is highly sensitive to their mothers socioeconomic status and their assets/vulnerabilities; (2) this implies that SEB is a malleable, rather than a fixed trait, and may respond well to direct or indirect interventions; and (3) this ought to be of central relevance to policymakers and practitioners.

The beneficial impact of social assets on child SEB wellbeing, hypothesised to operate through the beneficial impact on parent(s), should be recognised, measured and harnessed. It is possible that these beneficial effects of social assets prevent problems and that their privation may incur future problems. Policies that support the wellbeing and maintenance of

relationships may be of benefit to families. The Coalition is to spend money on supporting people's relationships (DfE, 2012c); unfortunately these only extend to intimate relationships. This paper would emphasise that supporting intra-familial relationships, between adult parents and adult children and between adult siblings, may be of benefit too.

It should be noted that the analysis presented in this chapter does not give a direction of causation between social assets and SEB wellbeing. A case could hypothetically be made that mothers with children with higher SEB wellbeing are more likely to have close and supportive relationships with close friends and family. However, given that: (1) the social assets measured pre-date the SEB measurements, (2) the theory suggests the direction of causation runs from social assets having an improving effect on children and families, and (3) the qualitative literature presents evidence that concurs with the theory that social assets have an advantageous impact on children and families, the conclusion of this analysis, therefore, is that social assets have an improving impact on child SEB wellbeing for children living in persistently low income. This assertion is consistent with the theoretical and empirical evidence.

References

- ADELMAN, L., MIDDLETON, SUE AND ASHWORTH, KARL 2003. Britain's Poorest Children: Severe and Persistently Poverty and Social Exclusion. London: Save the Children.
- ANDERSON, S., BRADSHAW, P., CUNNINGHAM-BURLEY, C., HAYES, F., JAMIESON, L., MACGREGOR, A., MARRYAT, L. & WASOFF, F. 2007. Growing up in Scotland: Sweep One Overview Report. Edinburgh: Scottish Government.
- ATTREE, P. 2005. Parenting support in the context of poverty: a meta-synthesis of the qualitative evidence. *Health & Social Care in the Community*, 13, 330-337.
- BLANDEN, J., GREGG, P. & MACMILLAN, L. 2008. Accounting for intergenerational income persistence: non-cognitive skills, ability and education. *The Economic Journal*, 117, C43-C60.
- BLAXTER, L. & HUGHES, C. 2000. Social Capital: a critique. In: THOMPSON, J. L. (ed.) *Stretching the academy : the politics and practice of widening participation in higher education*. Leicester: NIACE.
- BOURDIEU, P. 1986. The Forms of Capital. In: RICHARDSON, J. G. (ed.) *Handbook of Theory and Research for the Sociology of Education*. New York/Westport/London: Greenwood Press.
- BOURDIEU, P. 1993. *Sociology in question / Pierre Bourdieu ; translated by Richard Nice*, London ; Thousand Oaks, Calif. :, Sage.
- BOURDIEU, P. & PASSERON, J. C. 1990. *Reproduction in Education, Society and Culture*, London, Sage.
- BRADSHAW, J. 2002. Child Poverty and Child Outcomes. *CHILDREN & SOCIETY* 16, 131-40.
- BRADSHAW, J., HOELSCHER, P. & RICHARDSON, D. 2007. An index of child well-being in the European Union. *Social Indicators Research*, 80, 133-177.
- CHAMBERS, R. & CONWAY, G. 1991. Sustainable rural livelihoods: practical concepts for the 21st-century. *IDS Discussion Paper 296*. Brighton.
- COHEN, J. 2003. *Applied multiple regression/correlation analysis for the behavioral sciences*, Mahwah, N.J.; London, Lawrence Erlbaum Associates.
- COLEMAN, J. S. 1988. Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94, S95-S120.
- COLEMAN, J. S. 1990a. *Foundations of social theory* Cambridge, Mass. ; London : Belknap Press of Harvard University Press, 1990.
- COLEMAN, J. S. 1990b. Social Capital. *Foundations of social theory* Cambridge, Mass. ; London : Belknap Press of Harvard University Press, 1990.
- COLEMAN, J. S. 2000. *Social capital in the creation of human capital*.
- CORBETT, J., MARRYAT, L. & BRADSHAW, P. 2005. Growing up in Scotland Sweep 1 Data Documentation. *UK Data Archive study number 5760*. Edinburgh.
- CORBETT, J., MARRYAT, L. & BRADSHAW, P. 2005 Growing up in Scotland Sweep 1 User Guide. *UK data archive study number 5760*. Edinburgh: Scottish Centre for Social Research.
- CORBETT, J., MARRYAT, L. & BRADSHAW, P. 2006a. Growing up in Scotland Sweep 2 Data Documentation. *UK Data Archive study number of 5760*. Edinburgh: Scottish Centre for Social Research.
- CORBETT, J., MARRYAT, L. & BRADSHAW, P. 2006b. Growing up in Scotland sweep 2 User Guide. *UK Data Archive study number 5760*. Edinburgh: Scottish Centre for Social Research.

- CORBETT, J., MARRYAT, L., BRADSHAW, P. & FERRANDON, M. 2007a. Growing up in Scotland Sweep 3 Data Documentation. *UK Data Archive study number 5760*. Edinburgh: Scottish Centre for Social Research.
- CORBETT, J., MARRYAT, L., BRADSHAW, P. & FERRANDON, M. 2007b. Growing up in Scotland Sweep 3 User Guide. *UK Data Archive study number 5760*. Edinburgh: Scottish Centre for Social Research.
- DUNCAN, G. J. & BROOKSGUNN, J. (eds.) 1997. *Consequences of Growing Up Poor*, New York: Russell Sage Foundation.
- ENTWISLE, D. R., ALEXANDER, K. L. & OLSON, L. S. 2005. First grade and educational attainment by age 22: A new story. *American Journal of Sociology*, 110, 1458-1502.
- ERIKSSON, U., HOCHWALDER, J., CARLSUND, A. & SELLSTROM, E. 2012. Health outcomes among Swedish children: the role of social capital in the family, school and neighbourhood. *Acta Paediatrica*, 101, 513-517.
- FEINSTEIN, L. 2000. The relative economic importance of academic, psychological, and behavioural attributes developed in childhood. London: London School of Economics.
- FERGUSON, K. M. 2006. Social capital and children's wellbeing: a critical synthesis of the international social capital literature. *International Journal of Social Welfare*, 15, 2-18.
- GHATE, D. & HAZEL, N. 2002. *Parenting in Poor Environments: Stress, Support, and Coping*, Jessica Kingsley Limited.
- GOODMAN, R. 1997. The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, 38, 581-586.
- HARRIS, J., TREANOR, M. C. & SHARMA, N. 2009. *Below the breadline: a year in the life of families living in poverty*, London, Barnardos.
- HECKMAN, STIXRUD & URZUA 2006. The effects of cognitive and noncognitive abilities on labour market outcomes and social behaviour. *Journal of Labor Economics*, 24, 411-482.
- HOLSCHER, P. 2008. Children and young people's experiences of poverty and social exclusion. In: RIDGE, T. & WRIGHT, S. (eds.) *Understanding inequality, poverty and wealth*. Bristol: The Policy Press.
- KINTREA, K., ST CLAIR, R. & HOUSTON, M. 2011. *The influence of parents, places and poverty on educational attitudes and aspirations*, York, Joseph Rowntree Foundation.
- KRITSOTAKIS, G., VASSILAKI, M., CHATZI, L., GEORGIU, V., PHILALITHIS, A. E., KOGEVINAS, M. & KOUTIS, A. 2011. Maternal social capital and birth outcomes in the mother child cohort in Crete, Greece (Rhea study). *Social Science & Medicine*, 73, 1653-1660.
- MATHAI, J., ANDERSON, P. & BOURNE, A. 2002. The Strengths and Difficulties Questionnaire (SDQ) as a Screening Measure Prior to Admission to a Child and Adolescent Mental Health Service (CAMHS). *Australian e-Journal for the Advancement of Mental Health*, 1.
- MATHAI, J., ANDERSON, P. & BOURNE, A. 2003. Use of the Strengths and Difficulties Questionnaire as an outcome measure in a child and adolescent mental health service. *Australasian Psychiatry*, 11, 334-337.
- MATHAI, J., ANDERSON, P. & BOURNE, A. 2004. Comparing psychiatric diagnoses generated by the Strengths and Difficulties Questionnaire with diagnoses made by clinicians. *Australian and New Zealand Journal of Psychiatry*, 38, 639-643.
- MAY, C., BROWN, G., COOPER, N. & BRILL, L. 2009. *The Sustainable Livelihoods Handbook: an Asset Based Approach to Poverty*, Manchester, Oxfam And Church Action on Poverty.

- MORROW, V. 1999. Conceptualising social capital in relation to the well-being of children and young people: a critical review. *Sociological Review*, 47, 744-765.
- MORROW, V. 2001. Young people's explanations and experiences of social exclusion: retrieving Bourdieu's concept of social capital. *International Journal of Sociology & Social Policy*, 21, 37-63.
- RIDGE, T. 2002a. *Childhood poverty and social exclusion : from a child's perspective*, Bristol, Policy.
- RIDGE, T. 2002b. Listening to children: their contribution to antipoverty policies. *Poverty*, 111, 10-13.
- RIDGE, T. 2005. Hearing the voices of children. *Journal of Social Policy*, 34, 334-336.
- RIDGE, T. 2007. It's a family affair: Low-income children's perspectives on maternal work. *Journal of Social Policy*, 36, 399-416.
- RIDGE, T. 2009. *Living with Poverty: a Review of the Literature on Children and Families*. London: Department for Work and Pensions.
- RIDGE, T. 2011. The Everyday Costs of Poverty in Childhood: A Review of Qualitative Research Exploring the Lives and Experiences of Low-Income Children in the UK. *CHILDREN & SOCIETY*, 25, 73-84.
- RIDGE, T. & WRIGHT, S. (eds.) 2008. *Understanding inequality, poverty and wealth : policies and prospects*, Bristol: Policy Press.
- RIMM-KAUFMAN, S. E., PIANTA, R. C. & COX, M. J. 2000. Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, 15, 147-166.
- SCHOON, I., HOPE, S., ROSS, A. & DUCKWORTH, K. 2010. *Family hardship and children's wellbeing: the early years*.
- SCHOON, I., JONES, E., CHENG, H. & MAUGHAN, B. 2012. Family hardship, family instability, and cognitive wellbeing. *Journal of Epidemiology & Community Health*, 66, 716-722.
- SCOTCEN 2008. *Growing up in Scotland Sweep 4 - 2008/09 Data Documentation*. Edinburgh: Scottish Centre for Social Research.
- STEVENS, J. 2002. *Applied multivariate statistics for the social sciences* [Online]. Mahwah, N.J.: L. Erlbaum. Available: <http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=63477>.
- SULLIVAN, A. 2002. Bourdieu and Education: How useful is Bourdieu's theory for researchers? *The Netherlands' Journal of Social Sciences*, 38, 144-166.
- SULLIVAN, A., CARA, O., JOSHI, H., KETENDE, S. & OBOLENSKAYA, P. 2010. *The consequences of childhood disadvantage in Northern Ireland at age 5*. London: Institute of Education.
- WEBBER, M., HUXLEY, P. & HARRIS, T. 2011. Social capital and the course of depression: Six-month prospective cohort study. *Journal of affective disorders*, 129, 149-157.
- WHITHAM, G. 2012. *Child poverty in 2012: it shouldn't happen here*. Manchester: Save the Children.

Figure 1 Interaction of social assets and lowest/highest income quintile for SEB

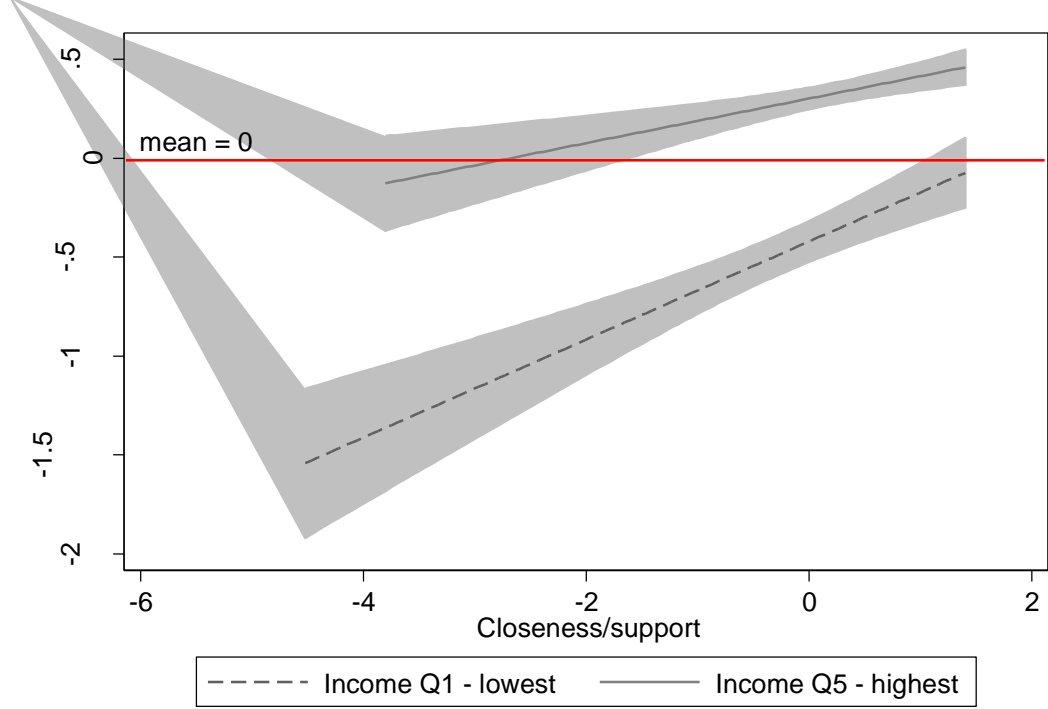
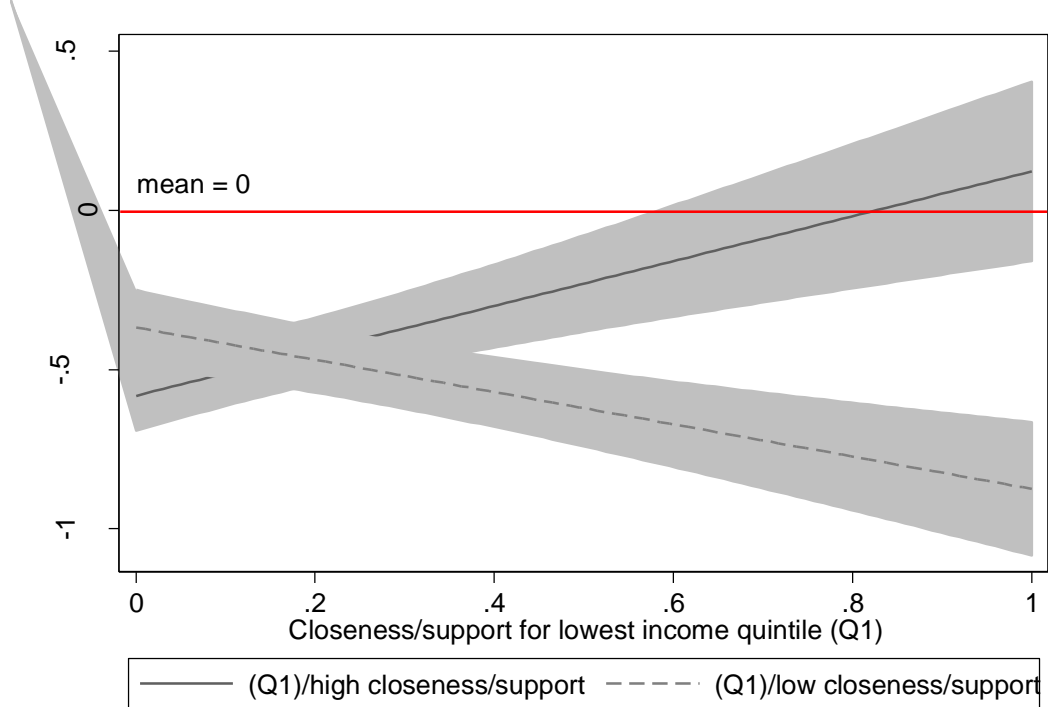


Figure 2 Low/high social assets for quintile 1 with SEB development



Tables

Table 1 – Sweep information for the birth cohort

Sweep	Year	Achieved sample	Response rate (all eligible cases)	Response rate (as % of sweep 1)
1	2005 - 2006	5,217	80%	100%
2	2006 – 2007	4,512	88%	87%
3	2007 – 2008	4,193	91%	80%
4	2008 – 2009	3,994	91%	77%
5	2009 - 2010	3,833	92%	73%

Source: GUS sweeps 1-5

Table 2 Summary of all variables

	count	mean	sd	min	max
Children's SEB	3557	0.00	1.00	-4.93	1.65
Social Assets	3557	0.00	1.00	-4.52	1.40
Averaged income					
Quintile 1	3557	0.13	0.34	0	1
Quintile 2	3557	0.19	0.39	0	1
Quintile 3	3557	0.21	0.41	0	1
Quintile 4	3557	0.23	0.42	0	1
Quintile 5	3557	0.23	0.42	0	1
First born child	3557	0.51	0.50	0	1
Gender (male)	3557	0.51	0.50	0	1
Maternal ethnicity (non-white)	3557	0.02	0.15	0	1
Family transition dummy variables:					
Couple	3557	0.79	0.41	0	1
Lone parent	3557	0.08	0.26	0	1
Re-partnered lone parent	3557	0.05	0.21	0	1
Separated couple	3557	0.06	0.23	0	1
Separations/Re-partnerings	3557	0.03	0.18	0	1
Age at birth of first child:					
aged 40 or over	3557	0.04	0.19	0	1
aged 30 to 39	3557	0.56	0.50	0	1
aged 20 to 29	3557	0.36	0.48	0	1
under20	3557	0.05	0.21	0	1

Source: GUS sweeps 1 to 5

Table 3 – Polychoric correlations

	Sw2 Close1	Sw2 Close2	Sw4 Close1	Sw4 Close2	Sw2 Opinion	Sw4 Opinion	Sw2 Support	Sw4 Support
Sw2 Close1	1							
Sw2 Close2	0.510426	1						
Sw4 Close1	0.591376	0.375628	1					
Sw4 Close2	0.389048	0.717097	0.453446	1				
Sw2 Opinion	0.419342	0.416229	0.355245	0.320817	1			
Sw4 Opinion	0.344654	0.324216	0.446758	0.433529	0.547703	1		
Sw2 Support	0.352428	0.493593	0.306371	0.438505	0.286405	0.218649	1	
Sw4 Support	0.303184	0.385844	0.354006	0.460882	0.226159	0.300213	0.60121	1

Source: GUS sweeps 2 and 4

Table 4 Tamhane's T2 post hoc analysis

Row Mean - Column Mean	Quintile 1 (lowest)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (highest)
Social assets					
Q 1 (lowest)		-0.139	-0.296***	-0.317***	-0.471***
Q 2	0.139		-0.157*	-0.179***	-0.332***
Q 3	0.296***	0.157*		-0.021	-0.175***
Q 4	0.317***	0.179***	0.021		-0.154***
Q 5 (highest)	0.471***	0.332***	0.175***	0.154***	

* The mean difference is significant at the 0.05 level.

** The mean difference is significant at the 0.01 level.

*** The mean difference is significant at the 0.001 level.

Table 5 Income inequality (ref: highest quintile), SEB and social assets

	Model 1 SEB	Model 2 SEB	Model 3 SEB	Model 4 SEB
Birth order (ref: first born)	0.0471 (0.042)	0.180*** (0.041)	0.189*** (0.038)	0.190*** (0.038)
Sex of child (ref: female)	-0.266*** (0.038)	-0.274*** (0.036)	-0.274*** (0.036)	-0.276*** (0.036)
Ethnicity of mother (ref: White)	-0.519*** (0.144)	-0.229 (0.139)	-0.162 (0.152)	-0.159 (0.155)
Longitudinal family transitions (ref: stable couple family)				
Stable lone parent family	-0.344*** (0.080)	0.0389 (0.102)	0.00603 (0.102)	0.000153 (0.103)
Lone parent who repartnered	-0.269* (0.108)	-0.0459 (0.112)	-0.104 (0.112)	-0.112 (0.113)
Couple who separated	-0.301*** (0.070)	-0.134* (0.065)	-0.126 (0.064)	-0.125 (0.064)
Separations and repartnerings	-0.730*** (0.092)	-0.505*** (0.088)	-0.499*** (0.089)	-0.493*** (0.089)
Maternal age at first birth (ref: 40 or over)				
30 to 39	0.0298 (0.085)	0.0323 (0.085)	-0.0394 (0.086)	-0.0293 (0.086)
20 to 29	-0.179* (0.083)	-0.0525 (0.083)	-0.160 (0.086)	-0.148 (0.086)
Under 20	-0.349* (0.136)	-0.0732 (0.140)	-0.188 (0.141)	-0.183 (0.141)
Income inequality (ref: highest quintile):				
Quintile 1		-0.834*** (0.088)	-0.700*** (0.088)	-0.695*** (0.087)
Quintile 2		-0.519*** (0.059)	-0.431*** (0.060)	-0.450*** (0.060)
Quintile 3		-0.265*** (0.052)	-0.224*** (0.048)	-0.242*** (0.048)
Quintile 4		-0.217*** (0.048)	-0.187*** (0.046)	-0.201*** (0.046)
Social Assets			0.190*** (0.018)	0.113*** (0.032)
Interaction income and social assets				
Quintile 4 and social assets				0.0511 (0.046)
Quintile 3 and social assets				0.0927 (0.060)
Quintile 2 and social assets				0.0499 (0.039)
Quintile 1 and social assets				0.150* (0.060)
Constant	0.248** (0.083)	0.396*** (0.083)	0.427*** (0.084)	0.435*** (0.085)
r2	0.090	0.133	0.164	0.167
N	3534	3518	3496	3496
df_r	65	65	65	65

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: GUS sweeps 1 to 5

Sweep 5 longitudinal weight and survey weights applied