Aspirations Failure and Well-Being Outcomes in Ethiopia

Towards An Empirical Exploration

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"*Poverty stifles dreams, or at least the process of attaining dreams. Thus poverty and the failure of aspirations may be reciprocally linked in a self-sustaining trap.*"

Ray (March 2003)

I. Motivation and Objectives

Fatalism is customarily, if not always formally or explicitly, attributed to Ethiopians - particularly to those who are poor. The intention, in such instances, is to characterise the lack of proactive and systematic effort to better one's own life, and the implied acceptance of their circumstances, that a lot of Ethiopians seem to display.[1] Some even go further and identify fatalism as a key factor that explains the rather slow socio-economic transformation in the country. This view certainly appears consistent with the language used by the disadvantaged to describe their life and difficulties thereof. For instance, Rahmato and Kidanu (July, 1999) report the following expressions:

> ***'We live only for today'*** - portrays a life style based only on the present. There is no planning ahead or thinking about the future. It is a clear indication that people have given up on life, and just don't know or don't want to think about what will happen tomorrow. It describes the state that people are reduced to living a day to day life with no future.
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> ***'It is a life of no thought for tomorrow'*** - is a common expression, particularly in urban areas, to indicate that whatever is 'found' today is for today and whatever will be 'found' tomorrow will be for tomorrow.
>
> ***'Waiting to die while seated'*** - expresses the state of being that hinges on giving up on life altogether. In the absence of alternatives, impending death is seen as solution to the problems people are facing.
>
> ***'We have neither a dream nor an imagination'*** - is another common term used to state desperation and hopelessness. This expression reveals that people are reduced to watching others eat."

From an economic perspective, and to the extent that it relates to current action and its impact on future outcomes, fatalism is equivalent to not making the necessary

[1] There is controversy regarding what fatalism is and whether it is an analytically useful concept. See Solomon (October 2003) for a critical review of the philosophical literature.

'investments' to better one's well-being. It may thus be the case that people refrain from making well-being-enhancing investments because they believe, in a boundedly rational way, that such investments are either infeasible or would not lead to significant changes.[2]

In fact, the phenomenon of low investment while returns to investment are and/or appear to be high is not unique to Ethiopia. There is indeed sufficient micro-level evidence showing that people often fail to invest even though returns are positive (and sometimes very high).

For instance in their study of farmers in Southern Ghana, Goldstein and Udry (2006) find that despite rates of real returns ranging between 250% and 300% compared to 30-50% in well-established food crop cultivation, only 18% of the land is used for pineapple growing. In Kenya, Duflo, Kremer and Robinson (2003) report that less than 15% of a sample of Maize farmers used fertilizers despite rates of returns greater than 100%. In the same region, Miguel and Kremer (2003) calculated that the pick-up rate of free de-worming pills (which was also shown to greatly improve children's health and school performance) was only 57%. In India, Munshi and Rozensweig (2006) show that despite rapid increase in the returns to English education during the 1990s, enrolment of boys from lower castes has not converged to the enrolment rate of boys from higher castes, while that is not true for girls.

The same evidence also shows that such behaviour is often even more acute among poorer populations (see Banerjee and Duflo (2003) and Banerjee and Duflo (2007) for reviews). The key message is that the poor can and do make choices and that these choices may not coincide with those implied by standard economic reasoning.

A variety of mostly complementary explanations have been forwarded over the years. In a first class, investments do not occur – at least as much as predicted by standard economic theory – because one's expectations of privately appropriable returns are simply too low. The problem here arises primarily from the individual's environment. More specifically, limited availability of investment opportunities (such as no schools) and/or low access to investable resources (such as lack of credit) restrict investment. Missing/thin markets (such as credit, insurance, and labour markets) are usually responsible for such outcomes since they constrain the set of economic choices with positive expected returns. Asymmetric information, weak incentives, and difficult enforcement in turn explain missing/thin markets.

There are also situation in which investment opportunities with positive (and potentially high) returns that are not being exploited due to lack of information/knowledge

[2] This characterisation also allows for the possibility that people may be unable to see where such investments lead to and/or how they lead to where they lead to.

about the opportunities/returns. Note that the lack of information can also be a lack of *sufficient* information. As in Yamaushi (2006), people often need to observe a wide variety of cases to make a decision.

Finally, social constraints may, independently or jointly with market failures, dampen the economic attractiveness of investment opportunities. Examples include egalitarian norms (Platteau (2000)) and excessive government taxation and regulations (Hausmann, Rodrik, and Velascoy (March 2005)). In this case, returns to individual effort are undermined by the necessity to share the benefits with other members or organisations in the community. In such cases, while adequate returns may be available, limits to private appropriation causes the apparent under-investments.

The explanations thus far assume, not always explicitly, that the underlying logic of poor people's decision-making is essentially consistent with standard economic reasoning but respectively identified external constraints thwart them from making the corresponding 'correct' choices. In contrast, a second class of explanations may be found in recent theoretical and empirical developments shifting the focus away from external constraints and towards the *manifested attributes* of decision makers. A number of sub-sets can be highlighted.

Identity issues: People's choices are conditioned by their sense of self. For example, in the experiment of Hoff and Pandey (June 2004) in India, the test performance of lower caste children declined due to the public revelation of caste status at the beginning of the test. Hoff and Pandey (June 2004) argue that individuals readily assume caste (or more generally stereotype) roles since they expect others to treat them according to these roles. Or, as in Munshi and Rosenzweig (August 2005), where lower caste families continue to send their sons to local language schools whereas globalization has made English language training more rewarding.[3]

Psychological issues: A sub-set of reasons originate from the behavioural economics literature and focus on, among others, impatience, commitment, and psychological barriers. Bertrand, Mullainathan, and Shafir (2001) summarise some of the relevant propositions including: the role of minor situational details called "channel factors"; loss aversion and the consequent preference for the status quo (or the "endowment effects"); and

[3] The recent work on identity in economics aims to provide theoretical underpinnings for these phenomena. See Akerlof (1997) Akerlof and Kranton (2000, 2002), and Fang and Loury (2005).

compartmentalized wealth and spending.[4] They also argue reasonably that these effects can be more significant for the poor in light of the rather small manoeuvre room that they have.

The present study adopts a perspective akin to both classes of explanations in that it attempts to blend external constraints that the poor face with the potential effect these constraints may have on the internal logic governing choice by these people.[5] The argument can be informally stated as follows. Decision-making by individuals crucially rely on the set of beliefs and perceptions (or mental models) they have regarding their physical and social environment - a set that evolves with learning through experience and reflecting motivation and information.

More specifically, poverty may lead individuals to construct mental models that uniquely diminish the significance of some features of the environment and magnify others. If an individual believes that she has little, if any, ability to impact on her wellbeing, then she would have inadequate incentives to become informed about or explore pathways into better wellbeing. Moreover, she would have little motivation to allocate resources (including cognitive ones) to modify her beliefs and perceptions. As a consequence, the set of beliefs about her inability to bring about positive change would be perpetuated. Thus, information, credit, insurance, or other resources/opportunities may be available (albeit with some cost), they remain unexploited by the agent because she is convinced that her actions will not make a difference.

This perspective affords an alternative characterisation of what appears to be fatalism, namely, aspirations failure (Appadurai (2001), Ray (2006)). Accordingly, a weak capacity to aspire can translate into low or no investments and that may pass for fatalism. To our knowledge however, this perspective has not been applied empirically,[6] certainly not in Ethiopia. This paper attempts to establish whether more systematic and rigorous analysis using this framework is warranted. In particular, we use recently collected data in rural Ethiopia to examine whether we can uncover basic correlations predicted by the aspiration failure framework. Based on evidence that it is so, we then outline empirical challenges to further test these models.

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[4] Many real life examples fit into this. The experiment by Ashraf, Karlan, and Yin (2004) shows exactly this. In addition the ROSCAS (Iqub in Ethiopia) can be seen as such a commitment device.

[5] This perspective is in line with that developed in Banerjee, Benabou, and Mookherjee (2006). See particularly, Part III of that book.

[6] Macours and Vakis (2008) is an exception we discovered recently.

The rest of the paper is organized as follows. Section II outlines the conceptual framework adopted. The findings of illustrative analyses conducted using data collected from a survey are reported in Section III. The fourth section describes the way forward.

II. Conceptual framework

A dictionary definition of the word 'aspiration' is 'a desire or ambition to achieve something'.[7] The word thus signifies some aim or target and a preference or wish to attain it. The meaning also suggests, rather implicitly, that some effort would be exerted to realize the desired aim/target. In short, aspirations combine or summarise the preferences held, the expectations formed, and the constraints acknowledged by an individual with respect to the future. Viewed as such, the broad concept of aspiration is not new to economics.

Perhaps the most familiar variant relates to the concept of satisficing that Herbert Simon initially elaborated fifty years ago.[8] Simon argues that the complex environment they function in and their limited cognitive and information-processing capabilities make full rationality beyond the reach of economic agents. Instead, he characterises decision-making by such agents as search for alternatives which meets or exceeds specified criteria or aspiration levels – a process that does not necessarily lead to the choice of a unique or best alternative. In other words, economic agents engage in 'satisficing' rather than 'optimising'.

Moreover, these aspiration levels are modified depending on circumstances – a process referred to as aspiration adaptation. In fact, Selten (May 1999) argues that the three central elements of Simon's original view of bounded rationality are: search for alternatives, satisficing, and aspiration adaptation. Indeed, the 'aspiration adaptation theory' summarized in Selten (May 1999), may provide an ingredient to a model of the dynamics of aspirations. However, little explicit consideration seems to be given to how aspirations are formed. As put by Selten (May 1999) himself:

> "Decision makers do not always know what they want. In new situations goals must be formed. Where does the aspiration scheme come from? Often only a finite number of decision alternatives is considered, even if in principle infinitely many are available. How is this selection made? If quantitative or qualitative expectations about goal variables need to be formed, how is this done? Aspiration adaptation theory leaves processes of goal formation, construction of alternatives and expectation formation largely unmodelled."

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[7] Oxford English Dictionary, Second Edition (1989), accessed at http://dictionary.oed.com/.

[8] See, for instance, Simon, Herbert A. (1977) and Selten (1999).

This issue leads to the framework outlined by Ray (2006),[9] who attempts to characterise aspirations as well as the process of their formation. Three concepts are central to that framework - aspiration window, aspiration gap, and aspiration failure. Aspirations reflect an individual's cognitive world, his/her zone of 'similar', 'attainable' individuals, labelled by Ray (2006) as that individual's aspiration window. This aspiration window is determined by the individual's observations of his/her peers to form comparisons, as well as of the information and economic opportunities of the local environment.

Ray (2006) argues that one additional concept is required before the link between aspirations and individual behaviour can be established. This he refers to as the aspiration gap - the difference between a person's contemporaneous 'standard of living' and the 'standard of living' she aspires to. It is this gap, not aspirations as such, that conditions future-regarding behaviour. The behavioural response of individuals to their respective aspiration gap may take the form of an aspiration failure. Aspiration failure occurs as lack of pro-active behaviour (or under-investment in explicitly economic terms) towards filling the aspiration gap. Given the fact that deliberate action would be costly, it is reasonable to expect very small and very large aspiration gaps to induce little or no effort to fill them. It is not only necessary that individuals have aspirations, but also that they have the kind of aspirations that are feasible and rewarding to act upon.

<< Figure 1 about here >>

The importance of the aspirations stems from the pattern of their distribution in society and the attendant consequences. In this regard, summarising Appadurai (2001), Ray (2006) emphasises that, being a socially determined capacity, aspirations are not evenly distributed between rich and poor. Furthermore, this uneven distribution has intrinsic as well as instrumental consequences. The intrinsic consequence is that the "terms of recognition" are adversely tilted against the poor, stripping them of voice and dignity. The instrumental consequence is that the poor thereby lack "the (aspirational) resources to contest and alter the conditions of their own poverty". Note that this does not mean the poor have no capacity to aspire, it rather means that their opportunity to explore the linkages among means and ends is much more limited than those who are more affluent – in Ray's terms, that they are confronted to narrow aspiration windows. As a result, they have a more restricted and weaker capacity to aspire (Appadurai (2001), Harriss (January 8, 2005). As put by Appadurai (2001):

> The capacity to aspire is thus a navigational capacity. The more privileged in any society simply have used the map of its norms to explore the future more frequently, more realistically

[9] The next three paragraphs are essentially a synoptic summary of Sections 2-3 in Ray (2002, 2006). See Ray (2002, 2006) for further details.

> and share this knowledge with one another more routinely than their poorer and weaker neighbours. The poorer members, precisely because of their lack of opportunity to practice the use of this navigational capacity (in turn because their situations permit fewer experiments and less easy archiving of alternative futures), have a more brittle horizon of aspirations.
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> This difference should not be misunderstood. I am not saying that the poor cannot wish, want, need, plan, or aspire. But part of poverty is a diminishing of the circumstances in which these practices occur. If the map of aspirations (continuing the navigational metaphor) is seen to consist of a dense combination of nodes and pathways, relative poverty means a smaller number of aspirational nodes and thinner, weaker sense of the pathways from concrete wants to intermediate contexts to general norms and back again. Where these pathways do exist for the poor, they are likely to be more rigid, less supple and less strategically valuable, not because of any cognitive deficit on the part of the poor but because the capacity to aspire, like any complex cultural capacity thrives and survives on practice, repetition, exploration, conjecture and refutation. Where the opportunities for such conjecture and refutation in regard to the future are limited (and this may well be one way to define poverty) it follows that the capacity itself remains relatively less developed.

Viewed in this light, aspirations become a valuable analytical device and a critical entry point for policy relevant to poverty reduction and ultimate socio-economic transformation: the poor may have a narrow aspiration window which may lead to a very narrow/wide aspiration gap and subsequently to aspiration failure. The ultimate consequence of this chain is the perpetuation of poverty.[10] More specifically, aspirations can help answer why entrepreneurship appears to be limited, both in spread and dynamism, in poor countries and thus what avenues are open to stimulate greater frequency and depth of entrepreneurial activity in such countries.

The capacity to aspire, in turn, is a cultural capacity that relates to the manner in which people visualise the future and engage in forward-looking behaviour (Appadurai (2001), Rao and Walton (March 2002)). Being a cultural capacity identifiable with individuals, it not only captures group-level characteristics, but also allows for the possibility of each individual breaking-out (i.e., individually deviant behaviour). It thus proves a useful handle on the individual-group symbiosis that seems to be a key to economic growth and socio-economic transformation. It is reasonable to posit that present-day rich countries were once poor by today's standards. It is also reasonable to assume that they achieved transformation through a process that combines individual initiative/effort and growing

[10] It is possible to view the 'development as self-discovery' characterisation (of Hausmann and Rodrik (April, 2003)) at the individual/community level from this perspective.

collective opportunities (and/or weakening resistance to change) working in a positive feedback loop.

III. Some Empirical Results

In January 2007, an opportunity arose to add a module to a rural household survey being implemented in poor areas of Ethiopia targeted by the national-level Productive Safety Net Program (PSNP). The sample covered approximately 24 households per village, in 54 villages of nine districts chosen for their broad representativeness of various physical and human (or livelihood) conditions in Ethiopia. In each household standard demographics, health, education, income, consumption and expenditure information were collected. The aspirations-related module was itself administered to two adults per household. For ease of interpretation however, and because certain of the covariate used were only available at the household-level, only household heads are kept in the sample used below. Note though that all estimations were also performed at the individual-level with equivalent – in fact, sometimes stronger – results.

Two objectives motivated the inclusion of this aspirations-related module. The first aim was to find a reasonable answer to the question "Are members of Ethiopian rural households willing and able to answer aspiration-related questions?" Establishing this is obviously important in that an affirmative answer would partly justify further analyses in the manner envisaged.[11] The second aim was to conduct some illustrative analyses to establish whether the proposed research project (and research agenda) is significant and feasible. To this end, this section reports on the findings of preliminary and illustrative analyses conducted using data collected from the said survey. We start with some indicators of aspirations, aspiration window and aspiration gap, before turning in the next section to some illustration of – related – aspirations failures.

An indicators of aspirations

Measuring levels of aspirations is in itself is a challenging task, and the subject of a lengthy discussion in a companion paper. Rather, our purpose here is to compare individuals with likely 'higher' aspirations to others with 'lower' and test whether this distinction can also be found in indicators of "aspiration window", "aspiration gap" or "aspiration failures". Note however, that due to significant endogeneity issues – in particular in the relationship between

[11] The importance of this has been analogously explored and an affirmative answer established in the 'subjective expectations' literature (see Manski (2004)).

one's aspiration window and her aspiration level – the correlations established here cannot be interpreted as evidence of causalities.

Recall that aspirations summarise not only the wants and preferences of individuals but also their beliefs and calculations regarding the feasibility of those wants and preferences. Thus, one rather rough indicator of the aspiration of individuals is their view regarding the degree of control they have over their 'life'. To ensure that the indicator used effectively captured this information, two sets of questions relating to different perspectives on why one may lack control were asked:

> *Q 15: For each of the following, please tell me which of the two propositions you most agree with:*
>
> *a. 1: "Each person is primarily responsible for his/her success or failure in life"*
> *2: "One's success or failure in life is a matter of his/her destiny"*
>
> *b. 1: "To be successful, above all one needs to work very hard"*
> *2: "To be successful, above all one needs to be lucky"*

The resulting binary responses were deemed informative about the extent to which individuals feel in control of their own future. Overall, in the present sample, 31 percent of the respondents agree that "*One's success or failure in life is a matter of his/her destiny*", while 32 percent of them believe that "*To be successful, above all one needs to be lucky*".[12] Indeed, the responses to these questions are quite consistent with each other: 72 percent of those who agreed with the statement that "One's success or failure in life is a matter of his/her destiny" also agreed with the statement that "To be successful, above all one needs to be lucky". For the sake of brevity, only the results obtained using the destiny-related indicator are reported in subsequent paragraphs.[13]

As a first consistency test, we relate this aspiration indicator with measures of wealth in a reduced form-type relationship, controlling for age, gender, and literacy status of the respondent, as well as village-level characteristics. Indeed the most common observation is that aspirations are positively related with wealth, thereby contributing to the perseverance of poverty.[14]

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[12] Although preliminary, and not clearly interpretable in their magnitude, these results nevertheless suggest that the feeling of hopelessness and resignation is a widespread phenomenon in our sample.

[13] Note however that all the tests reported were also performed using the luck-related indicator and that comparable results were obtained.

[14] We use a self-assessed wealth indicator as an outcome of the poverty–low aspiration feedback loop described above. In this sense, it captures a broader definition of poverty – e.g. including a sense of vulnerability – that is appropriate here. In all estimations using this indicator, we nevertheless add a

The self-assessed poverty indicator is captured via the following question:

> *Qm7s5q2: Just thinking about your own household circumstances, would you describe your household as: (i) Destitute, (ii) Poor, (iii) Never have quite enough, (iv) Can manage to get by, (v) Comfortable, (vi) Rich (vii) Very rich*

While 90 percent of the answers fell within the first four categories (recall that the sample was explicitly targeted at districts among the poorest in Ethiopia), the distribution nevertheless offers enough variations to investigate its relationship with the aspiration indicator described above. Results are reported in Figure 2, which as expected, displays a positive relationship between wealth and one's aspirations – although with significant heterogeneity in the predicted 'aspiration level' at each wealth category.

<< Figure 2 about here >>

Although preliminary, these results confirm the correlation between one's sense of control and what would be a finer and more complete measure of aspiration levels. In the following paragraphs, we assume that this correlation is monotonous, and therefore we use responses to question *Q15a* to contrast individual with 'lower' and 'higher' aspirations.

Indicators of Aspiration Window

According to the discussion in the previous Section, a person's aspirations are determined by the person's observation of his/her peers to form comparisons, as well as of the information and economic opportunities of the local environment. Accordingly, poorer households have lower aspirations because of narrower windows to observe from.

The data used here give a relatively strong support to this hypothesis. For instance, for 89% of the respondents their 'role model' lives in the same Kebele (although there is no close family link between the two individuals). Indeed, several "relatively" successful individuals are likely to be found in each Kebele. As put by respondents to an interview in Holte Kebele: "We have successful individuals who are a model for others in their activities to improve their food security status". Nevertheless, the fact that the vast majority of the respondents' role models are their more or less immediate neighbours indicate to a rather limited access to outside information.

The respondents' limited exposure to the rest of the world is further reflected in the fact that: 92% of all the household heads in the sample were born in the village they are currently living in, and more than 70 percent of responding household heads declare that both their first language and their religion is the same as that of the successful person or role

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measure of per capita expenditure in the set of control variables, to account for poverty-level induced behaviours.

model they have chosen.[15] In addition, while 57 percent of the respondents reported listening to the radio less than once a year, one-third did not have regular contact with at least one person outside of her village, and 56 percent did not have such contacts with individuals outside their district.[16]

Further, one can assess the validity of the claim that the low aspirations displayed by poor individuals are due to their limited aspiration windows, by investigating the relationship between wealth and aspiration window. In Figure 3, we report similar estimates as those in Figure 2, only this time we assess the probability that one may have regular contacts outside his/her district as a function of his/her self-assessed poverty status. Here also, the results tend to support the idea of narrower windows for poorer individuals.

<< Figure 3 about here >>

These indicators can be further illustrated by their relationship to aspiration level. According to the theory discussed in the previous Section, one's aspiration window should be positively related to aspiration level. In Table 1 we report simple tests of difference in response to 'aspiration window' related questions mapped onto the 'aspiration level' indicator discussed above. At this stage, these results may not be interpreted as causality. For instance, one's window can itself be the result of a higher aspiration individual's choice to seek more information, or of a third factor (or set of factors) influencing both one's window and her aspiration level. Nevertheless, they do suggest that larger windows are linked to higher aspirations.

<< Table 1 about here >>

Indicators of Aspiration Gaps

The desire to capture the distance between what is aspired to and what the current state is underlies the idea of the aspiration gap. According to the theory above, it is this gap which determines the level of 'effort' displayed by individuals to better their future. Importantly, and as shown in Figure 1, the same level of 'effort' can be obtained for narrow and wide aspiration gaps.

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[15] The fractions are even higher for speakers of specific languages (almost a 100 percent for Afar, Oromiffaa, and Tigrigna speakers) and followers of specific religions (above 90 percent for Orthodox Christians). The exceptions are Siltie speakers and Protestants

[16] That respondents reported fewer contacts outside their districts than outside their village constitutes an additional piece of evidence regarding the consistency of responses.

Several, albeit partial, indicators can be used to characterize the aspiration gap. First, we note that 73% of the respondents believe that they could become as successful as their respective role model within five years. These results overall suggest that, for most respondents, the distance between aspired and current states is not perceived to be very wide. This is further supported by the respondents' low desire for change. Indeed, only 45 percent of them were ready to change their main income earning activity (predominantly farming), and 28 percent were willing to move to somewhere else even when this would lead to improved standard of living – recall that all respondents were sampled from districts considered amongst the most deprived areas of Ethiopia. Overall, we believe that these results indicate a somewhat narrow aspiration gap.

This can be substantiated using respondent's self-assessment of his/her state of happiness as another indicator for his/her aspiration gap. This use is reasonable given the consistent associations between socioeconomic variables (such as income, unemployment, health, marital status, gender, race, and age) and reported happiness were found by a large body of research spanning both developed and developing countries (Di Tella, MacCulloch, and Oswald (July 30, 2002), Layard (2003), and Graham, Eggers, and Sukhtankar (2004), Stutzer (2006)). The line of causality is not always clear, however and admittedly, happiness itself is a rather vague measure that can lead to various interpretations.

It is rather striking that more than 70% of the respondents indicated that they were either happy or very happy, while less than 30% said otherwise. Despite widespread poverty, such levels of 'happiness' have been observed in many developing countries (see Duflo and Banerjee, 2005). Establishing a simple relationship between a person's aspiration and his/her aspiration gap may be challenging, as aspirations can evolve and be reassessed as the person moves towards his/her goals. Such dynamics have for instance been observed in the happiness literature where one finds that while richer individuals are on average happier than poorer ones, people do not necessarily become happier as they become richer, (due to the growth of aspirations as income does).

Brought to the present context, it may be safe to say that happiness can be linked to satisfaction with one's circumstances, while unhappiness indicates that one wishes things were different. Self-assessed state of happiness would thus be related to 'how far the person wants to go' or his/her aspirations gap. However, one's happiness may also be positively linked with one's feeling of moving forward – towards eventually closing the gap – which can be associated with a smaller or a larger gap. The vagueness of the relationship between happiness and aspirations – or more generally between aspirations and aspirations gap – is also found in Figure 4, where plotted prediction of one's happiness against his/her self-assessed poverty status does not reveal a clear pattern.

<< Figure 4 about here >>

In Table 2, we assess the relationship between aspiration gap and aspirations. Again, we report simple tests of differences in proportion between individuals with 'higher' and individuals with 'lower' aspirations. Again, the results illustrate the non-trivial relationship between aspirations and aspirations gap. On the hand, higher aspirations' individuals believe they are able to close their aspiration gap as reported by their broader belief that they can be as successful as their role model in a short period, and they tend to be happier. On the other hand, they also are the ones willing to change their activity and place of residency if need be, a fact indicating a potentially larger gap than 'lower aspiration' individuals.

<< Table 2 about here >>

Overall, and while based on interpretations, these results do support the claim that lower aspiration individuals are likely to be the ones with lower aspiration gaps, thereby more prone to aspiration failures.

IV. Aspiration failures

The hypothesis enunciated in Section II states that narrow aspiration windows engender very narrow or very wide aspiration gaps and ultimately lead to aspirations failure - as per the discussions in the previous Section, respondents in our survey tend to be better characterize by narrow aspiration gaps. If verified, such hypothesis provides a clear direction to address aspiration failures.

Aspiration failures occur when individuals are unwilling to make much pro-active investments to better their own lives. More precisely, a person with too narrow/wide an aspiration gap would tend to under-invest as compared to one with a reasonably wide gap. As one avenue of exploring this possibility, respondents were asked a set of questions regarding credit.

Q 21: A banker came to you and offered to lend you any amount of money you ask...[17]

a. 1: How much would you ask for if the loan was payable in 1 year?
2: What would you use this money for?

b. 1: How much would you ask for if the loan was payable in 5 years?
2: What would you use this money for?

c. 1: How much would you ask for if the loan was payable in 10 years?

[17] This formulation of the credit demand question was intended to make credit market imperfections in principle inoperative.

2: What would you use this money for?

Their responses provide part of the information needed to validate the hypothesis that narrow aspiration gaps would lead to aspiration failures. Figure 4 presents the distribution of answers to the first part of each question. Note that the amounts that would be borrowed remain relatively small, even for a 10-year repayment period (as a rule of thumb, one USD is roughly equal to 10 Birr). These amounts however increase with the length of the repayment period.[18] It is notable that a large proportion of individuals (17 %) are not interested in taking any loans,[19] and that it increases as the time horizon expands, suggesting a fear of commitment probably due to uncertainties about future economic status.

<< Figure 5 about here >>

In Table 3, the average loan amounts demanded are linked to the respondents' level of aspiration. The results are rather clear, showing that a person would borrow significantly more if he/she feels in control of his/her life. In other words, and as expected, differences between low aspiration and high aspiration individuals are significant, the latter being significantly more willing to take a loan for all maturity periods.

The types of investment the respondent would make if he/she were lent the money were considered next. To this end, answers were classified into three categories. The first category groups all short term investments such as expenditure immediate food consumption and household consumables. The second category groups what are identified as medium term investments. Specifically, investments aimed at enhancing the respondent's capacity within his/her present activity are included. Purchases of farm implements of all kind, oxen and other cattle fall into this category. Finally, the third category captures investments that are meant to help people break-out of their current socio-economic status. Such investments encompass education (respondent's own or his/her kids') or the start of a new business. The next question considered is whether 'lower aspiration' individuals would, as suggested by the theory, invest in shorter term activities more than their 'higher aspiration' counterparts. the results are relatively clear in that very few individuals would invest in immediate consumption in both cases, although higher aspiration individuals would invest significantly more often in long term activities (Table 4).

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[18] This is consistent with the finding that loan size is quite responsive to changes in loan maturity. See Karlan and Zinman (October 2005).

[19] This is even more striking since the hypothetical scenario would likely encourage respondents to overstate their willingness to borrow.

As a further step towards a more rigorous testing strategy, determinants of the amount a respondent would borrow if he/she were offered a loan were investigated econometrically. To see whether aspirations play a significant role in this choice, the destiny-related indicator of aspirations is included as a regressor. Figure 5 has shown that a number of individuals indicated that they would rather not take a loan if it was offered to them. A Tobit estimator is used to account for this censoring of the data.[20] The estimation was run for each of the three proposed repayment periods: one year, five years, and ten years. The marginal effects, calculated at the means of the independent variables, are reported in Table 5.

In order to clearly identify the role of the aspiration indicator, it is necessary to rule out other potential sources of explanation which may be correlated with aspiration levels. Indeed, several factors may compete in explaining one's investment behaviour including the lack of complementary assets, the exposure to income shocks, lack of information, identity traits, missing markets and limited local investment opportunities. To account for these alternative explanations, various controls at the individual, village and household-level were progressively added. In columns 2, 5 and 8, we include individual-level variables to control for identity traits, life cycle effects and human capital. In columns 3, 6 and 9, we include village-level fixed effects to control for local economic opportunities, missing markets or particular local customs.

Overall, the results give fairly strong support to the existence of aspiration failures. They are consistent both within each repayment period considered as well as across periods. As shown in the first three columns, 'higher aspirations' play a significant role in potential demand for credit. Such effect remains significant across the three specifications. However, this effect diminishes in magnitude as more controls are added, consistent with the idea that aspirations may be correlated with gender, age or education level, (column 2), or other village-level factors (column 3). The results in column 3 indicate that, on average, a person who believes that hard-work is the primary driver of success – as opposed to fate - would have a 13% higher demand for one-year loans.

Comparing the results on the aspiration-related variable across the time horizon considered, two observations are to be made. First, results related to the five years loan period are not significant (in line with the results in Table 3). Second, the size of the effects appear constant across time horizons in relative values - results in column 9 also indicate a 13% higher demand for those individuals with 'higher aspirations'. Finally, and although not

[20] Individuals who responded that they would not take any loan if it was offered to them may indeed be more willing to save. As such, their answers would have been negative and the zero values observed therefore support the use of a Tobit estimator.

reported here, a number of village fixed-effects were significant, indicating somewhat of a clustering of the demand for credit behaviour.

This section has provided preliminary, although robust empirical evidence that demonstrated the relevance of the "aspiration framework" to the analysis of poverty dynamics. In particular, the results suggest that low aspirations characterize a large proportion of the surveyed population and may significantly influence their future-oriented behaviour. Therefore, more rigorous and targeted analysis is justified. The next section outlines some of the components of such analysis.

V. Testing the Theory - Aspiration Gaps and Individual Behaviour

The theory outlined above predicts that individual economic behaviour is conditioned by the corresponding aspiration gap. The size of this gap reflects the width of the relevant aspiration window which, in turn, is determined by social and individual factors. The theory also suggests a solution to the aspiration failure problem it identifies: "enlarge" the relevant aspiration windows. This, in principle, is a testable proposition.

Several problems arise when empirically testing the relationships described above. Measurement and identification problems are particularly pertinent. The first relate to the *measurement* of aspirations and aspiration windows. The second relate to the *identification* of causal relationships between aspiration windows, aspirations and behaviour. We detail these issues below and outline some directions towards addressing them in subsequent analysis.

Measurement issues

The measurement of aspirations is likely to raise several issues - issues akin to those identified in the recent literature on happiness measures. Aspirations and aspiration levels can be read from observed behaviour – just like preferences can be revealed by observed choices. Or, aspirations can be directly measured through subjective assessments by respondents themselves.[21] The main question with the former is the extent of the link between observed choice and aspirations. Measurement errors, which may be correlated with the respondent's characteristics and therefore bias inference, are the major problem of the latter. As noted by Bertrand and Mullainathan (2001), the extent of these problems depend

[21] Aspirations have multiple dimensions that are potentially interrelated. As a consequence, the measurement of aspiration levels, as well as that of aspiration gaps, may be more effectively achieved via the construction of a summary measure - an aspiration index, say. Latent (unobserved) variable models may thus be the right approach. This and other options will be considered as appropriate.

not only on the way questions are being asked, but also on how the resulting data are being used.

The dataset described and used above will also be deployed to further explore these measurement issues. Overall, the survey contains a number of attempts to measure aspiration levels. These include direct questions relating to the respondent's role model, as well as more indirect questions aimed at revealing the importance of particular aspects of life through a series of trade-off questions. Finally, aspiration level can be revealed by choice in response to hypothetical questions regarding amount and types of investments. The extent to which these measures are consistent and give an accurate picture of aspiration levels is yet to be systematically established, however. Thus the first objective is to document measurement issues using this dataset, subsequently identify valid measures of aspirations levels, and characterize respondents' aspiration windows. It may also be possible to pilot some instruments to explore validity further.

Identification issues

The second objective is to generate plausible insights regarding the formation of aspirations and how they affect current behaviour, the aim being to help uncover eventual policy levers. Identification problems are likely to challenge the realisation of this objective. Specifically, it would be difficult to identify causal relationships net of confounding factors including reverse effects. For instance, a positive correlation between aspiration and investment may be the joint result of (i) individual characteristics affecting both aspiration and behaviour (for instance schooling levels, wealth, and family background), (ii) a causal relationship between investment and aspiration (the successful investor may in turn revise his/her aspiration to a higher level, or (iii) a causal relationship between aspiration and investment – the one we aim to identify.

Similarly, identifying the relationship between aspiration windows and aspiration levels is not straightforward. At the individual level, one may find the same problem as above in that the observed relationship between aspiration window and aspiration levels could be partly driven by common factors (cf (i)) or reverse causality (cf (ii)). An additional problem arises with respect to the aspiration window. Because a respondent's behaviour may influence the aspiration levels as well as behaviour of members of her aspiration window, the observed correlation between aspiration window and aspiration level may well be overstated. At the same time, sorting may occur in that higher aspiration individuals may interact more with each other even if they do not influence each other's aspiration level.

It is important, at this juncture, to note that a number of theoretical as well as empirical insights may be drawn from the social interactions literature. Accordingly, individuals interact directly with one another, in a number of direct dimensions rather than

indirectly via the effects of individuals on market prices - such direct interdependences in behaviours and outcomes are also known as non-market interactions to emphasize the fact that these interactions are not regulated by the price mechanism. For instance, Manski (Summer 2000) identifies three broad channels via which individuals interact with one another – constraints, expectations, and preferences. In short, the social interactions approach has developed theoretical constructs and empirical techniques that can be fruitfully deployed for the purpose of empirically applying the aspirations perspective.

However, unless the identification and/or generation of robust instruments can be achieved, one's aspiration window will remain endogenous, and causality difficult to establish. One way of doing so is via an experiment designed to influence the aspiration window independently from the individual's characteristics or socio-economic environment. Such an experimental approach is the second component of the further research that we will conduct.

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Tables and Figures

Figure 1. Aspiration gap and effort

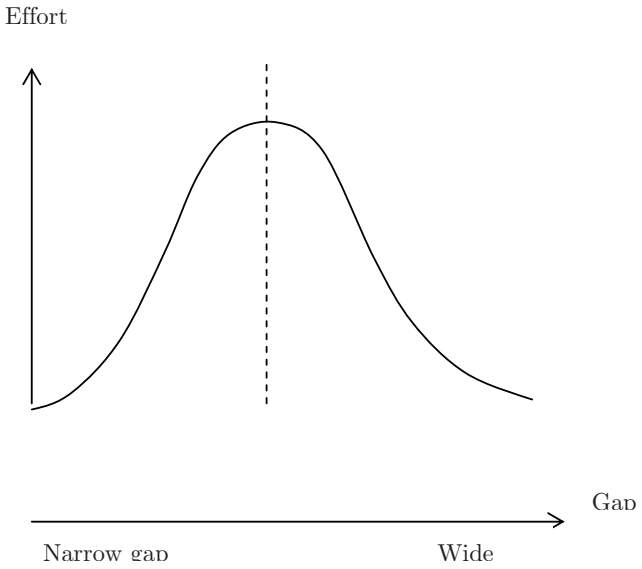
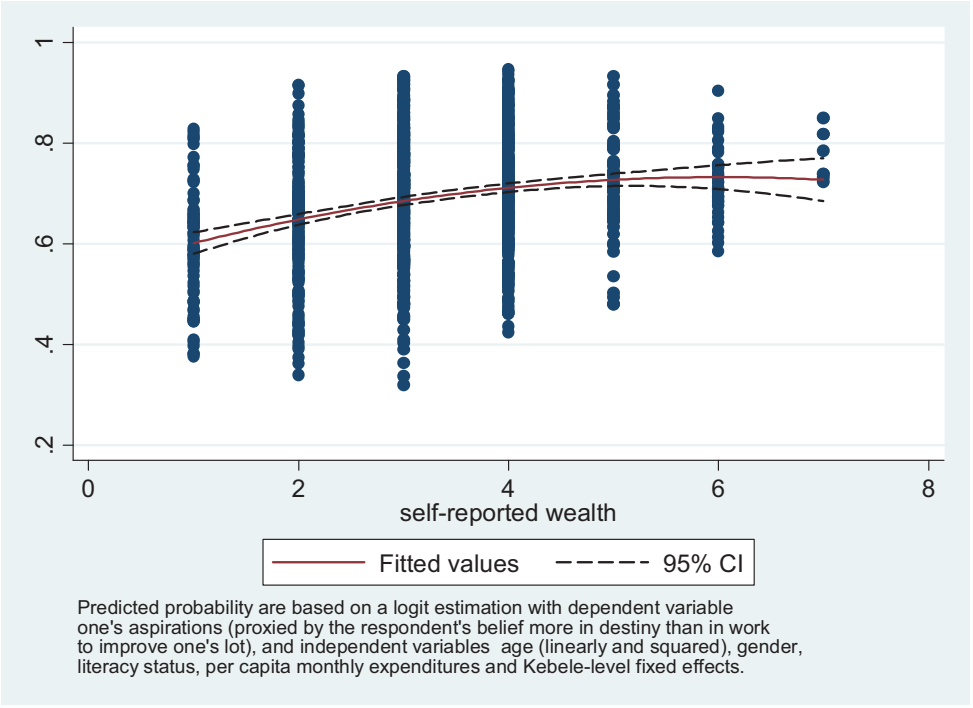
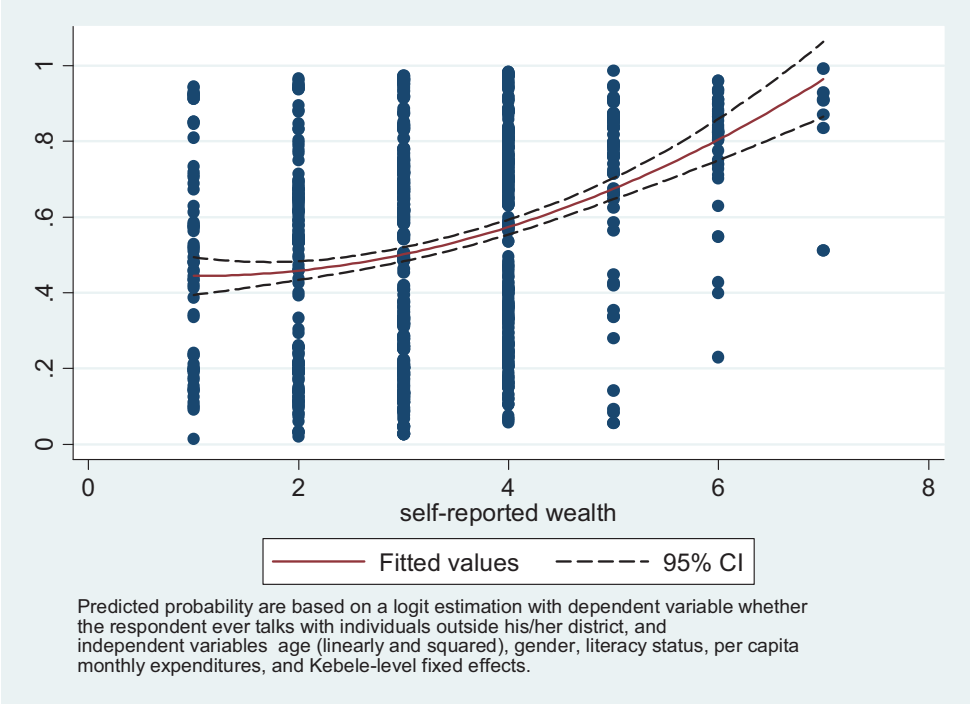


Figure 2: Aspirations and poverty



Predicted probability are based on a logit estimation with dependent variable one's aspirations (proxied by the respondent's belief more in destiny than in work to improve one's lot), and independent variables age (linearly and squared), gender, literacy status, per capita monthly expenditures and Kebele-level fixed effects.

Figure 3. Aspiration window and poverty



Predicted probability are based on a logit estimation with dependent variable whether the respondent ever talks with individuals outside his/her district, and independent variables age (linearly and squared), gender, literacy status, per capita monthly expenditures, and Kebele-level fixed effects.

Table 1. Aspirations and Aspiration windows

	(1) Total	(2) 'higher aspiration'	(3) 'lower aspiration'	Difference (2)-(3) (p-value)
Communicate regularly with at least one person outside the Village? (%)	66.5	68.0	63.3	0.14
Communicate regularly with at least one person outside the District? (%)	44.2	46.4	39.6	0.05
Listen to radio more than once a year (%)	57.3	61.7	47.2	0.00
Role model lives in same village (%)	88.6	88.8	88.0	0.68

Source: Own computation from the Path to Self-resiliency Survey (2007).

Figure 4. Happiness (aspiration gap) and poverty

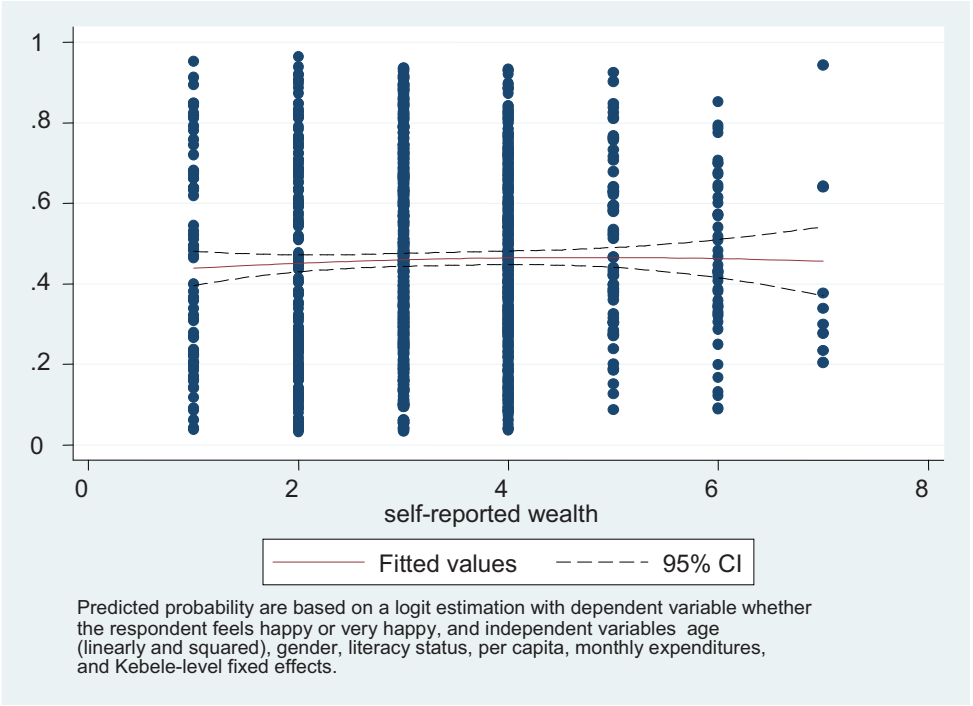


Table 2. Aspirations and Aspiration gap

	(1) Total	(2) 'higher aspiration'	(3) 'lower aspiration'	Difference (2)-(3) (p-value)
1. Can become as successful as role model within five years	72.8	75.2	66.8	0.00
2. Would like to change main income earning activity	45.5	47.7	40.5	0.02
3. Is willing to move to improve standard of living	28.0	29.9	23.9	0.03
4. Is happy or very happy (instead of unhappy or very unhappy)	71.3	74.7	63.9	0.00

Source: Own computation from the Path to Self-resiliency Survey (2007).

Figure 5 : Demand for credit, by length of repayment period

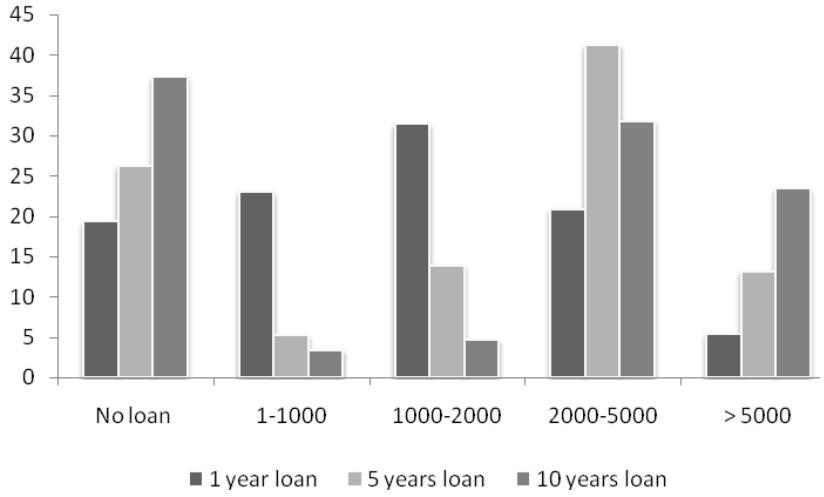


Table 3. Aspirations and aspirations failures (1)

	(1) Total	**(2) 'higher aspiration'**	**(3) 'lower aspiration'**	**Difference (2)-(3) (p-value)**
Amount borrowed for one year	2055	2131	1883	0.07
Amount borrowed for 5 years	3051	3074	3001	0.67
Amount borrowed for 10 years	3561	3699	3248	0.03

Source: Own computation from the Path to Self-resiliency Survey (2007).

Table 4. Aspirations and aspirations failures (2)

Use of hypothetical loan	(1) Total	(2) 'higher aspiration'	(3) 'lower aspiration'
Short term investment (immediate consumption)	3.95	3.79	4.37
Medium term investment (farm implements, oxen)	42.82	40.44	48.81
long term investment (Education, new business)	53.22	55.77	46.93
			Person Chi-square(2) = 5.8039, Probability = 0.05

Source: Own computation from the Path to Self-resiliency Survey (2007).

Table 5. Aspirations and aspirations failures (3)

	One year loan			Five years loan			Ten years loan		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
'higher aspirations' (0/1)	337.2	281.62	269.58	184.32	95.57	93.73	534.8	474.38	489.93
	(2.73)	(2.29)	(2.33)	(1.05)	(0.55)	(0.55)	(2.35)	(2.08)	(2.23)
Woman (0/1)		-526.33	-756.03		-519.79	-709.07		-112.99	-316.70
		(3.43)	(5.30)		(2.37)	(3.30)		(0.39)	(1.11)
Age		-0.49	7.85		56.51	71.22		89.66	100.77
		(0.02)	(0.35)		(1.64)	(2.11)		(1.96)	(2.26)
Age^2		-0.062	-0.146		-0.80	-0.92		-1.25	-1.31
		(0.25)	(0.62)		(2.24)	(2.64)		(2.62)	(2.83)
Schooling (0/1)		641.60	169.79		596.49	96.95		45.73	-430.93
		(4.72)	(1.31)		(3.13)	(0.51)		(0.19)	(1.77)
Village-level fixed effects			Yes			Yes			Yes
Number observations	1192	1192	1191	1192	1192	1191	1192	1192	1191
Censored obs (at credit demand = 0)	228	228	228	311	311	311	443	443	443

(a) Reported are marginal effects at mean of independent variable
(b) t statistics in parenthesis, *** = significant at 1% level, ** = significant at 5% level, * = significant at 10% level
(c) Dependent variables: 1-year loan : mean = 2048, standard deviation = 2183
5-year loan : mean = 3041, standard deviation = 2792
10-year loan : mean = 3549, standard deviation = 3492