Findings from the literature

**Determinants of aspirations**

*--- Poverty, SES, (perceived) income, wealth, consumption, urbanity*

Poorer individuals should have sub-optimally low aspirations, to be observed in aspirations gaps (Dalton et al., 2016)

In rural Nepal, current income is positively associated to income aspirations (Janzen et al., 2017).

In rural Ethiopia, wealthier households show higher income aspirations at baseline (Bernard et al., 2014)

In Young Lives data from Peru, socioeconomic status positively predicts the level of occupational aspirations (Pasquier-Doumer and Brandon, 2015)

In a study in Switzerland, “aspiration income” (measured as minimum income need) is a positive function of household income, past financial situation, and community income (Stutzer, 2004)

In a study in rural China, levels of actual and reference incomes are positively associated with income aspirations (measured as minimum income need). On the contrary, those whose *perceived* income rank is much *below* the village average have aspiration income substantially and signiﬁcantly higher than those at the village average (Knight and Gunatilaka, 2012).

Children as well as their parents aspire to a lower level of education if they come from poorer

households (Favara, 2017)

In Young Lives data from Ethiopia, urbanity correlated positively with the likelihood that parents had high educational aspirations for their child of age 15 (going to university; Favara, 2017).

In Young Lives data from Andra Pradesh, mothers from wealthier households have higher educational aspirations for their children (Serneels and Dercon, 2014).

In a study in India, parents of high-caste adolescents have higher aspirations and beliefs about income as well as educational attainment when treated with caste primes (Mukherjee, 2015)

*--- Gender*

In rural Ethiopia, males aspire to more wealth, education, and social status at baseline (Bernard et al., 2014).

In rural Burundi, boys' and girls' aspirations to exit agriculture for a wage job are not highly different, but boys aspire somewhat more; domestic violence is coupled with lower aspirations to leave agriculture in girls than in boys (Jeusette and Verwimp, 2017)

* Returns to capital lower for women than for men (de Mel, McKenzie, and Woodruff, 2008)
* Possible selection mechanism: In the traditional retail sector, firms competing are mainly subsistence businesses which are female-dominated and often operated out of the owner’s own premises. Males sorting into the market may be above average in skills and/or entrepreneurial motivation.

In a multi-country study, evidence for gender biases in educational aspirations for children is mixed. At age 12, parents’ aspirations are biased against girls in Andra Pradesh and, less strongly, in Ethiopia and against boys in Vietnam. Children’s aspirations at age 15 show the same biases, if diminished in intensity (Dercon and Singh, 2013; for Ethiopia also: Favara, 2017).

In a study in India, girls have educational aspirations that are biased downwards when treated with gender primes (Mukherjee, 2015)

In a study in rural China, men have lower income aspirations than women (measured as minimum income need; Knight and Guntilaka, 2012)

In a study in rural Myanmar, males report higher levels of aspirations for agricultural land and income. Males also generate somewhat higher scores on the hope scale due to Snyder (1994, 2002). No gender bias is found in educational aspirations for daughters and sons (Bloem et al., 2017).

--- *Age*

In rural Ethiopia, older individuals do not aspire to more income but only more status within their community (Bernard et al., 2014).

In a study in rural China, income aspirations for the household (measured as minimum income need) rises with the age of the respondent but at a diminishing rate, and peaks at age 47 (Knight and Gunatilaka, 2012).

In a study in rural Myanmar, older respondents express higher aspirations for remittances, other aspirations show no association with age (Bloem et al., 2017).

*--- Adverse weather shocks*

Pakistanis exposed to extreme rainfall in the run-up to the 2010 monsoon (1 SD) higher than average) 1.5 years later had aspiration levels that were 0.15 SD lower than those individuals experiencing just average levels of rainfall. This is the same negative shock to aspirations that one would experience as a result of a 50% reduction in household expenditures (Kosec and Mo, 2017)

* Interestingly, Knight and Gunatilaka (2012) observe a correlation between income aspirations (*measured as minimum income needs*) and a drop in income in the previous 5 years.

*--- Debt*

In a study in rural China, indebtedness is positively associated with income aspirations (measured as minimum income need; Knight and Gunatilaka, 2012)

--- *Savings*

In a study in rural Pakistan, no relation is found between aspirations and savings (Kosec and Mo, 2017)

*--- Formal education, education spending*

In Benin, availability of missionary schools increased peoples’ aspirations (Wantchekon et al., 2015)

In a study in rural China, the number of years of formal education is positively associated with income aspirations (measured as minimum income need; Knight and Gunatilaka, 2012)

In Young Lives data from Andra Pradesh, mothers with higher educational attainment have higher educational aspirations for their children (Serneels and Dercon, 2014).

In rural Myanmar, higher educational attainment of the parent is associated with higher educational aspirations for their child (Bloem et al., 2017).

*--- Self-efficacy*

Self-perceptions of efficacy and conﬁdence to fulﬁll educational requirements and occupational

roles are correlated with children’s aspirations (Bandura et al., 2001)

**Aspirations predicting outcomes**

*--- Investment*

Aspirations should positively predict investments (Ray, 2006; Dalton et al., 2016) and they do predict investments in the field (Janzen et al., 2017; Genicot and Ray, 2017)

Aspirations may positively predict investments in a linear fashion only up to a point from which on they do not spur further investments and may indeed become a negative predictor (Ray, 2006). This is observed in the field (Janzen et al., 2017)

--- *Fatalism*

In a study with poor households in rural Ethiopia, the authors document narrow aspirations gaps, external loci of control, and fatalism (defined as the absence of well-being improving investments;) among the poor (Bernard, Dercon, and Taffesse, 2012).

--- *Savings*

In a study in rural Nepal, income aspirations gaps predict the likelihood of membership in a savings group and the likelihood of having saved in the previous month; both relationships follow inverted u-shapes (Janzen et al., 2017)

Exposure to an aspirational movie causes increase in total savings in sample of rural Ethiopians (Bernard et al., 2014)

--- *Loan usage*

Aspiration levels positively predict cash loans outstanding as a share of yearly expenditure (Kosec and Mo, 2017)

Exposure to aspirational movie causes increase in total credit obtained and demand for long-term credit in rural Ethiopia (Bernard et al., 2014)

--- *Formal education, education spending*

In Young Lives data from Ethiopa, both parents’ and children’s aspirations are strong predictors of the childrens’ educational attainments (Favara, 2017)

In Young Lives data from India, the children of mothers who aspire to one additional year of schooling when their child is 12 have attained on average 1.8 years more schooling at age 15. (Serneels and Dercon, 2014; 4 countries: Dercon and Singh, 2013). This effect is non-linear: It is strongest for moderate and weakest for low aspiration levels (Serneels and Dercon, 2014).

In India, the sizes of adolescents’ occupational aspirations gaps at age 12 positively predict educational outcomes at age 19, namely whether or not the child is enrolled in school, the highest grade level achieved, and performance on a math, English, and a Telugu exam; the relationship follows an inverted u-shape and is mediated by the child's time investments, not the parents' behaviours (Ross, 2017)

Exposure to an aspirational movie causes increase in educational spending and children’s enrollment in sample of rural Ethiopians (Bernard et al., 2014)

International child sponsorship, Compassion International programme focusing among other things on raising children’s self-esteem and aspirations, increases years of completed schooling (Wydick et al., 2013). The authors suspect the results to be driven by higher aspirations and self-esteem.

--- *Happiness, well-being*

In a study in Switzerland, happiness is a positive function of income but a negative function of income aspirations (as measured by minimum income need) when both are used as predictors (Stutzer, 2004))

Subjective well-being is raised by actual income but lowered by income aspirations (measured as minimum income need; Knight and Gunatilaka, 2012)

--- *Labour supply*

Subjective individual characteristics like occupational aspirations affect labor supply independent of objective individual characteristics or labor market features.

(Datcher and Loury, 1986)

--- *Risk taking*

Aspiring to higher education at the age of 15 is negatively correlated with the probability to engage in criminal behaviour at the age of 19 (Favara and Sanchez, 2017)

Suggestive evidence for diminished risk-aversion after treatment through aspirational movie in rural Ethiopians (effect vanishes in ANCOVA specification with controls, Bernard et al., 2014)

*--- Locus of control*

Suggestive evidence for increased internality of locus of control after treatment through aspirational movie in rural Ethiopians (effect vanishes in ANCOVA specification with controls, Bernard et al., 2014)

**Formation of aspiration windows**

Statuses of one’s peers should be important in the constitution of one's aspirations window (Ray, 2006) and in a study in rural Nepal the average income of the extended network of a person and their friends within the same district (“tole”) do influence a person’s income aspirations (Janzen et al., 2017).

In a study in Mexico, parental aspirations are positively associated with children's educational attainment (Chiapa et al., 2012)

Across countries, there is a strong association between parents’ educational aspirations when the child is 12 and the child’s aspirations at age 15 and between these aspirations and outcomes (4 country study: Dercon and Singh, 2013; India: Serneels and Dercon, 2014)

In a study in Switzerland, “aspiration income” (measured as minimum income need) is a positive function of household income, past ﬁnancial situation, and community income. *Moreover, the interaction term between community income and a variable measuring the social interaction with neighbours (proxying social comparisons) is positive and significant* (Stutzer, 2004).

In Young Lives data from Peru, children with parents in poverty and of little education lower their aspirations with age (Pasquier-Doumer and Brandon, 2015)

In a study in rural Ethiopia, likelihood of any contact with peers outside of the community is positively correlated with wealth and locus of control (Bernard, Dercon, and Taffesse, 2012)

In Nicaragua, Macours and Vakis (2014) treat local female leaders with resources for productive investments. The authors exploit exogenous variation in the proximity to those leader to show that the share of female leaders to a household’s proximity (participants’ aspiration windows) positively affects human capital and productive investments as well as the future-oriented attitudes of other female beneﬁciaries. They argue that this is due to a change in the capacity to aspire rather than due to “technical” social learning (change in expectations).

Among rural households in Nepal, household heads judge the *adequacy* of their consumption in comparison with households in their district of origin even after having migrated (Fafchamps and Shilpi, 2008).

* Does not refer to aspirations but, with a bit of a stretch, comes close to own aspirations as shaped by a reference group (Janzen et al., 2017 use it as motivation)

In India, the sizes of caregivers’ aspirations gaps when the child is age 12 positively predict educational outcomes when the child is 19, namely whether or not the child is enrolled in school, the highest grade level achieved, and performance on a math, English, and a Telugu exam; the relationships follow an inverted u-shape (Ross, 2017)

**Determinants of aspirations horizons**

*--- Poverty*

Poorer farmers have shorter aspirations horizons. Horizons lengthen after respondents are being treated by an agricultural input subsidy and training programme. (Laajaj, 2017).

*--- Savings*

Among farmers in Mozambique, those with a savings account had three times longer planning horizons (Laajaj, 2017)

*--- Expectations*

Among farmers in Mozambique, those who “believe their economic situation will be better in 5 years” had three times longer planning horizons (Laajaj, 2017)

Miscellaneous

**Aspiration levels/accuracy**

In Jeusette and Verwimp (2017): Aspirations coincide with outcomes for 32% in a sample of rural children from Burundi (also possible: *Accuracy* as the absolute value of gap between outcomes and aspirations and *over- or under-shooting*)

Strong association between parents’ educational aspirations when the child is 12 and the child’s aspirations at age 15 *and between these aspirations and educational attainments* (4 country study: Dercon and Singh, 2013; India: Serneels and Dercon, 2014)

In a study in India, larger diﬀerences between aspirations and actual ability lead to negative eﬀects on eventual outcomes (Mukherjee, 2017)

**Hope and aspirations**

Negative shocks may boost hopes, but not aspirations; exposed to armed conflict, children “wished” more to be employed outside of agriculture but with lower subjective probability of achieving it (Jeusette and Verwimp, 2017)

**Determinants of investment (possibly moderated by aspirations)**

Individuals living in regions that have experienced adverse weather shocks show lower investments in education and health (Jensen, 2000; Maccini & Yang, 2009)

Studying the introduction of television into rural India, Jensen and Oster (2009) find suggestive evidence that exposure increases school enrollment for younger children.

**Effect of mere goals**

In a study in Mexico, the mere act of establishing a goal plays a large and significant role in individual outcomes, with subjects in any of the treatments where a goal is established achieving 35%-38% of the possible goals compared to rates of 15%-25% in control groups (Aguinaga et al., 2016)

When left to the individual, there can be selection into establishing mere goals. In a study in India, individuals agreed to contracts which contained a clause that payment was only due after reaching a self-chosen goal. Even if this constract was strictly dominated by an equivalent contract without any such goal, individuals lacking self-control were more prone to impose self-control onto themselves by establishing goals (Kaur et al., 2015)

Notes on measurement

**Definition of aspirations**

Educational aspirations confounding hope and aspirations: “Imagine you had no constraints and could study for as long as you liked, or go back to school if you have already left. What level of formal education would you like to complete?” (Favara and Sanchez, 2017)

* But, same paper: “It is important to note that aspirations are understood to be shaped to a large extent by self-efficacy (Bandura et al. 2001)”

Income/educational aspirations putting strong emphasis on agency: “What level do you personally think you might be able to achieve in the future?” (Bernard et al., 2014; Janzen et al., 2017)

- Plus, in Bernard et al. (2014): Aspirations elicited together with expectations which, if asked first, may have provided an anchor (regarding this point see also: Mukherjee, 2015)

Educational aspirations selectively confounding hope and aspirations:

Children: “Imagine you had *no constraints* and could study for as long as you liked, or go back to school if you have already left. What level of formal education would you like to complete?” (almost pure hope)

Parents: “*Ideally* what level of education would you like [NAME] to complete?” (less clear; Dercon and Singh, 2013)

Close to us: “What type of job or occupation would you like to have when you are 30 years old?” (Datcher-Loury and Loury, 1986)

* Close to our likelihood measure: “In addition, the NBER survey codes distinguish between respondents who thought their chances of attaining that job or occupation were “excellent” and those who thought their chances were only “good, fair, poor, or don’t know.””
* “Note, in addition, that at least 120 annual hours of work separate white-collar and crafts aspirants who believed their chances were excellent from those who did not. This suggests that the confidence with which the aspiration is held is a major factor determining the extent of its impact on work hours.” → Confidence as closeness to aspirational reference point?

Aspirations as “minimum income need”: Stutzer (2004) measures “aspiration income” as the income that respondents reported as being either ‘sufﬁcient’ or the ‘minimum required’. Knight and Gunatilaka (2012) follow the author’s approach by asking: “What is the minimum income needed to sustain the household for a year?”

**Educational aspirations**

Educational aspirations for the child could be measured as the gap between aspired education and parental education (following Janzen et al., 2017)

* Possible confounding factor: gender of respondent/parent

**Aspirations horizon**

Laajaj (2017) measures the horizon as the respondent’s association with their future self: “How far ahead do you plan your future expenditures?”

- Importantly, minimises failure: “When the respondent had some diﬃculty providing an answer to this question, the enumerator asked whether the respondent had any plans for future consumption or investment, and when the respondent expected to make this expenditure”

**Agency**

Favara (2017) works with same agency concept: “agency (building on the concepts of locus of control proposed by Rotter, 1966 and self-efﬁcacy by Bandura, 1993)”

**General**

Macours and Laajaj (2017) caution that in the measurement of non-cognitive skills (which aspirations are part of) evidence suggests that measurement error is non-classical, as correlations between questions are driven in part by the answering patterns of the respondents and the phrasing of the questions.

We might want to consider a different term from “pure hope” since we go against a widely cited strand of psychology literature (Snyder 1994, 2002; Snyder et al., 1991; Snyder et al., 1997) and at least terminologically against Lybbert and Wydick (2016) who see hope as the higher-level concept which aspirations, agency, and pathways are a part of. My best candidate would be “wishful thinking”.

Hypotheses

**Determinants of aspirations**

*--- Poverty, SES, (perceived) income, wealth, consumption, urbanity*

Poorer entrepreneurs should show narrower aspirations gaps than their wealthier peers

*--- Gender*

Gender effects seem to be fundamentally context-dependent.

--- *Age*

There is suggestive evidence that higher age is correlated with higher minimum income need (~risk aversion, demand for insuance). (We can test this with our measure for “minimum profit needed for shop survival”.)

*--- Adverse weather shocks*

Entrepreneurs in areas which experienced adverse weather shocks may show narrower aspirations gaps than their peers in less shock-prone areas. (We can test this by joining kelurahan- or RW-level GIS data of flooding.)

*--- Debt*

There is suggestive evidence that higher indebtedness is correlated with higher minimum income need (~risk aversion, demand for insurance). (We can test this with our measure for “minimum profit needed for shop survival”.)

--- *Savings*

There is suggestive evidence that saving behaviour might be correlated with aspirations gaps.

*--- Formal education, education spending*

a) More educated entrepreneurs should show higher educational aspirations for their offspring.

b) There is suggestive evidence that more educated entrepreneurs may also have higher income aspirations.

*--- Self-efficacy*

There is suggestive evidence that stronger self-efficacy beliefs are correlated with wider aspirations gaps.

**Aspirations predicting outcomes**

*--- Investment*

a) Entrepreneurs with wider aspirations gaps should invest more in their business

b) There might be non-linearity such that entrepreneurs with mid-sized aspirations gaps invest most in their business.

--- *Loan usage*

Entrepreneurs with wider aspirations gaps may show greater loan usage (loans obtained), demand (loans applied for) or higher indebtedness all loans combined (amount owed at the time of the survey).

--- *Happiness, well-being*

There is suggestive evidence that entrepreneurs with wider income aspirations gaps (sales aspirations) may be less happy when controlling for income (business profits). (We can test this with end-line data on overall life satisfaction.)

**Determinants of aspirations horizons**

*--- Poverty*

Poorer entrepreneurs should show shorter aspirations horizons than their wealthier peers

*--- Savings*

There is suggestive evidence that entrepreneurs who save have longer aspirations horizons