

Aspirations, Attitudes, and Investments: Evidence from Kyrgyzstan

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Research Question

Does having higher aspirations for the future predict forward-looking behaviors and attitudes? In particular, is it associated with:

- Economic engagement (employment—particularly in more lucrative sectors)?
- Civic engagement (civic participation and group membership)?
- Attitudes about one's ability to control what happens in life?
- Attitudes toward women?

Preview of the Results

After taking into account an individual's current standing (in the areas of income, assets, education, social status, and security) and controlling for a variety of covariates, having higher aspirations in these areas is associated with ...

- Higher rates of employment, driven by employment outside the household and in the services sector (as opposed to agriculture or production of goods)
- Greater civic participation and civic group membership
- An internal locus of control and the perception that poverty is something individuals can avoid through their own efforts
- Female empowerment in decision-making and egalitarian gender views

Motivation

- If the poor do not see a tomorrow in which their well-being can feasibly be much higher than what it is today, they are naturally unlikely take actions to improve it, and may thus be stuck in a poverty trap
- Aspirations are thus theorized to have an important impact on behaviors and everyday decision-making (e.g., Appadurai, 2004; Ray, 2006; Healy, Kosec, and Mo 2017; Genicot and Ray 2017)
- Aspirations may influence attitudes that tend to stall economic development—including fatalism and sexism
- There is little empirical evidence on how aspirations influence economic and civic engagement
- We know of no literature examining how aspiring to achieve more may influence attitudes toward women and women's empowerment
- This paper seeks to fill these gaps

Data

- Data source: The Life in Kyrgyzstan (LIK) Study, 2016
 - Longitudinal survey of households and individuals in Kyrgyzstan
 - 8,160 individuals (3,000 households) were interviewed in the first wave
 - Tracks individuals over time in all seven Kyrgyz regions (oblasts) and the two cities of Bishkek and Osh
 - Representative nationally and at the regional level (East, West, North, South)
 - First conducted in the fall of 2010 and it has been repeated four times: 2011, 2012, 2014, and 2016
- Aspirations module: A special feature of this particular round of the LIK Study
 - Individuals were asked about their current achievements, and *desired* achievements in the areas of income (soms), asset wealth (soms), education (categories – which can be coded into years of education), social status (on a 5-rung ladder), and security (on a 5-rung ladder)

Econometric Specification

- We estimate:

$$E_{ijk} = \beta_0 + A_{ijk} + \beta_2 \mathbf{X}_{jk} + \beta_3 \mathbf{Y}_{ijk} + \beta_3 \mathbf{Z}_{ijk} + \alpha_k + \epsilon_{ijk} \quad (1)$$

where

- i indexes individuals, j indexes households, and k indexes the oblast
- E_{ijk} is an engagement or attitude-related variable
- A_{ijk} is an individual-level aspiration index, measuring aspirations in 5 dimensions: income, assets, education, social status, and security
- \mathbf{X}_{jk} is a vector of HH-level controls including a quadratic in head age, dummies for head gender, marital status, education, and ethnicity, and HH size
- \mathbf{Y}_{ijk} is a vector of individual-level controls including a male dummy, age, and age², married dummy, and education dummies
- \mathbf{Z}_{ijk} is a vector of *current* levels of the 5 dimensions of aspirations
- α_k are oblast fixed effects

Aspiration Index Construction

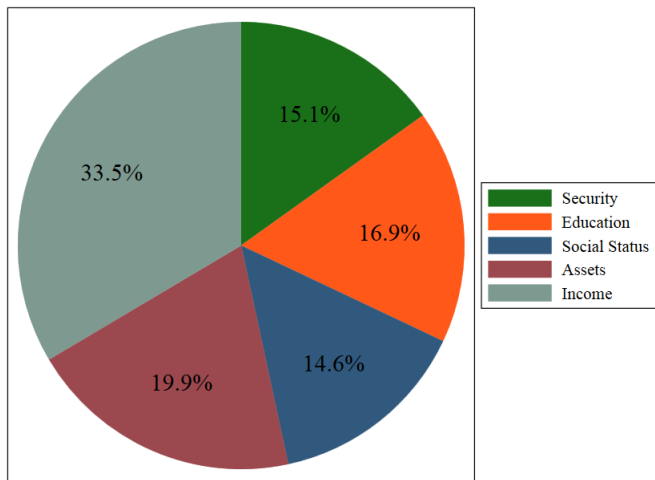
- To construct an aspiration index, respondents are asked what level they would like to achieve in the following 5 dimensions:
 - 1 Household earnings
 - 2 Household assets
 - 3 Respondent level of social status
 - 4 Family member average level of education
 - 5 Respondent level of security
- We normalized each (subtract sample mean, divide by sample S.D.) and summed them up, weighting according to the importance respondents said they placed on each. Formally:

$$\text{aspiration index} = \sum_{n=1}^5 \left(\frac{a_n^i - \mu_n}{\sigma_n} \right) w_n^i \quad (2)$$

- a_n^i is the aspiration of individual i on dimension n , μ_n and σ_n are the sample mean and S.D. of a_n^i (respectively), and w_n^i is the weight individual i puts on dimension n (these sum to 1).

Aspirations weights

- On average, over $\frac{1}{3}$ of the weights were assigned to income.



Outcome Index Construction

- When constructing an index based on N variables to represent one of our key outcomes (e.g., civic participation), we:
 - ① Normalize each variable (subtract sample mean and divide by sample S.D.)
 - ② Average across the full set of N variables
- Formally:

$$\text{outcome index} = \sum_{n=1}^N \left(\frac{v_n^i - \mu_n}{\sigma_n} \right) N^{-1} \quad (3)$$

- Here, v_n^i is the value of variable v for individual i on question n , μ_n and σ_n are the sample mean and S.D. of v_n^i (respectively).

Employment rates by age

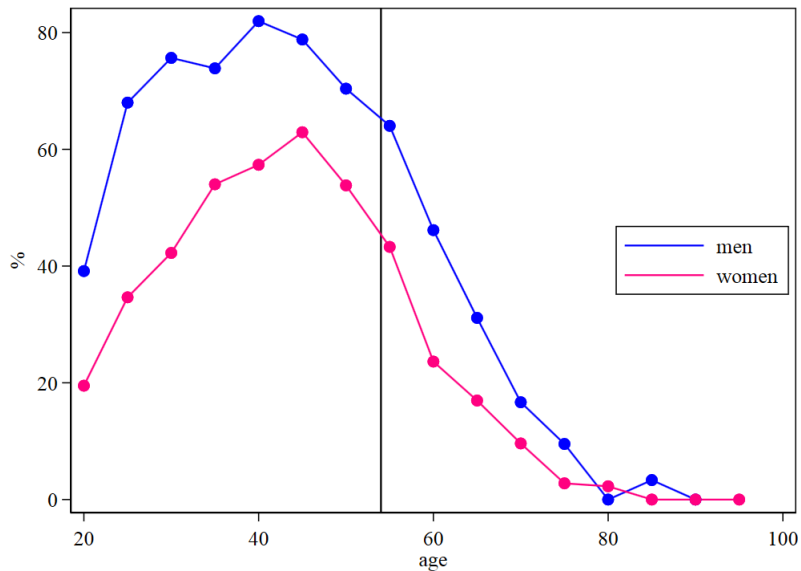


Table 1: Aspirations and employment

Outcome	Estimate	SE	N	R ²	Mean
<i>Panel A: employment</i>					
Employed	0.076***	(0.019)	5,405	0.274	0.57
<i>Panel B: employment type</i>					
Worked for non-household member	0.072***	(0.017)	5,405	0.158	0.30
Worked on a household farm or business	0.038***	(0.012)	5,405	0.137	0.12
Farming, fishing, hunting, or gathering	-0.028***	(0.008)	5,405	0.203	0.05
Absent, but will return to work	0.001	(0.012)	5,405	0.122	0.14
<i>Panel C: migration</i>					
Household has at least 1 migrant	0.020	(0.020)	2,096	0.203	0.14
Household has at least 2 migrants	-0.001	(0.014)	2,096	0.159	0.05
Number of migrants in household	0.015	(0.038)	2,096	0.238	0.23

Source: Authors' calculations based on LIKS 2016.

Notes: Panel A contains individual-level outcomes. The universe is everyone 18-54 who answered the aspirations questions. Employed is defined here as answering "yes" to one of the 4 other questions. Recall period is last 7 days. Panel B contains household-level outcomes. Migrants are defined as being listed in the household roster and not staying in the HH last week for work reason. Roster directions state "Please list all people, both family members and not related people, who share common housekeeping arrangements (i.e. share or are supported by a common budget). Please list also people who are household members but do not live in the household." Each row represents a separate regression. Only the estimate of the aspiration index is shown. Standard errors are in parentheses and clustered at the household level. *** indicates $p < 0.01$; ** indicates $p < 0.05$; and * indicates $p < 0.10$.

Table 2: Aspirations and entrepreneurship

Outcome	Estimate	SE	N	R ²	Mean
Entrepreneur	-0.016	(0.010)	5,418	0.068	0.10

Source: Authors' calculations based on LIKS 2016.

Notes: These are individual-level outcomes. Universe is 18-54. Entrepreneurship is defined as not being a wage worker and having a business type of entrepreneur or enterprise (this excludes business types of "farming" and "cooperative"). Each row represents a separate regression. Only the estimate of the aspiration index is shown. Standard errors are in parentheses and clustered at the household level. *** indicates $p < 0.01$; ** indicates $p < 0.05$; and * indicates $p < 0.10$.

Table 3: Aspirations and employment in goods and services sectors

Outcome	Estimate	SE	N	R ²	Mean
<i>Panel A: Goods</i>					
Construction	-0.023**	(0.011)	3,055	0.117	0.09
Manufacturing	0.009	(0.009)	3,055	0.055	0.05
Mining	-0.000	(0.006)	3,055	0.033	0.02
<i>Panel B: Services</i>					
Trade and repair	-0.008	(0.017)	3,055	0.057	0.13
Education	0.015	(0.015)	3,055	0.173	0.12
Private households with employed persons	-0.064***	(0.013)	3,055	0.223	0.09
Transport and communications	-0.002	(0.011)	3,055	0.073	0.08
Health and social work	0.003	(0.010)	3,055	0.067	0.06
Utilities, social and personal services	0.012	(0.012)	3,055	0.032	0.06
Public administration	0.002	(0.007)	3,055	0.047	0.03
Energy and water	0.007	(0.007)	3,055	0.041	0.02
Hotels and restaurants	0.003	(0.008)	3,055	0.030	0.02
Finance	0.019***	(0.007)	3,055	0.034	0.02
Real estate, renting and business activities	-0.001	(0.004)	3,055	0.013	0.00

Source: Authors' calculations based on LIKS 2016.

Notes: These are individual-level outcomes. Universe is employed 18-54. Each row represents a separate regression. Only the estimate of the aspiration index is shown. Standard errors are in parentheses and clustered at the household level. *** indicates $p < 0.01$; ** indicates $p < 0.05$; and * indicates $p < 0.10$.

Table 4: Aspirations and employment in goods sectors and services sectors (private HHs with employed persons = missing unless business type is a farm, in which case it is agriculture)

Outcome	Estimate	SE	N	R ²	Mean
<i>Panel A: Goods</i>					
Construction	-0.026**	(0.012)	2,932	0.120	0.09
Manufacturing	0.009	(0.009)	2,932	0.055	0.05
Mining	-0.001	(0.007)	2,932	0.034	0.02
<i>Panel B: Services</i>					
Education	0.012	(0.015)	2,932	0.178	0.13
Trade and repair	-0.011	(0.018)	2,932	0.056	0.13
Transport and communications	-0.004	(0.012)	2,932	0.074	0.09
Health and social work	0.001	(0.010)	2,932	0.069	0.06
Utilities, social and personal services	0.011	(0.012)	2,932	0.031	0.06
Finance	0.019**	(0.007)	2,932	0.034	0.03
Public administration	0.001	(0.007)	2,932	0.047	0.03
Energy and water	0.007	(0.007)	2,932	0.042	0.02
Hotels and restaurants	0.002	(0.008)	2,932	0.032	0.02
Real estate, renting, and business activities	-0.001	(0.004)	2,932	0.013	0.01

Source: Authors' calculations based on LIKS 2016.

Notes: These are individual-level outcomes. Universe is employed 18-54. Each row represents a separate regression. Only the estimate of the aspiration index is shown. Standard errors are in parentheses and clustered at the household level. *** indicates $p < 0.01$; ** indicates $p < 0.05$; and * indicates $p < 0.10$.

Table 5: Aspirations and employment in services sectors

Outcome	Estimate	SE	N	R ²	Mean
Agriculture & fishing	-0.021	(0.021)	2,932	0.254	0.27
Goods producing (excluding ag)	-0.018	(0.017)	2,932	0.085	0.16
Service producing	0.039*	(0.022)	2,932	0.185	0.57

Source: Authors' calculations based on LIKS 2016.

Notes: These are individual-level outcomes. Those who report an employment sector of "private households with employed persons" and a business type of "farming" are considered in the agriculture sector. Each row represents a separate regression. Only the estimate of the aspiration index is shown. Standard errors are in parentheses and clustered at the household level. *** indicates $p < 0.01$; ** indicates $p < 0.05$; and * indicates $p < 0.10$.

Table 6: Aspirations and civic engagement

Outcome	Estimate	SE	N	R ²	Mean
Index: civic participation index (9)	0.081***	(0.027)	5,410	0.083	0.018
Index: civic group membership index (13)	0.082***	(0.014)	5,417	0.207	0.008

Source: Authors' calculations based on LIKS 2016.

Notes: These are individual-level outcomes. The number of questions used to construct each index is in parentheses. The civic participation index was constructed from dummy variables. Each row represents a separate regression. Only the estimate of the aspiration index is shown. Standard errors are in parentheses and clustered at the household level. *** indicates $p < 0.01$; ** indicates $p < 0.05$; and * indicates $p < 0.10$.

Table 7: Aspirations and attitudes about one's ability to control what happens in life

Outcome	Estimate	SE	N	R ²	Mean
Index: internal locus of control (10)	0.167***	(0.022)	5,369	0.158	-0.005
Index: poverty caused by external sources (10)	-0.068***	(0.018)	5,360	0.118	0.016
Index: risk seeking (1)	0.105***	(0.041)	5,418	0.110	0.005
Discount rate	0.010	(0.606)	5,418	0.049	33.4

Source: Authors' calculations based on LIKS 2016.

Notes: These are individual-level outcomes. The number of questions used to construct each index is in parentheses. To construct a discount rate, respondents were asked how much they would need to be given in one month in order to prefer that option to getting 5,000 Soms today. The discount rate was then calculated as $100 \times \frac{\text{amount} - 5000}{\text{amount}}$. Responses to questions about locus of control and poverty sources were recorded on a 1-4 scale where 1 indicated strong disagreement and 4 indicated strong agreement. Each row represents a separate regression. Only the estimate of the aspiration index is shown. Standard errors are in parentheses and clustered at the household level. *** indicates $p < 0.01$; ** indicates $p < 0.05$; and * indicates $p < 0.10$.

Table 8: Aspirations and attitudes toward women

Outcome	Estimate	SE	N	R ²	Mean
Index: traditional gender views index (9)	-0.165***	(0.020)	5,403	0.151	0.019
Index: female decision-making index (17)	0.094***	(0.035)	2,726	0.401	-0.105

Source: Authors' calculations based on LIKS 2016.

Notes: These are individual-level outcomes. The number of questions used to construct each index is in parentheses. The female decision-making indexes were constructed from dummy variables. Each row represents a separate regression. Only the estimate of the aspiration index is shown. Standard errors are in parentheses and clustered at the household level. *** indicates $p < 0.01$; ** indicates $p < 0.05$; and * indicates $p < 0.10$.

Conclusion

After taking into account an individual's current standing (in the areas of income, assets, education, social status, and security) and controlling for a variety of covariates, having higher aspirations in these areas is associated with ...

- Higher rates of employment, driven by employment outside the household and in the services sector (as opposed to agriculture or production of goods)
- Greater civic participation and civic group membership
- An internal locus of control and the perception that poverty is something individuals can avoid through their own efforts
- Female empowerment in decision-making and egalitarian gender views

Civic participation activities

- 1 Participated in political activities
- 2 Participated in community-based projects
- 3 Worked for an NGO/civil society
- 4 Volunteered for non-profit or social service organization
- 5 Helped fundraising for charity
- 6 Run internet blogs on social issues
- 7 Distributed information to raise public awareness
- 8 Donated funds to poor and other vulnerable people
- 9 Participated in protests, marches and demonstrations

Group membership

Member of . . .

- 1 Professional union
- 2 Neighborhood committee
- 3 Religious or spiritual group
- 4 Political party
- 5 Local Kenesh
- 6 Sherine
- 7 Cultural club
- 8 Festival society
- 9 Credit or savings group
- 10 Sports group
- 11 NGO or civic group
- 12 Local self defense unit
- 13 Other group

Locus of control questions

- 1 To a great extent my life is controlled by accidental/chance happenings.
- 2 I feel like what happens in my life is mostly determined by powerful/influential people.
- 3 When I make plans, I am almost certain/guaranteed/sure to make them work.
- 4 My experience in my life has been that what is going to happen will happen.
- 5 People like myself have very little chance of protecting our personal interests when they conflict with those of more powerful people.
- 6 Its not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.
- 7 I can mostly determine what will happen in my life.
- 8 I am usually able to protect my personal interests (I can usually look after what is important to me)
- 9 When I get what I want, its usually because I worked hard for it.
- 10 My life is determined by my own actions.

Causes of poverty perceptions

- 1 They lack the ability to manage money or other assets
- 2 They do not actively seek to improve their lives
- 3 They are exploited by rich people (e.g. rich people pay poor people a very low wage)
- 4 Society fails to help and protect the most vulnerable (e.g. disabled people, people living with illnesses)
- 5 The distribution of land between poor and rich people is uneven/unequal
- 6 They lack opportunities because they come from poor families
- 7 They have bad fate/destiny
- 8 They encounter many difficulties and misfortunes
- 9 They are not motivated because of aid (e.g. from government or NGOs)
- 10 They are born with less talent/they are less gifted

Risk question

Imagine you are playing a game where probability of two outcomes A and B is equal. You can choose one of the games below. Which game would you like to play?

Outcome A	Outcome B
You receive 1250 Soms	You receive 1250 Soms
You receive 1000 Soms	You receive 2000 Soms
You receive 750 Soms	You receive 2500 Soms
You receive 500 Soms	You receive 3500 Soms
You receive 0 Soms	You receive 5000 Soms

Gender attitudes questions

- 1 Important decisions should be made by the husband rather than the wife.
- 2 A man's job is to earn money; a woman's job is to look after the home and family.
- 3 A woman is really fulfilled only when she becomes a mother.
- 4 A working woman can establish just as warm and secure relationship with her children as a mother who does not work.
- 5 A husband's career should be more important to the wife than her own.
- 6 A university education is more important for a boy than for a girl.
- 7 Both the husband and the wife should contribute to the household income.
- 8 Being a housewife is just as fulfilling as working for pay.
- 9 Woman should not work outside her home due to religious considerations

Female decision-making questions

Female involved in decision about ...

- 1 Where male household member should work
- 2 Where female household member should work
- 3 Whether to buy major items (e.g. car, house)
- 4 Whether or not to lend money to others
- 5 How much to save of household income
- 6 How much money to give to relatives at weddings or funerals
- 7 Whether or not to borrow money from others
- 8 How to use remittances
- 9 Marriage of male household members
- 10 Marriage of female household members
- 11 How much kalym to pay for bride
- 12 Children's education and health
- 13 Negotiating with neighbors
- 14 Participation to discuss community issues
- 15 Migration of a household member
- 16 Which production crop to cultivate
- 17 When and at what price to sell the harvest or livestock

Table 9: Aspirations and decision-making

Outcome	Estimate	SE	N	R ²	Mean
<i>Female involved in decision about ...</i>					
Where male household member should work	-0.023	(0.023)	2,558	0.177	0.372
Where female household member should work	0.066***	(0.023)	2,523	0.267	0.647
Whether to buy major items (e.g. car, house)	0.087***	(0.024)	2,475	0.263	0.560
Whether or not to lend money to others	0.091***	(0.022)	2,613	0.324	0.589
How much to save of household income	0.091***	(0.022)	2,694	0.340	0.614
How much money to give to relatives at weddings or funerals	0.069***	(0.023)	2,646	0.345	0.615
Whether or not to borrow money from others	0.014	(0.023)	2,576	0.352	0.595
How to use remittances	0.068**	(0.029)	1,808	0.330	0.602
Marriage of male household members	0.044*	(0.026)	2,013	0.322	0.617
Marriage of female household members	0.031	(0.023)	2,059	0.348	0.666
How much kalyam to pay for bride	-0.033	(0.024)	1,852	0.388	0.628
Children's education and health	0.014	(0.021)	2,541	0.285	0.764
Negotiating with neighbours	0.042**	(0.020)	2,695	0.232	0.779
Participation to discuss community issues	0.051**	(0.023)	2,587	0.219	0.592
Migration of a household member	0.081***	(0.026)	1,984	0.275	0.654
Which production crop to cultivate	0.050*	(0.027)	2,156	0.216	0.565
When and at what price to sell the harvest or livestock	0.032	(0.027)	2,143	0.221	0.559

Source: Authors' calculations based on LIKS 2016.

Notes: These are individual-level outcomes. Universe is female respondents 18-54. Outcome coded as 1 if respondent reports that the main decision-making authority for the activity was "Myself," "I together with my spouse," "All female household members," or "All household members together." Outcome coded as 0 if respondent reports "My spouse," "All male household members," "My parents," or "My parents-in-law." Standard errors are in parentheses and clustered at the household level. Each row represents a separate regression. Only the estimate of the aspiration index is shown. *** indicates $p < 0.01$; ** indicates $p < 0.05$; and * indicates $p < 0.10$.