



Munich Personal RePEc Archive

Social Norms, Status Spending and Household Debt: Evidence from Kyrgyzstan

Aldashev, Alisher

New School of Economics, Satbayev University

January 2019

Online at <https://mpra.ub.uni-muenchen.de/91363/>

MPRA Paper No. 91363, posted 11 Jan 2019 05:52 UTC

Social Norms, Status Spending and Household Debt: Evidence from Kyrgyzstan

Alisher Aldashev *

This version: January 9, 2019

Abstract

Development economists have two key paradigms concerning poverty and financial markets. One considers the poor in the developing world as operating in imperfect markets. Another view is that the poor are subject to constraints. The policy prescriptions stemming from these views would be improving market access and redistribution. We consider one important constraint the poor are facing: social norms which require spending on ceremonial activities. This paper adds to the literature by providing empirical evidence that having access to loans makes households spend more on ceremonies and with the higher ceremonial spending they increase the likelihood of debt thus creating a vicious circle which might keep households in poverty. Thus policies which are aimed at either removing market frictions or providing benefits to the poor will not have a desired effect. These measures have to be combined with reforms aimed at changing the existing institutions.

Keywords: Ceremonial spending, conspicuous consumption, debt, poverty trap, Kyrgyzstan, instrumental variable

JEL Classification: I39, O16, D91

*Alisher Aldashev is professor at the New School of Economics, Almaty. Address: Satbayev University, New School of Economics

1. INTRODUCTION

Development economists have two key paradigms concerning poverty and financial markets. One view of poverty is what Esther Duflo calls poor but neoclassical (Duflo, 2006; Ghatak, 2015). This view considers the poor in the developing world to be simply operating in an unfavorable environment with market frictions and this prevents the poor from fully realizing their potential. For example, with the financial markets not functioning properly the poor are unable to borrow and thus are unable to make capital or human capital investment and as a consequence remain in poverty. Another view of poverty is that even in the absence of market frictions the poor are subject to different constraints. For example, under extreme scarcity subsistence considerations impede saving and keep the poor locked in a bad equilibrium (Ghatak, 2015).

The social norm which requires families to spend significant amounts of money on activities which do not contribute to their well-being constitutes yet another constraint that the poor in many developing countries are facing. This together with the social pressure to keep up with the norm puts families under unnecessary financial strain and contributes to poverty. It can be argued that spending on status goods or ceremonies is unproductive as it channels scarce resources of a household away from investment and hence families get locked in poverty trap (Moav and Neeman, 2010, 2012; Kaus, 2013). Poor people in the developing world spend large amounts on weddings, dowries, and christenings (Banerjee and Duflo, 2007; Brown *et al.*, 2005). In part this could be because households do not want to lose face when the social norm is to spend lavishly on these events. In South Africa, 90% of poor households (living under \$1 a day) spend money on festivities (Banerjee and Duflo, 2007). Lavish spending on weddings is not uncommon in poor villages with poor households trying to imitate the richer families (Bloch *et al.*, 2004).

The policies aimed at tackling poverty can be broadly classified into three categories: access to markets, infrastructure and redistribution (see Ghatak, 2015). The first category deals with market frictions, for example imperfect financial market. Second category deals mostly with public goods such as roads or schools. The third category involves unconditional cash transfers, conditional cash transfers and in-kind transfers.

In this paper we argue that if preferences of individuals are such that status is important and social norms put pressure on households to spend big on certain occasions then policies which are aimed at either removing market frictions or providing benefits (cash or non-cash) to the poor will not have a desired effect despite the effectiveness of some of such programs (Handa

et al., 2018). The simple theoretical model shows that improving access to the credit market will also increase the status spending. The empirical results show that borrowing leads to increase in spending on ceremonies. Moreover, ceremonial expenditure makes households borrow even more thereby creating a vicious circle trapping households in accumulation of debt and potentially poverty.

2. THEORETICAL MODEL

Consider a two-period model. In each period the utility of an individual is given by $u(c, x) = c^\alpha x^\beta$, where c is consumption and x is status. For simplicity assume that ceremonial spending is transformed to status one-to-one,¹ that is by spending on ceremonies (which is a visible good) the individual builds up his status in the society. Here we do not try to explain why people spend on visible goods. This could be evolutionary (as mentioned in Frank, 1985a,b) and even if not optimal any longer these habits still survive through cultural transmission (Bisin and Verdier, 1998; Heffetz and Frank, 2011). Or it could be strategic in the sense that the social capital can potentially generate returns in the future (Moav and Neeman, 2012). Assume further that individuals spend on status only in period 1 but the status does not depreciate and is preserved in the next period. In each period the individual earns income of y . If financial markets were perfect then the individual maximizes intertemporal utility $U = u_{t_1}(c, x) + \frac{u_{t_2}(c, x)}{1+\rho}$ subject to the intertemporal budget constraint $c_{t_1} + x + \frac{c_{t_2}}{1+r} \leq y + \frac{y}{1+r}$, where ρ is the individual discount rate and r is the market interest rate.

For simplicity we assume that the discount rate and market interest rate are both zero.² Then the optimization problem becomes $\max U = 2c^\alpha x^\beta$ s.t. $2c + x \leq 2y$. Solving this optimization problem yields: $c = \frac{2y}{2+\beta/\alpha}$ and $x = \beta c/\alpha$. This implies that the individual would borrow in period 1 to invest in status and pay back in period 2. Demand for borrowing is $c + x - y$ and will be equal to:

$$B^D = \frac{\beta y}{2\alpha + \beta}, \tag{1}$$

where B^D denotes demand for a loan.

Suppose that financial market is imperfect. The individual receives a loan from a bank (if

¹For an alternative way of linking status and conspicuous consumption see Moav and Neeman (2012).

²Relaxing this assumption and introducing non-zero discount factor does not change the results qualitatively.

applies) with an exogenous probability³ π . Hence, demand for loans is realized with a probability π and the expected level of borrowing in the economy is:

$$E(\text{debt}) = \pi B^D = \pi \frac{\beta y}{2\alpha + \beta}. \quad (2)$$

The level of status spending (investment in status) for an individual depends on whether he or she gets a loan from the bank. Denote the indicator function explaining whether the individual receives a loan or not by L , so $L = 1$ implies that the individual receives the loan and $L = 0$ - that the bank does not grant a loan.

If individual secures the loan from the bank then his level of x is the solution to the intertemporal utility constraint maximization problem and is equal to:

$$(x|L = 1) = \frac{2\beta y}{2\alpha + \beta}. \quad (3)$$

However, if an individual cannot borrow, then he or she maximizes utility in each period. The maximization problem is then $\max u(c, x) = c^\alpha x^\beta$, s.t. $c + x = y$. Solving the problem yields:

$$(x|L = 0) = \frac{y\beta}{\alpha + \beta}. \quad (4)$$

The expected level of status spending in the economy is:

$$E(x) = \pi \frac{2y\beta}{2\alpha + \beta} + (1 - \pi) \frac{y\beta}{\alpha + \beta}. \quad (5)$$

The comparative statics for status spending shows:

$$\frac{\partial E(x)}{\partial \pi} = \frac{y\beta^2}{(2\alpha + \beta)(\alpha + \beta)} > 0. \quad (6)$$

This result indicates that as access to credit becomes easier (higher probability of getting a loan, π) individuals would borrow more and with this extra liquidity they increase their spending on status.

³We do not model the decision-making of a bank to simplify the analysis. Nevertheless, the partial equilibrium setting still gives us important conclusions and links well with the empirical model.

The comparative statics for debt shows:

$$\frac{\partial E(\text{debt})}{\partial \beta} = \frac{2\beta\alpha y}{2\alpha + \beta} > 0. \quad (7)$$

This result implies that individuals with higher preference for status (higher β) would spend more on status goods and because of higher demand for status goods they would borrow more.

3. DATA AND EMPIRICAL MODEL

3.1. EMPIRICAL MODEL

From the theoretical model we established that higher preference for status spending and ease of borrowing increase both debt and status spending. Ceremonial spending is one means of status spending and we use the spending on ceremonies *in lieu* of status spending in the empirical analysis.

Empirically we specify demand for borrowing as a function of ceremonial spending:

$$D_i^* = \beta_0 + \beta_1 CS_i + \beta_2 X_i + \epsilon_i, \quad (8)$$

where D_i^* is demand for borrowing, CS_i is the log ceremonial expenditure, X_i - other household characteristics, and ϵ_i is the error term satisfying the OLS assumptions.

The credit organization decides whether to grant a loan to a household by comparing the household's demand for loans and the expected payoff. If the expected value of what the credit organization would get back from the household⁴ is less than the demand for loans by the household, the loan is not granted. Define ED_i as the expectation of what the household pays back to the creditor from the perspective of the credit organization. Naturally, ED is unobserved. However, it is related to the credit history of a household. If a household has a good credit history this decreases subjective probability of a default from the perspective of a credit organization. Define D_i as the dummy variable which equals to 1 if the loan is granted. It is related to the observed borrowing by a household in the following way:

$$D_i = I(ED_i - D_i^* > 0). \quad (9)$$

⁴In reality it is not the household who applies for a loan but an individual but it is not critical for the model.

Equation 9 can be thus estimated using the probit with the set of regressors from equation 8 plus the regressors which proxy credit history (which affect ED). One potential problem with this approach is that ceremonial spending is endogenous to the model as the theoretical model suggests.

Ceremonial expenditure depends on occurrence of a specific shock. These shocks include (but are not limited to) marriage, funeral, commemoration etc. Incidence of these shocks cause positive spending on ceremonies. The ceremonial spending equation has the following form:

$$CS_i = \alpha_0 + \alpha_1 D_i + \alpha_2 X_i + \alpha_3 Shock_i + u_i, \quad (10)$$

where D_i is the loan or debt of a household, X_i are household characteristics including income, and u_i is the error term satisfying the usual regression requirements.

It follows then that equation 8 can be estimated by a probit with an endogenous regressor, where the occurrence of a specific shock can be used as an instrument to identify the effect of ceremonial expenditure on debt. One such potential instrument is death of a person. One could argue that it is random. However, this variable should not affect debt directly. That is, it should not be in equation 8 in its own right. Death of a household member would not only trigger expenditure on funerals but also reduce income of a household if the deceased household member worked and earned income and hence would affect demand for loans of a household *directly*. We therefore use the *death of a relative* who was not a member of a household as an instrument. We argue that income of a relative who was not a member of a household is unlikely to be the household's source of income and thus should not directly affect the household's demand for loans. However, the ceremonial expenditure of the household would be affected as relatives traditionally do participate financially in organizing funerals.

3.2. DATA AND STYLIZED FACTS

Kyrgyzstan is a poor mountainous country with the GNI per capita in 2016 about 3113 USD PPP and poverty rate of about 25 percent.⁵ The major ethnic groups are the Kyrgyz (73% as of 2018), Uzbeks (14.6%), and Russians (5.6%).

In Kyrgyzstan, the excessive ceremonial spending is considered to be a problem. However, no official statistics on ceremonial expenditure is available. The estimates put forward by politicians

⁵Source: World Bank, <https://data.worldbank.org/indicator/NY.GNP.MKTP.PP.KD?locations=KG>

vary considerably. Nevertheless, the problem has received much political attention. The calls for regulation of ceremonial expenditure became loud as the president of the neighboring Tajikistan banned the showing off at weddings (Marat, 2008).

The bill to regulate the excessive spending on ceremonies was fiercely debated in the parliament in 2010 and later in 2016. The bills did not gain the support of the majority in the parliament. There are certain items in the bills that highlight the extent of the lavishness of ceremonial spending. For example the 2016 bill states that a wedding has to be held during one day only and the number of guests cannot exceed 150 people. The wedding cortege cannot exceed 5 cars. The bill does not introduce a cap on a number of guests at funerals. However, it forbids slaughter of livestock. Presenting gifts and money is forbidden. On the ceremonies of the "third day", "seventh day", "40th day" and "one year" after the funeral slaughter of livestock is forbidden and the number of guests is capped at 100. As one can see funerals and weddings usually last more than one day and given large number of guests exert high financial strain on households.

The public opinion on the problem of excessive ceremonial expenditure is mixed. In a nationally representative survey on customs and traditions (Koshbakova, 2011), 36.7 percent of the respondents believe that families spend on ceremonies within their means, 34.4 percent believe that spending are excessive and 28.9 percent believe that weddings, funerals and other ceremonies became show-off contests.

In 2013 about a quarter of households in urban areas and a third of households in rural areas spent on ceremonies. Moreover, households spent on average 3 percent of income on ceremonies in urban areas. For the rural areas this figure is about 8 percent. However, if one considers only the households who did spend on ceremonies a positive sum, then in urban areas the figure would rise to 15% and in rural to over 25%! The anecdotal evidence suggests that due to social pressure to spend lavishly on weddings and funerals many households borrow money which they struggle to repay. In 2013 the ratio of debt to income among the households who did borrow was 32 percent in the urban areas and 39 in the rural.⁶

For empirical analysis we use the data from the fourth wave of the life in Kyrgyzstan Survey (2013). Life in Kyrgyzstan is a nationally representative longitudinal survey of households in Kyrgyzstan. The survey was started in 2010 and has been repeated in 2011, 2012, and 2013. The households in the survey (as well as each individual) are asked various socio-economic questions

⁶ Authors own calculations based on Life in Kyrgyzstan Survey.

on such things as: housing, assets, education, health, consumption and expenditure, migration, income etc. For detailed description of the survey and the sampling procedure see Brück *et al.* (2014).

The primary unit of observation for us is the household. So for the purpose of this paper we mainly used the household survey. The information that we took from the household survey contained the dummy on debt (if the household took a loan within the last 12 months), whether the household spent on ceremonies within the last 12 months and if so what was the highest expenditure (monetary and non-monetary). We also had information on income of the household (from various sources), region of residence and type of settlement (urban or rural). We also estimated the shares of high-skilled and medium-skilled in the household, ethnic shares, number of children etc (see list of variables and descriptive statistics in table1).

– Table with descriptive stats here –

In our estimation sample about 10% of households report to have taken a loan within last 12 months. The logarithm of highest ceremonial spending is 9.71 which means that the highest spending on a ceremony of a household in the last 12 months was about 16,482 Soms on average which is about 236 US dollars as of December 2018. This does not seem to be an extraordinary sum. However, one has to bear in mind that the log of monthly income is 9.48 which means that households earn 13,095 Soms per month on average or 157,142 Soms per year (about 2250 dollars per year).

About a third of households in the sample reside in the South of Kyrgyzstan and about two-thirds live in rural areas. On average a quarter of all households have females as heads of a household. The share of households where the head is high-skilled is 13%. Most of the households in the sample are mono-ethnic with the share of ethnic Russians about 8% and the share of ethnic Uzbeks about 10%.

4. EMPIRICAL RESULTS

4.1. HOUSEHOLD DEBT

Table 2 presents the results of estimating equation 8 with four different specifications. The F-statistic from the first stage is large thereby indicating that the instrument is not weak (see Staiger and Stock, 1997; Stock and Yogo, 2005). The results in all four specifications indicate

Table 1: Descriptive Statistics

| variable | mean | st dev | min | max |
|--------------------------------------|-------------|---------------|------------|------------|
| <i>Debt</i> | 0.10 | 0.30 | 0 | 1 |
| <i>log spending</i> | 9.71 | 1.36 | 6.21 | 13.22 |
| <i>log income</i> | 9.48 | 0.88 | 3.69 | 12.35 |
| <i>south</i> | 0.37 | 0.48 | 0 | 1 |
| <i>city</i> | 0.32 | 0.47 | 0 | 1 |
| <i>mean age</i> | 32.11 | 13.40 | 9.80 | 85 |
| <i>share of females</i> | 0.40 | 0.26 | 0 | 1 |
| <i>share of elderly</i> | 0.05 | 0.17 | 0 | 1 |
| <i>share of ethnic Russians</i> | 0.08 | 0.26 | 0 | 1 |
| <i>share of ethnic Uzbeks</i> | 0.10 | 0.28 | 0 | 1 |
| <i>num of infants</i> | 0.18 | 0.43 | 0 | 3 |
| <i>num of children 2-6 yrs</i> | 0.47 | 0.77 | 0 | 6 |
| <i>num of children 7-17</i> | 0.79 | 1.07 | 0 | 6 |
| <i>household head female</i> | 0.23 | 0.42 | 0 | 1 |
| <i>household head medium-skilled</i> | 0.13 | 0.34 | 0 | 1 |
| <i>household head high-skilled</i> | 0.14 | 0.35 | 0 | 1 |

that ceremonial spending increases demand for loans. This could mean that the households who spend more on ceremonies are more likely to experience liquidity problems and might need to borrow. Regarding the magnitude, the coefficient of 0.62 imply the marginal effect of 0.16 at the mean. This means that one percent increase in the ceremonial spending increases the likelihood of debt by 0.16 percentage points on average. We also observe that households are less likely to borrow in the South of the country. The results also shows that ceteris paribus there is no difference in the likelihood of borrowing between urban and rural areas. The households with more infants are less likely to borrow. Interestingly, the household with larger female shares are more likely to borrow although the effect is more noisy.

Insert table 2 here.

Perhaps surprisingly, the likelihood of the debt is independent of income. One potential explanation could be that the richer households also spend more on ceremonies and thus could face the same liquidity problems as the poorer household.

Table 2: Effect of ceremonial spending on debt, IV probit model

| Dependent variable: Incidence of debt | | | | | | | | |
|--|-------------|------------|-------------|------------|-------------|------------|-------------|------------|
| <i>variable</i> | <i>coef</i> | <i>sig</i> | <i>coef</i> | <i>sig</i> | <i>coef</i> | <i>sig</i> | <i>coef</i> | <i>sig</i> |
| <i>log spending</i> | 0.62 | *** | 0.63 | *** | 0.64 | *** | 0.62 | *** |
| <i>log income</i> | -0.05 | | -0.05 | | -0.05 | | -0.06 | |
| <i>south</i> | -0.89 | *** | -0.96 | *** | -0.96 | *** | -0.97 | *** |
| <i>city</i> | -0.02 | | -0.02 | | -0.02 | | -0.05 | |
| <i>mean age</i> | -0.00 | | | | | | | |
| <i>share of females</i> | 0.64 | * | 0.66 | ** | 0.66 | ** | | |
| <i>share of elderly</i> | -0.34 | | -0.43 | | -0.44 | | | |
| <i>share of ethnic Russians</i> | -0.07 | | | | | | | |
| <i>share of ethnic Uzbeks</i> | -0.34 | | | | | | | |
| <i>num of infants</i> | -0.38 | *** | -0.36 | *** | -0.36 | *** | | |
| <i>num of children 2-6 yrs</i> | 0.09 | | 0.10 | | 0.10 | | | |
| <i>num of children 7-17</i> | 0.03 | | 0.05 | | 0.05 | | | |
| <i>household head female</i> | 0.01 | | -0.01 | | | | | |
| <i>household head medium-skilled</i> | 0.08 | | 0.09 | | | | | |
| <i>household head high-skilled</i> | -0.04 | | -0.01 | | | | | |
| <i>F-stat first stage</i> | 21.7 | | 23.4 | | 24.3 | | 24.5 | |
| <i>N</i> | 687 | | 687 | | 687 | | 687 | |

4.2. CEREMONIAL SPENDING

The effect of debt on ceremonial expenditure is another interesting and important aspect of this paper. Imperfect financial markets in the developing countries may cause underinvestment (Banerjee, 2005). Improving access to finance may improve the lives of poor households and provide a way out of poverty (Perez-Moreno, 2011; Rewilak, 2017). For example, access to credit enables investment into fertilizers (Deb and Suri, 2013). However, one has to be aware the possibility that households, when given access to finance, might channel it into unproductive activities such as ceremonial spending, which otherwise could have been less lavish.⁷ To shed more light onto this issue we estimate equation 10 in this subsection.

Given equation 8 D_i is endogenous to equation 10. To identify the effect of debt on ceremonial expenditure in equation 10 we need to instrument the debt. We have argued that the actual debt (loan taken) depends not only on demand for loans by a household but also on the approval by the credit organization which usually depends on credit history. Then the likelihood of an approval is higher if an individual had already successfully applied for a loan before. We use two questions from the questionnaire to construct the "good credit history" dummy for a household. 1) Have your household members ever applied for a loan to a bank, microfinance agency or credit union? 2) Have you received a loan every time you applied?

We define CH_i as a binary variable which takes on a value of one if the household positively answered both question (1) and (2). Otherwise $CH_i = 0$. Past applications for a loan should not directly affect the ceremonial expenditure today and could be used as an instrument for debt.

Equation 10 is estimated using the IV approach. The results are provided below. The first stage F-statistic is large thus indicating that the instrument is not weak (see Staiger and Stock, 1997; Stock and Yogo, 2005).

– Insert Table 3 here –

First of all, the elasticity of ceremonial spending is about 0.35, that is for any increase in the household's income about one third of the increase is spent on ceremonies. There is also a big gap in ceremonial spending between two parts of the country: household spending on ceremonies is on average more than 70% higher in the southern regions. In cities, households spend about 25% less money on ceremonies than in rural areas.

⁷This is also in line with the argument that access to credit reduces precautionary saving of the households and might reduce income in the long run (Fulford, 2013).

The results also show that in mixed households where the share of ethnic Russians is higher the ceremonial spending is lower. This indicates that lavish ceremonial spending is culturally closer to Kyrgyz or Uzbeks but not so for Russians. Death of a relative increases the ceremonial spending by about 50% which implies that funerals and commemoration impose a huge cost on a household.

The effect of having debt is highly significant and is between 1.11 and 1.13 in magnitude. This could be interpreted that households which are given access to loans spend thrice as much as households that do not (or cannot) borrow.

Results from tables 2 and 3 imply that having access to loans makes households spend more on ceremonies and with the higher ceremonial spending they increase the likelihood of debt thus creating a vicious circle which might keep households in poverty. Thus the usual anti-poverty measures such as improving access to finance or providing the cash or non-cash benefits may not have the desired effect. Whether the radical initiatives like in Tajikistan or more moderate endeavors be effective in curbing the excessive status spending is another matter altogether. Given the lack of empirical evidence it is not easy to conclusively argue in favor of a specific initiative. However, there is some hope that moderate reforms can help changing customs which otherwise hinder the development (Aldashev *et al.*, 2012).

5. EXTENSIONS

In our sample only 25% of households reported to have spent on ceremonies within the last 12 months. It could be because the other 75% of households did not face a shock which requires ceremonial spending (wedding or funeral). Assuming that these shocks are random the truncated sample would also be random and thus the results would still be consistent. However, there remains a possibility that some choose not to spend the money even when faced with a shock. If this trait also affects taking loans then the estimated coefficients would be inconsistent.

Let I_i^* be the utility of holding an event. Suppose that it is given by the following equation:

$$I_i^* = \gamma_0 + \gamma_1 Z_i + \eta_i, \quad (11)$$

where Z_i are some exogenous characteristics and η_i is the household specific preference for status, which is normally distributed. In the data we observe I_i which is 1 if a household spends

Table 3: Effect of debt on log ceremonial spending, IV regression

| Dependent variable: Log ceremonial spending | | | | | | | | |
|---|-------------|------------|-------------|------------|-------------|------------|-------------|------------|
| <i>variable</i> | <i>coef</i> | <i>sig</i> | <i>coef</i> | <i>sig</i> | <i>coef</i> | <i>sig</i> | <i>coef</i> | <i>sig</i> |
| <i>debt</i> | 1.12 | *** | 1.13 | *** | 1.13 | *** | 1.11 | *** |
| <i>log income</i> | 0.36 | *** | 0.36 | *** | 0.35 | *** | 0.35 | *** |
| <i>south</i> | 0.76 | *** | 0.76 | *** | 0.77 | *** | 0.78 | *** |
| <i>city</i> | -0.25 | ** | -0.26 | ** | -0.29 | *** | -0.31 | *** |
| <i>mean age</i> | -0.01 | | | | | | | |
| <i>share of females</i> | -0.30 | | -0.36 | | 0.66 | ** | | |
| <i>share of elderly</i> | -0.07 | | 0.32 | | 0.34 | | | |
| <i>share of ethnic Russians</i> | -0.89 | *** | -0.88 | *** | -0.90 | *** | -0.92 | *** |
| <i>share of ethnic Uzbeks</i> | 0.12 | | 0.12 | | 0.13 | | 0.12 | |
| <i>num of infants</i> | 0.22 | ** | 0.16 | * | 0.16 | * | 0.15 | |
| <i>num of children 2-6 yrs</i> | -0.08 | | -0.12 | ** | -0.12 | ** | -0.12 | ** |
| <i>num of children 7-17</i> | -0.06 | | -0.09 | ** | -0.09 | ** | -0.09 | ** |
| <i>household head female</i> | -0.01 | | -0.02 | | | | | |
| <i>household head medium-skilled</i> | -0.10 | | -0.10 | | | | | |
| <i>household head high-skilled</i> | -0.12 | | -0.13 | | | | | |
| <i>death relative</i> | 0.50 | *** | 0.51 | *** | 0.51 | *** | 0.52 | *** |
| <i>F-stat first stage</i> | 30.3 | | 30.5 | | 30.9 | | 30.0 | |
| <i>N</i> | 687 | | 687 | | 687 | | 687 | |

a positive amount on an event or zero otherwise. The larger the preference for status, the higher the utility from an event and the more the household would be willing to hold it. Thus it is not unlikely that the correlation between η_i from equation 11 and u_i from equation 10 is non-zero which would render estimation of equation 10 inconsistent.

Hence we specify a system of three equations:

$$\begin{aligned}
 D_i &= I(ED_i - D_i^* > 0) \\
 I_i &= I(I_i^* > 0) \\
 CS_i &= \alpha_0 + \alpha_1 D_i + \alpha_2 X_i + u_i.
 \end{aligned}
 \tag{12}$$

This first two equations in the system are binary. The last equation is observed only when $I_i = 1$, so the last equation is of Heckman selection type. The incidence of a shock would affect the likelihood that a household holds an event and thus would enter equation 2 in the system. On the other hand, the income of a household would affect the amount of spending but not the incidence of an event and thus would enter equation 3.

The estimation results are provided in the table 4.

– Insert Table 4 here –

The results are qualitatively similar to the ones from Section 4. With a notable difference that now the likelihood of debt declines with income. Another interesting result is that in the South of the country the households are less likely to spend on ceremonies but when they do, they spend significantly more than in the North. Also, households having ethnic Russian members are as likely to spend on ceremonies as Kyrgyz and Uzbek households. However, the households with ethnic Russian members spend significantly less on ceremonies.

6. CONCLUSIONS

The poor in the developing world are facing multiple constraints. For example imperfect financial markets may cause underinvestment in physical or human capital. Moreover, in many countries they face social norms which force families to spend significant amounts of money on activities which do not contribute to their well-being. This together with the social pressure to keep up with the norm puts families under unnecessary financial strain and contributes to poverty.

Table 4: System Estimation

| <i>variable</i> | Dependent Variable | | | | | |
|--------------------------------------|--------------------|------------|----------------|------------|----------------|------------|
| | Inc. of Debt | | Inc. of Cerem. | | Cerem. Expend. | |
| | <i>coef</i> | <i>sig</i> | <i>coef</i> | <i>sig</i> | <i>coef</i> | <i>sig</i> |
| <i>debt</i> | — | | — | | 1.23 | *** |
| <i>log spending</i> | 0.73 | *** | — | | — | |
| <i>log income</i> | -0.24 | *** | — | | 0.34 | *** |
| <i>south</i> | -0.51 | *** | -0.31 | *** | 0.84 | *** |
| <i>city</i> | -0.21 | * | -0.22 | *** | -0.18 | * |
| <i>share of females</i> | -0.04 | | 0.94 | *** | -0.55 | ** |
| <i>share of elderly</i> | 0.15 | | -0.50 | *** | 0.37 | |
| <i>share of ethnic Russians</i> | 0.70 | *** | -0.06 | | -0.88 | *** |
| <i>share of ethnic Uzbeks</i> | -0.16 | | 0.09 | | 0.11 | |
| <i>num of infants</i> | -0.32 | *** | 0.32 | *** | 0.13 | |
| <i>num of children 2-6 yrs</i> | 0.03 | | 0.08 | ** | -0.12 | ** |
| <i>num of children 7-17</i> | 0.02 | | 0.08 | *** | -0.10 | ** |
| <i>household head medium-skilled</i> | 0.09 | | 0.12 | | -0.12 | |
| <i>household head high-skilled</i> | 0.03 | | 0.20 | *** | 0.16 | |
| <i>death relative</i> | — | | 0.38 | *** | — | |
| <i>loan before</i> | 0.23 | *** | — | | — | |

The simple theoretical model shows that improving access to the credit market will also increase the status spending. The empirical results corroborate this finding. Using the instrumental variable approach and the system estimation we show that borrowing increases the spending on ceremonies. The estimates show that households who borrow spend three times more on ceremonies. Moreover, the estimates show that one percent increase in ceremonial spending increases borrowing likelihood by 0.16 percentage points. To put this differently: borrowing leads to increase in spending on ceremonies and ceremonial expenditure makes households borrow even more thereby creating a vicious circle trapping households in accumulation of debt and potentially poverty.

This paper adds to the literature by providing empirical evidence that if preferences are such that status is important and social norms put pressure on households to spend big on certain occasions then policies which are aimed at either removing market frictions or providing benefits to the poor will not have a desired effect. The existing traditions impede or negate the otherwise good-intended policies. Hence, these measures have to be combined with reforms aimed at changing the existing institutions. Whether the radical initiatives like in Tajikistan or more moderate endeavors be effective in curbing the excessive status spending is beyond the scope of this paper. The theoretical literature shows that under certain conditions moderate reforms can be more effective than the radical but further empirical research is needed.

REFERENCES

- ALDASHEV, G., CHAARA, I., PLATTEAU, J.-P. and WAHHAJ, Z. (2012). Using the law to change the custom. *Journal of Development Economics*, **97**, 182–200.
- BANERJEE, A. (2005). Inequality and investment. In F. Ferreira and M. Walton (eds.), *World Development Report: Equity and Development*, Washington DC: World Bank, pp. 89–104.
- and DUFLO, E. (2007). The economic lives of the poor. *Journal of Economic Perspectives*, **21**, 141–167.
- BISIN, A. and VERDIER, T. (1998). On the cultural transmission of preferences for social status. *Journal of Public Economics*, **70**, 75–97.
- BLOCH, F., RAO, V. and DESAI, S. (2004). Wedding celebrations as conspicuous consumption signaling social status in rural India. *Journal of Human Resources*, **39** (3), 675–695.
- BROWN, P., BULTE, E. and ZHANG, X. (2005). Positional spending and status seeking in rural China. *Journal of Development Economics*, **96**, 139–149.
- BRÜCK, T., ESENALIEV, D., KROEGER, A., KUDEBAYEVA, A., MIRKASIMOV, B. and STEINER, S. (2014). Household survey data for research on well-being and behavior in Central Asia. *Journal of Comparative Economics*, **42** (3), 819–835.
- DEB, R. and SURI, T. (2013). Endogenous emergence of credit markets: Contracting in response to a new technology in Ghana. *Journal of Development Economics*, **101**, 268–283.
- DUFLO, E. (2006). Poor but rational? In A. Banerjee, R. Benabou and D. Mookherjee (eds.), *Understanding Poverty*, Oxford: Oxford University Press, pp. 367–378.
- FRANK, R. (1985a). *Choosing the Right Pond: Human Behavior and the Quest for Status*. New York: Oxford University Press.
- (1985b). The demand for unobservable and other nonpositional goods. *American Economic Review*, **75** (1), 101–116.
- FULFORD, S. (2013). The effects of financial development in the short and long run: Theory and evidence from India. *Journal of Development Economics*, **104**, 56–72.
- GHATAK, M. (2015). Theories of poverty traps and anti-poverty policies. *The World Bank Economic Review*, **29**, 1–29.

- HANDA, S., NATALI, L., SEIDENFELD, D., TEMBO, G. and DAVIS, B. (2018). Can unconditional cash transfers raise long-term living standards? Evidence from Zambia. *Journal of Development Economics*, **133**, 42–65.
- HEFFETZ, O. and FRANK, R. (2011). Preferences for status: Evidence and economic implications. In J. Benhabib, A. Bisin and M. Jackson (eds.), *Handbook of Social Economics*, vol. 1, 3, North Holland: Elsevier, pp. 69–91.
- KAUS, W. (2013). Conspicuous consumption and race: Evidence from South Africa. *Journal of Development Economics*, **100** (1), 63–73.
- KOSHBAKOVA, B. (2011). *Evolution of Socio-Cultural Traditions and Customs of Kyrgyz People in Modern Times*. Dissertation, Kyrgyz National University.
- MARAT, E. (2008). *Tajik Government Regulates Wedding Splendor*. Central asia and caucasus analyst 06/11/2008, Asia Caucasus Institute.
- MOAV, O. and NEEMAN, Z. (2010). Status and poverty. *Journal of the European Economic Association*, **8**, 413–420.
- and — (2012). Saving rate and poverty: The role of conspicuous consumption and human capital. *The Economic Journal*, **122** (September), 933–956.
- PEREZ-MORENO, S. (2011). Financial development and poverty in developing countries: a causal analysis. *Journal of Empirical Economics*, **41**, 57–80.
- REWILAK, J. (2017). The role of financial development in poverty reduction. *Review of Development Finance*, **7** (2), 169–176.
- STAIGER, D. and STOCK, J. (1997). Instrumental variables regression with weak instruments. *Econometrica*, **65**, 557–586.
- STOCK, J. and YOGO, M. (2005). Testing for weak instruments in linear IV regression. In J. Stock and D. Andrews (eds.), *Identification and Inference for Econometric Models: Essays in Honor of Thomas J. Rothenberg*, 5, Cambridge University Press, pp. 80–108.