

# In pursuit of happiness: do social assistance and remittances improve subjective well-being?

Jennifer Waidler, Franziska Gassmann, Melissa Siegel\*

\*UNU-MERIT/Maastricht Graduate School of Governance,  
Maastricht University

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# Motivation

- Growing consensus on the importance of measuring subjective well-being
- While clear links have been established between transfers and objective measures of well-being, in the case of subjective well-being the relationship is more ambiguous
- Migration: remittances may not compensate for the physical separation (negative), new –richer- reference groups to compare with (negative), higher status and higher income (positive)
- Social protection: stigma and shame (negative), transfers seen as other sources of income (positive)

# Contribution

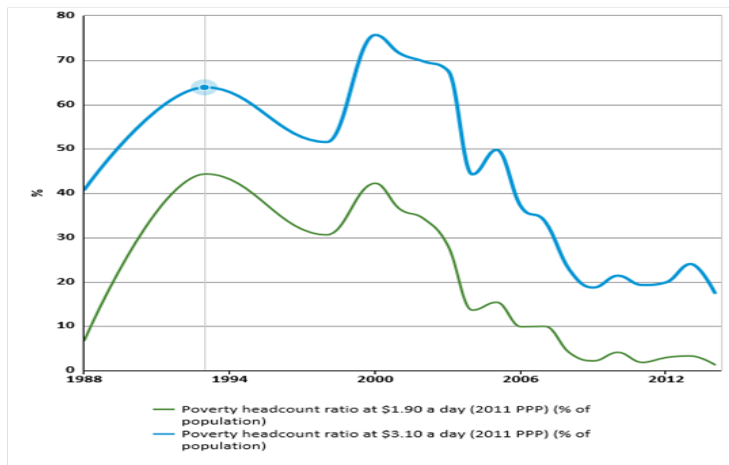
- Looking at different indicators of subjective well-being
- Comparing private vs public transfers
- Methodology: control for factors that are usually unobserved in these studies (personality), implement panel data techniques, IV estimation to get rid of endogeneity

## Literature review

- Positive effects of remittances on subjective economic well-being (Andersson 2014, Semyonov 2008)
- Negative effects of migration (and remittances) on subjective well-being -happiness- (Jones 2013, 2015; Borraz et al. 2008)
- But, social remittances may bring positive changes (Levitt 2001, Cohen et al. 2005)
- Positive effects of social pensions on subjective well-being (Lloyd-Sherlock 2012; Moller-Radloff 2012)
- But with CCTs this is not the case (Galama, Morgan and Saavedra 2016)

# Case study: Kyrgyzstan

Figure: Poverty headcount



Source: *World development indicators*

## Case study: Kyrgyzstan

- Remittances are received by 25 percent of the population (representing more than 40 percent of hh income). Therefore, determinant role in poverty reduction
- Social protection reflects the legacy from the Soviet era (categorical transfers, low coverage)

## Data and indicators

Life in Kyrgyzstan Survey (2010-2013), 8,000 individuals (final balanced sample 5,900)

Dependent variables:

- Life satisfaction
- Subjective economic well-being
  - If you look back one year, how has your household's economic situation changed since that date?
  - How do you think the economic situation of your household will be in one year from now?

Independent variables: receiving remittances and social assistance

Control variables: demographic, working status and education, access to networks, membership, practice sports, personality, assets, income per capita, exposure to shocks, subjective economic well-being, oblast, rural/urban

## Methodology: panel estimates

We estimate random effects ordered probit regression (for the life satisfaction indicator), and random effects probit regression (for the subjective economic well-being indicators):

$$y_{it}^* = X'_{it} + u_{it} \quad (1)$$

if

$$\alpha_{j-1} < y_i^* < \alpha_j \quad (2)$$

In addition, to remove unobserved heterogeneity, we estimate fixed effects and mundlak:

$$Y_{it} = \beta_1(SA_{it}) + \beta_2(REM_{it}) + \beta_3(IND_{it}) + \beta_4(HH_{it}) + \alpha_i + \epsilon_{it} \quad (3)$$



## Methodology: IV regressions

Instrument: migrant networks (measured through the percentage of households in the community with a migrant abroad) interacted with a variable indicating the percentage of households in the community where the eldest person speaks Russian as a second language.

Second stage equation:

$$Y_{it} = \beta_1(SA_{it}) + \beta_2(REM_{it}^*) + \beta_3(IND_{it}) + \beta_4(HH_{it}) + \epsilon_{it} \quad (4)$$

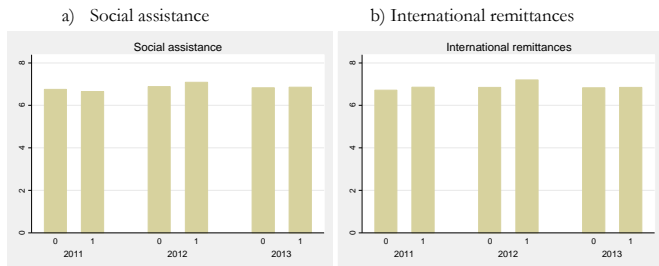
# Descriptive results

Table: Transfers characteristics by year

	2011	2012	2013
<hr/>			
Social assistance			
<hr/>			
Percentage recipients	9.1	10.2	6.5
Per capita received	298	308	390
Percentage of total income	15.6	13.8	13.8
<hr/>			
Remittances			
<hr/>			
Percentage recipients	15.7	15.2	16.3
from migrant households	88.5	82.2	81.2
Per capita received	982	1683	2672
Percentage of total income	30.9	39.1	56.0
<hr/>			

# Descriptive results

Figure: Average life satisfaction by transfer recipient status



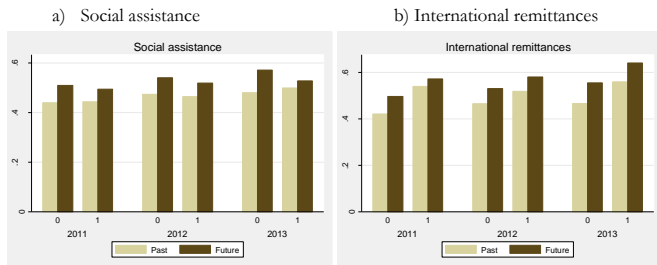
Source: authors' calculations, LiK 2011, 2012, and 2013.

1a) Differences between recipients and non-recipients are only significant in 2012 (at a 5% level)

1b) Differences between recipients and non-recipients are significant in 2011 (at a 10% level), and in 2012 (at a 1% level)

# Descriptive results

Figure: Subjective economic wellbeing by transfer recipient status



Source: authors' calculations, LiK 2011, 2012, and 2013.

1a) Differences between recipients and non-recipients are not significant when comparing the current situation with the past, and are only significant in 2013 -at a 10% level- when comparing the current situation with the future.

1b) Differences between recipients and non-recipients are always significant at a 1% level (both in the case of the past and the future)

# Descriptive results

Table: Summary statistics 2011

Variable	Social assistance	Remittances	Total
Male	0.45	0.43	0.46
Age***	40.9	44.3	41.7
Married	0.77	0.78	0.73
Kyrgyz**	0.67	0.69	0.67
HH size***	5.9	6.1	5.2
Primary	0.13	0.13	0.13
Secondary**	0.65	0.58	0.53
Technical	0.14	0.17	0.18
University**	0.08	0.13	0.17
Works	0.21	0.22	0.29
Sports	0.18	0.21	0.22
Member of an organization	0.07	0.09	0.05
Networks**	0.31	0.36	0.35
Personality	0.06	0.11	0.005
Idiosyncratic shocks*	0.32	0.28	0.21
Subjective econ WB*	5.8	6.0	5.98
Per capita income***	2543	3550	3505
Asset index**	-0.19	-0.12	0.08
Urban***	0.19	0.28	0.37
Issyk-Kul***	0.06	0.02	0.09
Jalal-Abad***	0.18	0.28	0.15
Naryn***	0.06	0.002	0.05
Batken***	0.09	0.15	0.08
Osh***	0.25	0.34	0.21
Talas***	0.12	0.04	0.04
Chui***	0.13	0.08	0.17
Bishkek***	0.06	0.03	0.17
Osh city**	0.05	0.07	0.05
Life satisfaction*	6.7	6.9	6.7
Past***	0.44	0.54	0.44
Future***	0.49	0.57	0.51
Observations	534	925	5900

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



# Regression results: effects on life satisfaction

	Life satisfaction ordered probit	Life satisfaction fixed effects	Life satisfaction Mundlak
Receives SA	0.05 (0.03)	0.06 (0.06)	0.06 (0.06)
Receives remittances	0.03 (0.02)	-0.01 (0.05)	-0.01 (0.05)
Male	-0.05** (0.02)		-0.08** (0.03)
Married	0.18** (0.02)	0.11 (0.10)	0.12 (0.10)
Ethnic Kyrgyz	0.06** (0.02)		0.06* (0.03)
HH size	0.01+ (0.00)	0.05* (0.02)	0.05* (0.02)
Urban	-0.14** (0.03)		-0.19** (0.04)
Works	0.04* (0.02)	0.15** (0.05)	0.15** (0.05)
Practices sports	0.16** (0.03)	0.16** (0.05)	0.16** (0.04)
Networks	0.11** (0.02)	0.19** (0.03)	0.19** (0.03)
Personality	0.18** (0.01)		0.23** (0.02)
Relative economic WB	0.36** (0.01)	0.48** (0.01)	0.48** (0.01)
Observations	17270	17314	17270

Standard errors in parentheses

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$

# Regression results: effects on economic subjective well-being

	Past RE probit	Past fixed effects	Past Mundlak
Receives SA	-0.02 (0.01)	-0.04* (0.02)	-0.04* (0.02)
Receives remittances	0.06** (0.01)	0.06** (0.01)	0.07** (0.02)
Married	0.04** (0.01)	0.10** (0.03)	0.11** (0.03)
Ethnic Kyrgyz	0.06** (0.01)		0.07** (0.01)
Urban	-0.06** (0.01)		-0.07** (0.01)
Secondary	-0.00 (0.01)	0.24** (0.07)	0.25** (0.07)
Technical	-0.00 (0.02)	0.16* (0.07)	0.18** (0.07)
University	0.02 (0.02)	0.30** (0.08)	0.31** (0.08)
Works	0.01 (0.01)	0.04** (0.01)	0.04** (0.01)
Idiosyncratic shock	-0.02** (0.01)	-0.03** (0.01)	-0.04** (0.01)
Personality	0.03** (0.01)		0.03** (0.01)
Relative economic WB	0.07** (0.00)	0.06** (0.00)	0.07** (0.00)
pc income before transfers	0.00** (0.00)	0.00** (0.00)	0.00** (0.00)
Observations	17270	17314	17270

Standard errors in parentheses

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$

# Regression results: effects on economic subjective well-being

	Future RE probit	Future fixed effects	Future Mundlak
Receives SA	-0.07** (0.01)	-0.09** (0.02)	-0.10** (0.02)
Receives remittances	0.03** (0.01)	0.02 (0.02)	0.02 (0.02)
Married	0.03* (0.01)	0.06* (0.03)	0.06* (0.03)
Ethnic Kyrgyz	0.08** (0.01)		0.08** (0.01)
Urban	-0.04** (0.01)		-0.04** (0.01)
Secondary	-0.03* (0.01)	0.05 (0.07)	0.06 (0.07)
Technical	-0.05** (0.02)	0.01 (0.07)	0.02 (0.07)
University	-0.01 (0.02)	0.14+ (0.08)	0.15+ (0.08)
Works	-0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Idiosyncratic shock	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Personality	0.06** (0.01)		0.06** (0.01)
Relative economic WB	0.05** (0.00)	0.05** (0.00)	0.06** (0.00)
pc income before transfers	0.00** (0.00)	0.00* (0.00)	0.00* (0.00)
Observations	17270	17314	17270

Standard errors in parentheses

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$



# Regression results: IV regressions

	IV	IV	IV	IV	IV	IV
	Life satisfaction RE	Life satisfaction FE	Past RE	Past FE	Future RE	Future FE
Receives remittances	-0.30	-0.45	0.41**	0.58**	0.05	0.22
	(0.20)	(0.40)	(0.06)	(0.13)	(0.07)	(0.14)
Receives SA	0.03	0.06	0.00	-0.04 <sup>+</sup>	-0.06**	-0.09**
	(0.06)	(0.06)	(0.02)	(0.02)	(0.01)	(0.02)
Married	0.26**	0.10	0.04**	0.11**	0.02**	0.07*
	(0.03)	(0.10)	(0.01)	(0.03)	(0.01)	(0.03)
Ethnic Kyrgyz	0.09**		0.06**		0.08**	
	(0.03)		(0.01)		(0.01)	
Urban	-0.23**		-0.05**		-0.04**	
	(0.04)		(0.01)		(0.01)	
Education (ref category: basic)						
Secondary	-0.06	0.29	-0.01	0.21**	-0.03*	0.04
	(0.04)	(0.20)	(0.01)	(0.08)	(0.01)	(0.08)
Technical	-0.07	0.10	-0.01	0.12	-0.05**	-0.01
	(0.06)	(0.19)	(0.01)	(0.08)	(0.02)	(0.08)
University	-0.06	0.46 <sup>+</sup>	0.01	0.26**	-0.01	0.13
	(0.07)	(0.26)	(0.01)	(0.09)	(0.01)	(0.10)
Works	0.06*	0.14**	0.01	0.05**	-0.01	0.01
	(0.03)	(0.05)	(0.01)	(0.02)	(0.01)	(0.01)
Idiosyncratic shock	-0.04	-0.01	-0.03**	-0.04**	-0.01	-0.02
	(0.03)	(0.04)	(0.01)	(0.01)	(0.01)	(0.01)
Personality	0.26**		0.03**		0.06**	
	(0.02)		(0.00)		(0.01)	
Subjective economic WB	0.53**	0.48**	0.06**	0.06**	0.05**	0.05**
	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
PC income	0.00**	0.00**	0.00**	0.00**	0.00**	0.00**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	17270	17314	17270	17314	17270	17314
Kleibergen-Paap rk Wald F statistic	114.6	114.6	114.6	114.6	114.6	114.6

Standard errors in parentheses

<sup>+</sup>  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$

# Conclusion

- Social assistance, as compared to labor income, is unlikely to contribute to improved economic well-being (and social mobility)
- International remittances are a better strategy for poverty reduction, or at least for an improvement in the living conditions of recipients
- International remittances do not increase life satisfaction, but neither do social assistance lead to lower levels of satisfaction with life

Thank you!

[jennifer.waidler@maastrichtuniversity.nl](mailto:jennifer.waidler@maastrichtuniversity.nl)

## Table: First stage regression

	(1)
Receives SA	-0.02** (0.01)
Male	-0.02* (0.01)
Age	0.01** (0.00)
Age squared	-0.00** (0.00)
Married	-0.03** (0.01)
HH size	0.01** (0.00)
Urban	-0.03** (0.01)
Education (ref category: basic) Secondary	0.02* (0.01)
Technical	0.04** (0.01)
University	0.02 (0.01)
Works	-0.02** (0.01)
Practices sports	0.03** (0.01)
Membership	0.02* (0.01)
Idiosyncratic shock	0.02** (0.01)
pc income before transfers	-0.00** (0.00)
Asset index	0.02** (0.00)
Good flooring	0.03** (0.01)
Networks <sub>Russian</sub>	0.34** (0.02)
Observations	17270

Standard errors in parentheses

†  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$