

How Presence of Children Influences on Female Entrepreneurship: Evidence from the Kyrgyz Republic

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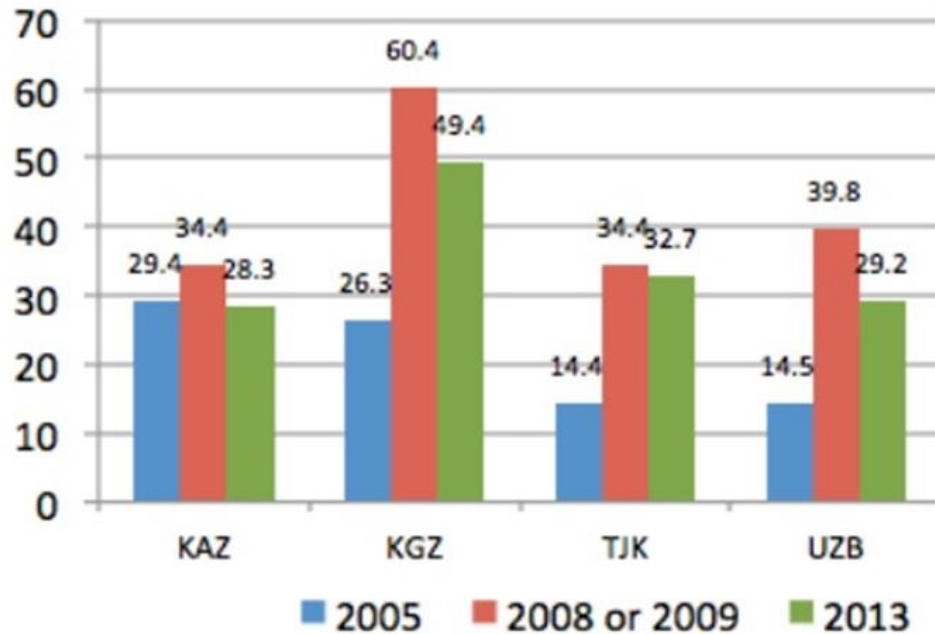
Background of research



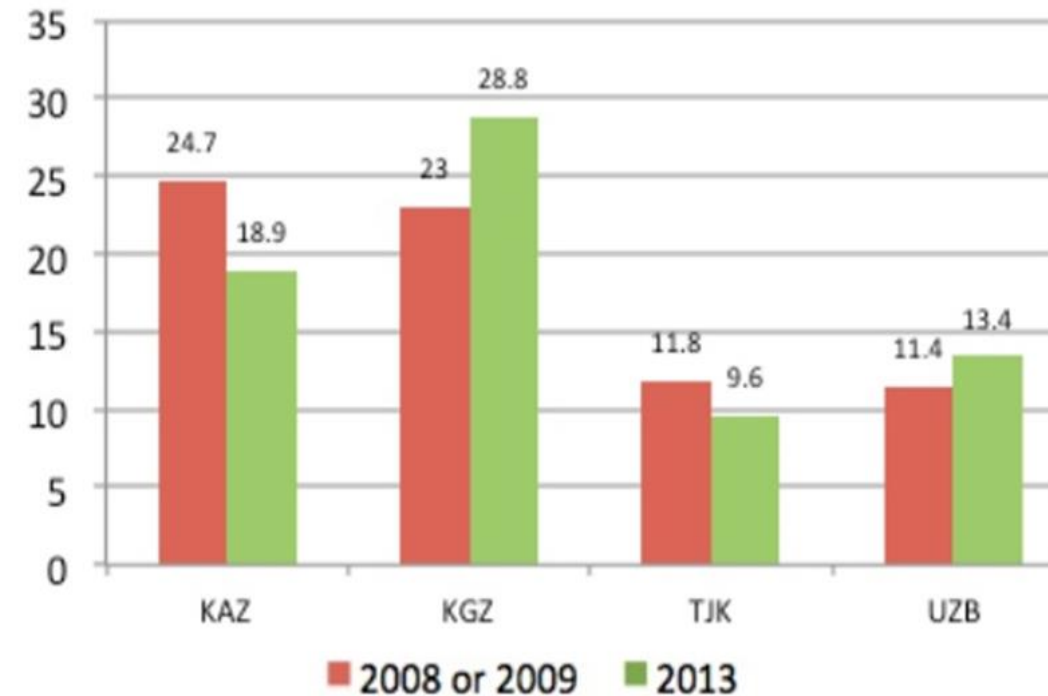
- Family is a barrier or motivation?
- Coverage of different topics
- Personal motives

Female entrepreneurship in post-soviet countries

Percentage of firms with participation in ownership female



Percentage of firms with female Top manager



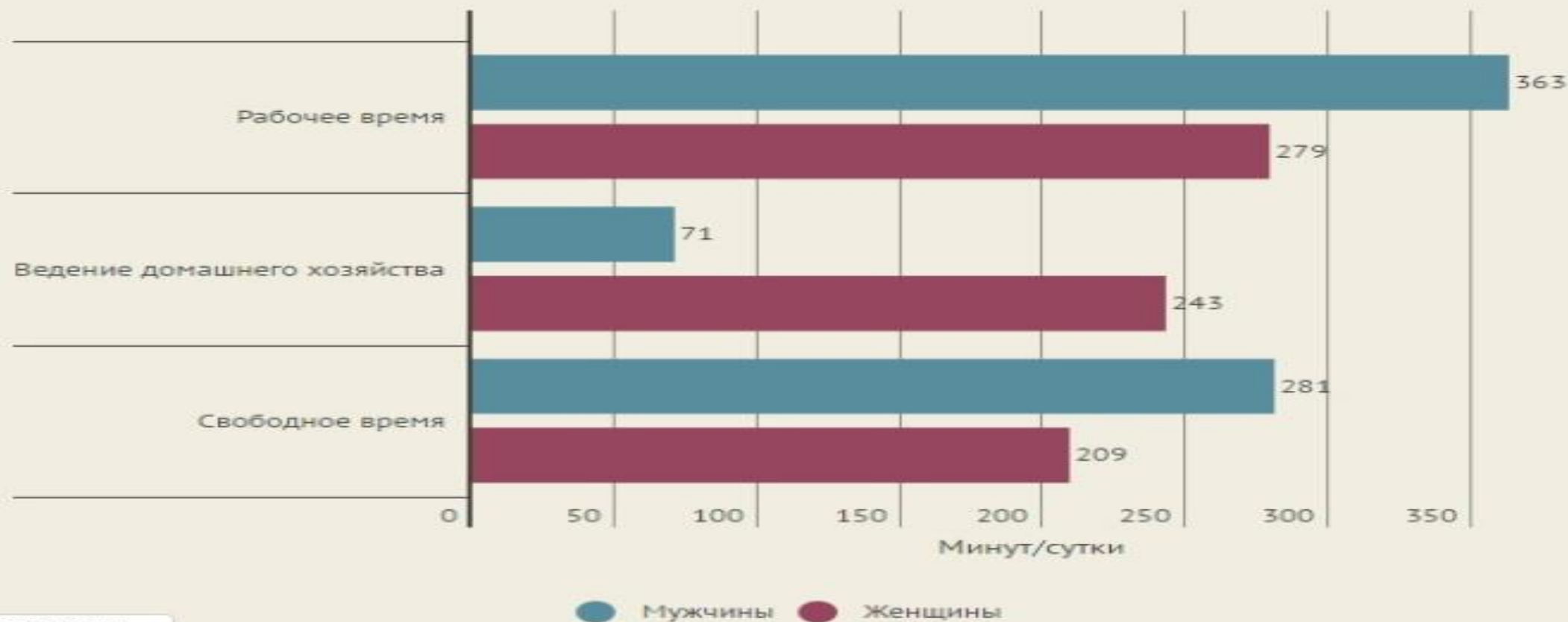
A circular illustration divided vertically into two halves. The left half is teal and contains icons representing work and technology: a smartphone, a lightbulb, a computer monitor, a pie chart, a clock, a shopping cart, a car, a magnifying glass, and a gear. The right half is pink and contains icons representing family and domestic life: a mug, a bicycle, a baby bottle, a stroller, a heart, a cake, a pot, an iron, and a car. In the center, a woman with short dark hair, wearing a dark blazer over a green top and dark pants, holds a baby in a blue onesie. She is holding a black briefcase in her right hand. The background is a solid light blue.

- HBS research (24 countries, 13,326 women 18,152 men, 2002-2012) children benefit
- Forbes (57% of managers: women having children more **effective** employees)
 1. Multitasking
 2. Effective time-management
 3. Improve negotiation skills (teamwork, manage conflicts)
- Women in Top management (Facebook)

- Differences between male and female entrepreneurship
 - Forbes: age, men earlier vs. women in 40-60
 - Marital status
 - Men are risky
- Gender parenthood
 - PwC research (4000 professionals from 75 countries) balance between family and career is important for **94%**



Мужчины Кыргызстана работают на **80 минут** больше женщин, зато на **3 часа** меньше работают по дому



i-12_384004.jpg



**Уход за детьми
и внуками**
30 минут
7 минут

Источник: Нацстатком КР

AVERAGE TIME SPENT ON UNPAID CARE WORK GLOBALLY

MEN



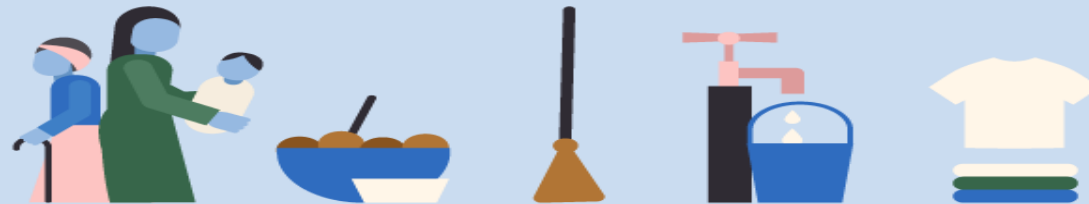
**1 hour
41 minutes/day**

WOMEN



**4 hours
19 minutes/day**

EXAMPLES OF UNPAID CARE WORK



* Based on data from 83 countries
SOURCE | UN Women, 2018



Childcare during the day in Kyrgyzstan, LiK, 2013

who usually takes care of a child during the day?	Freq.	Percent	Cum.
mother	1,174	73.38	73.38
father	27	1.69	75.06
both parents	164	10.25	85.31
siblings	27	1.69	87.00
grandparents	178	11.13	98.13
other household members	16	1.00	99.13
other non-household relatives	4	0.25	99.38
nanny	1	0.06	99.44
others	9	0.56	100.00
Total	1,600	100.00	

a man's job is to earn money; a woman's job is to look after the home and family	a husband's career should be more important to the wife than her own					Total
	Absolutel	Disagree	Agree	Absolutel	Don't kno	
Absolutely disagree	346	125	72	98	12	653
Disagree	178	508	315	167	33	1,201
Agree	235	503	919	531	83	2,271
Absolutely agree	217	269	589	1,858	79	3,012
Don't know	8	21	20	37	149	235
Total	984	1,426	1,915	2,691	356	7,372

a working woman can establish just as warm and secure of a relationship with her	a pre-school child is likely to suffer if his/her mother works					Total
	Absolutel	Disagree	Agree	Absolutel	Don't kno	
Absolutely disagree	48	94	65	102	14	323
Disagree	45	229	299	231	25	829
Agree	53	331	909	560	113	1,966
Absolutely agree	218	408	707	2,135	191	3,659
Don't know	4	23	72	125	371	595
Total	368	1,085	2,052	3,153	714	7,372

a woman is really fulfilled only when she becomes a mother	being a housewife is just as fulfilling as working for pay					Total
	Absolutel	Disagree	Agree	Absolutel	Don't kno	
Absolutely disagree	154	131	191	153	31	660
Disagree	116	388	396	199	70	1,169
Agree	74	328	902	457	121	1,882
Absolutely agree	155	244	601	1,710	181	2,891
Don't know	23	59	67	93	528	770
Total	522	1,150	2,157	2,612	931	7,372

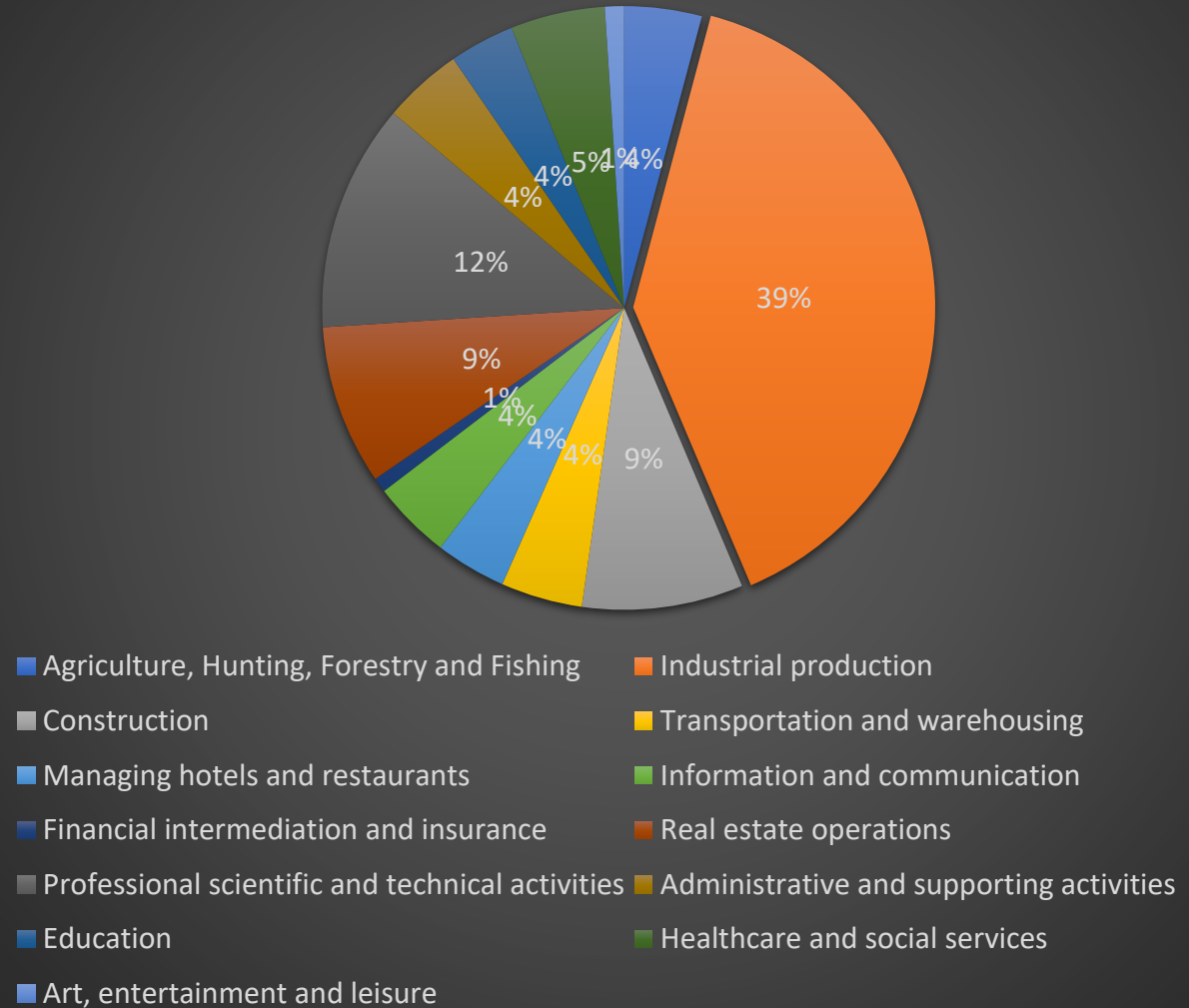
both the husband and the wife should contribute to the household income	a university education is more important for a boy than for a girl					Total
	Absolutel	Disagree	Agree	Absolutel	Don't kno	
Absolutely disagree	199	83	48	181	3	514
Disagree	211	351	355	194	19	1,130
Agree	362	721	759	365	62	2,269
Absolutely agree	981	607	422	1,045	69	3,124
Don't know	38	21	33	41	202	335
Total	1,791	1,783	1,617	1,826	355	7,372

Women entrepreneurship in Kyrgyzstan

- In Kyrgyzstan only **30%** of all entrepreneurs are women
- International organizations are aimed at women empowerment in Kyrgyzstan (UN Women, FAO, IFAD, WFP, UNDP, OSCE and etc.)

06/11/2019

Proportion of women in average number of entrepreneurs in line of business, 2015



- **Theory and hypothesis**

- **Hypothesis 0:** The presence of children is a barrier for female entrepreneurship in Kyrgyzstan (lack of time, gender stereotypes)
- **Hypothesis a:** The presence of children is a motivation for women to start a business (lack of education, financial motives, absence of a partner)

- **Data and sample**

- “Life in Kyrgyzstan”, 2013 (2,584 households and 7,675 individuals)
- 2013 survey includes general attitude towards the role of females in the society

- **Method**

- Probit model $P[Y_i=1|X_{1i},\dots,X_{Ki};\beta_0,\dots,\beta_K]=\Phi(\beta_0+\sum\beta_kX_{ki})$
 - ❖ 1 - Yes, a woman is engaged into female entrepreneurship
 - ❖ 0 - No, a woman is not engaged into female entrepreneurship

- **Variables and the way how are they measured**

- Independent variable **fementrep** - a self-employed status of a worker
- Dependent variable
 - Individual characteristics (**number of children**, age of the youngest child, age, age squared, ethnicity, risk evaluation)
 - Social factors (education, marital status, presence of partner)
 - Economic factors (household income, loan and savings)
 - Geographical factors (rural and urban, south and north)

Results of regression

```
Iteration 0:    log likelihood = -194.23066
Iteration 1:    log likelihood = -139.53773
Iteration 2:    log likelihood = -137.3758
Iteration 3:    log likelihood = -137.36697
Iteration 4:    log likelihood = -137.36697
```

Probit regression

```
Number of obs   =          324
LR chi2(14)     =        113.73
Prob > chi2     =          0.0000
Pseudo R2      =          0.2928
```

Log likelihood = -137.36697

fementrep	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
numofchild	-.0860438	.074266	-1.16	0.247	-.2316025	.0595148
ageofyoun	-.0084454	.0179495	-0.47	0.638	-.0436257	.026735
age	.2277125	.0577553	3.94	0.000	.1145142	.3409108
agesqr	-.0023627	.0007741	-3.05	0.002	-.0038798	-.0008456
edu	-.0571877	.0433951	-1.32	0.188	-.1422405	.0278651
marit	.3052943	.1894917	1.61	0.107	-.0661026	.6766912
kyrgyz	-.2470165	.3636031	-0.68	0.497	-.9596655	.4656325
uzbek	.2416319	.41816	0.58	0.563	-.5779467	1.06121
lnincome	.1222509	.1151063	1.06	0.288	-.1033534	.3478552
savings	.3886513	.2247998	1.73	0.084	-.0519482	.8292508
loan	-.1467712	.2557068	-0.57	0.566	-.6479472	.3544049
rural	-.1536385	.2079905	-0.74	0.460	-.5612924	.2540154
south	-.9099465	.2409732	-3.78	0.000	-1.382245	-.4376477
risk	-.025484	.0313135	-0.81	0.416	-.0868574	.0358894
_cons	-5.104894	1.641616	-3.11	0.002	-8.322403	-1.887386

Results of regression

```
. margins, dydx(*)
```

Average marginal effects

Number of obs = 324

Model VCE : OIM

Expression : Pr(fementrep), predict()

dy/dx w.r.t. : numofchild ageofyoun age agesqr kyrgyz uzbek marit edu lnincome savings loan rural south risk

	Delta-method					[95% Conf. Interval]
	dy/dx	Std. Err.	z	P> z		
numofchild	-.0202818	.0173838	-1.17	0.243	-.0543535	.0137899
ageofyoun	-.0019907	.0042303	-0.47	0.638	-.0102819	.0063005
age	.0536752	.0125299	4.28	0.000	.029117	.0782334
agesqr	-.0005569	.0001738	-3.21	0.001	-.0008975	-.0002164
kyrgyz	-.0582254	.0856508	-0.68	0.497	-.2260979	.1096471
uzbek	.0569562	.09828	0.58	0.562	-.135669	.2495814
marit	.0719623	.044162	1.63	0.103	-.0145937	.1585183
edu	-.01348	.0101477	-1.33	0.184	-.0333692	.0064092
lnincome	.0288163	.0270166	1.07	0.286	-.0241353	.0817679
savings	.0916108	.0522536	1.75	0.080	-.0108044	.194026
loan	-.0345961	.0602407	-0.57	0.566	-.1526656	.0834734
rural	-.0362148	.0488665	-0.74	0.459	-.1319914	.0595617
south	-.2144877	.0538376	-3.98	0.000	-.3200074	-.108968
risk	-.0060069	.007357	-0.82	0.414	-.0204264	.0084125

Results of regression

- The one unit change in the number of children variable decreases the probability of a woman doing business by 0.0202818 or **2%**. The outcome of the regression shows that childless woman is more like to be self-employed in comparison with mother. **Family is a barrier**
- The one unit change in the age of the youngest child is more likely will decrease the probability that mother will be engaged into entrepreneurship by 0,19%.
- The regression shows that in general the presence of children negatively affects the female entrepreneurship in Kyrgyzstan.
- The one year change in woman's age is more likely to increase the probability of her participation in business by 5.36%.
- The age squared has a negative effect on the probability that woman is self-employed, it which means that as women in Kyrgyzstan get elder than the effect of age is lessened.

Results of regression

- The most unpredicted results show **ethnicity** variable, if a woman is Kyrgyz it is less probability that she is self-employed in comparison with Uzbek, Russian, Dungan, Uigur, Tajik, Kazakh and other nation. If a woman is Uzbek the probability that she is self-employed is more likely to increase
- Presence of husband positively influences on woman's participation in entrepreneurship
- Education has a negative effect
- The household incomes, as well as **savings**, have a positive effect on the probability of women's entrepreneurship in contrast with variable **“loan”** which negatively influences on the independent variable.

Results of regression

- The life in urban area stimulates women to manage entrepreneurship in comparison with rural
- The probability that women are self-employed is higher if she lives in Issyk-Kul, Naryn, Talas, Cui oblast' or Bishkek rather than if a woman is from Jalal-Abad, Batken, Osh oblast' and Osh city
- The change in one unit of risk-taking is more likely to decrease the probability that woman is involved in entrepreneurship by 0.6%.

CONCLUSION

- The results of probit model regression provide with evidence that parenthood is more likely *to decrease* the probability that a woman in Kyrgyzstan is self-employed
- Involvement of women in entrepreneurship leads to economic development of the whole country
- Low support with regards to female entrepreneurship by husbands and other family members
- Lack of financial literacy hinder development of women entrepreneurship

Policy recommendations:

- ❖ Provide with accessible well-established childcare system and preschool education
- ❖ Encourage girls to apply for more business-oriented faculties instead of “traditionally” female professions as education, medicine and etc.
- ❖ Fight against motherhood stereotypes that preschool - aged children suffer if their mother decides to work. The recent Harvard studies have proven that children having a working mother will become more successful
- ❖ Provide information policy on the importance of the presence of a family partner in childcare

Thank you and help your wives,
sisters, daughters and mothers to
do business!

