

# Informal Employment A Stepping Stone?

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# Informal Employment

- “Productive” Definition: small scale production for the market
  - Individual Entrepreneur / Family Business
- “Social Protection” Definition: dependent workers not covered by labor market institutions
  - Unregistered employees
  - Casual/Irregular activities for pay

# Negative Consequences

- Private Cost
  - Low wages/income
  - Lack of employment benefits
  - Low levels of subjective well-being / satisfaction
- Social Cost
  - Lower tax receipts
  - Inefficient technology

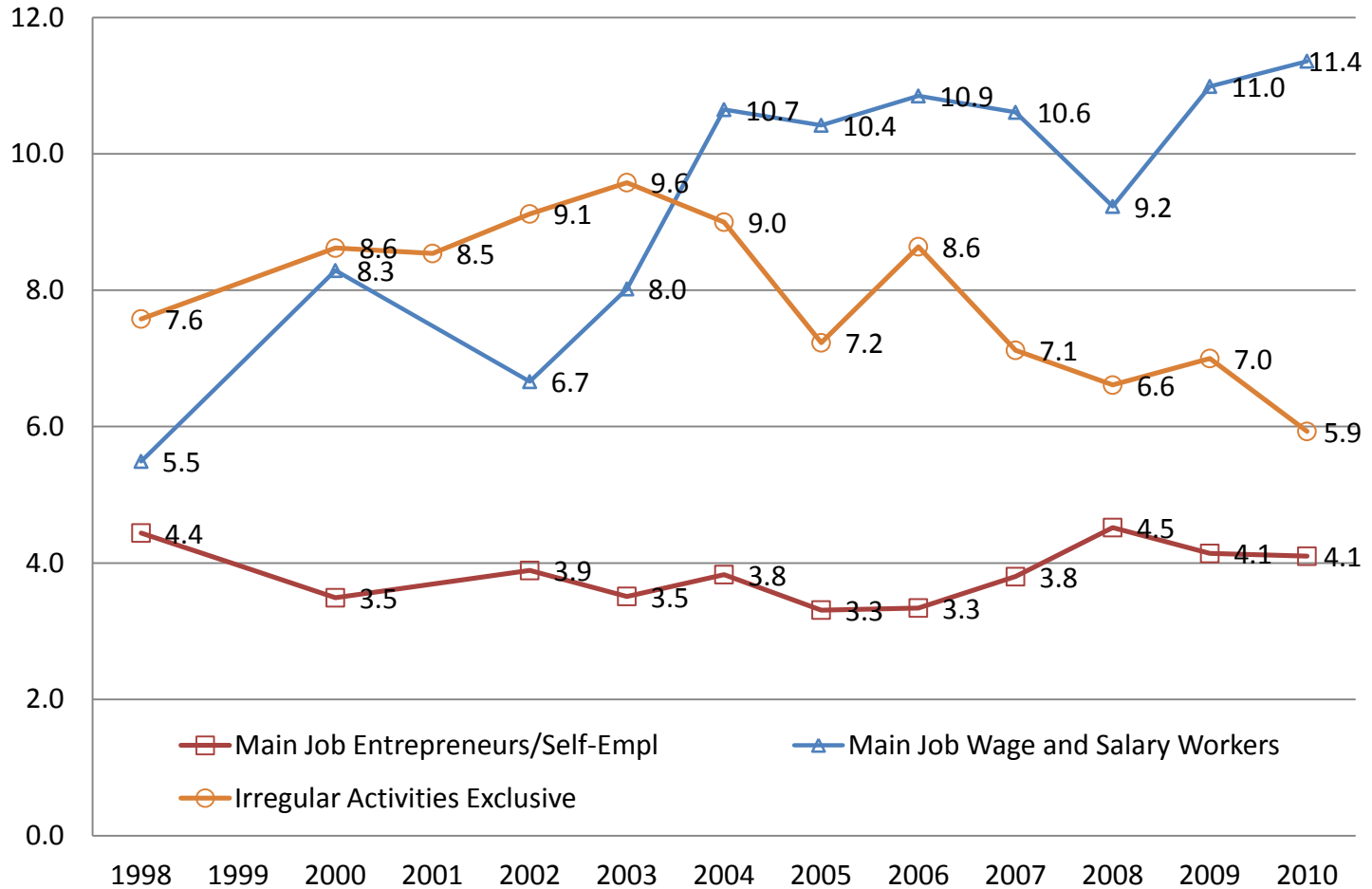
# Why might informality be a stepping stone?

- Human and non-human capital accumulation
- Expansion of Professional Network
- Uncertainty Regarding Cost/Benefits of Industry
- Signaling/screening
- On the other hand, a long spell in informal employment might carry a stigma

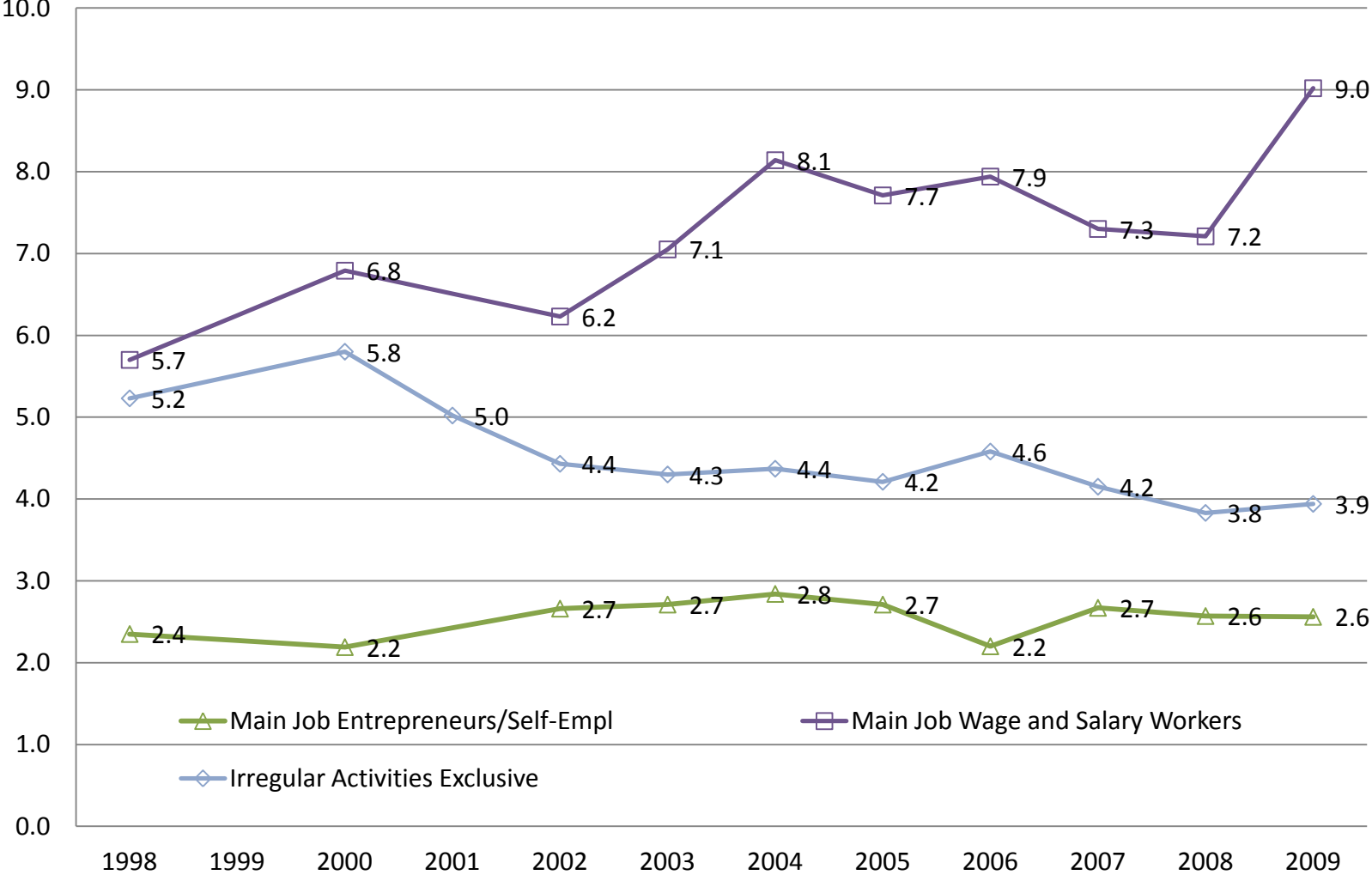
# Outline

1. Descriptive Analysis
2. Informality and Subjective Well-being
3. Informality and Earnings
4. Mobility

# Informal Employment: Males



# Informal Employment: Women



# Sector Choice: multinomial logit

	ALL			
	Formal Entrep	Inf Entrep	Inf Salary	Irreg Act Exc
Female	0.6***	0.7***	0.8***	0.6***

RRR		MALES				FEMALES			
		Formal Entrep	Inf Entrep	Inf Salary	Irreg Act Exc	Formal Entrep	Inf Entrep	Inf Salary	Irreg Act Exc
AGE RANGE (relative to 15-24)	25-34	7.9***	3.8***	1.5***	3.0***	2.6	1.8*	1.1	2.6***
	35-44	13.7***	10.0***	2.8***	17.3***	4.2**	4.8***	2.0***	10.0***
	45-54	19.6***	16.4***	5.8***	64.2***	5.6**	7.9***	3.5***	53.4***
	55-65	14.2***	24.6***	8.0***	238.4***	4.3*	23.3***	6.9***	226.0***
EDUC CATEG (relative to Upper- Second incomp)	HS COMP	0.6	1.3	0.9	0.7***	1.2	1.7	1.1	0.7*
	VOC COMP	0.4*	1.0	0.9	0.6***	0.9	1.2	1.0	0.6**
	TECHNIC COMP	0.6	1.1	0.7*	0.4***	1.1	1.4	0.9	0.6**
	UNIV or MORE	0.6	0.6	0.5***	0.4***	0.8	0.8	0.9	0.8



# Sector Choice cont.

		MALES				FEMALES			
		Formal Entrep	Inf Entrep	Inf Salary	Irreg Act Exc	Formal Entrep	Inf Entrep	Inf Salary	Irreg Act Exc
OCCUPATION (relative to Legislators, Senior Managers, Officials)	Professionals	0.1***	0.1***	0.4***	0.4**	0.0***	0.0***	0.2***	1.4
	Technicians and Assoc Prof	0.1***	0.1***	1.4	1.5	0.0***	0.0***	0.7	2.9*
	Clerks	0.1***	0.0***	1.1	2.6**	0.0***	0.0***	0.7	2.8
	Service & Mkt Workers	0.1***	0.2***	2.4***	8.3***	0.1***	0.3***	8.8***	34.2***
	Skilled Agric & Fishery Workers	1.5	1.6	1.9	9.4***	0.5	0.3	2.8	61.6***
	Craft and Related Trades	0.0***	0.1***	2.8***	9.7***	0.0***	0.1***	2.7***	85.5***
	Plant & Machine Operators and Assemblers	0.0***	0.1***	2.3***	2.7***	0.0***	0.0***	0.8	3.7**
	Unskilled Occup	0.0***	0.0***	3.8***	8.6***	0.0***	0.0***	2.2***	22.8***

# Sector Choice cont.

	MALES				FEMALES			
	Formal Entrep	Inf Entrep	Inf Salary	Irreg Act Exc	Formal Entrep	Inf Entrep	Inf Salary	Irreg Act Exc
Russian Ethnic	0.8	0.6***	0.8***	0.8***	0.6**	0.5***	0.7***	0.8
LM Experience	1.0***	0.9***	0.9***	0.8***	1.0	0.9***	0.9***	0.8***
# Children	1.2	1.2**	1.0	1.1*	1.1	1.1	0.9**	1.1
# Adults	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Urban Location	2.3	1.7	1.0	0.7*	2.1	2.8**	1.2	0.6***
Married	0.7**	0.9	0.7***	0.5***	1.2	1.2	0.8***	0.6***
Student	3.2	1.6	2.9***	21.8***	0.0***	0.0***	3.1***	44.1***
Pension	0.5	0.9	1.3**	2.6***	1.1	0.6	1.4**	2.6***
Good Health	0.9	1.0	0.9**	0.7***	1.2	0.9	0.8***	0.8**
Omitted: constant, region dummies (39), RLMS round dummies (8) , Robust s.e.								
Observations	21,140				24,220			
# Indiv	6355				6835			
Log Likelihood	-13123				-10275			
Pseudo-R2	0.209				0.291			

# Subjective Well-being: ordered Probit

GENERAL SATISFACTION					
"To what extent are you satisfied with your life in general at the present time?"					
		MALES		FEMALES	
EMP STATUS (reference category is NILF)	Unemployed	-0.2***	-0.2***	-0.3***	-0.3***
	Formal Entrep	0.9***	0.5***	0.7***	0.6***
	Inf Entrep	0.8***	0.4***	0.4***	0.3***
	Formal Salary	0.6***	0.3***	0.2***	0.1***
	Inf Salary	0.4***	0.2***	0.1**	-0.0
	Irreg Act Exc	0.1***	-0.1	-0.1***	-0.2***
AGE RANGE (relative to 15- 24)	25-34	-0.2***	-0.2***	-0.2***	-0.3***
	35-44	-0.4***	-0.4***	-0.4***	-0.5***
	45-54	-0.4***	-0.3***	-0.4***	-0.5***
	55-65	-0.3***	-0.3***	-0.4***	-0.4***
EDUC CATEG (relative to HS incomp)	HS COMP	0.0	-0.1	0.1	0.0
	VOCATIONAL	-0.0	-0.0	0.0	-0.0
	TECHNICAL	0.1***	0.0	0.1***	0.1
	UNIVERSITY OR +	0.2***	0.1**	0.3***	0.2***
	Russian Ethnicity	0.1***	0.1**	0.0	0.0
	Urban Location	-0.0	-0.1**	-0.0	-0.0
	Married	0.2***	0.2***	0.2***	0.2***
	Student	0.6***	0.8***	0.4***	0.5***
	Pension	0.1***	0.0	0.1**	0.0
	Good Health	0.3***	0.3***	0.4***	0.4***
	Log Total Income		0.2***		0.1***
Omitted: constant, region dummies, RLMS round dummies, LM Experience, # children, #adults. Robust s.e.					
Observations		31,412	26,237	40,036	33,940
# Indiv		7647	7010	8857	8228

# Subjective Well-being: ordered Probit

SATISFACTION ECONOMIC					
"How satisfied are you with your economic conditions at the present time?"					
		MALES		FEMALES	
EMP STATUS (reference category is NILF)	Unemployed	-0.4***	-0.2***	-0.3***	-0.3***
	Formal Entrep	1.0***	0.4***	1.0***	0.7***
	Inf Entrep	0.9***	0.3***	0.7***	0.4***
	Formal Salary	0.5***	0.1	0.1***	-0.0
	Inf Salary	0.5***	0.0	0.2***	0.0
	Irreg Act Exc	0.1**	-0.2***	-0.1***	-0.3***
AGE RANGE (relative to 15- 24)	25-34	-0.2***	-0.2***	-0.2***	-0.3***
	35-44	-0.3***	-0.3***	-0.3***	-0.4***
	45-54	-0.3***	-0.3***	-0.3***	-0.4***
	55-65	-0.3***	-0.2**	-0.2***	-0.3***
EDUC CATEG (relative to HS incomp)	HS COMP	0.0	-0.1	0.1**	0.0
	VOCATIONAL	0.0	-0.1	0.1	-0.0
	TECHNICAL	0.1	-0.1	0.1**	0.0
	UNIVERSITY OR +	0.2***	0.0	0.3***	0.1**
	Russian Ethnicity	0.0	0.0	-0.0	0.0
	Urban Location	-0.1	-0.1***	-0.1*	-0.1**
	Married	0.1***	0.0	0.2***	0.2***
	Student	0.5***	0.7***	0.3***	0.5***
	Pension	0.2***	0.1**	0.1***	0.0
	Good Health	0.3***	0.2***	0.3***	0.3***
	Log Total Income		0.4***		0.3***
Omitted: constant, region dummies, RLMS round dummies, LM Experience, # children, #adults. Robust s.e.					
Observations		28,849	24,670	37,066	32,091
# Indiv		7220	6721	8482	7937

# Subjective Well-being: ordered Probit

FEAR OF POVERTY					
"How concerned are you about the possibility that you might not be able to provide yourself with the bare essentials in the next 12 months?"					
		MALES		FEMALES	
EMP STATUS (reference category is NILF)	Unemployed	0.4***	0.3***	0.4***	0.4***
	Formal Entrep	-0.5***	-0.3***	-0.6***	-0.4***
	Inf Entrep	-0.4***	-0.2**	-0.3***	-0.1
	Formal Salary	-0.1***	0.0	-0.1**	0.0
	Inf Salary	-0.1	0.1**	-0.1*	0.0
	Irreg Act Exc	0.1*	0.2***	0.1	0.1***
AGE RANGE (relative to 15-24)	25-34	0.1***	0.1***	0.1***	0.2***
	35-44	0.1***	0.2***	0.2***	0.3***
	45-54	0.1**	0.1*	0.2***	0.2***
	55-65	0.0	0.0	0.0	0.0
EDUC CATEG (relative to HS incomp)	HS COMP	0.0	0.0	-0.0	-0.0
	VOCATIONAL	0.0	0.0	-0.0	-0.0
	TECHNICAL	-0.0	-0.0	-0.1	-0.1
	UNIVERSITY OR +	-0.2***	-0.2***	-0.3***	-0.2***
Russian Ethnicity	-0.0	0.0	0.0*	0.0	
Urban Location	0.0	0.0	-0.0	-0.0	
Married	0.1***	0.1***	-0.1***	-0.1***	
Student	-0.3***	-0.3***	-0.4***	-0.3***	
Pension	-0.1***	-0.0	-0.0	0.0	
Good Health	-0.2***	-0.2***	-0.2***	-0.2***	
Log Total Income			-0.1***	-0.1***	
Omitted: constant, region dummies, RLMS round dummies, LM Experience, # children, #adults. Robust s.e.					
Observations		31,353	26,190	39,991	33,921
# Indiv		7636	6999	8856	8230

# Earnings

Dependent Variable Log(Real Monthly Labor Income)		MALES			FEMALES		
		POOLED OLS	H-Taylor	FE	POOLED OLS	H-Taylor	FE
EMP STATUS (ref. Formal Entrep)	Inf Entrep	-1.14	-0.70	-0.77	1.08	0.27	0.25
	Formal Salary	-1.46*	-0.38	-0.51	-0.24	0.02	-0.00
	Inf Salary	-2.40***	-1.13*	-1.16	-0.93	-0.96	-0.96
	Irreg Act Exc	-2.90***	-1.88***	-1.90**	-0.95	-1.22**	-1.14
LOG HOURS	Log(Hours)	0.01	0.13	0.07	0.39*	0.29***	0.26
	Log(Hours) X Inf Entrep	0.23	0.16	0.18	-0.23	-0.06	-0.05
	Log(Hours) X Formal Salary	0.21	0.04	0.08	-0.06	-0.07	-0.05
	Log(Hours) X Inf Salary	0.39***	0.19	0.22	0.07	0.12	0.14
	Log(Hours) X Irreg Act Exc	0.51***	0.36***	0.39**	0.07	0.17	0.18

# Earnings cont.

		MALES			FEMALES		
		POOLED OLS	H-Taylor	FE	POOLED OLS	H-Taylor	FE
AGE	25-34	0.07**	0.11***	0.17***	0.07**	0.08***	0.12***
RANGE	35-44	0.00	0.06*	0.17***	0.02	0.05*	0.11**
(relative to	45-54	-0.12**	-0.02	0.15**	-0.07*	0.00	0.08
15-24)	55-65	-0.28***	-0.16***	0.04	-0.24***	-0.07*	0.04
EDUC	HS COMP	0.21***	0.08**	-0.04	0.19***	0.12***	0.07
CATEG	VOCATIONAL	0.18***	0.08**	-0.01	0.16***	0.08**	0.04
(relative to	TECHNICAL	0.31***	0.19***	0.02	0.34***	0.22***	0.11*
HS incomp)	UNIVERSITY OR +	0.49***	0.33***	0.02	0.63***	0.44***	0.18***
	LM Experience	0.01*	0.00*	0.01*	0.01***	0.02***	0.03***
	LM Experience <sup>2</sup> /100	-0.00	-0.01	-0.01	-0.02**	-0.04***	-0.06***
	Russian	0.06***	0.05**		-0.03	-0.05**	
	Urban Location	0.15***	0.14***		0.14***	0.15***	
	Married	0.18***	0.11***	0.03	-0.00	0.00	0.01
	Student	-0.31***	-0.40***	-0.58***	-0.14	-0.23***	-0.37***
	Pension	-0.20***	-0.20***	-0.17***	-0.04*	-0.08***	-0.09***
	Good Health	0.08***	0.04***	0.02	0.06***	0.02**	0.00
Also included: Region dummies, RLMS dummies. Robust s.e.							
	Observations	20,325	20,325	20,325	24,121	24,121	24,121
	R-squared			0.35	0.51		0.43
	Number of idind	6071	6,071	6,071	6716	6,716	6,716

# Transition Matrix

Men										
Origin State		Destination State							Total	
		NILF	Unemp	Formal Entrep	Informal Entrep	Formal Wage and Salary	Inf Wage and Salary	Irreg Activ Exc	Freq	col %
NILF	Freq	1885	217	3	30	354	142	381	3012	13%
	row %	62.6	7.2	0.1	1.0	11.8	4.7	12.7	100	
Unemployment	Freq	247	188	4	15	333	92	168	1047	4%
	row %	23.6	18.0	0.4	1.4	31.8	8.8	16.1	100	
Formal Entrepreneurs	Freq	13	2	163	70	65	12	6	331	1%
	row %	3.9	0.6	49.2	21.2	19.6	3.6	1.8	100	
Informal Entrepreneurs	Freq	17	8	98	410	77	77	53	740	3%
	row %	2.3	1.1	13.2	55.4	10.4	10.4	7.2	100	
Formal Wage and Salary	Freq	452	325	65	86	13414	633	370	15345	64%
	row %	3.0	2.1	0.4	0.6	87.4	4.1	2.4	100	
Inf Wage and Salary	Freq	95	67	17	87	618	774	139	1797	7%
	row %	5.3	3.7	1.0	4.8	34.4	43.1	7.7	100	
Irregular Activities Exc	Freq	368	143	8	62	355	206	658	1800	7%
	row %	20.4	7.9	0.4	3.4	19.7	11.4	36.6	100	
Total	Freq	3077	950	358	760	15216	1936	1775	24072	100%
	row %	12.8	4.0	1.5	3.2	63.2	8.0	7.4	100	



# Transition Matrix

Women										
Origin State		Destination State							Total	
		NILF	Unemp	Formal Entrep	Informal Entrep	Formal Wage and Salary	Inf Wage and Salary	Irreg Activi Exc	Freq	col %
NILF	Freq	4623	363	10	31	716	209	402	6354	26%
	row %	72.8	5.7	0.2	0.5	11.3	3.3	6.3	100	
Unemployment	Freq	390	231	2	14	364	106	113	1220	5%
	row %	32.0	18.9	0.2	1.2	29.8	8.7	9.3	100	
Formal Entrepreneurs	Freq	4	1	121	43	42	10	4	225	1%
	row %	1.8	0.4	53.8	19.1	18.7	4.4	1.8	100	
Informal Entrepreneurs	Freq	32	2	58	390	35	48	24	589	2%
	row %	5.4	0.3	9.9	66.2	5.9	8.2	4.1	100	
Formal Wage and Salary	Freq	813	343	51	51	17551	535	180	19524	81%
	row %	4.2	1.8	0.3	0.3	89.9	2.7	0.9	100	
Inf Wage and Salary	Freq	185	66	14	47	574	745	67	1698	7%
	row %	10.9	3.9	0.8	2.8	33.8	43.9	4.0	100	
Irregular Activities Exc	Freq	379	73	0	30	181	114	393	1170	5%
	row %	32.4	6.2	0.0	2.6	15.5	9.7	33.6	100	
Total	Freq	6426	1079	256	606	19463	1767	1183	30780	
	row %	20.9	3.5	0.8	2.0	63.2	5.7	3.8	100	128%

# Is Informality a Stepping Stone?

RRR		MALES					
		NILF	Unemp	Formal Entrep	Informal Entrep	Inf Wage and Salary	Irregular Activities Exc
LAGGED STATUS (baseline is NILF)	Unemployed (t-1)	0.3***	1.1	1.2	0.4**	0.7*	0.6***
	Formal Entrep (t-1)	0.2***	0.1***	138.0***	10.9***	0.7	0.2***
	Informal Entrep (t-1)	0.2***	0.4**	103.9***	46.3***	3.3***	1.4
	Formal W&S (t-1)	0.0***	0.1***	0.4	0.1***	0.2***	0.1***
	Informal W&S (t-1)	0.1***	0.3***	2.6	1.5	3.1***	0.4***
	Irreg Act Exc (t-1)	0.4***	0.8	2.5	1.9**	1.5***	1.9***
	Missing (t-1)	0.1***	0.2***	2.2	0.5***	0.5***	0.2***
AGE RANGE (relative to 15-24)	25-34	1.9***	1.3**	5.2***	2.7***	1.5***	2.7***
	35-44	7.4***	3.3***	7.7***	5.1***	2.3***	9.7***
	45-54	24.4***	8.3***	7.8***	6.1***	3.8***	27.8***
	55-65	113.0***	14.0***	5.7**	7.3***	4.8***	82.1***
EDUC CATEG (relative to HS incomp)	HS COMP	0.5***	0.9	1.3	2.0**	1.0	0.7***
	VOCATIONAL	0.5***	0.8*	1.0	1.6	1.0	0.6***
	TECHNICAL	0.3***	0.6***	2.1*	2.2**	0.7**	0.4***
	UNIVERSITY OR +	0.2***	0.5***	3.7***	1.9*	0.4***	0.2***
Also included: Region dummies, RLMS round dummies, experience, Russian, etc.							
Observations		31,553					
Individuals		7659					
Log pseudo-likelihood		-26855					

# Is Informality a Stepping Stone?

RRR		FEMALES					
		NILF	Unemp	Formal Entrep	Informal Entrep	Inf Wage and Salary	Irregular Activities Exc
LAGGED STATUS (baseline is NILF)	Unemployed (t-1)	0.3***	1.2*	0.4	0.9	1.2	0.8**
	Formal Entrep (t-1)	0.0***	0.1**	140.2***	25.5***	1.3	0.4*
	Informal Entrep (t-1)	0.3***	0.1**	108.2***	241.9***	6.0***	2.1**
	Formal W&S (t-1)	0.0***	0.1***	0.2***	0.1***	0.1***	0.0***
	Informal W&S (t-1)	0.1***	0.3***	1.4	2.1***	4.4***	0.3***
	Irreg Act Exc (t-1)	0.4***	0.7*	0.0***	4.1***	2.3***	3.0***
	Missing (t-1)	0.1***	0.2***	0.8	0.6**	0.5***	0.1***
AGE RANGE (relative to 15-24)	25-34	1.6***	1.2*	3.0**	2.2***	1.0	2.4***
	35-44	3.3***	2.3***	4.6***	4.1***	1.5***	6.8***
	45-54	13.3***	5.1***	5.4***	5.6***	2.2***	22.0***
	55-65	51.7***	9.0***	5.0**	18.4***	3.9***	70.5***
EDUC CATEG (relative to HS incomp)	HS COMP	0.6***	1.1	1.3	2.1*	0.9	0.6***
	VOCATIONAL	0.5***	1.0	1.0	1.7	0.8	0.6***
	TECHNICAL	0.3***	0.7**	1.5	1.7	0.5***	0.4***
	UNIVERSITY OR +	0.2***	0.5***	1.4	1.3	0.3***	0.2***
Also included: Region dummies, RLMS round dummies, experience, Russian, etc.							
Observations		40,199					
Individuals		8869					
Log pseudo-likelihood		-29836					

# Preliminary Conclusions

- The Russian labor market has a non-negligible informal component
  - Some forms of informality (self-employment, casual work) are stable or decreasing
  - Informal wage and salary workers have become more prevalent
- The characteristics of informal workers are very much like those found in other countries

# Preliminary Conclusions

- Formal and informal entrepreneurs seem to attain higher levels of welfare
  - Formal employees only come third in the ranking
- Informality is not an absorbing state. There is significant mobility
- Informal self-employment seems to be a stepping stone toward formal entrepreneurship. The picture is less clear for other forms of informality