

Employment, Wages, and Alcohol in Russia: Simultaneous Estimates

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Motivation

- Alcohol is a part of life and culture
- Russia is one of the leaders in alcohol consumption (WHO)
- Influence of alcohol consumption on labor market in Russia?
- Relationship between alcohol consumption and labor market outcomes is not linear

Background

- Positive influence of moderate alcohol consumption on health was found in the medical literature (Shaper, 1988; Coate, 1993; Linn et al., 1993)
- Whether positive influence of moderate alcohol consumption extends on a labor market?
- Positive association between moderate drinking and labor market outcomes (Hamilton and Hamilton, 1997; Zarkin et al., 1998; MacDonald and Shields, 2001)
- Alcoholism and abusive drinking are negatively connected with income and employment (Mullahy and Sindelar, 1993, 1996; Kenkel and Ribar, 1994)
- Only a few researches in Russia (Tekin, 2002)

Benefits and risks of alcohol consumption

Benefits:

- Lower risk of cardiovascular diseases
- Remove stress
- Give pleasure
- “Networking” function

Risks :

- Decreases in productivity
- Higher probability of other diseases
- Social consequences

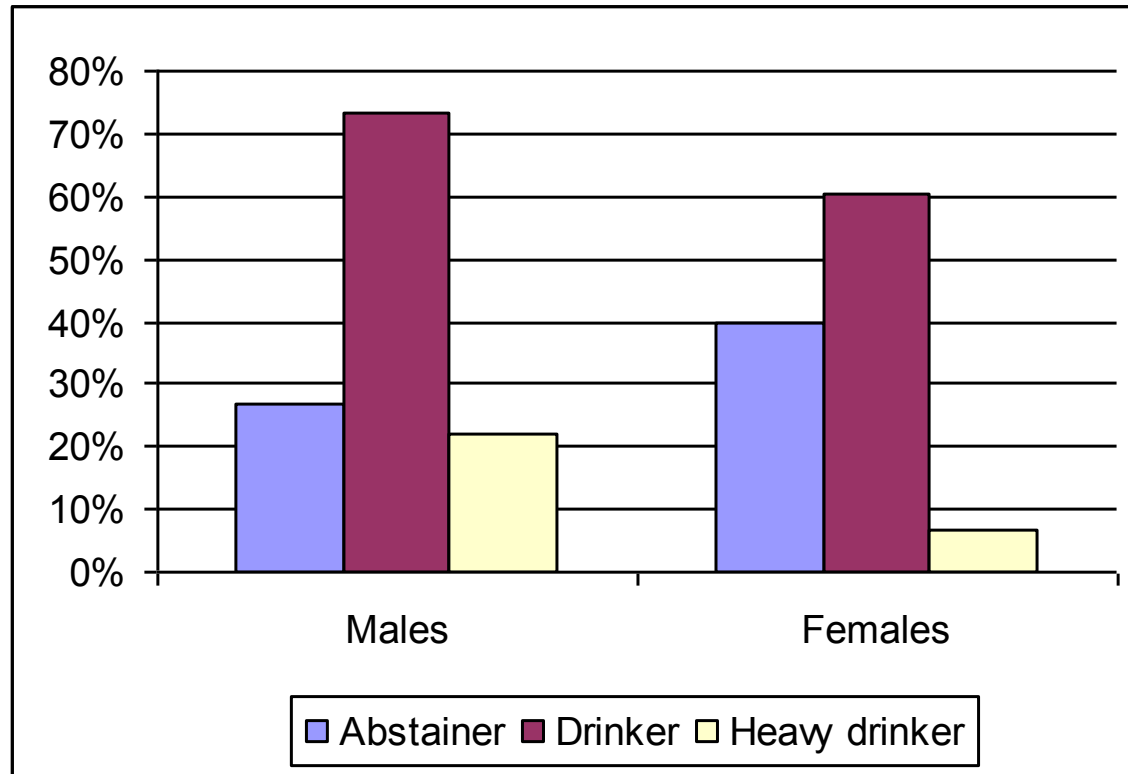
Econometric Model

- System of simultaneous equations
- Multivariate probit
- Allows to consider:
 - Endogeneity of alcohol consumption
 - Nonlinear relationship between alcohol consumption and labor market
 - Simultaneous influence of alcohol consumption on various parameters of labor market
 - Selectivity bias
- Maximum simulated likelihood

Data

- Russia Longitudinal Monitoring Survey (RLMS) - representative household-based survey
- Data from the last four rounds from 2004 to 2007
- Excellent data source. Contains detailed information on labor force behavior and alcohol consumption
- Final sample consists of 7179 men (46 %) and 8268 women (54 %)

Distribution of drinking



Average daily ethanol consumption:

- 27 ml for males
- 6 ml for females

Results

	Drinking status	Males	Females
Employment	Drinker	1.2151	1.073
	Heavy drinker	-1.2696	-1.0885
Wage	Drinker	0.634	0.5942
	Heavy drinker	-0.5437	-0.3616
Hours of work	Drinker	0.0603	0.0443
	Heavy drinker	-0.0669	-0.0077

Estimation results

- Moderate drinking increases probability of employment
- Excessive drinkers have lower probability of employment
- Moderate drinkers have higher wages and work more hours
- Heavy drinking removes this positive effect.
- Factors of drinking and heavy drinking are different

Conclusions

- U-shape relationship between alcohol consumption and labor market
- Moderate drinking positively influences on labor market outcomes
- Importance of endogeneity of alcohol consumption