Tobacco Consumption Determinants in Russia

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INTRODUCTION

The following paper aims to contribute the existing literature on Russian tobacco use by analysing the determinants of smoking, and comparing the results to previous researches. We are also one of the few, if not the first to test the significance of BMI (Body Mass Index) with smoking habits. Our results mostly compromise with the results of previous English literature. Smokers generally tend to lose weight, and obese people naturally do not practice smoking. Educated people, religion believer smoke significantly less than school leavers, nonbelievers and army servers do.

The process of analysing has started by dividing tobacco consumption determinants into two types: de jure and de facto. *De Jure* determinants are those that cause tobacco use, such as work and general life satisfaction. *De Facto* determinants are those that usually occur because of tobacco use, such as weight, health and partly drinking. We express few determinants as having both endogenous and exogenous impacts. Financial status, drinking habits, and weight, for instance, can either cause or result from smoking habits (Graph 1.1 explains more in detail).

We organize the paper as follows: Section II outlines the importance of studying smoking. Section III gives a brief background research and empirical literature. Section IV describes data and data limitations. Section V gives explanation to our logit model. Section VI provides results and comparative results. Section VII concludes.

SUBJECT URGENCY

Smoking is the serious concern for Russia's long-term prospects. It is the third most dangerous risk factor of mortality (around 15 percent of death is smoking related – Vangas and Cencka, 2007), causing population decrease for decades (Linzi, 2013). Russia has become one of the favorite places for tobacco industries since the dissolution of Soviet Union. Smoking rate has been increasing ever since. Even the decreasing population rates could not justify tobacco consumption behavior. In 2012 alone, more than 39 percent of the population smoke regularly according to World Health Organization (WHO). Smoking was more common among men (roughly 27 per cent more than female ones (Vanags and Cunska, 2007), and largely blamed for the consequences of high mortality rates, and thereby decreasing population rates. However, lately relative rates are increasing much higher among women and young children, especially living in the urban area. Medvedev (2012-13), Russian prime minister, has accused tobacco industry leaders for such behavior aiming youth and females, and termed it a wake-up call to banning smoking at public places in that smoking do not only lead to hurt an individual's health, but the country's long-term

prospects as well. The recent changes taken by Russian parliament (2013-2014), as a result, intends to discourage citizens, including young non-smokers and particularly women, who are mostly vulnerable to external smoking perception. The legislation is agreed to be effective in 2015. Still smoking rates among Russian citizen are relatively higher than among European counterparts' (International Tobacco Statistics, 2010); it is so high that if demolished by power, it could hurt trade sector and then the whole economy (Ministry of Economics, 2012). Even though majority of Russian residents (mostly non-smokers) are supporting more smoke-free legislature, remembering late 1990s cigarette revolution is adequate to realize the significance of the way of combat against smoking. Even though the money circulating inside the tobacco industry constitutes around insignificant 1 per cent of total GDP, possible side effects, such as the outburst of black market, and smuggling activities should be prevented in time, as smoking if it is ever going to happen should happen under Russian umbrella. Thus, overtime, the necessity of finding determinants of smoking and creating gradual and effective policies to fight against them became one of the debated and crucial issues.

LITERATURE

Widely accepted perception is that men smoke, much literature as a result has been devoted to study the impacts of smoking on merely teenagers and females during different conditions (DeCicca, *et al.,* 2002). Clearly biggest growth has been seen in female smoking habits, not only in Russia, but also in many other areas (Boreham, 2002). This might have spurred the importance of studying the determinants. Previous researches has undertook the addiction level by measuring price elasticity of tobacco consumption in order to recommend a policy. Their findings were that people are mostly inelastic to cigarette prices. Young 1983, Harris and Chan 1999 have documented this too. Thus, increasing taxes possibly lead to decreased rates of smoking and increased rates of government tax revenue. On the other hand, Becker, back in 1980s, studied consumer behaviour in tobacco consumption by measuring addiction level by past cigarette consumption of an individual. Chaloupka (1991) has also confirmed this method. Many other studies also took tobacco consumption frequency or quantity (Young, 1983, Harris and Chan, 1999, Farrell, et al., 2003). Unlike quantitative and periodical measures, DeCicca et al., (2002) argued that addiction could also be succeeded by passive smoking, where not the person himself but his surrounding people, such as his parents smoke.

Lunze and Migliorini, 2013 has noted that despite price hikes around 40%, cigarette consumption in real terms continued to rise, becoming the largest tobacco consumption area among Europe and former Soviet Union countries. Smoking rate among men increased around 6 per cent whereas among women it accounted for more than a half amount it used to be. Lack of policies and

transitional period economic difficulties, incurred before Putin era, are thought of main reasons behind acquired smoking habits of most middle-aged Russian people. His findings also proved that non-smokers generally earn noticeably less than smokers do. However, this should not give a false perception that if a person smokes his income is to rise.

Ministry of health defends its objections towards smoking by stating that due to smoking productivity is being lost, which is alternatively could have been spent on more useful economic activities. Nevertheless, it should be kept in mind that Russian tobacco industry was the first one to accept large foreign investment. Even though low import tariffs, so far, caused industries to import their raw materials, cigarettes are being produced domestically. Lunze and Migliorini (2013) claims that political instability will also create lack of tobacco control. The recent started political and economic war between Russia and west might also results outburst of high smoking rates among Russian residents in the near future.

Paradox to smoking rates, life expectancy of Russian men has increased from lower level (57 years) to 64 years (2013). A third of men residing in Russia smoke. Comparing significantly less proportion 4% of women smoke (Gilmore and McKee, 2004). Smoking men lives 6.7 years shorter than non-smokers. Moreover, for female 5.3 years. Smoking rates are even higher among middle-aged group, which would hurt the economy soon (Gilmore, et al., 2004). Urban females smoke more than rural ones, but recently the gap is diminishing. Marketing is mostly conducted with Russian beauty models to attract females to smoke. Modern styles of cigarette sticks target women and youth for suggesting lower harms, which is not.

Among teenagers boys smoke more than girls. The absence of smoking-free public places has been blamed for this. Warning in tobacco is small and not graphically illustrated (Bobak, et al., 2006). It might be effective after 2015 regardless of the oppositions of ministry of economy. Smoking has become accepted trait, as services for helping smokers to quit is widely not available through the country, despite its significance. Even 53% of psychologists are smokers; they rarely touch this subject, mostly saying it is a free choice. The bill might be only effective at urban areas, but restaurant business, workers in other industries might not gain the desired productivity in that workers will be spending smoking at some designed areas, not in their usual places, performing tasks. ‘Russia already practices tobacco promotion banning through media, and vending machines’ quotes advocate Perlman, et al.,(2007) ‘The smoking rates are at their natural level’. Rather than directly banning smoking, major determinants should be targeted instead.

World Bank recommends increasing tobacco price dramatically, as it has been one of the effective practice against increasing smoking rates in many countries, but they have suggested shock therapy

to Boris Yeltsin too- never worked. Hence, the bill mentioned above is also intending to increase tax by 50% in real terms. Empirical countries show that 10% price increase usually decreases smoking rates by 8%. However, illegal cigarette trading might be uncontrollable if prices are infeasible. Vast majority of adults more than two third agrees and supports banning tobacco related advertisements. Nevertheless, majority of them are non-smokers. Moreover, it is planned to create telephone quit help lines in Russia and alleviate the smoking problems in the near future.

Ogloblin and Brock (2000) also studied Russia and found that women with education smoke less. Men smoking rates are increasing significantly less than women are. Women since 2000 to 2009, smoke more at every age groups, whereas men declined at all ages. This thing is different in Eastern Europe, where men always has become first in smoking. Tekin et al (2009) relates smoking among teenagers to their mental health, emotional and behavioral problems. He found that all positive effects on smoking rates, but did not identify the determinants of mental health problems further in detail.

Sarker, et al., (2013) found that Bangladeshi residents are more exposed to smoking because of alcohol drinking, insufficient sleep, mental stress, and number of family member. Xin et al., explained that the cost of smoking is not only associated with tobacco consumption, but with the medical care during and after smoking period in which period they become stressed and unproductive. He emphasized more harmful effects on poor income families, as they will be substituting the cost of tobacco with their basic needs.

DATA AND DATA DESCRIPTION

We adopted survey data of Russia Longitudinal Monitoring Survey (RLMS). It covers random 21,993 basic target units, Russian residents born in 16 post Soviet Union countries, but how much they lived there [country where they are born] and here [Russia] is not reported, thus relative coefficients might give biased outcomes. It comprises information on smoking and drinking socioeconomic factors, such as education, family status and health issues. Prior researches has taken number of cigarette consumption and the duration of smoking into their regression. However, this paper due to data limitations does not carry out specification on which type of smoking and drinking involved. If number of cigarette consumption per day was defined, more detailed and convincing structure could have been achieved. Out of 21993, 3735 respondents (at 16.98%) ignored answering smoking related question, more than 25% on their education standings, accounting more than two third for both masters and candidacy. Thus, our model only covers 4512 respondents (active 21 per cent) who fully answered to survey questions of our interest. The smoking related question is a dummy variable, if a person smokes – (1), otherwise –

(0). We took 2013 for the survey time dimensions particularly for calculating relative ages. As many researches included those variables, we will solely rely on their results when interpreting. A list of variables and their descriptions are provided in the first section of appendix.

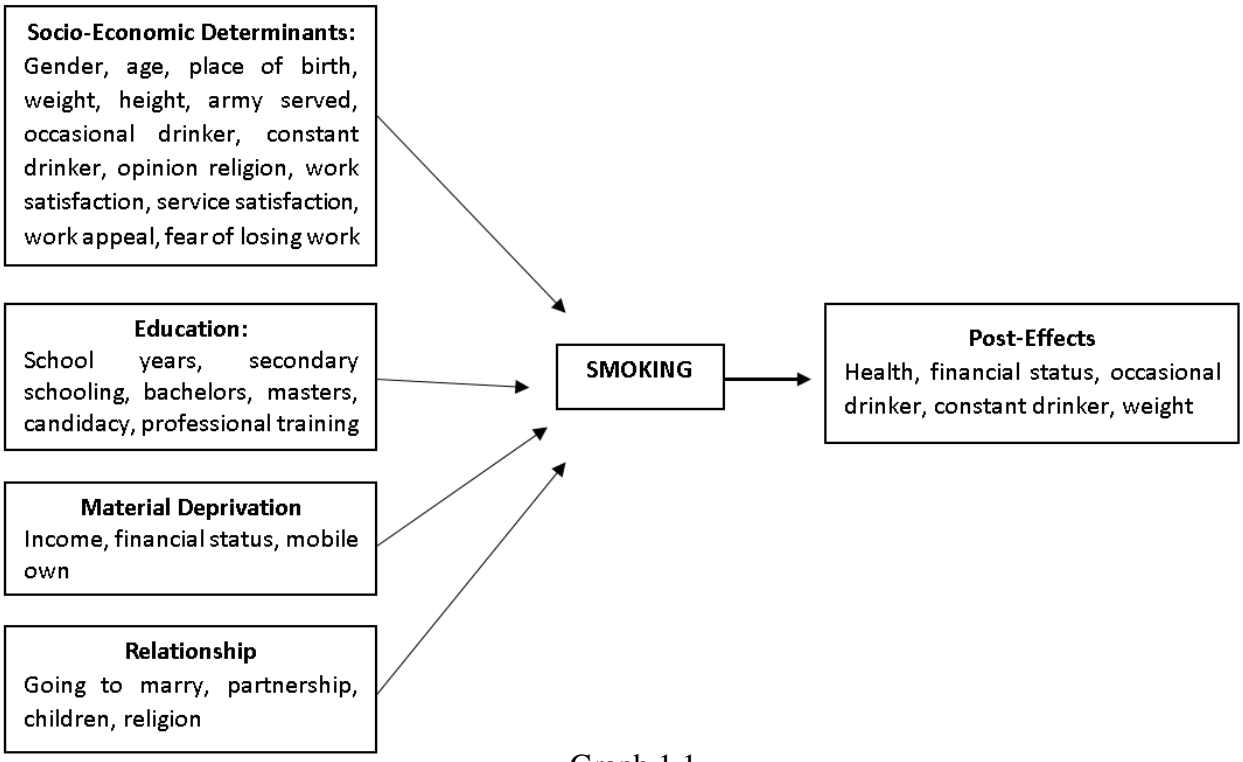
Additionally, we derived BMI (Body Mass Index) for adults, and divided the observation group into subdivisions: underweight, normal weight, overweight and obese (WHO). The following table is recommended for both men and women, age 18 or older:

Underweight	*<18.5*
Normal Weight	18.5-24.9
Overweight	25-29.9
Obese	30<

An individual's BMI is calculated by the following formula: BMI = weight (kg)/height^2 (m^2), and it is widely accepted as a measure of healthy weight based on one's height. Due to its ease of use, the indices are considered optimal. Since we cannot include weights or heights directly, BMI becomes better alternative.

PRELIMINARY FINDINGS

Interestingly, smokers in general feel positive about answering questions, as missing percentage for individual who smoke, for each question available in the dataset, is lower than non-smokers miss. Most smokers are at their 30-44 ages in the survey for both genders. Noticeably, the percentage of smokers among age groups tend to increase until 44 for both genders, and decrease thereafter. One possible explanation, which is quite subjective, could be that natural selection takes smokers out of old age basket. In addition, early school leavers (those with 5-9 school years) are more inclined to smoke than those studied for 12 years (at around 58 and 18 for male and females respectively). It can be further observed from the table in appendix. Very few respondents answered negative to attestation diploma question. Nevertheless, preliminary data suggests that if a person have attestation, there is more probability that he smokes. However, this trend has turned backward after bachelors, suggesting that individuals with bachelors, master's degree and candidacy smoke steadily less than the ones who do not. Professional training also gave lower smoking rates. Yet, the figures are not significant for female smokers. As for the dataset, most people own mobiles, and smoke. For male respondents, earning rates are inversely related with smoking habits. For female respondents, it is quite the opposite. Once again, smokers are more open to answer income questions, as 10% out of 50% missing value corresponds to smokers. The flow of perception is exchanged when considering financial status change.



Graph 1.1

Men usually smoke if their financial status falls significantly or increases significantly. For women, it is almost the same, except that they tend to stop smoking if their financial status starts to decrease a little, apparently for short-term economic reasoning. Regarding to the income level of birthplaces, respondents, especially female ones tend to decrease their smoking habits if country where they are born is at a higher income level. For men, it is a bit different; they tend to decrease smoking in middle-income countries. If Russians are going to marry, it is highly likely that men catch up smoking and women cease. If a person is in the repeated marriage, then for both smokers, smoking rates are going to increase. Among divorced respondents, smoking rates are even higher, but if their marriage partner dies and they become widowed then probability of tobacco use will be lower for both sexes. In partnership, both gender groups tend to smoke more where males are more exposed. Having first kid or second, probably due to habitation towards new life style, individuals tend to smoke more, regardless of their gender. Next 3-6 children makes lower smoking rates among men, 3-4 for females. If it exceeds 5, then there is a very high chance that wife might be smoking. Work salary service satisfaction and lower smoking rates are positively associated; fear of being fired will do little to impact on smoking habits. If a person is believer (religious), then smoking rates fall. Christians smoke more than Muslim particularly for female. Serving for army yields more probabilities of smoking. Occasional and constant drinkers are also associated with higher levels of smoking rates. Pitiful is that smokers observed do believe that

their health is normal, whereas detrimental post effects of tobacco use is very serious and life threatening.

ECONOMETRICAL MODEL

Previous researchers took mainly logit and probit models (Zavoina and McElvey 1975, Marcus and Greene 1985, Harris, et al., 2002). Becker and Murphy (1988) included age to the model in a square form. We also introduce the same method with logit. The following formula outlines the main attributes of the regression models we use:

$$P_{Smoking} = f\{DJ\left(\begin{matrix}Socioeconomic\ determinants, including\ material\ deprivation, education, \\ and\ belongingness\end{matrix}\right), DF(Posteffects)\}$$

DJ (de jure) represents determinants that are most likely bring smoking habits and DF (de facto) those that are the post factors of tobacco use. Notably some factors do not have direct relationship to smoking habits, but rather hypothetical and periodical factors. We cannot label a person smoker according to his height or mobile own, or we cannot separate a particular religion to cause smoking habits. What we do is interpreting that among the survey participators, most smokers were of this religion, but it does not necessarily mean that religion is significant for smoking behaviour. No discriminatory use of data is the paper's main policy.

The odds ratio is given by P/ (1−P), the ratio of the probability that a person smokes to the probability that he does not. If it exceeds one, then odds favour to smoking habits. We run different models not to lose observations. Since smoking mostly harms individual health, education plays important role in this. Therefore, we include secondary schooling, bachelors, masters, and candidacy into our model. As missing values represent more than 50% of the whole data, we recommend using it cautiously for future presentations.

RESULT

We run different separate models by dividing the observation into groups. That helped us not to lose observations. However, observations included are still lower than 50 per cent of survey data; for education and relationship included models, relative observation were even lower. This may invalidate any results we derive, and pseudo r squares are very low for each regression model. Nevertheless, our regression mostly confirmed previous preliminary findings. Men whose background is related to middle and high-income countries smoke more than middle income related ones. For female respondents, smoking rates are inversely related to the income level of

their birthplace, significant at 1 per cent. We also found that obese people and underweight people are less inclined to smoke – significant at 1%, followed by overweight –significant at 11%. This might be the direct cause of self-control. People do not smoke if they weigh less, prominently thinking of their health, and more weighted people naturally do not smoke, suggesting that smoking might diminish obesity problems. Army serving increases smoking habits, we only hypothetically blame peer pressure for that. Religion factor among the survey respondents does make little difference in men, whereas Muslim women smoke less than orthodox women do at 1 per cent significance. Our calculated BMI index turned very significant for both genders, negatively related to smoking habits, which implicitly referring that smoking leads to weight loss. Education is found to be insignificant for men, showing favourable odds to smoking behaviour in masters and candidacy variables. For female, the longer school years mainly positively effects their smoking behaviour. Preliminary age factor results accurately predicted statistical relationship. We used age and age square (with positive and negative relation respectively - see literature), since there was a turning point in observations. F-stat test for joint coefficient efficiency has also proved its validity. For both genders, financial status negatively associated with smoking habits. Any belonging feelings to a partner, children pushes people smoke more. Possible factors could be satisfaction on their working atmosphere, salary that are positively associated with smoking rates.

COMPARATIVE RESULTS

Harris and Zhao (2004) have also came to the same conclusion that higher smoking rates have been noticed at high-income earners. Becker and Murphy (1988) also documented that smoking habits are more common at middle age group. Andreeva, et al., (2007) also found that smoking rates has been being concerning in Ukraine as well. Possible factors she pointed were education, wealth, and urbanization. The former two was found negative and the latter positive to Ukrainian smoking rates. Adioetomo, et al., (2005) has also reported that country income level shows similar effects on smoking rates with household income levels. Ranjit, et al., (2013) found that Nepal pregnant women are highly exposed to diseases due to smoking. However, our results showed that health is not damaged by smoking habits in that most smokers (around 70%) think that they are healthy and can stop smoking at any time. Sarker et al (2013) has also conclude that number of family members increases smoking rates. Our results partly match with his result.

CONCLUSION

Depending on the results of different models, it is suggested to make changes in school disciplinary policies, as schoolgirls are potentially exposed to smoking as they study more years at high

schools. It is recommended to think about family's financial and social status before diving into family life, such as having children. Our findings might erroneously estimate the true impact of smoking because of the missing values' significance. It is highly recommended to conduct wider survey research with the presence of survey organizers, as respondents themselves tend to skip many questions. It is also necessary to educate people through media about serious post effects and smoking-related diseases more frequently, as statistics suggest that smokers do not realise that they are harming their own health.

APPENDIX

	Count	Average mean	Standard deviation	min	max	Missing value in %
Gender	21993	1.561633	.4961981	1	2	0.00
Place of Birth	8736	1.926511	2.733054	1	16	60.28
Work satisfaction	10205	2.388731	.953182	1	5	53.60
Service satisfaction	10180	2.452652	.9940474	1	5	53.71
Salary satisfaction	10144	3.181782	1.190302	1	5	53.88
Work accusation	10260	1.794542	.4040557	1	2	53.35
Income incurred last month	9427	16556.35	13959.33	50	350000	57.14
Fear of getting fired	10206	2.63012	1.3761	1	5	53.59
Financial status change	17881	2.945081	.7721404	1	5	18.70
Date of Birth	21993	1973.531	21.99787	1911	2012	0.00
Number of school years	18137	9.438055	1.540811	0	12	17.53
Secondary schooling	11040	1.017301	.1303954	1	2	49.80
Bachelor's degree	4723	1.109041	.3117235	1	2	78.52
Master's degree	3980	1.958794	.1987914	1	2	81.90
Candidacy	3989	1.979945	.1402065	1	2	81.86
Professional training incurred last year	17543	1.957761	.2011398	1	2	20.23
Mobile ownership	19739	1.104413	.3058028	1	2	10.25
Going to marry	18119	2.442133	1.319797	1	5	17.61
Unregistered partnership	9150	2.564153	.8110238	1	3	58.40
Opinion on religion	17838	1.908622	.9388148	1	5	18.89
Religion	16350	1.40526	3.025052	1	76	25.66
Children	18292	1.269025	.443465	1	2	16.83
Children number	13365	1.731313	.8319669	1	12	39.23
Army served	7205	1.394865	.4888555	1	2	67.24
Weight	20717	65.59192	23.83755	2	153	5.80
Height	21054	159.4569	23.64811	45	202	4.27
Health	21882	2.66557	.7512353	1	5	0.50
Smoker	18258	1.691971	.4616914	1	2	16.98
Occasional drinker	18209	1.308089	.4617164	1	2	17.21
Constant drinker	12578	1.272698	.4453647	1	2	42.81
Total observation:	21993					

	Original Data			Relevant Smokers (%)		
	Men	Women	Total	Men	Women	Total*
Respondents	9641	12352	21993	-	-	-
Note: *percentage of total observation						
Age Group						
-15	1861	1819	3680	0	0	0
16-29	2089	2258	4347	43.9	16.92	5.9
30-44	2314	2728	5042	62.27	23.97	9.53
45-59	1908	2494	4402	59.43	15.92	6.96
60-74	1059	1890	2949	45.14	6.56	2.74
75+	410	1163	1573	21.71	0.69	0.44
Missing	*0*	*0*	*0*	*0*	*0*	*0*
Education						
School years:						
10-12	4348	6738	11086	48.80	13.85	13.89
5-9	3255	3420	6675	57.79	17.92	11.34
0-4	96	280	376	26.04	0.71	0.12
Missing	*1942*	*1914*	*3856*	*1.60*	*0.89*	*0.22*
Attestation Diploma:						
Yes	4247	6602	10849	49.52	13.87	13.73
No	84	107	191	14.29	11.21	0.11
Missing	*5310*	*5643*	*10953*	*36.61*	*12.29*	*11.74*
Bachelors Diploma:						
Yes	1556	2652	4208	37.60	11.16	4.01
No	257	258	515	59.53	27.52	1.02
Missing	*7828*	*9442*	*17270*	*42.42*	*12.69*	*20.55*
Masters Diploma:						
Yes	72	92	164	36.11	14.13	0.18
No	1407	2409	3816	37.74	11.21	3.64
Missing	*8162*	*9851*	*18013*	*42.91*	*13.01*	*21.75*
Candidacy:						
Yes	43	37	80	25.58	16.22	0.08
No	1436	2473	3909	38.09	11.20	3.75
Missing	*8162*	*9842*	*18004*	*42.89*	*13.03*	*21.75*
Professional Training:						
Yes	270	471	741	50.00	18.26	1.00
No	7126	9676	16802	54.60	15.16	24.36
Missing	*2245*	*2205*	*4450*	*1.47*	*0.54*	*0.20*
Material Deprivation Indicators						
Mobile own:						
Yes	7632	10046	17678	47.58	14.64	23.20
No	863	1198	2061	42.18	7.19	2.05
Missing	*1146*	*1108*	*2254*	*5.58*	*0.72*	*0.33*
Income incurred last month:						
-70000	4356	4999	9355	58.65	18.86	15.91
70001-140000	45	17	62	42.22	41.18	0.12
140001-210000	7	1	8	28.57	0	0.01

210001-280000	0	1	1	0	0	0.00
280001-350000	1	0	1	100	0	0.00
Missing	*5232*	*7334*	*12566*	*28.33*	*8.39*	*9.53*
Financial Status Change:						
Significantly increased	146	171	317	56.16	17.54	0.51
Barely increased	1815	2288	4103	47.27	14.55	5.42
Not changed	4401	6099	10500	52.08	14.76	14.51
Barely decreased	857	1310	2167	60.09	14.05	3.18
Significantly increased	333	461	794	65.17	22.34	1.46
Missing	*2089*	*2023*	*4112*	*4.55*	*0.74*	*0.50*
Place of Birth (Former USSR) (by GDP per capita):						
Relative high*	2954	4715	7669	53.49	13.06	9.98
Middle**	312	387	699	49.68	13.44	0.94
Relative low***	140	173	313	58.57	19.08	0.52
Other	24	31	55	37.5	0	0.04
Missing	*6211*	*7046*	*13257*	*35.95*	*12.26*	*14.08*
Note: Countries are divided according to WDI GDP per capita database **Kazakhstan, Russia, Latvia, Lithuania, Estonia (7,1,9,10,15)* ***Armenia, Azerbaijan, Ukraine, Turkmenistan, Belarus (5,4,2,13,3)* ****Tajikistan, Kyrgyzstan, Uzbekistan, Moldova, Georgia (12, 8, 14, 11, 6)*						
Expenditure Indicators						
Going to marry						
Never married	2278	2256	4534	46.80	17.46	6.64
First Marriage	3852	3955	7807	50.70	11.48	10.94
Repeated Marriage	585	670	1255	56.07	20.15	2.11
Divorce	730	1549	2279	74.25	26.21	4.31
Widowed	244	2000	2244	44.26	7.45	1.17
Missing	*1952*	*1922*	*3874*	*3.18*	*1.40*	*0.40*
Partnership						
Yes, registered	911	973	1884	72.68	32.07	4.43
Yes, unregistered	104	116	220	68.27	31.03	0.49
No	2282	4764	7046	44.92	12.93	7.46
Missing	*6344*	*6499*	*12843*	*36.27*	*9.25*	*13.20*
Children number						
None	2588	2333	4921	46.06	14.14	6.92
1-2	4509	7183	11692	55.40	15.59	16.45
3-4	612	906	1518	53.59	11.37	1.96
5-6	51	94	145	52.94	11.70	0.17
7+	7	15	22	85.71	6.67	0.03
Missing	*1877*	*1830*	*3707*	*63.93*	*18.03*	*6.96*
Body						
Height						
-50	3	1	4	0	0	0
51-100	554	535	1089	0	0	0
101-150	959	1391	2350	0.42	2.52	0.18
151-200	7688	9905	17593	51.01	15.09	24.63
201+	2	0	2	50	0	0.00
Missing	*433*	*506*	*939*	*30.48*	*6.92*	*0.76*
Weight:						
-50	1781	2472	4253	2.30	5.62	0.82

51-100	6735	8804	15539	52.28	14.56	21.84
101-150	499	387	886	45.29	16.80	1.32
151+	1	0	1	0	0	0
Missing	*618*	*658*	*1276*	*43.37*	*11.40*	*1.56*
Health						
Very Good	335	289	624	29.85	9.34	0.58
Good	4450	4424	8874	34.81	10.99	9.25
Normal	4027	5864	9891	50.34	9.06	13.29
Bad	685	1497	2182	47.01	9.15	2.09
Very Bad	96	215	311	40.63	5.12	0.23
Missing	*48*	*63*	*111*	*45.83*	*12.70*	*0.14*
Psychological Factors						
Work satisfaction						
Wholly satisfied	600	778	1378	46.83	21.72	2.05
Rather satisfied	2493	2736	5229	57.40	16.70	8.58
Yes or No	985	1164	2149	64.97	19.50	3.94
Rather not satisfied	545	609	1151	61.65	23.15	2.17
Not satisfied at all	135	163	298	64.44	25.15	0.58
Missing	4886	6902	11788	26.28	7.68	8.25
Service satisfaction						
Wholly satisfied	523	777	1300	46.65	20.33	1.83
Rather satisfied	2332	2721	5053	55.53	16.61	7.94
Yes or No	1050	1083	2133	66.00	21.33	4.20
Rather not satisfied	654	653	1307	63.30	20.98	2.51
Not satisfied at all	184	203	387	64.67	27.59	0.80
Missing	4898	6915	11813	26.42	7.68	8.30
Salary satisfaction						
Wholly satisfied	331	368	699	44.41	22.83	1.05
Rather satisfied	1392	1392	2784	55.82	15.66	4.52
Yes or No	1104	1081	2185	58.43	20.07	3.92
Rather not satisfied	1301	1625	2926	62.11	19.2	5.09
Not satisfied at all	588	962	1550	62.59	21.00	2.59
Missing	4925	6924	11849	26.68	7.68	8.39
Work accusation						
Yes	1042	1066	2108	47.98	18.20	3.16
No	3738	4414	8152	61.16	10.30	14.21
Missing	4861	6872	11733	26.19	7.74	8.21
Fear of getting fired						
Very worried	1123	1420	2543	62.60	18.03	4.36
Little worried	1586	1662	3248	57.19	17.21	5.42
Yes or No	584	643	1227	56.34	17.73	2.01
Not much worried	852	965	1817	58.33	21.24	3.19
Not at all worried	612	759	1371	54.25	22.27	2.28
Missing	4884	6903	11787	26.43	7.75	8.30
Other Factors:						
Religion						
Christian – Orthodox	5945	9095	15040	53.39	15.32	20.77
Muslim	521	614	1135	39.92	4.07	1.06
Other (74 religion)	-	-	175	-	-	-
Missing	3114	2529	5643	20.91	5.30	3.57
Religion opinion						

Believer	2105	4516	6621	47.46	13.37	7.29
Rather believer	3294	4681	7975	53.64	15.15	11.26
Rather unbeliever	1165	708	1873	54.16	18.22	3.46
Unbeliever	659	330	989	59.33	20.91	2.09
Atheist	253	127	380	51.38	22.05	0.72
Missing	2165	1990	4155	6.51	1.31	0.76
Army served						
Yes	4360	-	4360	57.66	-	11.43
No	2845	-	2845	51.00	-	6.60
Missing	2436	-	9641	3.86	-	0.98
Drinking and Smoking Habits:						
Smoke						
Yes	4059	1565	5624	-	-	25.57
No	3695	8939	12634	-	-	57.45
Missing	1887	1848	3735	-	-	16.98
Occasional Drinker						
Yes	5894	6705	12599	59.16	19.96	21.94
No	1831	3779	5610	30.42	5.98	3.56
Missing	1916	1868	3784	0.78	0.05	0.07
Constant Drinker						
Yes	4712	4436	9148	61.52	25.00	18.22
No	1170	2260	3430	49.74	10.13	3.69
Missing	3759	5656	9415	15.38	4.01	3.66

Income Level	Male	Female
Relative high	2.013***	-2.006***
	(36.84)	(-36.46)
Middle	1.859***	-1.975***
	(15.47)	(-12.92)
Relative low	2.218***	-1.557***
	(12.59)	(-7.92)
_cons	-1.872***	0.112**
	(-46.44)	(3.28)
N	8730	8730

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Weight	Male	Female
underweight	-0.815**	0.294
	(-3.27)	(0.95)
Normal weight	-0.165	0.312
	(-0.78)	(1.08)
overweight	-0.475*	0.0659
	(-2.24)	(0.23)
obese	-0.635**	-0.113
	(-2.93)	(-0.39)
_cons	0.440*	-1.872***
	(2.12)	(-6.52)
N	7247	9870

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	Male	Female
orthodoxy	0.434 (1.67)	0.341 (1.15)
muslim	-0.111 (-0.41)	-1.106** (-3.08)
_cons	-0.297 (-1.15)	-2.050*** (-6.96)
N	6523	9814

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	Male	Female
BMI	-0.0263*** (-4.99)	-0.0285*** (-5.78)
_cons	0.752*** (5.47)	-0.987*** (-7.54)
N	7247	9870

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Education	Male	Female
School years	0.0255 (0.22)	0.364** (2.68)
Secondary schooling	omitted	omitted
Bachelors	omitted	omitted
Masters	-0.0315 (-0.12)	0.0316 (0.09)
Candidacy	0.712 (1.85)	-0.610 (-1.33)
Professional training	0.0481 (0.19)	0.112 (0.45)
_cons	-2.209 (-1.39)	-4.955** (-2.68)
N	1277	2216

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	Male	Female
age	0.171*** (21.63)	0.172*** (14.39)
age2	-0.00189*** (-22.14)	-0.00226*** (-16.33)
_cons	-3.217*** (-19.32)	-4.395*** (-18.08)
N	7754	10504

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	Male	Female
Mobile own	-0.00975 (-0.05)	0.0759 (0.30)
Income last month	-0.00000846*** (-4.05)	0.0000146*** (5.11)
Financial status change	0.107* (2.52)	0.0738 (1.54)
_cons	0.209 (0.86)	-1.946*** (-6.46)
N	4331	4962

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	Male	Female
Going to marry	-0.193** (-3.02)	-0.268*** (-8.64)
Partnership	-0.189* (-2.47)	-0.395*** (-7.71)
Children number	-0.157 (-1.85)	-0.160** (-2.74)
_cons	2.146*** (8.17)	0.744*** (4.52)
N	1011	3786

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	Male	Female
Work satisfaction	0.0333 (0.67)	-0.00143 (-0.03)
Service satisfaction	0.142** (3.05)	0.110* (2.23)
Salary satisfaction	0.0437 (1.37)	0.0122 (0.36)
Work appeal	0.449*** (6.16)	0.0375 (0.42)
Worrying of losing job	-0.0365 (-1.64)	0.0861*** (3.49)
_cons	-0.933*** (-5.63)	-2.047*** (-10.14)
N	4653	5366
adj. R^2		

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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