

Ethnic Disparities in Conspicuous Consumption in Kyrgyzstan: Evidence from the Life in Kyrgyzstan Household Survey, 2010-2019

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Introduction

Conspicuous Consumption and Social Status

Conspicuous consumption is a lavish or wasteful spending thought to enhance social prestige (*Merriam-Webster*).

Sociological and economic perspective:
purchasing and displaying goods and
services to **signal social status and
catch up on groups with a higher SES.**

Conspicuous consumption is prevalent in Central Asian countries due to the cultural emphasis on displays of wealth.



Addressing the Research Gap

- Previous literature - race and consumption patterns in developed countries;
- Kyrgyzstan - context for studying ethnic disparities in consumption;
- Studying inefficient consumption patterns given high rates of poverty.

Kyrgyz - 73.8%,
Uzbeks - 14.9%,
Russians - 5%,
Dungans - 1%,
Uigurs, Tajiks - 0.9%
of total population (2021)¹

Objective:

Investigate ethnic disparities in conspicuous consumption in Kyrgyzstan as an indicator of potential socioeconomic disadvantage of certain ethnicities.

Addressing the Research Gap

Contribution: ethic level, developing countries.

Implications: Well-being and potential socioeconomic inequalities among ethnic groups in Kyrgyzstan.

Possible policy implications: Interventions to reduce disparities and promote financial literacy, saving, and investment among ethnic minorities.

Research Question and Hypothesis

Research question:

Are there statistically significant disparities in conspicuous consumption among seven major ethnic groups in Kyrgyzstan on a household level during the years 2010-2013, 2016, and 2019?

Hypothesis:

After controlling for socioeconomic and demographic factors, households of ethnic minorities in Kyrgyzstan will exhibit statistically significant differences in item-specific and aggregate conspicuous consumption compared to Kyrgyz households, having higher propensity to consume conspicuously.

Literature review

Theories by Veblen and Caplovitz

Veblen, 1899 - "The Theory of the Leisure Class":

- functionalist approach to society and social differentiation
- consumption as a means to gain social esteem (income is not observed)
- both the rich and poor do conspicuous consumption, for different reasons

Caplovitz, 1967 - "The Poor Pay More":

- minor groups generate the respect they were denied in the world of work by their consumption habits
- “compensatory” consumption

Empirical Studies, developed countries

Heffetz, 2011: item visibility perception and expenditure elasticity

Charles et al., 2009: racial disparities in conspicuous consumption in the US

Ryabov, 2016: ethnicity and conspicuous consumption in the US

Nationally representative household- and individual-level data,
Tobit model, IV model, Bayesian estimation

Findings:

Racial minorities spend more on visible goods than comparable major groups (Blacks and Colored, Blacks and Hispanics, etc.); conspicuous goods are luxuries

Empirical Studies, developing countries

Kaus, 2010: racial conspicuous behavior patterns in South Africa

Van Kempen, 2007: households' ownership of conspicuous durables in Bolivia

Timperio et al., 2016: interethnic differences in luxury perception in Singapore

Bloch et al., 2004: poorer households spend more on weddings, India.

Adjusting the basket of goods to the national context

Basket: clothing and shoes, jewellery, personal care, vehicles, alcohol and tobacco, furniture, weddings...

Summary and Assumptions

Assumptions:

- 1. Interethnic utility functions are the same (preferences homogeneity assumption).**

This assumption is introduced to exclude ethnic disparities in conspicuous consumption that may arise from preferences differences.
- 2. Households demonstrate conspicuous consumption behavior so as to signal their status (social comparison theory assumption).**

Being an ethnic minority representative, a household is expected to do more conspicuous consumption compared to the major groups - that is to compensate for social status and decrease lagging behind ethnic groups having a higher socioeconomic status.

Data

Data Collection and Source

"Life in Kyrgyzstan" (LiK) - main data source

World bank, CPI, Kyrgyzstan

National Statistical Committee, regional unemployment, Kyrgyzstan

Longitudinal survey conducted annually from 2010 to 2013, in 2016 and 2019

Approximately 3000 households in each wave

Including only households that did not change place of living in the studied period

Variables and Household Characteristics

**Summary Statistics for the variables
included in the aggregate conspicuous consumption model**

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max
hh_kyrgyz	12,380	0.700	0.458	0	1
hh_uzbek	12,380	0.113	0.316	0	1
hh_russian	12,380	0.104	0.305	0	1
hh_dungan	12,380	0.0291	0.168	0	1
hh_uigur	12,380	0.00291	0.0538	0	1
hh_tajik	12,380	0.00404	0.0634	0	1
hh_kazakh	12,380	0.000727	0.0270	0	1
hh_other	12,380	0.0211	0.144	0	1
hh_multi	12,380	0.0242	0.154	0	1
issyk_kul	12,326	0.103	0.305	0	1
djalal_abad	12,326	0.178	0.383	0	1
naryn	12,326	0.0462	0.210	0	1
batken	12,326	0.0850	0.279	0	1
osh	12,326	0.176	0.381	0	1

Household socioeconomic
and demographic data

Individual-level information
such as gender, age,
education attainment.

Panel data transformation ->
to control for unexpected
heterogeneity and
time-varying effects.

Conspicuous Consumption Articles

Focus on easily observable and highly portable articles for conspicuous consumption

Considering Kyrgyz cultural component and frequent house visits by guests

- personal care
- entertainment
- celebrations
- clothing
- private education and extracurricular activities
- furniture
- jewelry,

to be tested empirically if they have a luxurious nature and differ significantly across ethnicities in Kyrgyzstan

Currency Conversion and Inflation Adjustment

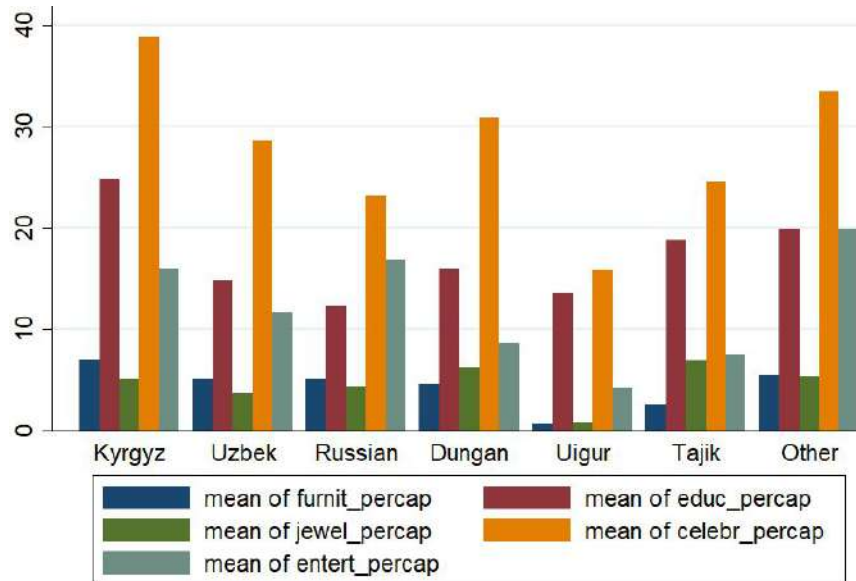
1. Converting nominal variables into USD - the median annual exchange rate
2. Inflation adjustment to constant 2010 USD using annual CPI data provided by the World Bank
3. Including year dummies
4. Taking a natural logarithm of nominal variables using the natural logarithm of the increment transformation (given occurrences of zero)

Winsorization to replace outliers with less extreme previous values in the distribution

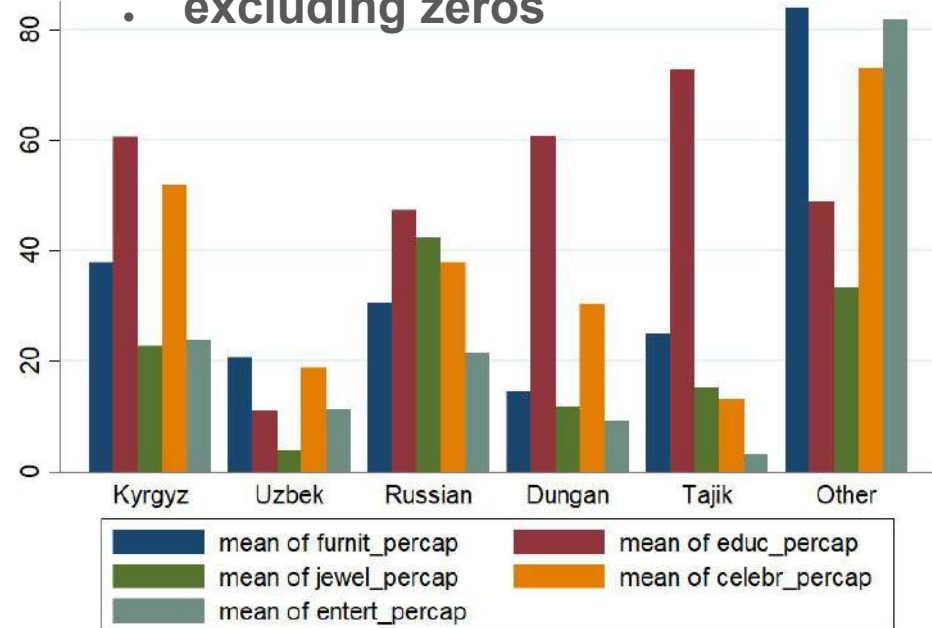
Consumption per capita

Annual Mean Household Consumption per Capita by Category and Ethnicity, 2010 USD

• including zeros



• excluding zeros



Model and methodology

Model Specification

$$\ln(1+consp)_{it} = \beta_0 + \beta_{1-9}hh_ethn_{it} + \beta_{10}\ln(pInc)_i + \beta_{11}\theta_{it} + \beta_{12-17}year + \mu_i + v_{it},$$

$$\begin{aligned} \ln(1+consp)_{it} = & \beta_0 + \beta_1hh_uzbek_{it} + \beta_2hh_russian_{it} + \beta_3hh_dungan_{it} + \beta_4hh_uigur_i + \\ & + \beta_5hh_tajik_{it} + \beta_6hh_kazakh_{it} + \beta_7hh_other_{it} + \beta_8hh_multi_{it} + \beta_9\ln(pInc)_i + \beta_{10}issyk_kul_i + \\ & + \beta_{11}djalal_abad_i + \beta_{12}naryn_i + \beta_{13}batken_i + \beta_{14}osh_i + \beta_{15}talas_i + \beta_{16}chui_i + \beta_{17}osh_city_i + \\ & + \beta_{18}urban_{it} + \beta_{19}head_age_{it} + \beta_{20}head_age_sqrd_{it} + \beta_{21}head_married_{it} + \beta_{22}head_male_{it} + \\ & + \beta_{23}no_adults_{it} + \beta_{24}hh_size_{it} + \beta_{25}satisf_inc_{it} + \beta_{26}satisf_liv_{it} + \beta_{27}risk_{it} + \beta_{28}remit_{it} + \\ & + \beta_{29}networks_few_{it} + \beta_{30}networks_some_{it} + \beta_{31}network_many_{it} + \beta_{32}\ln(totexp)_{it} + \beta_{33}y11_t + \\ & + \beta_{34}y12_t + \beta_{35}y13_t + \beta_{36}y16_t + \beta_{37}y19_t + \mu_i + v_{it}, \end{aligned}$$

Endogeneity source and solution

Measurement error -> proxying permanent income using total annual household expenditures (Modigliani's life-cycle hypothesis)

Instrumental variables for permanent income:

- logassets (natural logarithm of household's total annual assets)
- hh_educperc (household education percentage)
- unem (regional annual unemployment rates)

Assumption: IVs affect household's conspicuous consumption only through their direct effect on permanent income

Results

Item-specific Tobit Regressions

Table VII.

Differences in Log Expenditures by Category Among Ethnic Groups in Kyrgyzstan, Kyrgyz households as a reference group

VARIABLES	(1) hh_uzbek	(2) hh_russian	(3) hh_tajik	(4) hh_dungan	(5) hh_uigur	(6) hh_kazakh	(7) hh_other	(8) hh_multi	(9) logtotalexp
logpers_care	.0069422*** (.001701)	-.0013808 (.0018809)	.0122212 (.008654)	-.0102487*** (.003092)	.0185017** (.009294)	-.0098686 (.0168078)	.0055705 (.0034924)	.010117*** (.0037742)	.029356*** (.0065755)
logeduc	-.1317604*** (.0161902)	-.0966653*** (.0196888)	-.3288839*** (.1154833)	-.0388407 (.0287348)	-.0656497 (.0957131)	-.2203128 (.1935868)	-.1485711*** (.0359319)	-.0486918 (.0341577)	.2156217*** (.0440341)
logfurnit	.0488109*** (.0153404)	-.0399667** (.0192856)	.0294414 (.076391)	.080556*** (.027424)	-1.347351 (215.2831)	.0692992 (.1323896)	-.0475136 (.0358611)	.0341894 (.0325588)	.1712105*** (.0482804)
logcloth	-6.27e-06 (.000013)	-.000062*** (.0000124)	.0000502 (.0000397)	-.0000154 (.0000199)	-.0000244 (.0000673)	.000094 (.0000911)	-.000032 (.0000203)	-.0000244 (.0000346)	.0001512*** (.0000317)
logcelebr	-.0034839 (.010893)	-.1256696*** (.0127891)	-.0207424 (.0539874)	.1349404*** (.019038)	-.0599895 (.0600419)	.2083742** (.1010488)	-.0294836 (.0224675)	-.0836716*** (.024709)	.2200047*** (.0298337)
logjewel	.0655378** (.0311424)	-.0049316 (.0436165)	.0225584 (.1324916)	.2001435*** (.0616755)	.0831771 (.2337432)	.3768261 (.3069445)	-.2280674** (.0961902)	.0367528 (.0680752)	.3607605*** (.0514839)
logentert	-.0196255 (.0136062)	-.047296*** (.0159342)	-.0094414 (.0664278)	.0941102*** (.0246065)	-1.699504* (.0840455)	-.2533504 (.1453236)	-.1768323*** (.0312516)	.0540149* (.030003)	0.2449059*** (0.0370989)

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Item-specific Tobit Regressions

Jewelry:

Uzbek** - 6.77% more

Dungan*** - 22.16% more

Entertainment and eating out:

Dungan*** - 9.87% more

Celebrations:

Dungan*** - 14.45% more

Kazakh** - 23.17% more

Furniture:

Uzbek*** - 5.00% more

Dungan*** - 8.39% more

Hausman-Taylor estimates

Uzbek*** - 20.7% less

Dungan*** - 44.7% more

Russian*** - 86.6% less

Table IX.

Differences in Log Conspicuous Expenditures between Ethnic Groups in
Kyrgyzstan, alternative model specifications and restrictions

VARIABLES	(1) Households with more than 1218.45 2010 USD annual total expenditures	(2) Central Asian ethnicities only (no Russian and other households)	(3) Households with household heads below 60 years old
hh_uzbek	-0.249** (0.103)	-0.217** (0.101)	-0.265*** (0.101)
hh_russian	-0.944*** (0.116)	-	-0.801*** (0.119)
hh_dungan	0.399** (0.191)	0.617*** (0.186)	0.361* (0.189)
hh_uigur	-0.392 (0.571)	-0.109 (0.564)	-0.0715 (0.555)
hh_tajik	-0.194 (0.454)	-0.139 (0.449)	-0.0887 (0.506)
hh_kazakh	0.834 (0.795)	1.114 (0.792)	1.011 (0.968)
hh_other	-0.603*** (0.209)	-	-0.491** (0.220)
Observations	6,978	6,978	6,621
Number of households	2,122	2,122	1,803

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Findings

The finding that Kyrgyz households in Kyrgyzstan spend more on conspicuous goods compared to other ethnic groups, except for the Dungan minority group, contradicts the pattern found in previous literature.

Item-specific estimation proves to be more informative.

At the same time:

- in the Kyrgyz culture, there might be specific norms or values that place a higher emphasis on visible displays of wealth or status.

Limitations

- Item bundle is not restricted to the chosen items
- Measurement error
- Underrepresentation of ethnic minorities in the sample

Results might only be applicable to the context of Kyrgyzstan and, to a limited extent, the countries with similar cultural and demographic characteristics.

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