



Households Under the Minimum Housing Standard

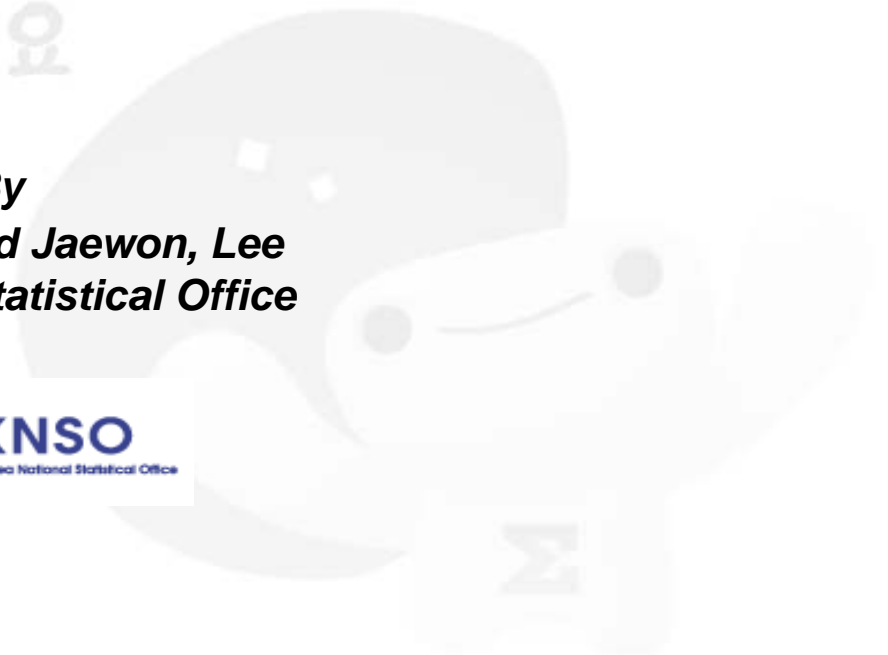
함께해요

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1. Introduction

❖ Outline of the 2005 Census

- ❖ 5 years basis since 1925
- ❖ Legal basis
 - o Statistics Act
 - o Population and Housing Census Decree
- ❖ Census-taking period : November. 1~15
- ❖ Census items : 44 items (short form: 21, long form: 23)
- ❖ Enumeration methods
 - o Face-to-face interviews, self-enumeration, and internet survey
- ❖ Release of the results : 2005.12 ~ 2006.12



❖ Role of the Korean Census

- ❖ Data for national, sub-national policies and plans
 - o Provide valuable insight on the latest economic, social and demographic conditions and trends
- ❖ Base population for population projection
- ❖ Bench mark and sampling framework for sample surveys
- ❖ Measure the quality and quantity of housing in Korea

❖ Dwelling Conditions of Households (HHs)

- ❖ Decrease of housing shortage due to government policies to promote housing construction
 - o Housing supply ratio (housing stock / HHs in demand of housing) : 71.7%(1985) → 105.9% (2005)
- ❖ Policy changes from providing more housing to improving housing conditions



2. Minimum Housing Standards

❖ Definition (MHS)

- ❖ Socially-desirable minimum standards for housing that guarantee the human rights of a healthy and safe environment

❖ Objectives

- ❖ Measure the quality of housing conditions
- ❖ Support the improvement of housing conditions of HHs under the MHS
- ❖ Embodies articles 35 of the Constitutions of Korea that enacts the citizen's right to a healthy and agreeable environment.



❖ Fundamental Rules to set up the MHS

- ❖ Universal standards based on essential components of dwellings
- ❖ Consideration of socio-economic conditions of Korea
- ❖ Consideration of budgets for the HHs under MHS

❖ Enactment of the MHS

- ❖ The Ministry of Construction and Transportation revised the Housing Construction Promotion Act in 2003
 - o The act prescribed the MHS in Korea
- ❖ Conduct a sample survey to collect detail data for MHS



- ❖ **Four Sections of MHS** : bedroom, housing facilities, floor space, and environmental standard
- ❖ **Major Standards by Section**
 - 1) **Bedroom standards**
 - o Married couple has a separate bedroom
 - o Two persons maximum per room
 - o Boys and girls have a separate bedroom after age 8
 - 2) **Housing facilities standards**
 - o Kitchen : modern style kitchen for private use
 - o Bathroom : a flush toilet
 - o Bathing facility : a hot or cold water bathing facility
 - o Water supply : clean water supply facility



3) Floor space standards

- o Bedroom : 10.8 m² for main bedroom, 8.1 m² for twin room, 5.76 m² for single bedroom
- o Kitchen : 2.4 m² for one person, 3.0 m² for 2~4 persons, 3.48 m² for 5 and more persons
- o Other space : 4.12 m² for one person, 6.49 for two persons, ...

4) Environmental standards

- o Standards for street noise, odor, and air pollution
- o Not considered in this paper since the data are unavailable



3. Characteristics of HHs under MHS

- ❖ **Data** : the 2000 and 2005 Census data
- ❖ **HHs under the MHS**
 - ❖ 3,312 thousand (23.1%) in 2000 → 1,911 thousand (12.0%) in 2005
 - o In 2005 : housing facility (8.6%), floor space (4.3%), bedroom (0.6%)
 - ❖ Housing facility standards: rural (22.1%), urban (5.2%)
Floor space standards: rural (2.2%), urban (4.9%)
Bedroom standards: rural (0.3%), urban (0.7%)



❖ HHs under MHS by HH Head Age

Household head's age	2000 (%)	2005(%)
Total	23.1	12.0
~19	49.0	21.7
20~29	23.6	11.4
30~39	15.1	6.6
40~49	19.2	9.5
50~59	23.1	11.3
60~64	30.3	14.4
65+	43.6	24.5

❖ HHs under MHS by Type of Occupancy

2005	Total	Housing facility	Bedroom	Floor space	More than two standards
Own house	9.5	8.4	0.1	1.3	0.3
Rent	14.9	8.2	1.3	8.4	3.0



❖ HHs under MHS by Type of Household

2005	Family	Family + Non Family	One-person	Non-Family
HH (%)	9.5	12.1	21.2	22.0

❖ HHs under MHS by Year of Construction

Year	Total	Housing facility	Bedroom	Floor space	More than two standards
'00~'05	4.09	1.55	0.73	2.42	0.61
'90~'94	7.76	3.32	0.51	4.74	0.81
'80~84	17.08	13.09	0.80	5.76	2.57
'70~79	30.72	26.26	0.89	7.97	4.41
'60~'69	52.20	48.28	1.00	9.14	6.21
Before	63.64	61.37	0.72	7.10	5.54



4. Determinants of HHs under MHS

- ❖ **Data** : the 2005 Census long form data
- ❖ **Methods** : Logistics regression analysis
- ❖ **Models**

$$\text{logit}(Px) = \ln[Px/(1-Px)] = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4;$$

Where is Px = probability of household under MHS

x_1 = gender of the household head,

x_2 = age of household head,

x_3 = educational attainment of household head,

x_4 = year of housing construction



❖ Results of Analysis

Parameter	Estimate	Odd ratio	Pr > chisq
Intercept	-2.3039	-	0.0001
Gender	0.0546	1.115	0.0001
Age	-0.0121	0.988	0.0001
Education	-0.4345	0.648	0.0001
Year of construction	0.3723	4.451	0.0001



5. Summary and Discussion

❖ Descriptive Analysis

- ❖ Different characteristics according to region(urban, rural), age, type of occupancy, type of HHs, and year of housing construction
 - Government's aid programs according to the various characteristics of HHs under MHS

❖ Logistics Regression Analysis

- ❖ Positive effect on the probability of HHs under MHS: gender of HH head, year of housing construction
- ❖ Negative effect : age and education of HH head



Thank You