

# **The Decline of Social Mobility Perception in South Korea**

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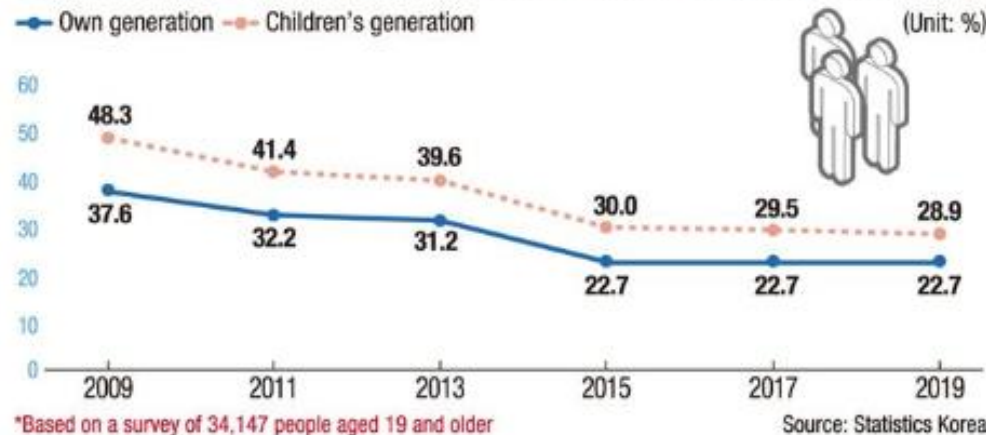
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# Motivation

## Koreans become more skeptical about upward social mobility

2019-11-25 : 17:48

### Ratio of positive answers over social mobility



Source: Koreatimes, 2019

- Widening income and consumption disparities and increasing polarization in South Korea
- Growing concerns on rapidly declining social mobility perception
  - Increasing public interests, policy discussions, and media coverages on social mobility (perception)

# Where is Korea? - Great Gatsby Curve

Plotting the relationship between **inequality (Gini)** and **intergenerational social immobility (IGE)** in several countries

$$\text{IGE: } \ln Y_1 = \alpha + \beta \ln Y_0 + \epsilon$$

where  $Y_1$  is income in current generation and  $Y_0$  is income of parents

**FIGURE 4.2** Higher relative IGM in income is associated with lower income inequality



(Source: World Bank, 2018)

['Fair Progress?: Economic Mobility across Generations around the World'](#)

- In Korea, educational mobility is high, but earnings mobility is around average among OECD countries (OECD, 2018)

# Why Social Mobility Perception?

## Why social mobility matters?

- Higher levels of social mobility mean better and more opportunities for people to overcome historical inequalities and reach their full potential, which leads to economic growth

## Why social mobility perception matters?

- Individual's decisions such as human capital investment (e.g., Browman et al., 2018)
- Influences on the attitude towards inequality and redistributive policies (e.g., Benabou & Ok, 2001 – POUM hypothesis)
  - “... across all countries, the more **pessimistic** respondents (on social mobility) tend to **favor more generous redistributive policies**, especially equality of opportunity policies.” (Alesina et al., 2018)
- (Although correlated with social mobility itself,) people can **underestimate or overestimate** the reality (Alesina et al., 2018; Cheng & Wen, 2019)

# Perception vs. Reality (Alesina et al., 2018)

Conducting an **experiment** to investigate **the gap between the reality and perception across countries**

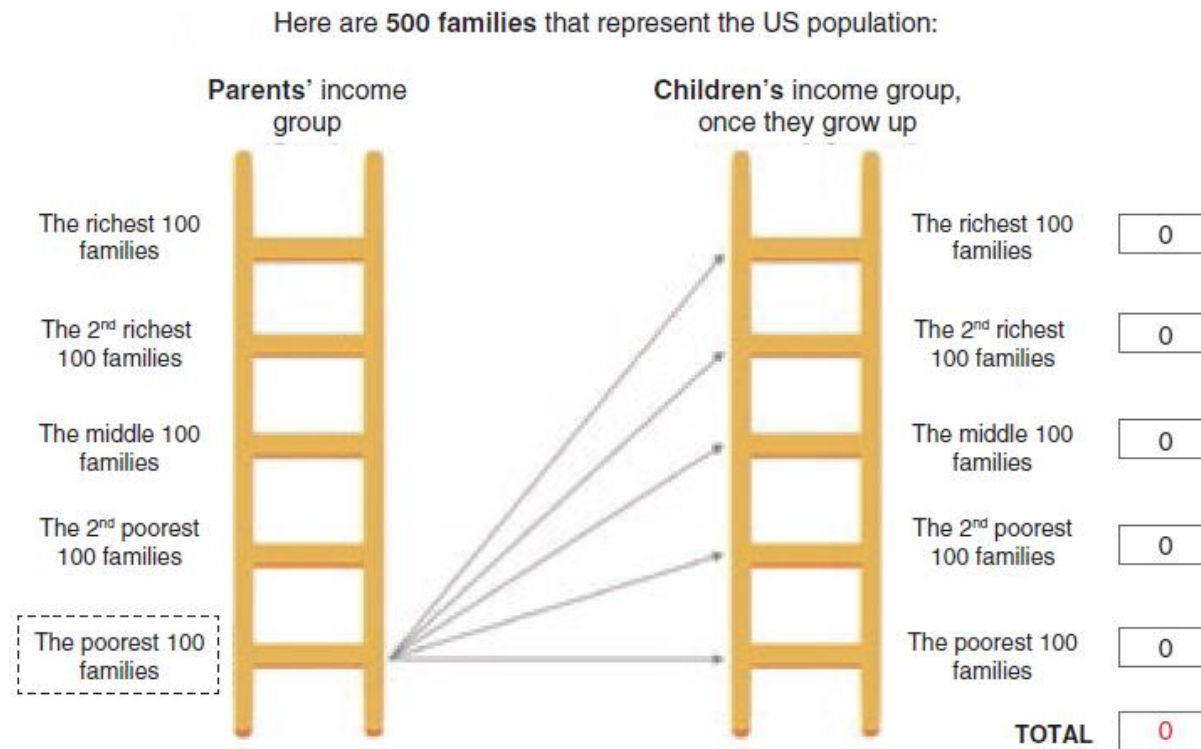


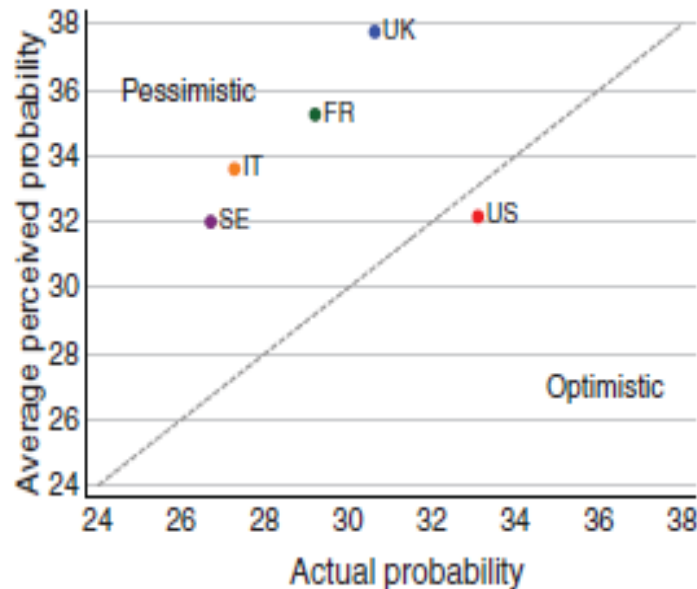
FIGURE 1. LADDER QUESTION TO ELICIT PERCEIVED MOBILITY

- Prob: Bottom 20% (Q1) -> Bottom 20% (Q1)
- Prob: Bottom 20% (Q1) -> Top 20% (Q5)

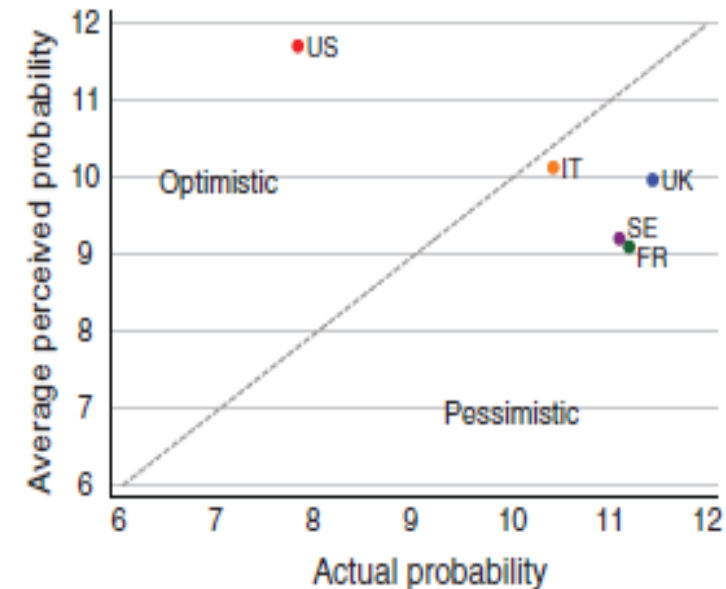
# Perception vs. Reality

- U.S. vs. European countries

Panel A. Q1 to Q1 probability



Panel B. Q1 to Q5 probability



- Americans are more optimistic in their social mobility perception
- **Cheng & Wen (2019)**: Americans **overestimate** the intergenerational persistence in income ranks
  - **Overestimate** economic prospects for children from **rich** families
  - **Underestimate** economic prospects for children from **poor** families

# Literature and Research Question

- **(Intergenerational) Social mobility**
  - Income – Hyun (2018)
  - Occupation – Park and Chung (2019)
  - Education - Choi and Lee (2018)
- **Perception on inequality:** Hwang and Gye (2018)
- **Social mobility perception**
  - Lee, Kim, and Choi (2016) – ‘Social Survey’ 1999–2009, 2011, 2015
  - Lee (2018) – ‘Social Survey’ 2013 & 2017, focusing on the youth
  - Shin (2016) – Focusing on the middle-aged
- **Purpose of this study**
  - Investigate long-term trends of social mobility perception
  - Examine whether there is any potential **heterogeneity by demographic and socioeconomic characteristics**

# Data – Social Survey

- Collected by Korean statistical office to understand quality of life and social changes and to develop social development policies by measuring social interests and subjective opinions
- Annually collected for 5 modules (out of total 10 modules)
- A module for '**Social Participation**' contains questions on social mobility perception and is collected every two years
  - **Survey years: 2009, 2011, 2013, 2015, 2017, 2019**
- Rich information on demographic and socioeconomic characteristics
- **Age: 20~69**
- Final analytical sample: 171,846 (approximately, **28,600** per year)

Notes:

**2006 Survey** – Household income was not collected

**2003 Survey** – Only household head answered on SM questions with a different structure from the following surveys



# Key Variables – Social Mobility Perception

## Upward mobility perception

### 1) Own generation

“In our society, what do you think is the likelihood that **a person's socioeconomic status will increase if he or she makes lifelong efforts?**”

- |                  |                  |
|------------------|------------------|
| 1) Very high,    | 2) Somewhat high |
| 3) Somewhat low, | 4) Very low      |
| 5) Do not know   |                  |

### 2) Next generation

“In our society, what do you think is the likelihood that **the socioeconomic status of the next generation will increase compared to your generation?**”

#### 계 층 이 동

53 우리 사회에서 일생동안 노력을 한다면 개인의 사회경제적 지위가 높아질 가능성은 어느 정도라고 생각하십니까?

- |          |          |        |
|----------|----------|--------|
| 1 매우 높다  | 2 비교적 높다 |        |
| 3 비교적 낮다 | 4 매우 낮다  | 5 모르겠다 |

# Key Variables: Social Mobility Perception (SMP)

Social Mobility Perception				
Survey	Analysis	Value	Own Gen. (%)	Next Gen. (%)
1	3	Very high	2.3	3.8
2	3	Somewhat high	26.1	34.8
3	2	Somewhat low	42.2	33.7
4	1	Very low	16.3	11.1
5	Drop	Do not know	13.2	16.7

- Construct a variable with three levels of ordinal categories
  - Combine **“Very high”** and **“Somewhat high”** into **“High”**
  - **Reverse coding:**  
**High=3, Somewhat low=2, Very low=1**
- Exclude those who answered as “Do not know” in the analysis

# Covariates

- Demographic characteristics
  - Gender(2): **Female**, Male
  - Cohort(5): **20s**, 30s, ... , 60s
  - Marital status(3): **Never married**, married, divorced + widowed
- Socioeconomic characteristics
  - Education(5): **Middle school graduates or below**, High school graduates, Junior college graduates, University graduates, Master+
  - Household Income(8): **Below 100**, 101~200, ..., Above 701 (in 10,000 won, approximately \$8.5)
- Other characteristics
  - Region(16)
  - Employment status
  - Housing ownership and Housing type (apartment, multi-family, etc)

# Method

- Ordered logistic regression

$$Y_{it} = \begin{cases} 1: \text{Very low} \\ 2: \text{Somewhat low} \\ 3: \text{High (Somewhat high + Very high)} \end{cases}$$

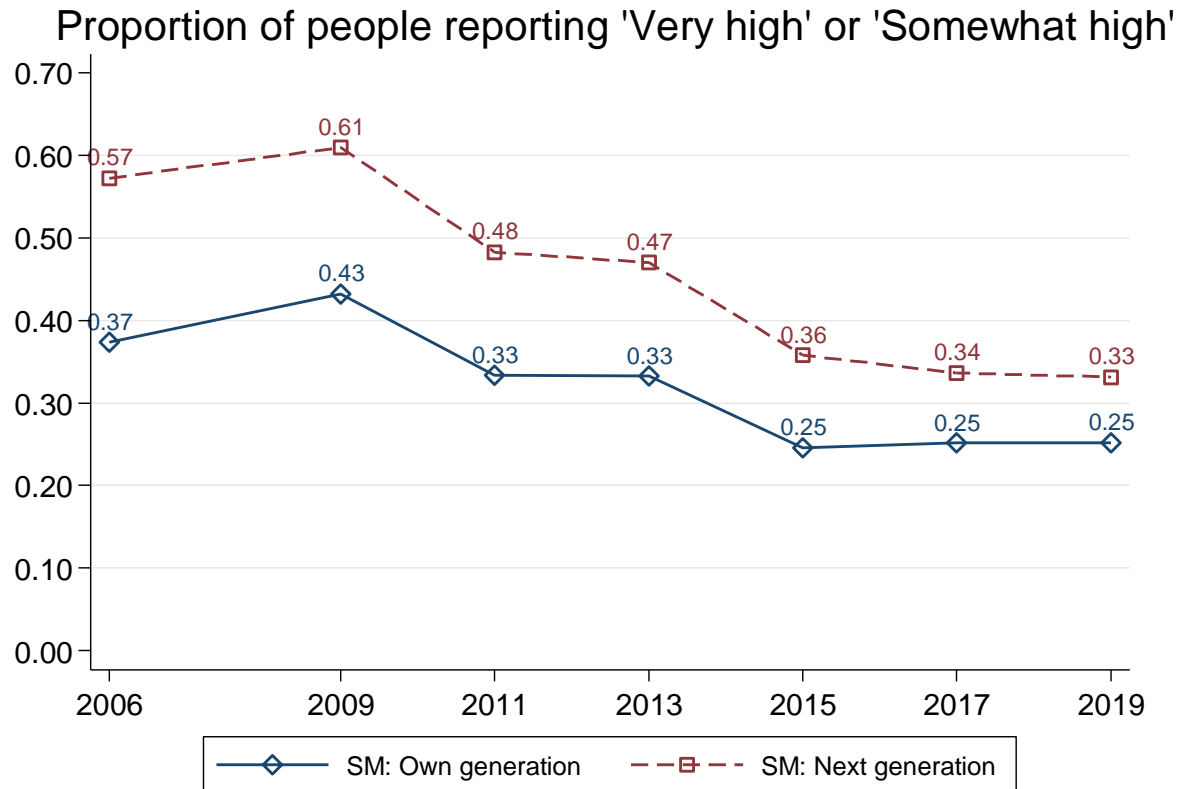
- Present **marginal effects** (and predicted probability) based on estimated coefficients

$$\Pr(Y_{it} = j) = \begin{cases} \Pr(-\infty < X_{it}\beta + u \leq \varphi_1) = \frac{1}{1 + \exp(-\varphi_1 + X_{it}\beta)} & \text{if } j = 1 \\ \Pr(\varphi_1 < X_{it}\beta + u \leq \varphi_2) = \frac{1}{1 + \exp(-\varphi_2 + X_{it}\beta)} - \frac{1}{1 + \exp(-\varphi_1 + X_{it}\beta)} & \text{if } j = 2 \\ \Pr(\varphi_2 < X_{it}\beta + u \leq \infty) = 1 - \frac{1}{1 + \exp(-\varphi_2 + X_{it}\beta)} & \text{if } j = 3 \end{cases}$$

, where

$$\begin{aligned} X_{it}\beta = & \beta_1 \text{Male}_{it} + \sum_{c=3}^6 \beta_{2c} 1(\text{Cohort}_{it} = c) + \sum_{e=2}^5 \beta_{3e} 1(\text{Edu}_{it} = e) + \sum_{k=2}^8 \beta_{4k} 1(\text{Income}_{it} = k) \\ & + \sum_{m=2}^3 \beta_{5m} 1(\text{Marriage}_{it} = m) + \beta_6 \text{Work}_{it} + \sum_{r=2}^{16} \beta_{7r} 1(\text{region}_{it} = r) + \mu_t \end{aligned}$$

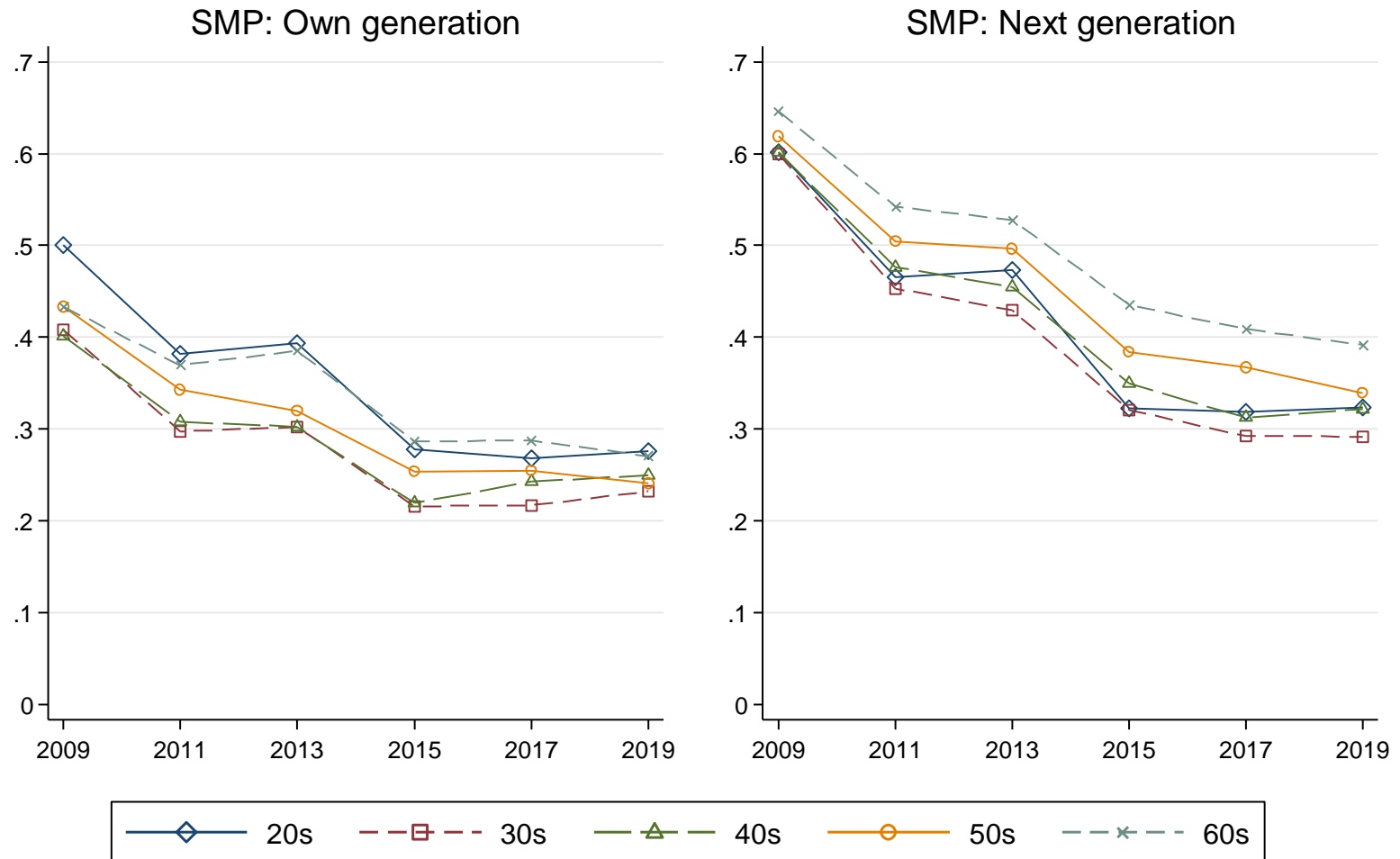
# Trends (2006~2019)



- Rapid decline in social mobility perception between 2009 and 2015
  - SM for next generation > SM for own generation
  - But the gap has been narrowed (17.7%p in 2009 → 8.0%p in 2019)

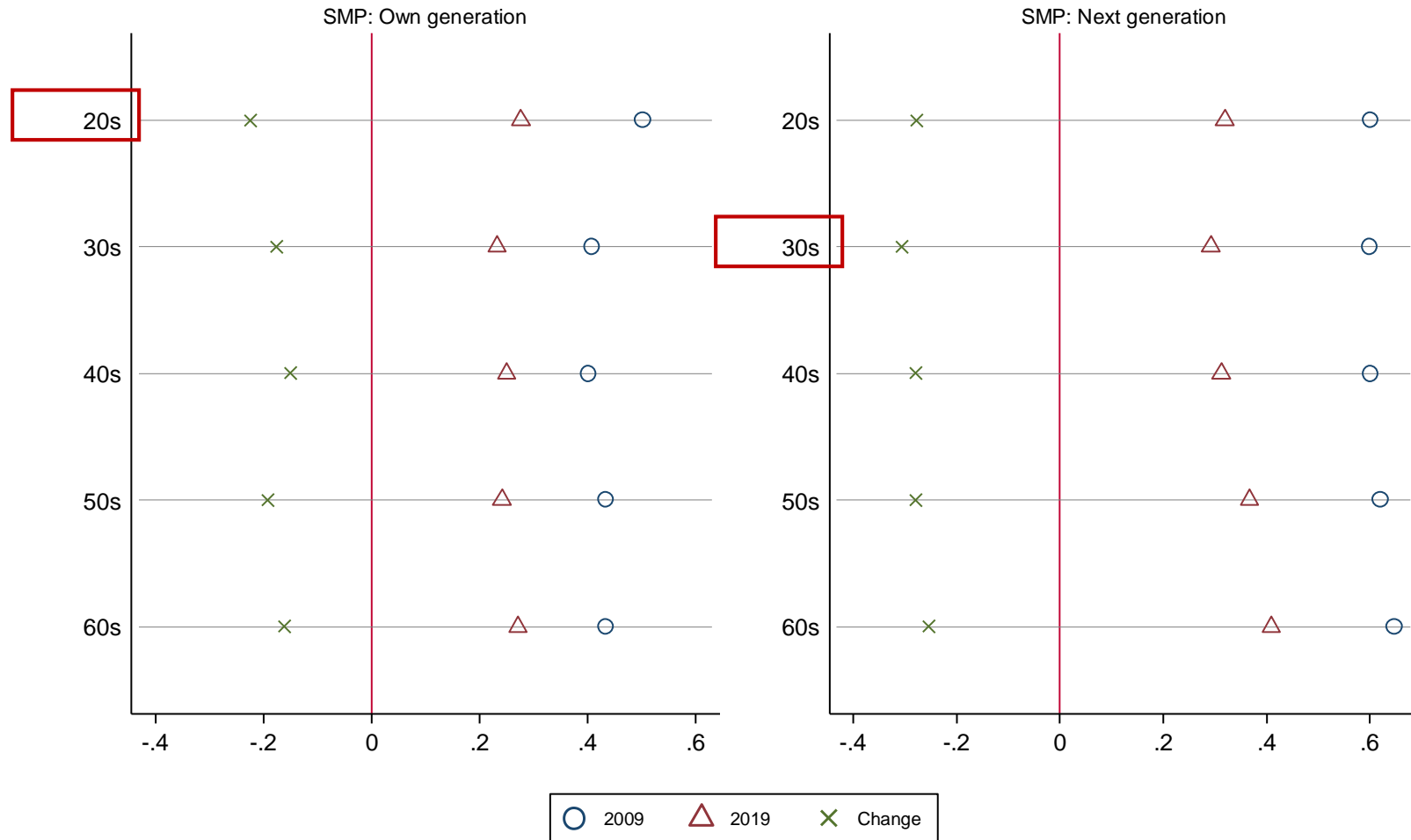
Notes: In 2006, proportion of those who answered as "do not know" on SMP questionnaire is higher than the preceding survey years.

# Trend in SMP by Cohort: 2009 - 2019



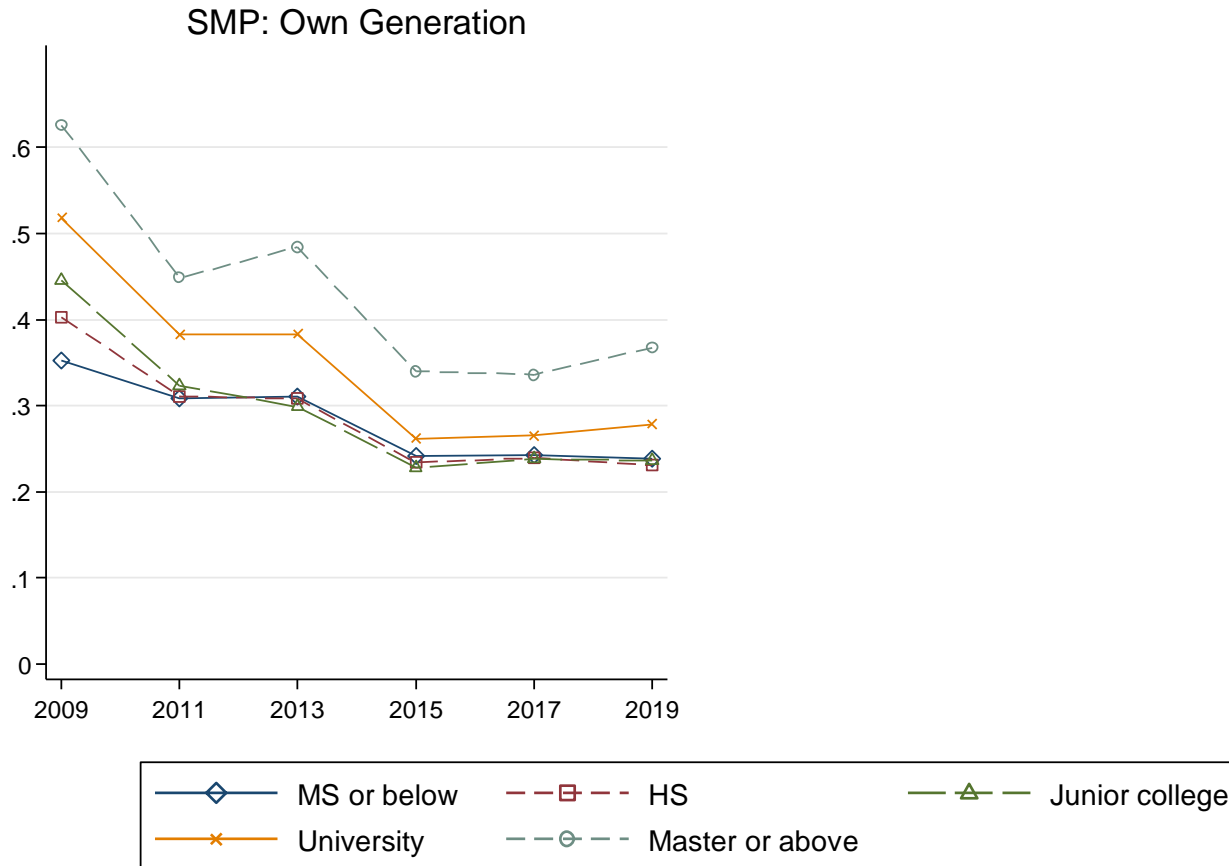
- SMP for own generation drops most among the 20s
- SMP for next generation drops most among 30s and then 40s
- **0.5 for 20~29 in 2009 (Millennials born in 1980~1989) -> 0.23 for 30~39 in 2019**

# Change in SMP by Cohort: 2009 vs. 2019



- SMP for own generation drops most among the 20s
- SMP for next generation drops most among the 30s

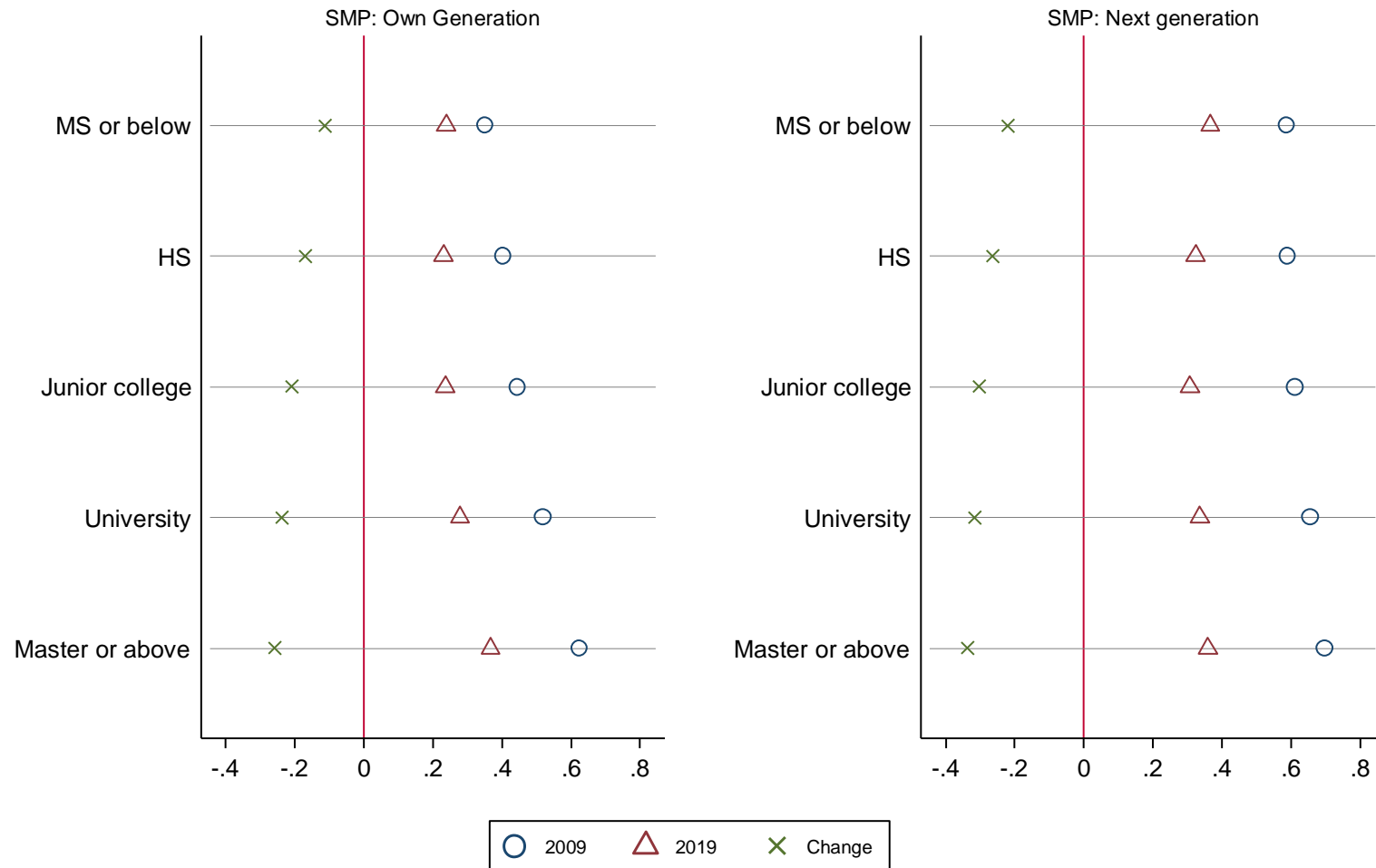
# Trend in SMP by Education Level: 2009 - 2019



- Magnitude of decline is larger for more educated, especially between 2009 and 2015
- There is very little gap for SMP of next generation across groups by education level

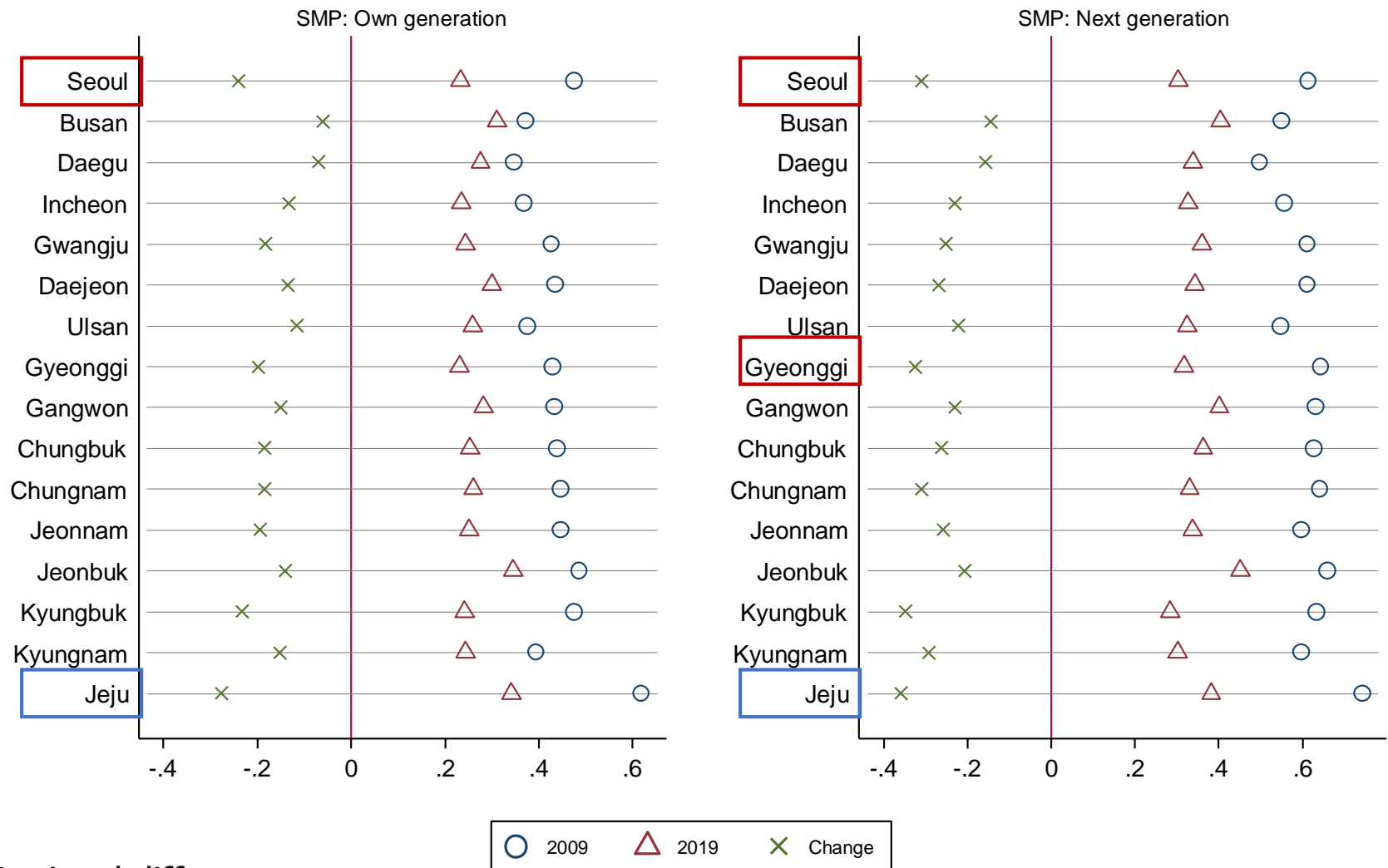


# Change in SMP by Education Level: 2009 vs. 2019



- The gap in SMP by education level has been narrowed, especially for next generation

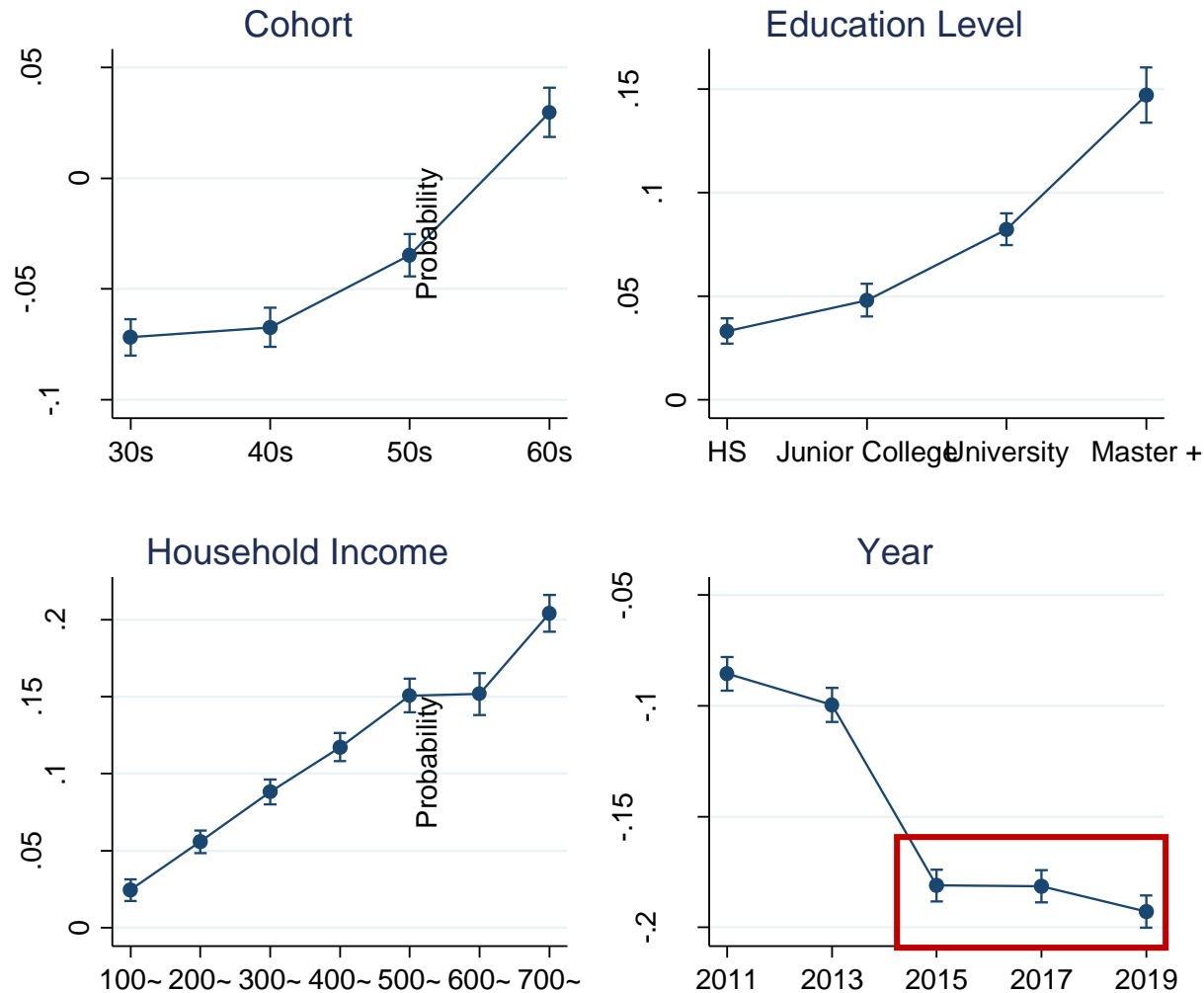
# Change in SMP by Region: 2009 vs. 2019



- Regional difference
  - Own generation: Seoul and Jeju
  - Next generation: Seoul, Gyeonggi, and Jeju

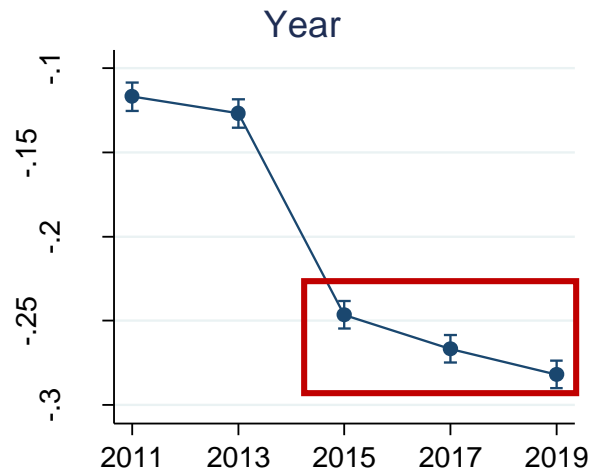
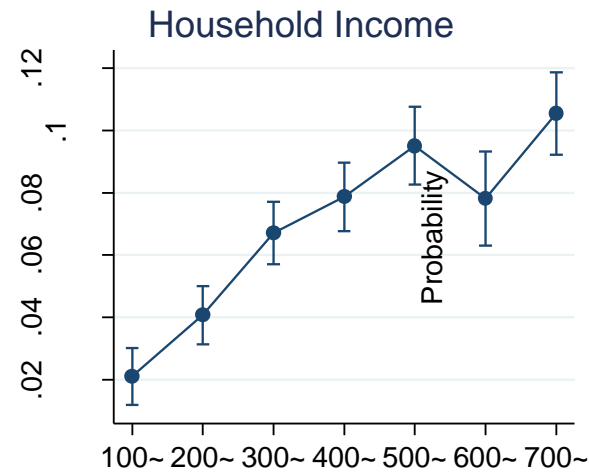
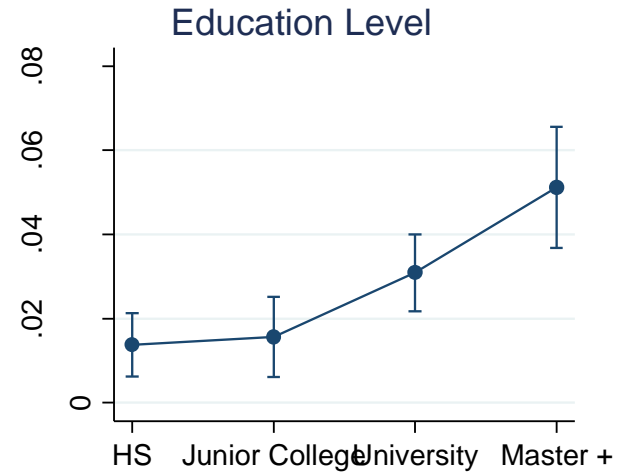
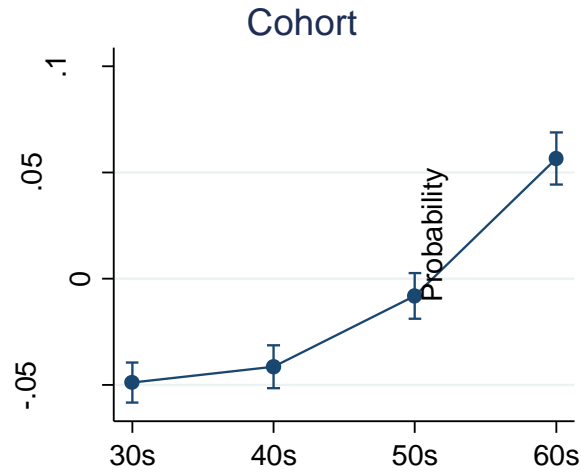
# Marginal Effects for SMP about Own Generation

$\Pr(Y=3|X)$ , Change in probability of answering as "High"



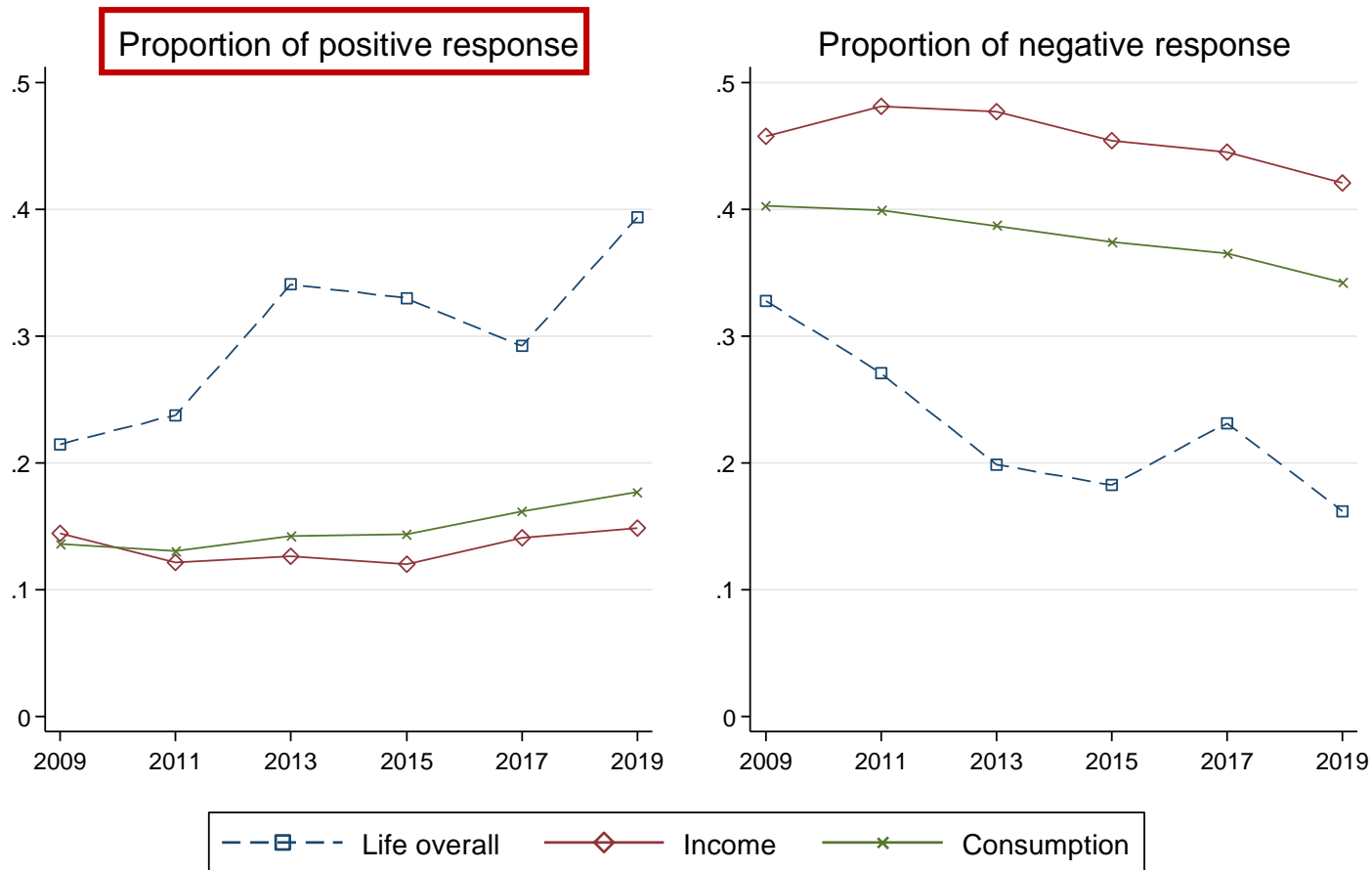
# Marginal Effects for SMP about Next Generation

$\Pr(Y=3|X)$ , Change in probability of answering as "High"



# Discussion – Trends in 'Satisfaction'

- Three questions on the levels of satisfaction
  - **Life overall, Income, Consumption**
  - {4, 5: Positive}, {3: Middle}, {1, 2: Negative}

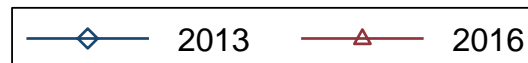
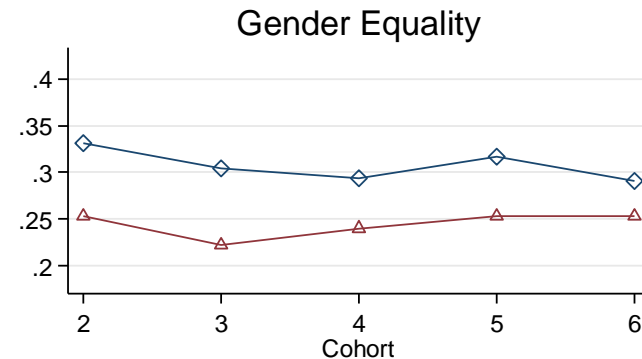
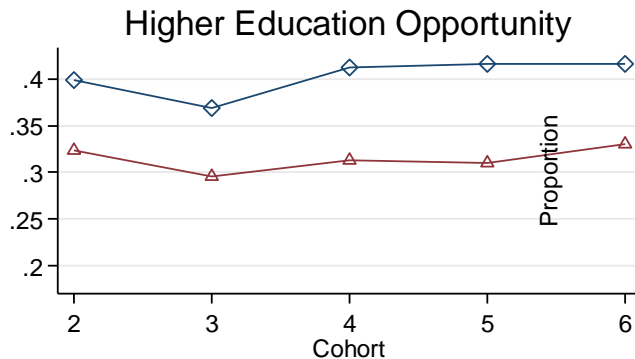
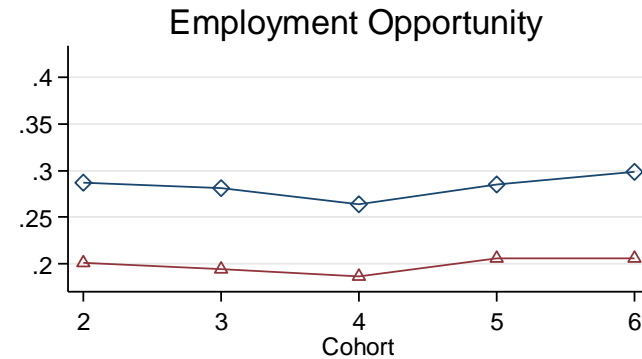
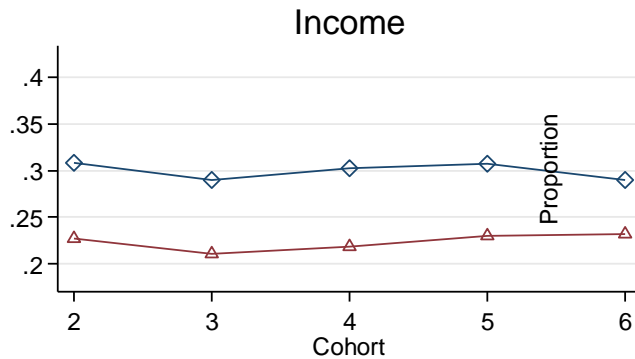


# Discussion – What about 'Fairness'?

- Seoul Survey – 2013 ~ 2016

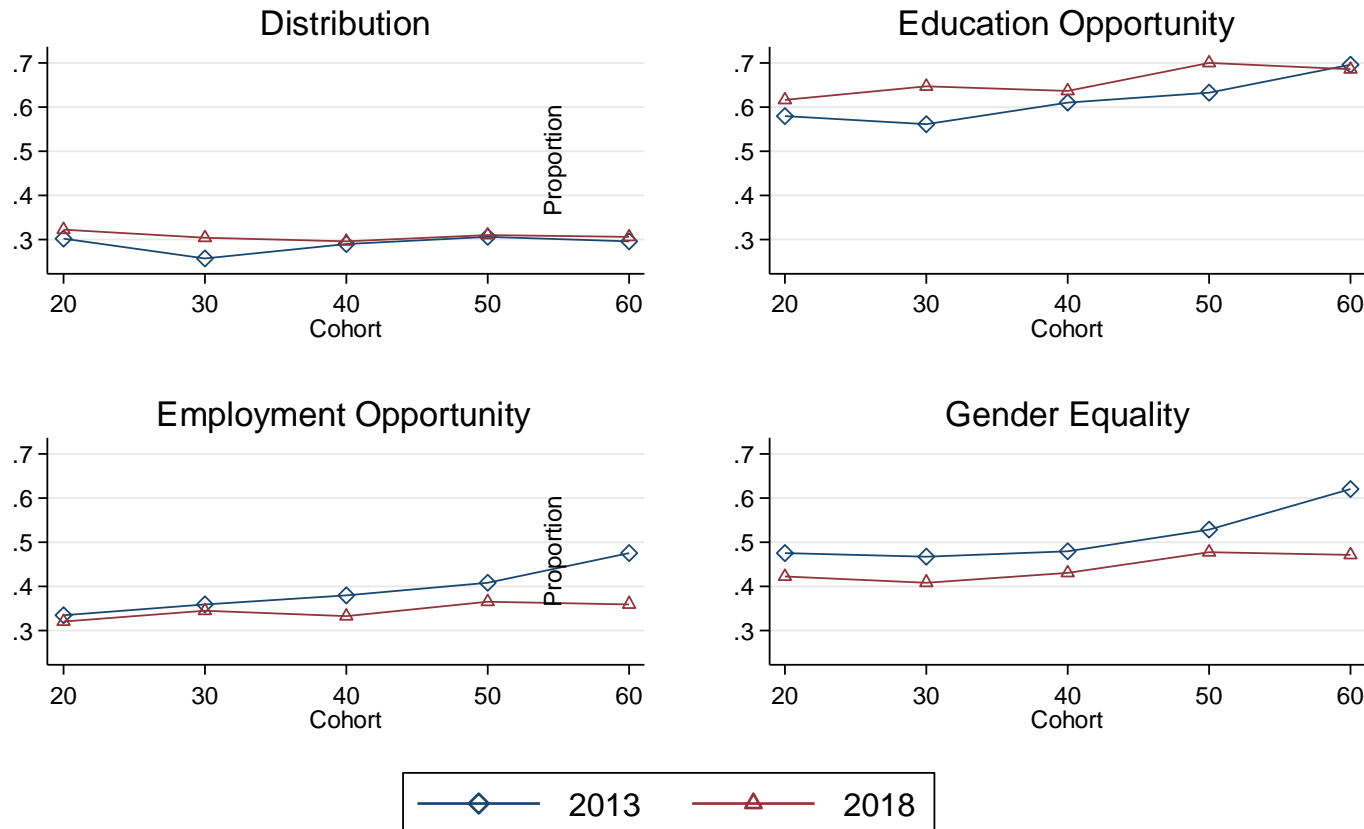
“How fair do you think our society is in terms of ... ?”

- {1, 2: Unfair, Somewhat unfair}
- {3: Neutral}
- {4, 5: Somewhat Fair, Fair}



# Discussion – What about 'Fairness'?

- Korea Social Integration Survey – 2013 ~ 2018
  - “How fair do you think our society is in terms of ... ?”
    - {1, 2: Unfair, Somewhat unfair}
    - {3, 4: Somewhat Fair, Fair}



Notes: Baseline year for 'Distribution' is 2014. Baseline for all other items are 2013.

# Discussion

- Although descriptive, provide detailed pictures on changing social mobility perception in South Korea
- Policy Implication
  - To elevate social mobility perception, Korean government needs to be more focused on the most vulnerable groups such as youth and those living in Seoul metropolitan areas
  - Information on social mobility can change SM perception and policy preferences (Alesina et al., 2018)
    - Necessary to provide more reliable measures for social mobility measures using administrative data as in other countries



# Limitation and Future Work

- “**WHY SMP has been declined over the last 10 years?**”
  - Changing industrial structures and low growth?
  - Moon & Choi (2019): Examining the role of comparison groups in social mobility perception, “**relative position**”
  - **Qualitative studies** that can provide deeper understanding on “why”
  - More questions in the survey on why people think social mobility is declining in Korea
  - (More analysis using panel data)
  - More thoughts on
    - Insecurity in the **labor** market, **housing** market, **educational** opportunities
    - Fairness (e.g., employment, admission), discrimination, inequality
- **Cross national** comparative study



● 헬조선  
Search term

● 수저계급  
Search term

● 노오력  
Search term

● 흙수저  
Search term



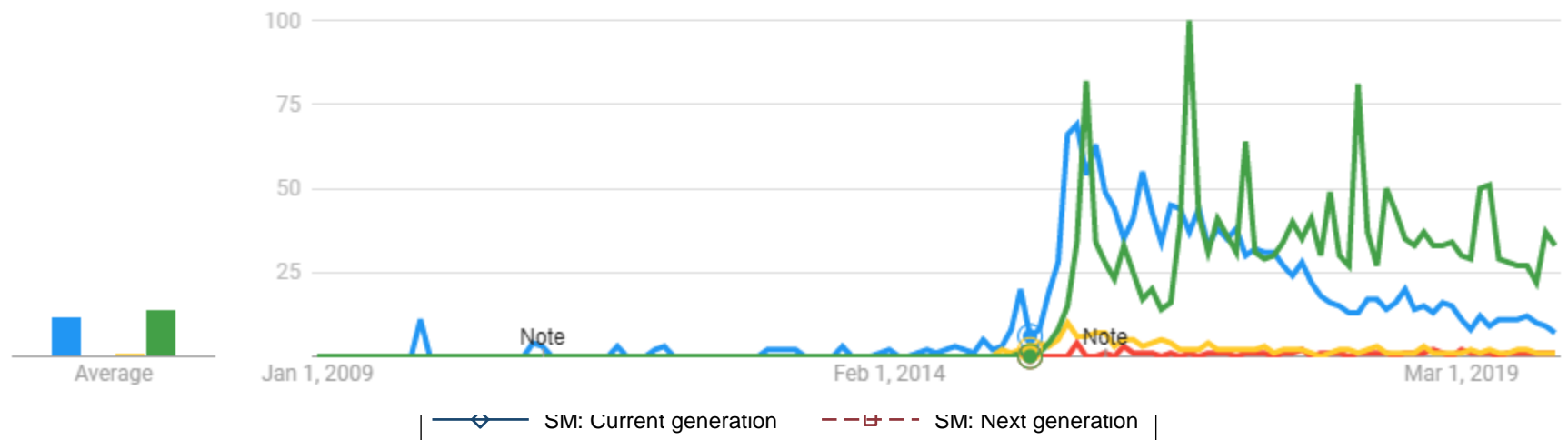
South Korea ▼

1/1/09 - 1/31/20 ▼

All categories ▼

Web Search ▼

Interest over time ?





● 삼포세대  
Search term

● 3포세대  
Search term

● N포세대  
Search term

● 열정페이  
Search term

● 88만원세대  
Search term

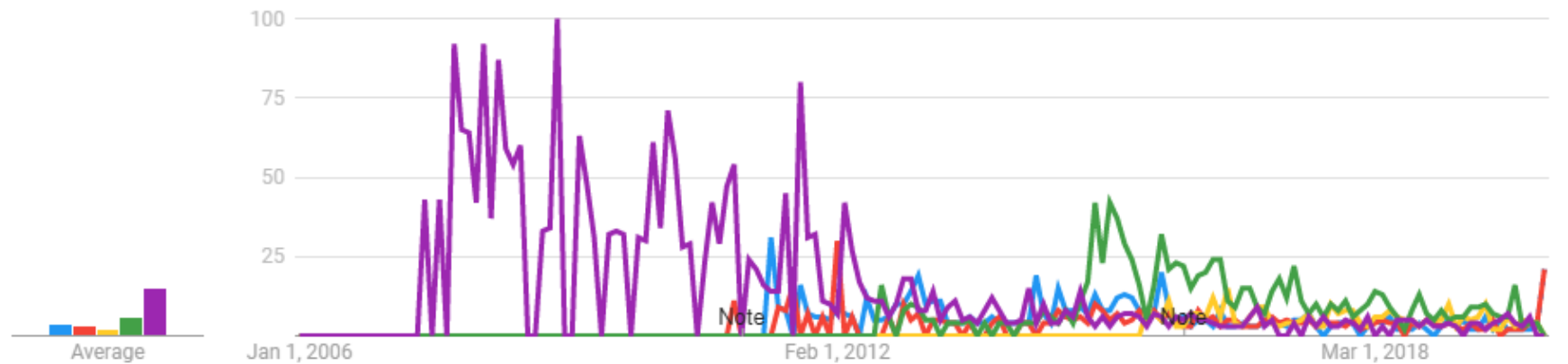
South Korea ▼

1/1/06 - 2/5/20 ▼

All categories ▼

Web Search ▼

Interest over time



# Appendix

# Youth Unemployment

## 1) 연령별 경제활동인구 총괄

자료갱신일 : 2020-01-15 / 수록기간 : 월, 분기, 년 1999.06 ~ 2019.12 / 자료문의처 : 042-481-2266~2268, 2270

일괄설정 +

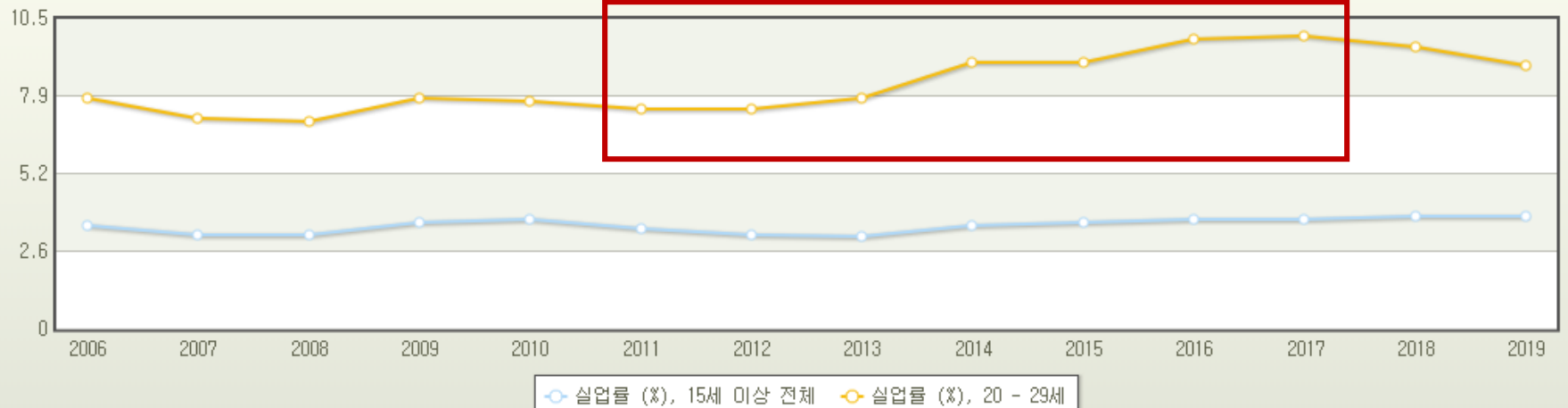
항목[1/8]

연령계층별[2/20]

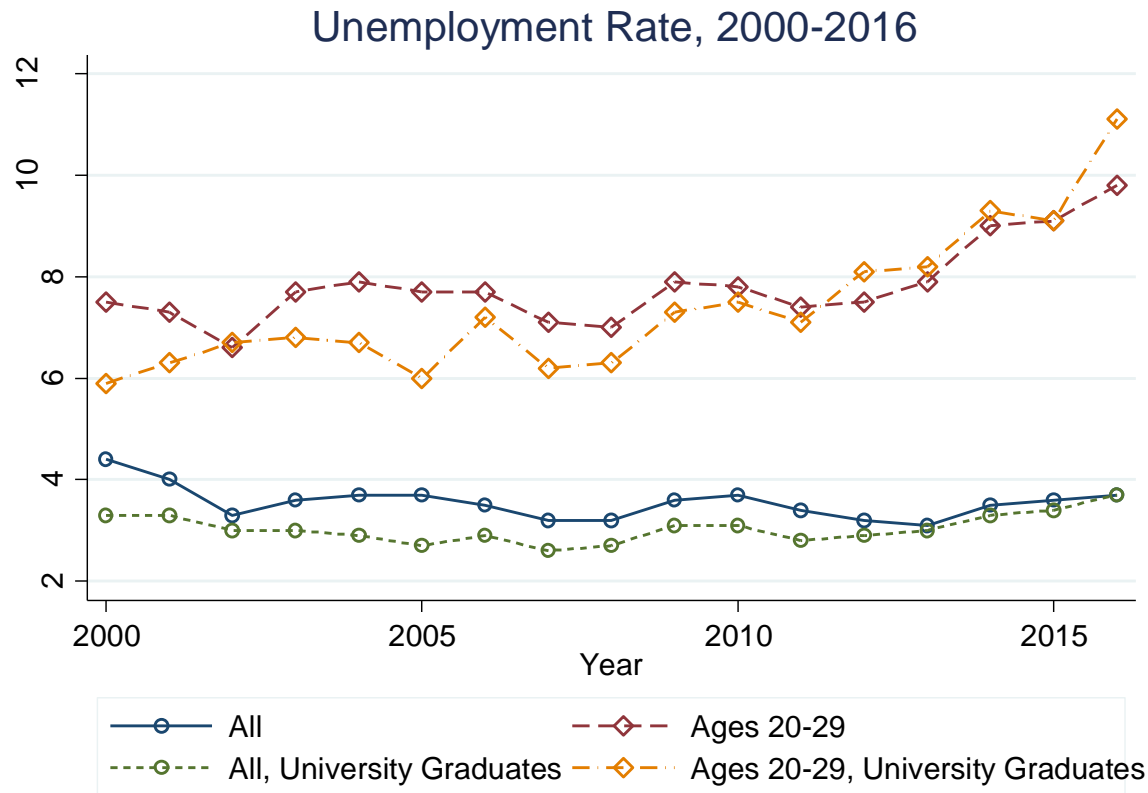
시점[14/349]



연령별 경제활동인구 총괄

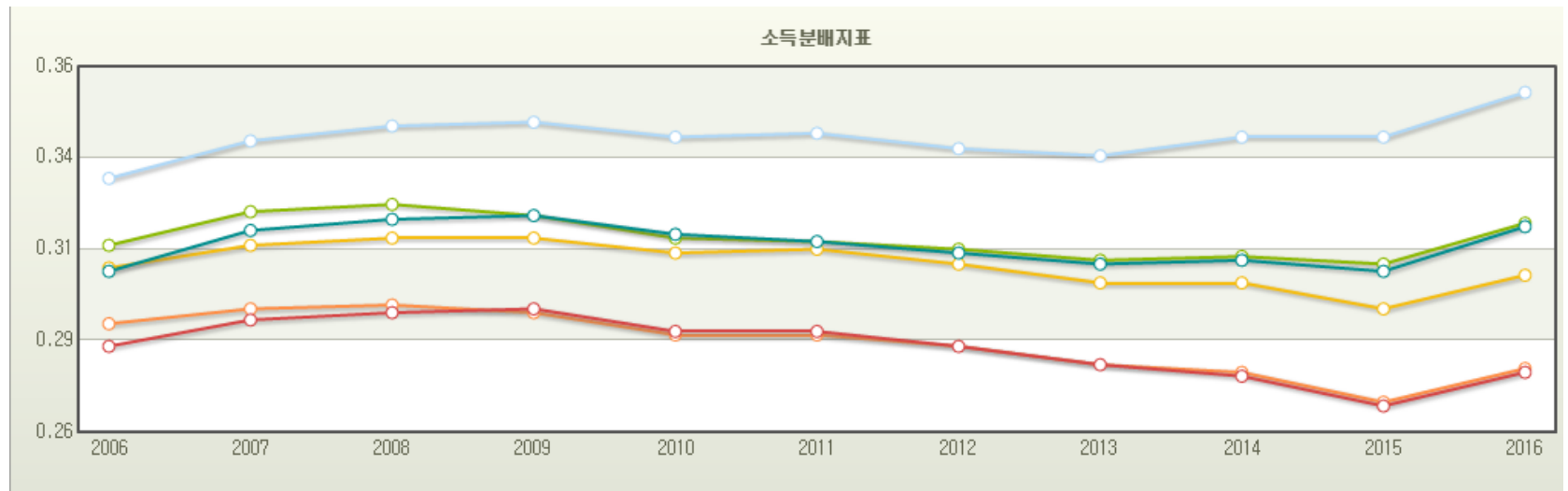


# Youth Unemployment (Choi, 2020)



- Youth **Unemployment Rate (UR)** has increased sharply, especially striking since 2011 (In contrast with the trend for the entire population)
- The greatest increase in UR is among young people with a **university degree or above**, from 5.9% to 11.1% (in contrast to the pattern before 2011)
- Labor market conditions for youth in Korea are poor compared with conditions for other age groups, **particularly for youth with a university degree or above**

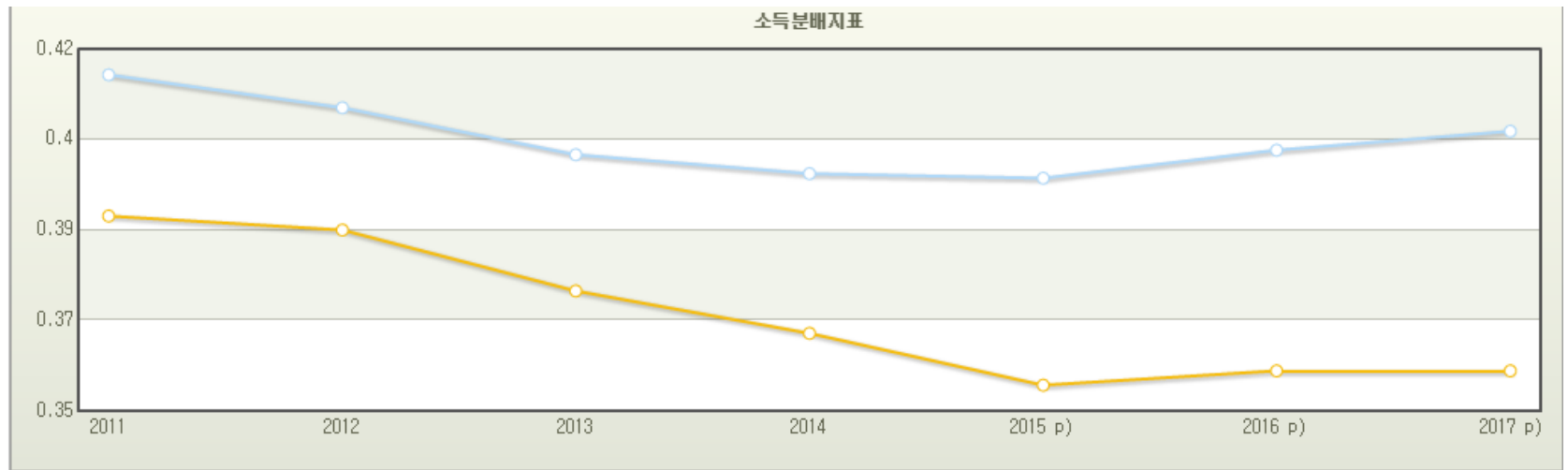
# 소득분배 지표 - 가계동향조사



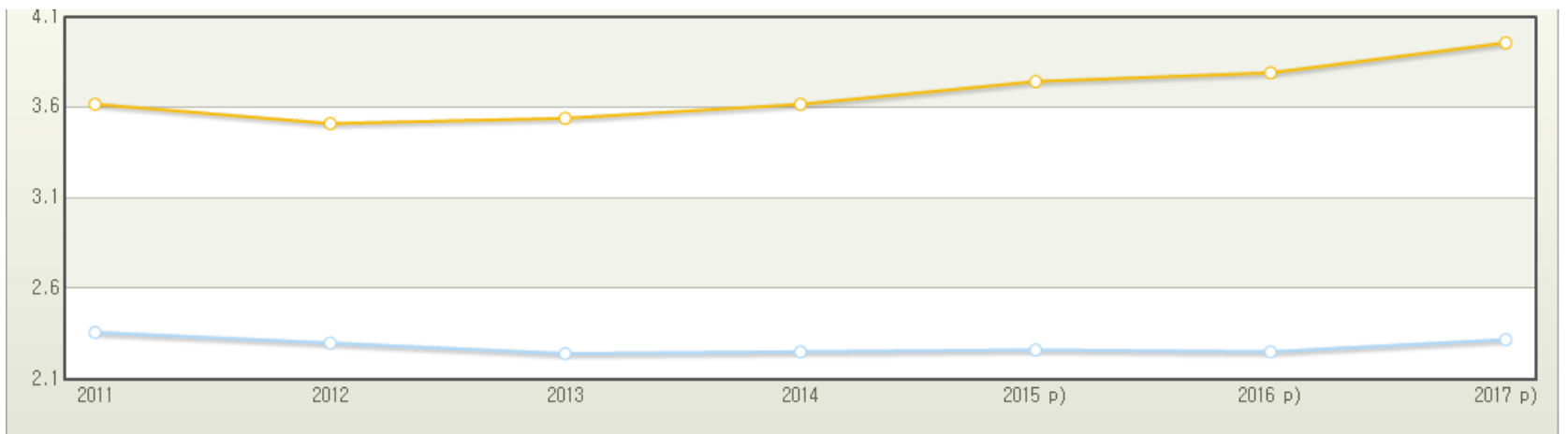
	항목	분배지표별	소득별
■	전체가구	지니계수	시장소득
■	전체가구	지니계수	처분가능소득
■	2인이상 비농가	지니계수	시장소득
■	2인이상 비농가	지니계수	처분가능소득
■	도시 2인이상	지니계수	시장소득
■	도시 2인이상	지니계수	처분가능소득

2015			2016		
전체가구	2인이상 비농가	도시 2인이상	전체가구	2인이상 비농가	도시 2인이상
▲ ▼ ▢	▲ ▼ ▢	▲ ▼ ▢	▲ ▼ ▢	▲ ▼ ▢	▲ ▼ ▢
0.341	0.307	0.305	0.353	0.318	0.317
0.295	0.270	0.269	0.304	0.279	0.278

# 소득분배 지표 - 가계금융복지조사



분배지표별(1)	2017 p)		2016 p)		2015 p)	
	시장소득	처분가능소득	시장소득	처분가능소득	시장소득	처분가능소득
지니계수	0.406	0.355	0.402	0.355	0.396	0.352



항목	분배지표별(1)
■ 시장소득	P90/P50
■ 시장소득	P50/P10



# Proportion of non-regular workers

## 1) 비정규직근로자 비율(시도)

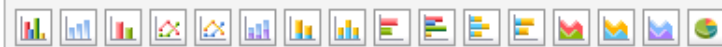
출처 : 통계청, 지역통계종합

자료갱신일 : 2019-11-19 / 수록기간 : 년 2003 ~ 2019 / 자료문의처 : 02-2012-9114, 042-481-3717

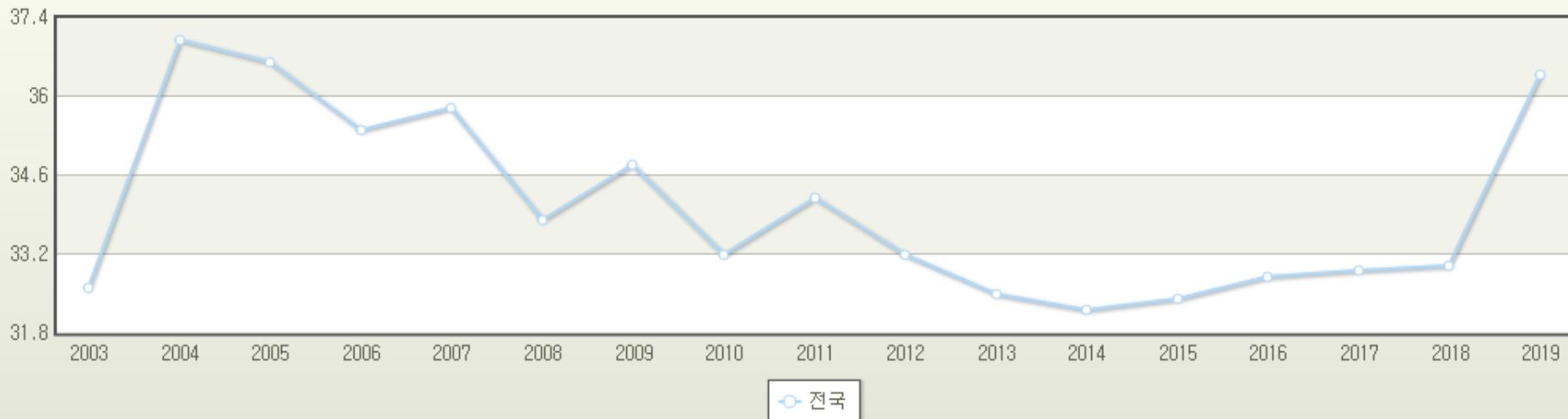
일괄설정 + 항목[1/1] 행정구역별[1/18] 시점[17/17] [차트조회](#)

(단위 : %)

주석 > URL > [차트저장](#) [차트인쇄](#) 5 [닫기](#)



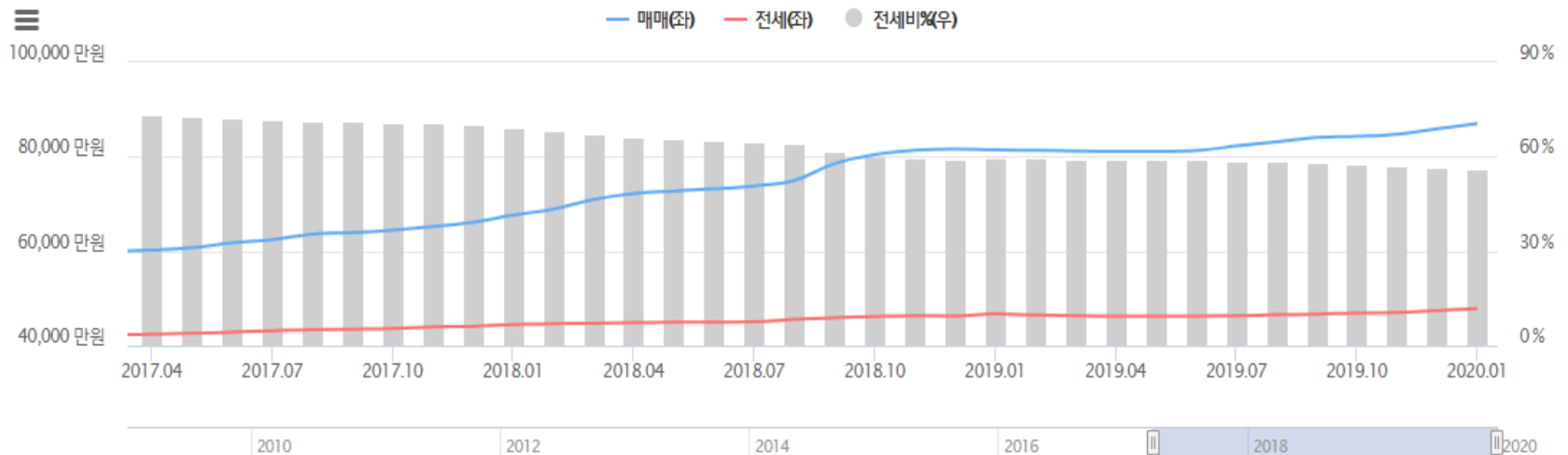
비정규직근로자 비율(시도)



# KB 부동산 아파트 가격 추이, 서울

월간 KB주택가격동향 자료

평균 아파트 가격 추이 및 매매 대비 전세 비율



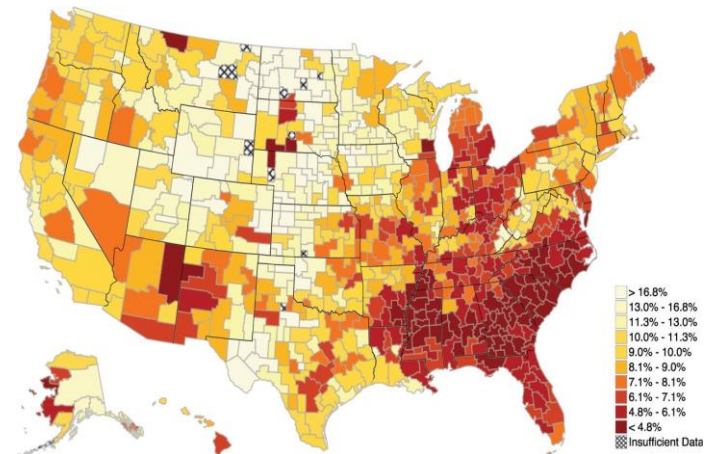
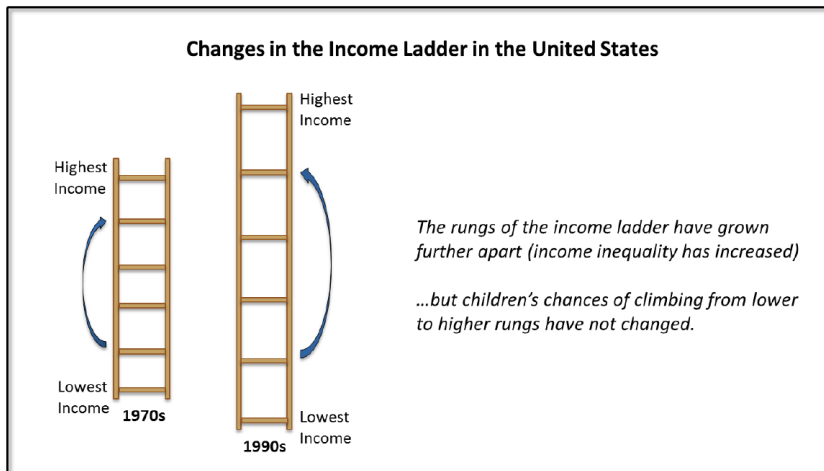
2017.4: 60,215만원 → 2019.12: 86,997만원 (\$750K)

44.5% increase in 2 years and 8 months

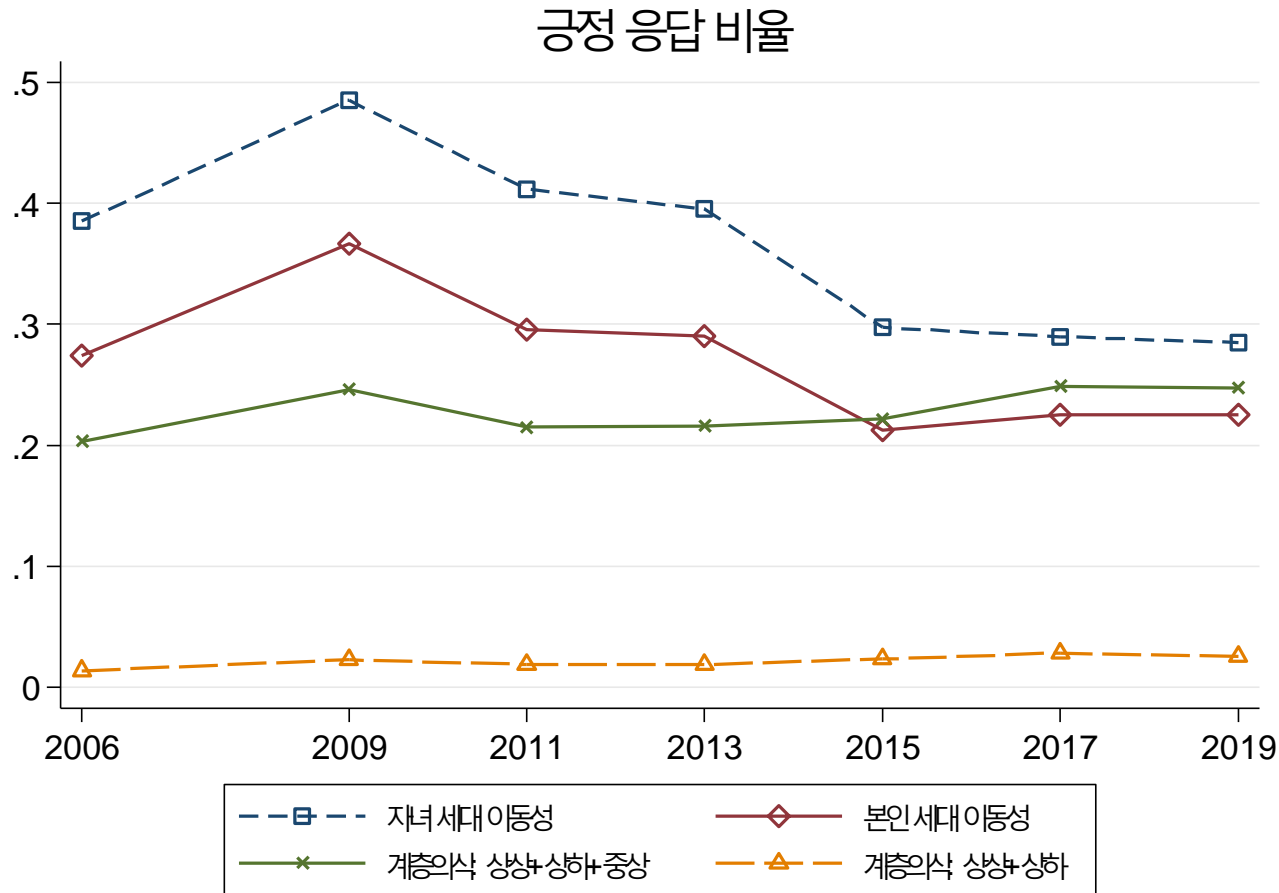
# Background

Growing research on inequality and social mobility using administrative data in the U.S. and Northern European countries

- **Social mobility** (e.g., Chetty et al., 2017)
- **Inequality among at the top of the distribution** (e.g., Kopczuk et al., 2010; Saez & Piketty, 2003)
- **Long-term trends in inequality** (e.g., Burkhauser et al., 2012)
- **Multi-generational** mobility (e.g., Solon, 2018; Torche 2015)



# 계층이동 인식과 계층의식의 변화 (2006~2017)



- 2009년 이후 이동성 인식은 2015년까지 급격하게 부정적으로 변화
  - 자녀 세대 이동 가능성을 높다고 보는 비율이 본인 세대 이동 가능성을 높게 보는 비율보다 높지만, 그 차이는 감소하고 있음
- 본인의 계층지위를 일정 수준 이상이라고 응답한 비율은 안정적으로 유지되어 있음

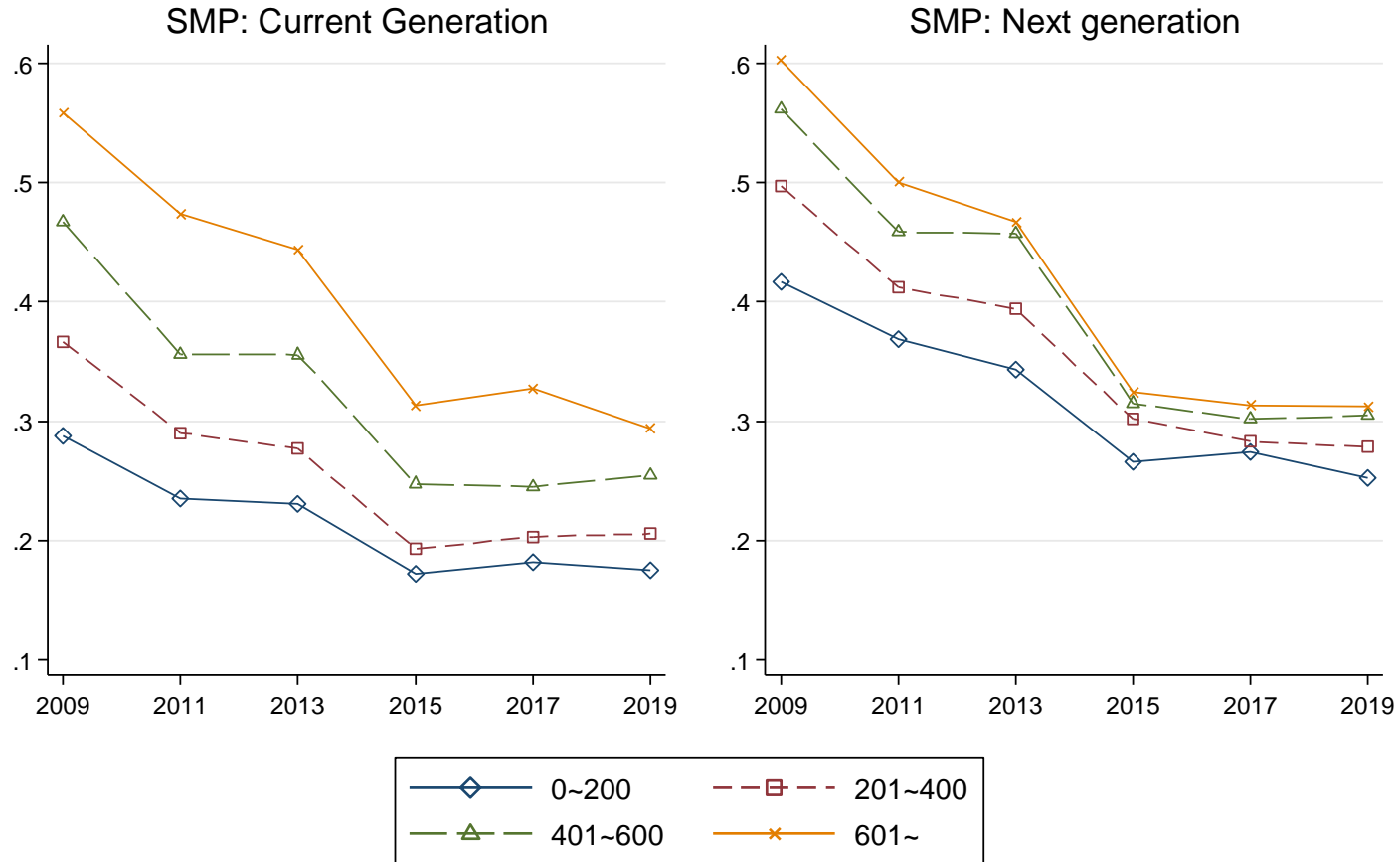
# 계층의식 변화

- “귀하의

설문	분석	응답	본인 세대 이동성 (%)	자녀 세대 이동성 (%)
1	3	매우 높다	2.3	3.8
2	3	비교적 높다	26.1	34.8
3	2	비교적 낮다	42.2	33.7
4	1	매우 낮다	16.3	11.1
5	.	모르겠다	13.2	16.7

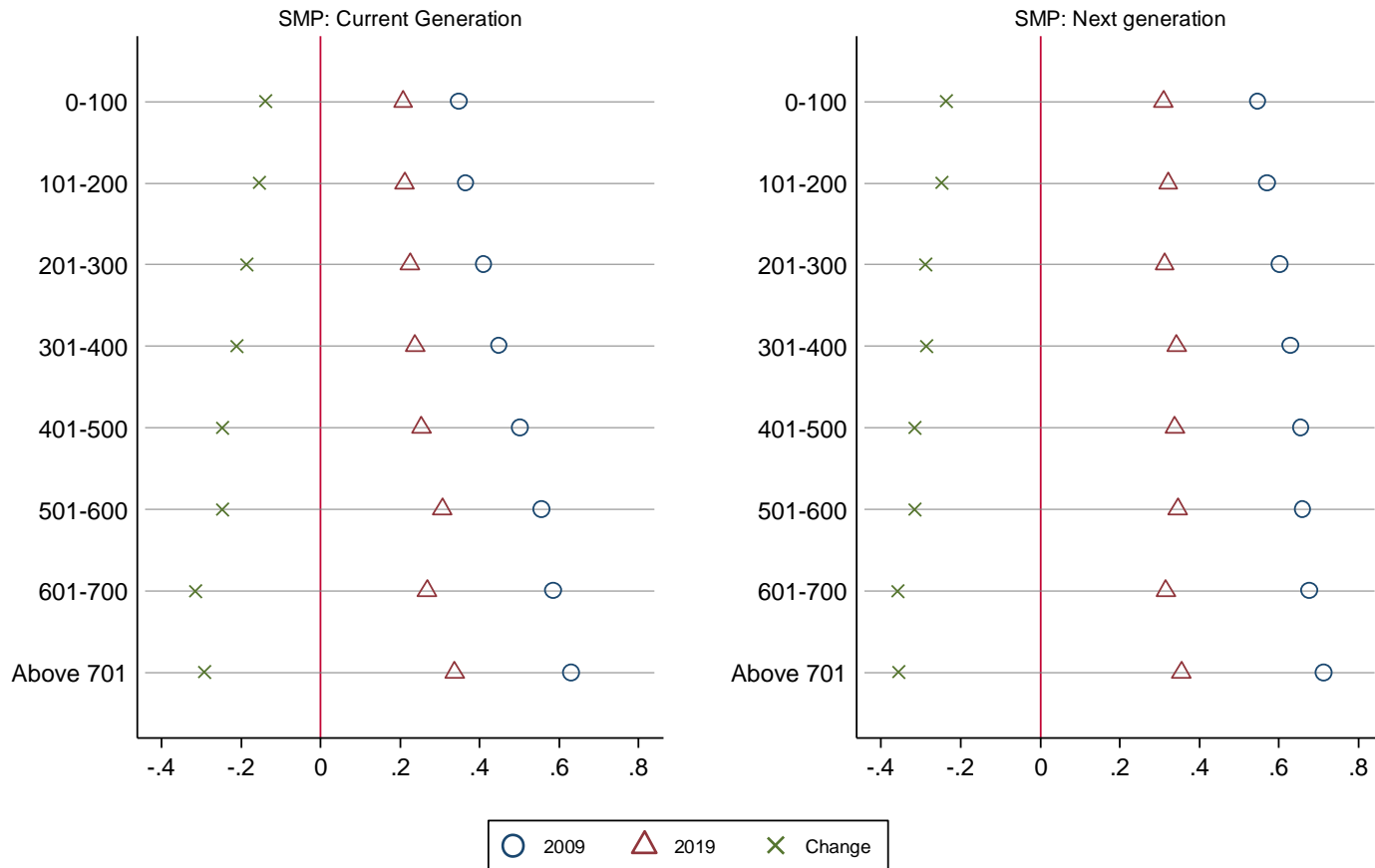
설문	분석	응답	계층의식 (%)
11	5	상상	0.5
12	5	상하	1.6
21	4	중상	20.6
22	3	중하	38.0
31	2	하상	24.7
32	1	하하	14.7

# Trend in SMP by Household Income: 2009 - 2019



- 2015년까지 고소득 그룹의 하락 속도가 빠르며, 2015년 이후에는 큰 변화가 없음
- 2017년 시점에서 자녀세대 상향이동 가능성 긍정 응답 비율의 차이는 축소
- Notes: Monthly household income is used in 10,000 Korean won (approximately, \$8.5)

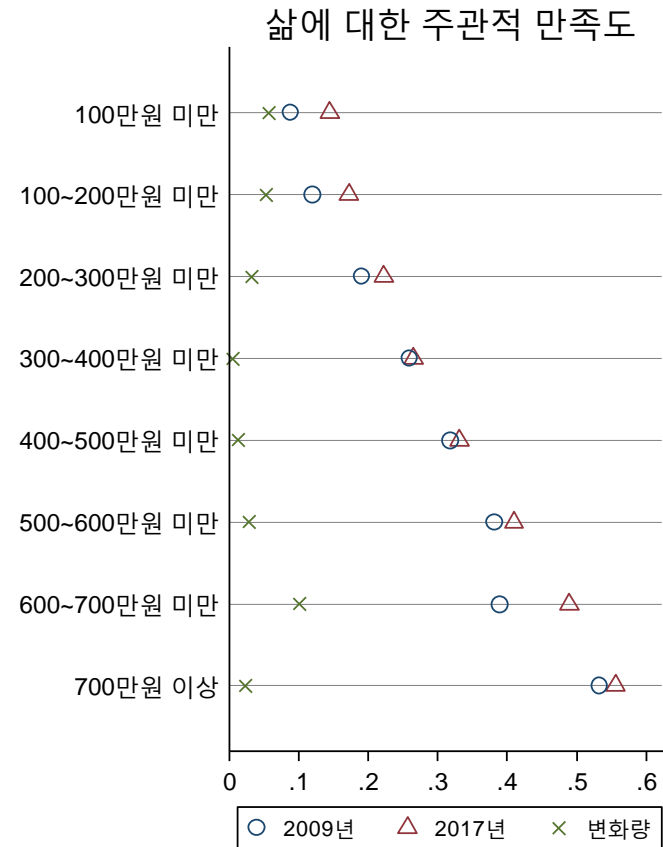
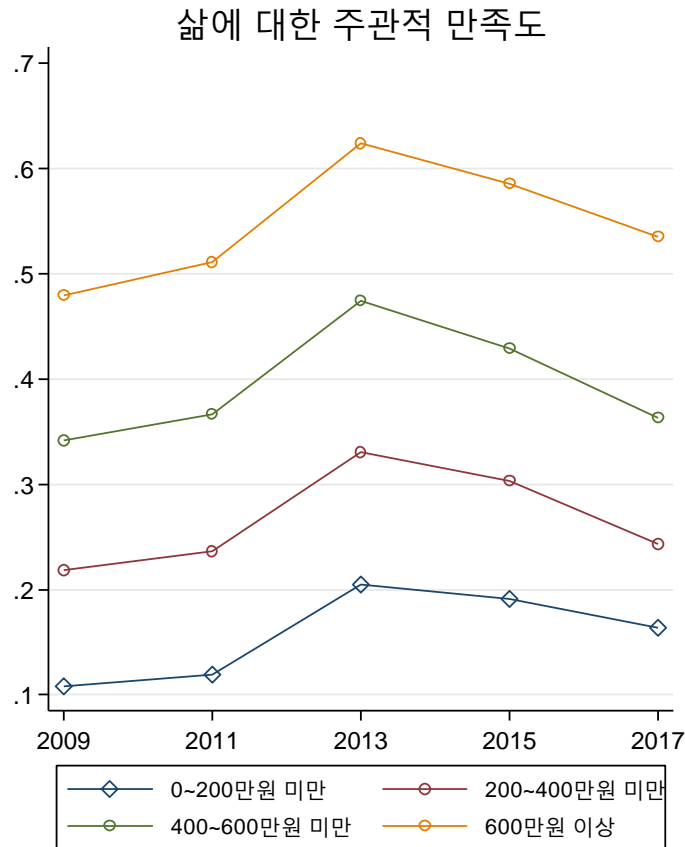
# Change in SMP by Household Income: 2009 vs. 2019



- 대체로 소득 수준이 높을수록 감소폭은 크게 나타남
- (600~700만원 미만 그룹의 하락폭이 더 큰 이유는 추가 확인 필요)

# Discussion – ‘주관적 만족감’의 변화

“귀하의 생활을 전반적으로 고려할 때 현재 삶에 어느 정도 만족하십니까?”



- 삶에 대한 주관적 만족감의 변화를 소득 수준별로 분석
  - 계층이동이나 계층의식의 하락과 달리, 삶에 대한 주관적 만족감은 2013년까지 상승
  - 2013년 이후 하락하지만 2009년보다는 여전히 높음



# Perception vs. Reality (Cheng & Wen, 2019)

- **Intergenerational income mobility** has remained **low and stable** in **America** (e.g., Chetty et al., 2014)
- Popular discourse routinely assumes that Americans are **optimistic** about mobility prospects



Fig. 3. Rank-rank relationship in perception and in reality.

- Americans **overestimate** the intergenerational persistence in income ranks
  - **Overestimate** economic prospects for children from **rich** families
  - **Underestimate** economic prospects for children from **poor** families

# Seoul Survey – Fairness Items

