POLI3148 Group Project
Measuring Identity Affinities: Socioeconomic Changes and Two Nationalisms in Hong Kong
## Members: Anson Tam & John Bewley

1. Aim
- Investigate the relationship between rising residential property prices in HK and the changes in Hongkongers' identity inclinations

2. Hypotheses
- Hypothesis 1 (H1): HK nationalism and Chinese nationalism are situated at opposite ends of a *linear* identity spectrum
- Hypothesis 2 (H2): Hongkongers' identifications are contingent on socioeconomic conditions – residential property prices

### 3. Datasets, Variables and Methodological Approach
- Scope of data collected: 2010-2018
- *Federal Bank of St. Louis (FBRSL) dataset key elements:*
- Property prices were measured using consumer price index
- *Public Opinion Research Institute (PORI) dataset key elements:*
- Respondents indicated their HK and Chinese identity inclinations
- Age groups 18-29, 30-39, 40-49, 50-59, 60-69, and 70 or above were coded as 1.0, 2.0, 3.0, 4.0, 5.0 and 6.0 respectively
- Registered voters coded as 1.0, non-registered voters as 2.0
- *Methodology:*
- .sav PORI datasets transformed into .csv using "haven" package
- Column names of data frames were unified prior to merging
- Descriptive statistics and visualizations to observe whether empirical patterns coincide with expected observations
- Preliminary results faceted against voter registration and age group

4. Testing H1

Relationship between Hong Kong Identity and Chinese Identity
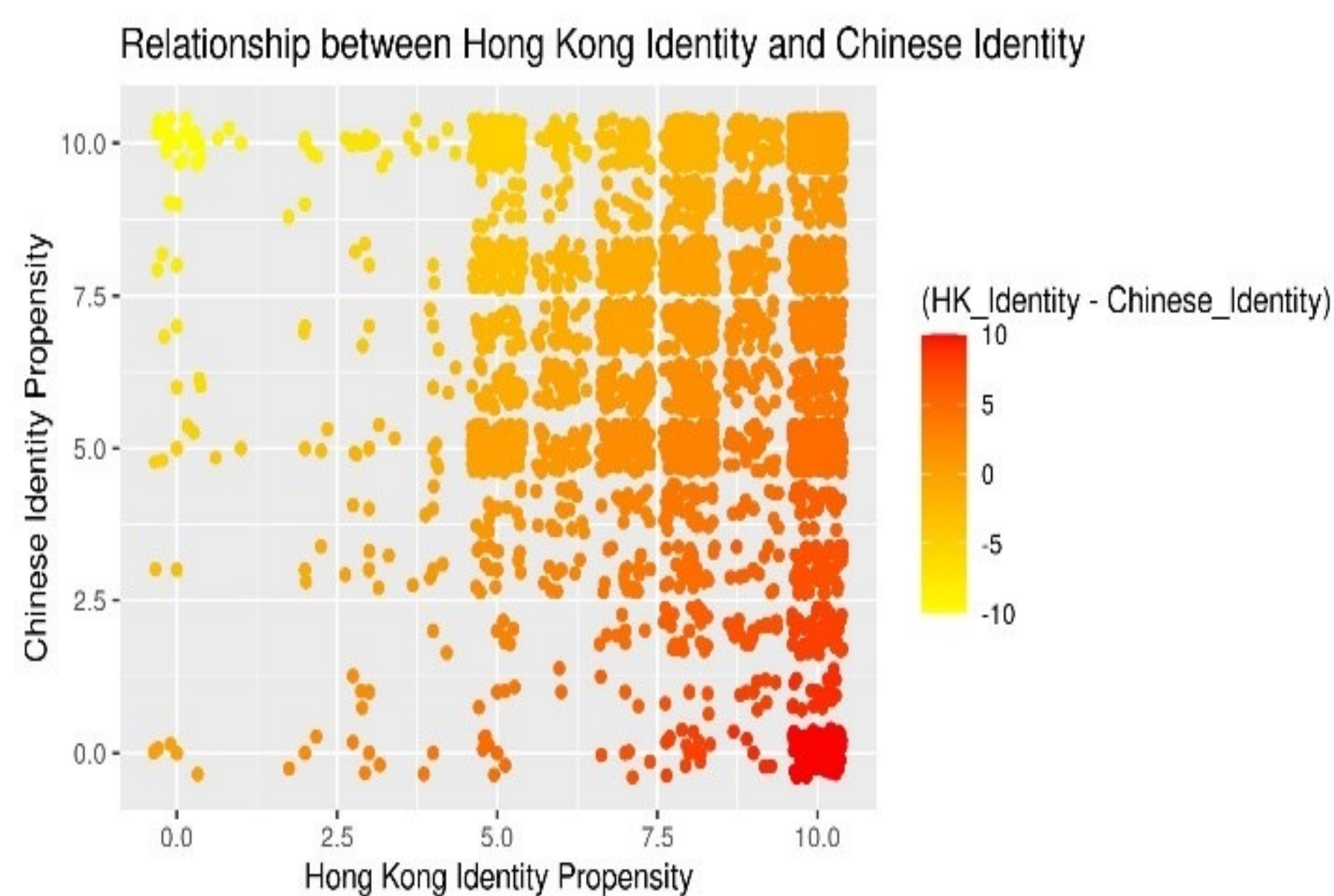
- *reductio ad absurdum* assumption of a linear model
- H1 expected observation: concentrated areas on the top left and bottom right corners
- Result: data points are dispersed across the scatterplot; high concentration of data points in the top right corner
- **Hence, H1 is false** – linear model of identity orientation adopted will be replaced by a two-dimensional model

5. Testing H2
- Persistent increase in HK's residential property prices overall


Residential Property Prices, 2010-2018
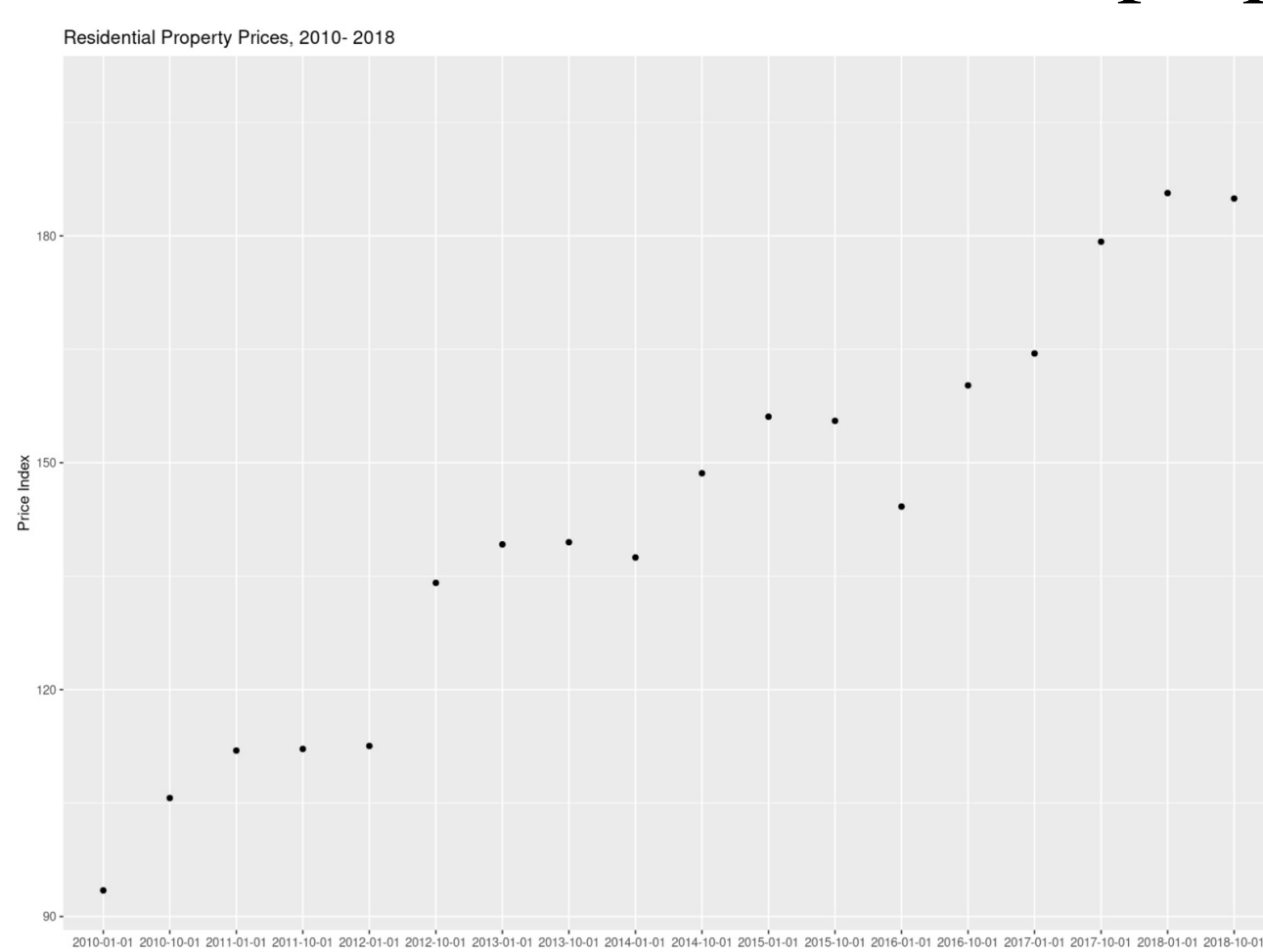
- The identity plane is divided into 4 quadrants at x=5 and y=5
- Expected observation: gradual shift of the location of the boxplot itself towards a certain Quadrant, and/ or a persistent pattern exhibited by certain measures of central tendency

Aggregate population
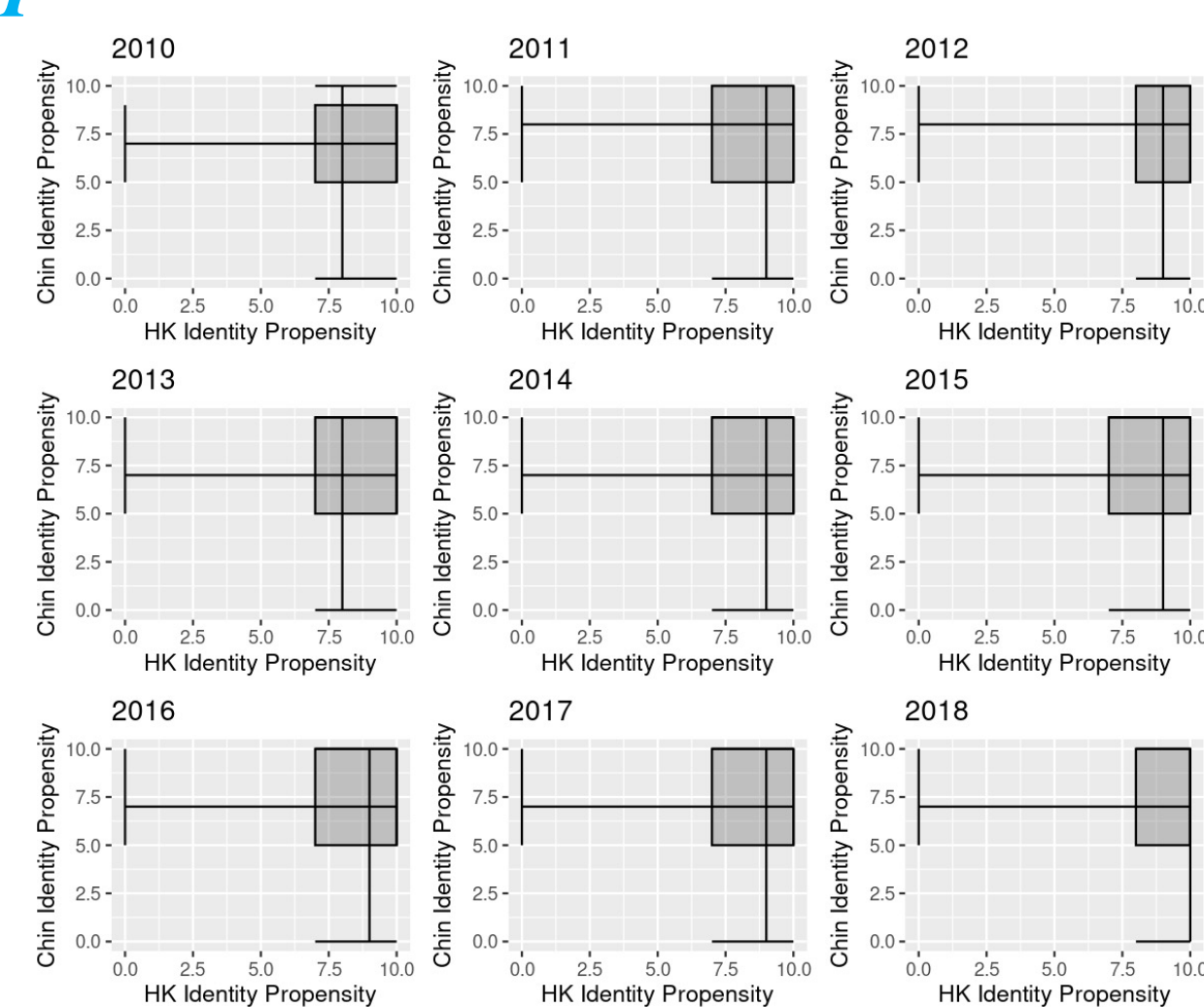
- Result: limited change to the mean and IQR of both identities except some anomalies

Faceted by voter registration
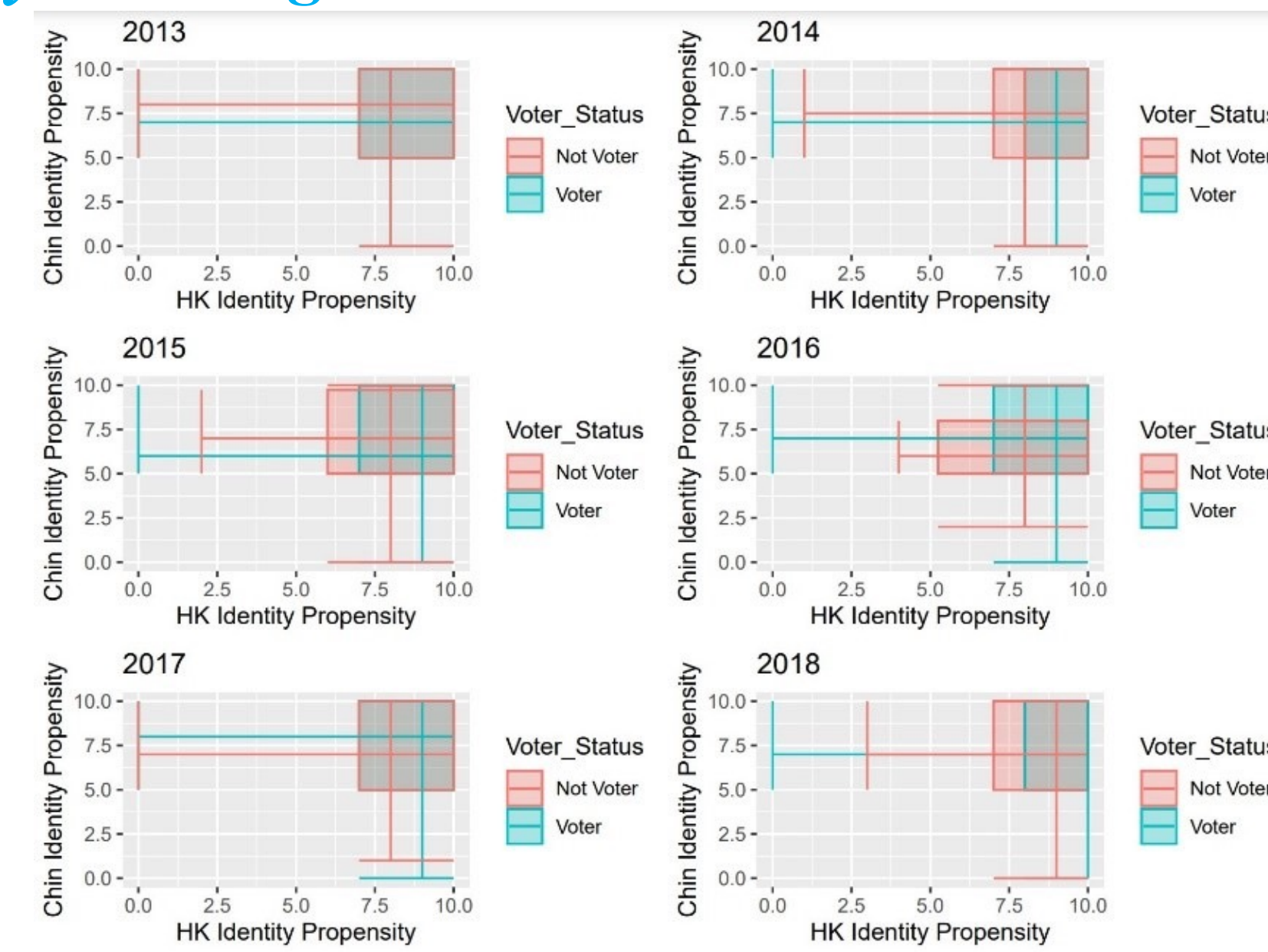
- Significant overlap in top right corner, same Chinese IQR
- Larger HK IQR for non-voters: less steady HK inclination
- Relative increase over time of voters' median HK identification coincides with expected observations

Faceted by age group
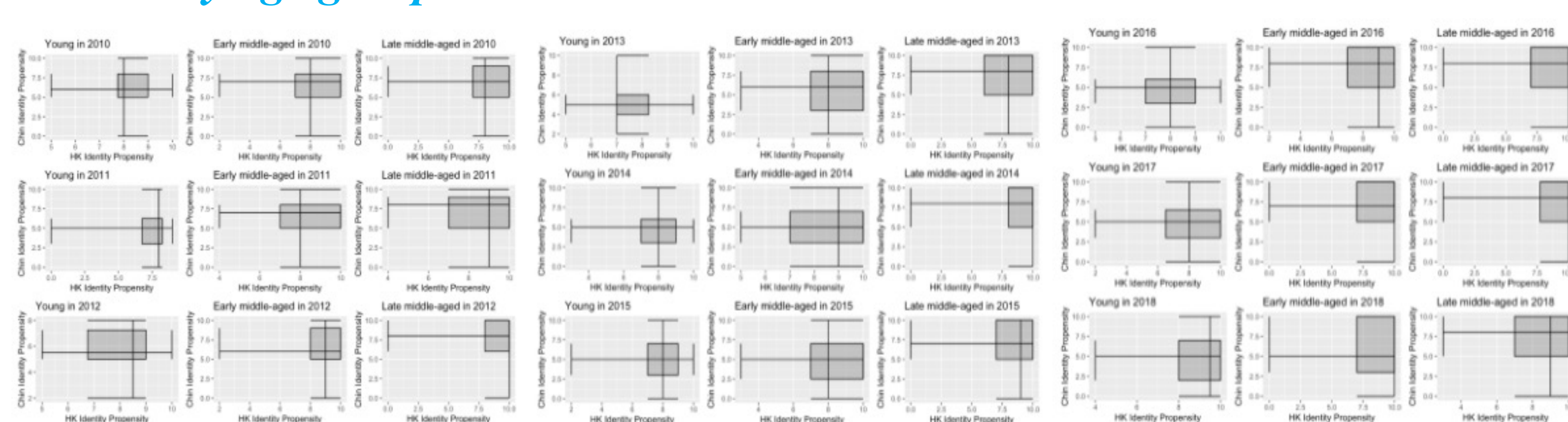
- General concentration of identity inclinations in top right quadrant
- Groups 1 & 2 had the most fluctuation across quadrants

Visualizations of medians and IQR for age groups over time (by measures)
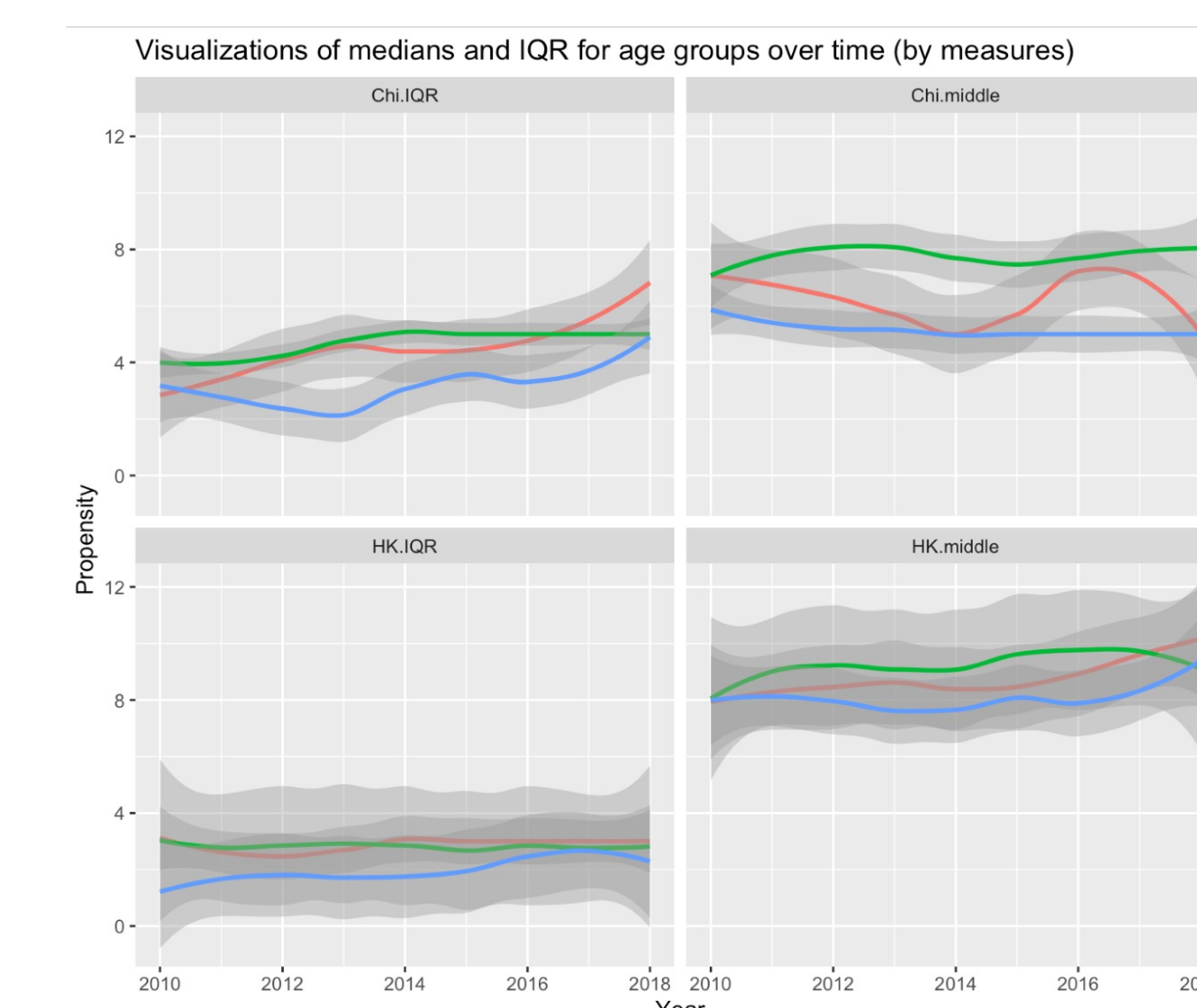
- For group 2, persistent increase in Chinese IQR despite substantial fluctuations
- For group 1, net increase in Chinese identity IQR albeit a drop from 2010 to 2013.
- For groups 1 and 2, slight increase in the median for HK identity propensity.
- Patterns exhibited by group 2 coincide most with the expected observations of H2 compared to other groups.

Discussion and Conclusion
- H1 is invalid and the lack of observable change in identity propensities in the aggregate population makes H2 debatable
- HK and Chinese identity propensities are skewed towards the top right quadrant without a clear pattern of change – difficult to draw inferences on what caused the limited change observed
- Confounding variables that trigger nationalistic sentiment could have affected the results in H2 even if it is true
- Unavailability of micro-level data that can serve as metrics for the housing problem limits our approach to causal inference concerning via correlating micro-level patterns of identity with the macro-level data of residential property prices – an ill comparison
- The young and early middle-aged are more concerned with changing residential property prices, an inference supported by empirical data concerning house ownership across age groups
- The relationship between voter registration and identity orientation is unclear
- Qualitative approaches should be adopted for a more comprehensive understanding
- **In sum, there exists no clear causal linkage between changes in residential property prices and Hongkongers' HK and Chinese identity propensities**