**Appendix**

**Measures and Coding**

For the Hannara and the Minju, variables drawn from the KAPS survey are coded as follows.

*Dues-paying.* “Are you currently paying your membership dues?” Yes (1) and no (0).

*Evaluations of IPD.* “How much do you agree with each of the following statements?” From not at all (1) to very strong influence (5).

* “Decision making is done mostly in a top down process from the central office to local branches in the party”
* “Local opinions are well reflected when the central office formulates party decisions including candidate selection.”
* “The party leadership exercises their status in an abusive manner.”

*Member ideology*. “In politics, people talk of progressive (left) and conservative (right). Where would you place yourself and the party on this scale, where 0 means the progressive and 10 means the conservative?”

*Male*. Male (1), female (0).

*Education*. “What is the highest level of education you have achieved?” Middle school, or below (1), high school (2), and college or higher (3).

*Age*. Actual age of respondent.

*Income.* “How would you evaluate your household financial situation?” From very bad (1) to very good (4). The KAPS survey does not include a question asking objective income.

*Party efficacy. “*How much control do you think you have over decision-making of your party?” The question asked respondents to rank their agreement on a scale from 1 (not at all) to 5 (very much).

*Incentives.* “How much do you agree with the following statements?” From not at all (1) to strongly agree (5).

* *Purposive—policy.* “Party activities are among the very important ways to influence policies and government.”
* *Sociality--community.* “Party activities offer the sense of community belonging.”
* *Sociality—fun.* “Electoral campaigning is itself very interesting and fun.”
* *Selective--career.* “I am trying to build my political career through party activities.”
* *Selective—network.* “I like to be connected to people holding important positions.”

*Voluntary*. “Did you join the party by your own will or because of someone’s request?” By my own will (1) and because of someone’s request (0).

For the Justice, variables drawn from the party’s internal survey in 2016 are coded as follows.

*Member Activism* “Which level of party activities do you think is suitable for you?” Dues-paying only (1), advertising the party (2), attending party activities, except for protests (3), attending party activities, including protests (4), taking a party positon (5), and standing as a candidate of the party in an election (6).

*Evaluations of IPD.* From very poor (1) to very good (5).

* “To what extent do you think the Justice is doing a good job in aggregating member opinions?”
* “To what extent do you think the Justice is doing a good job in guaranteeing members’ participation in party activities?”

*Member Ideology.* “Where would you place yourself on this scale, from most progressive (1) to most conservative (7).”

*Age.* 20s or below (1) 30s (2), 40s (3), 50s (4), and 60s or above (5). The question is given as a multiple-choice, instead of asking actual age.

*Education*. “What is the highest level of education you have achieved?” Middle school, or below (1), high school (2), 2-year college, enrolled or graduated (3), 4-year college, enrolled or graduated (4), and graduate school, enrolled or graduated (5).

*Income.* “Please indicate your yearly household income.” 1,000,000 KRW (1), 10,000,000 – 30,000,000 KRW (2), 30,000,000 – 50,000,000 KRW (3), 50,000,000 – 70,000,000 KRW (5), 70,000,000 – 100,000,000 KRW (6), 100,000,000 KRW or above (7). The Justice survey does not include a question asking subjective income.

*Male.* Male (1), female (0). Responses of “others” (three responses out of total 1650 responses) are recoded as missing.

*Party Efficacy*. “Do you think your desire or expectation at the time of joining the Party is being fulfilled? Not at all (1), Very good (5)