How Do Female Spouses' Political Interests Affect Male Spouses' Views About a Women's Issue?

Yamamura, Eiji

26 October 2009

How Do Female Spouses' Political Interests Affect Male Spouses' Views About a Women's Issue?

Abstract. This paper explored how the degree of female spouses' political interest affects male spouses' views about women's empowerment, using individual level data in Japan. Controlling for unobserved area-specific fixed effects, results showed that males were likely to consider women's empowerment important if their spouses were interested in politics. This spouse effect was observed for conservative males but not for progressive-neutral males. Results were unchanged when the endogeneity bias caused by spouses' political interests were controlled for. These findings suggest that female family members' political interests and views play an important role in determining male views regarding women's issues.

Introduction

How and why is an individual's preference influenced by the environment? A growing amount of research has examined this question. Some studies have explored the influence of fathers, mothers, and siblings on a family member's decision making (e.g., Bertrand et al., 2000; Fernandez et al., 2004; Kawaguchi & Miyazaki, 2009; Sacerdote, 2007).[1] In addition, gender gaps in views about political issues have been increasingly observed (Goldin, 1990).[2] For instance, it has been found that females are more likely than males to consider growth in social welfare spending important (Funk & Athmann, 2008) and to support left-wing policies (Edlund & Pande, 2002).[3] If this is the case, from the viewpoint of economics, a wife's political interest affects her husband's view and is thought to play a critical role in income redistribution policy.

These findings prompt the following question: How is an individual's political view affected by the gender of family members or spouses? Previous studies have provided evidence that offspring gender has a critical influence on parents' views about gender (e.g., Warner, 1991; Warner & Steel, 1999; Washington, 2008).[4] Edlund and Pande (2002) have suggested that the gender gap in political views

---

[1] In the area of public choice, family is treated as a decision-making unit with intergenerational transfer when a voting model is constructed (Breyer & von der Schulenburg, 1990).

[2] Cebula and Meads (2008) have researched the determinants of gender difference related to voter turnout.

[3] According to historical works, it is acknowledged that women's suffrage has had a critical influence on size of government and the allocation of public spending (e.g., Abrams & Settle, 1998; Aidt & Dallal, 2008; Lott & Kenny, 1999; Miller, 2008).

[4] Washington (2008) has reported that men with daughters tend to support policies giving benefits to females, implying that fathers' political views are affected by their daughters.

decreases following marriage, whereas the gap increases following divorce. Intuition suggests that the extent of influence of opposite sex family members would depend on their political interest. That is, the degree of a wife's or daughter's political interest would be associated with the husband's or father's political view. In this case, the husband's or father's general political position should also be considered. However, the relationship between a husband's and wife's characteristics in relation to political views has not been sufficiently taken into account when male political views have been analyzed. To examine this issue, using individual level data in Japan, this paper investigated the effect spousal political interest had on male views about women's empowerment. Furthermore, this effect was compared in conservative and progressive-neutral males.

Data

This paper used individual level data including demographic characteristics (age and sex), household income, education, and political position.[5] In addition, spouse's political interest was also considered. Data were constructed from the Japanese Election and Democracy Study 2000 survey (JEDS hereafter) conducted in all parts of Japan in 2001. A total of 2500 adults (aged 20 years or older) were invited to participate in a survey with stratified two-stage random sampling. The survey collected data on 1618 adults, resulting in a response rate of 64.7%. There

---

[5] The data for this secondary analysis were from the "Japanese Election and Democracy Study 2000 Survey: Social Capital and Perception of Democracy in Japan." Data were gathered in 2000 by the JEDS research group (Yoshitaka Nishizawa, Hiroshi Hirano, Ken'ichi Ikeda, Ichiro Miyake, and Aiji Tanaka). Data were provided by the Social Science Japan Data Archive, Information Center for Social Science Research on Japan, Institute of Social Science, The University of Tokyo.

were 180 sample points divided into 11 areas. According to population size, cities and towns were divided into 5 groups including 13 metropolitan cities, cities with at least 200,000 people, cities with at least 100,000 people, and other cities, towns and villages.

The construction of samples used in this research is shown in Table 1. The original sample contained 1618 observations; 749 were males. Sample size was reduced to 478 when some observations were deleted due to missing values for views about women's empowerment and respondents' characteristics such as age, household income, education or marital status. Furthermore, after excluding observations without valid answers for spouse's political interest, the sample size became 419. The remaining observations divided into progressive-neutral and conservative males were 239 and 180, respectively. These observations were used for the probit estimation, and results are shown in Table 3. To control for endogeneity bias caused by spouse's political interest, I restricted the sample to males with spouses whose ages were available because spouse's age was used as an instrumental variable. This additional selection further reduced the samples.[6] Results using these samples are reported in Table 5.

Variables used for estimation are as follows. The dependent variable was whether respondents thought women's empowerment important, measured using the question "In the list, please choose all that you think are important." Respondents could choose numbered statements from among the list, which

---

[6] It should be noted that selection bias occurred due to restricting samples to males with spouses. Controlling for both endogeneity bias and sample selection bias should be required and is a remaining issue in future research.

included "women's empowerment in public affairs."[7] The key variable capturing spouse's interest in politics was measured by the question "Is your spouse interested in politics?" Response choices were "interested" or "not interested." Control variables were males' ages, household incomes, and years of education.

Women's empowerment was presumed to be important for females but not for males. Therefore, we anticipated that male views about women's empowerment would be influenced by spouses. Twenty-three percent of males with spouses and 19% of males without spouses thought that women's empowerment was important. Therefore, males with spouses were more likely to think women's empowerment important than males without spouses, implying that male views about women's issues appear to depend on the presence of a spouse. This finding is consistent with previous works (e.g., Warner, 1991; Warner & Steel, 1999; Washington, 2008). After further restricting the sample to males with spouses, 31 % of males with spouses who were interested in politics and 20 % of males with spouses who were not interested in politics thought that women's empowerment was important. This shows that males with spouses interested in politics were 1.5 times more inclined to think women's empowerment important than males with spouses not interested in politics. It can be concluded that males seem to be influenced not only by family structure but by a family member's attitude towards politics.

Male political position was measured by the question "If progressive is "0" and conservative is "10," what do you think might best indicate your own position?"

---

[7] The list contained 10 choices. Excluding women's empowerment, choices were not associated with gender issues.

Responses ranged from 0 (progressive) to 10 (conservative). Therefore, males who chose 0 to 4 and males who chose 6 to 10 were considered progressive and conservative, respectively. Those who chose 5 were seen as neutral. Figure 1 presents the distribution of male political position and shows that most males were neutral. I divided the sample into two groups: progressive-neutral (0-5) and conservative (6-10). Table 2 displays means of variables for progressive-neutral and conservative male groups. The rate of respondents who considered women's empowerment important was 0.24 in the progressive-neutral group; the rate was 0.19 in the conservative group. The difference between the two groups was statistically significant (t-test, $p < 0.05$). Therefore, consistent with intuitive thought, respondents in the progressive-neutral group were more likely to consider women's empowerment important than those in the conservative group. The rate of spouses interested in politics in the progressive-neutral group (0.23) was slightly higher than in the conservative group (0.21). The difference between them was not, however, statistically significant (t-test, $p = 0.36$). It should be noted that this finding does not suggest that progressive males are more inclined to choose more political females as spouses.[8] Furthermore, the progressive-neutral group was younger and more educated than the conservative group.

Methods

I explored how the degree of a spouse's political interest affected a male's political opinion about women's empowerment. The estimated function takes the

---

[8] It seems appropriate to conjecture that a male's political position has an influence on his spouse's political interest. This effect appears to result in estimation bias and should be controlled for in future studies.

following form:

Women's empowerment $_{imn}$ = α_0 + α_1 (Spouse dummy) $_{imn}$ +α_2 (Spouse dummy)*
(interest in politics dummy) $_{imn}$ + α_3 Ln (age) $_{imn}$ +α_4Ln (household income) $_{imn}$
+α_5Ln (years of education) $_{imn}$ +e_m+ f_n + u_{imn} ,

where *Women's empowerment $_{imn}$* represents the dependent variable in
individual *i,* city size *m,* and area *n.* Regression parameters are symbolized by *α*'s.
Unobservable area specific effects are represented by *e_m* and *f_n,* which are
controlled by dummy variables, and *u_{imn}* represents the error term. The empirical
model was estimated using Probit analysis. The dependent variable, *Women's*
empowerment, was coded 1 if women's empowerment was thought to be
important, otherwise it was 0. *Spouse dummy* was 1 if the male had a spouse,
otherwise it was 0. As previously indicated, a male's view about a women's issue
depended on whether he had a spouse. *Spouse dummy* was expected to take the
positive sign. *Interest in politics dummy* was coded 1 if a spouse was interested in
politics, otherwise it was coded 0. The key variable was the interaction term
between *Spouse dummy* and *Interest in politics dummy,* which captured how the
degree of a spouse's political interest affected the male's political view. As
mentioned previously, a male's view about a women's issue was affected by the
spouse's political interest; *(Spouse dummy)* (interest in politics dummy)* was
expected to yield the positive sign. In addition, males' ages, household incomes,
and years of education were included to control for individual characteristics.

I conducted the estimation using all samples. Then, to compare effects of male
political position, samples were split into progressive, progressive-neutral, and
conservative males. Separate estimations were carried out using these split

samples. As mentioned earlier in the Data section, a male's political position could seemingly affect choice of females, resulting in endogeneity bias. Therefore, I restricted the sample to males with spouses and used the Probit model with endogenous regressors to control for this bias.[9] Although, in traditional Japanese society, females tended to follow along with their husbands or parents, this has been increasingly changing (Hendry, 1981). In modern Japan, the social position of females has improved, and females have become influential in society. This change reflects the Equal Employment Opportunities Law for Men and Women, enacted in 1985 to improve employment opportunities for females. Younger generations of females are more likely to be appreciated and benefit from the law. Consequently, they are different in social position from older generations, resulting in differences in political position across generations. Hence, spouse's age was used as the instrumental variable because spouse's age is thought to be related to spouse's political interest, but not with the error term u_{imn}.

Results

Tables 3 and 4 show the results of the Probit estimations. Table 5 displays the Probit model with endogenous regressors.

As defined previously, based on the index for male political position ranging from 0 (progressive) to 10 (conservative), I divided the sample into progressive-neutral (0-5) and conservative (6-10) groups.[10] These subsamples

---

[9] The Probit model with endogenous regressors uses instruments for endogenous variables. The software used for the estimation was Stata 10.

[10] As seen in Table 1, progressive group samples were very small, so I combined progressive and neutral groups. When I included city size and area dummies, some samples were

were used for estimations. One might regard people rating themselves as 4 or 6 to be neutral rather than progressive or conservative. Therefore, it was important to examine the sensitivity of estimation results to changes in definitions of male political position. For this purpose, I also defined the sample (0-3) or (0-4) as the progressive group, the sample (0-6) as the progressive-neutral group, and the sample (7-10) as the conservative group. Then I alternatively defined subsamples used for estimations. Definitions of subsamples are exhibited in the political position row in Tables 3, 4, and 5.

Table 3 (A) displays results of *Spouse dummy*. Added to it, Table 3(B) exhibits its interaction term with *Interest in politics dummy*. In the first row, *Spouse Dummy* produced both negative and positive signs, while being statistically insignificant. I found it interesting that a male's political view about women's empowerment was not dependent on having a spouse. Regarding the spouse's political interest effect, it can be seen from *(Spouse dummy)* (interest in politics dummy)* in columns (8)-(14) that positive signs were produced in all estimations, congruent with anticipated results. *(Spouse dummy)* (interest in politics dummy)* was statistically significant, as seen in column (8), indicating that spouse's political interest increased the likelihood that males considered women's empowerment important. After splitting the sample, results for conservative males in columns (13) and (14) were statistically significant, but results for

---

discarded. Sample size of the progressive group, defined by a political position value of (0-3), reduced to only 11 if these dummies were included. To increase sample size, I did not include city size and area dummies when the progressive group was estimated. Results of the progressive-neutral and conservative groups did not change even when these dummies were excluded.

progressive males in columns (9) and (10) and progressive-neutral males in columns (11) and (12) were not significant. Therefore, it can be argued that a spouse's political interest has a greater influence on a conservative male's political view about women's empowerment.

Table 4 reveals that *Interest in politics dummy* was positive in columns (15)-(21) and statistically significant in columns (1), (17), (20) and (21). Additionally, results were considered after controlling for endogeneity bias caused by a male's choice of spouse. As exhibited in column (22) of Table 5, when all samples are used, *Interest in politics dummy* takes the anticipated positive sign, despite being statistically insignificant. It is surprising to observe that *Interest in politics dummy* produced an unexpected negative sign in columns (23)-(26), whereas it yielded the anticipated positive sign in columns (27) and (28). Results in columns (23)-(26) are statistically insignificant, and those in columns (27) and (28) exhibit results statistically significant at the 1 % level. This indicates that a male's political preference is strongly associated with choice of spouse, resulting in estimation bias. As a consequence of controlling for this bias, a spouse's political interest increased conservative male support for women's empowerment, but did not influence support in progressive-neutral males.

Considering the statistical analysis based on the individual data as a whole, in general, a male's political view was affected by his spouse's characteristics, in particular her political interest. This effect was, however, remarkable for conservative males but not for progressive-neutral males. That is, the conservative male's view about a women's issue changed significantly with respect to his spouse's political interest, whereas the progressive or the

10

progressive-neutral male's view changed little. An example of a conservative male changing his views based on female family influence is represented by John Bercow (the new Speaker of the UK House of Commons).[11]

Conclusion

A number of research studies have explored how individuals are affected by family structure and gender differences among family members. There seems to be a difference in values concerning economic policy between genders. For instance, females are considered to have an opinion different from males concerning size of government and the allocation of public spending (e.g., Abrams & Settle, 1998; Aidt & Dallal, 2008; Lott & Kenny, 1999; Miller, 2008). Therefore, the effect of interaction between genders cannot be neglected when economic policy is planned. However, the relationship between an individual's interest in politics and political positions among family members has not been adequately considered in these studies. Therefore, this paper explored how the degree of a spouse's political interest affects the male's view about a women's issue, using individual level data compiled by the JEDS survey.

Key findings are as follows: (1) The degree of a spouse's political interest plays

---

[11] John Bercow was a member of the Conservative Monday Club, which promoted a policy of voluntary repatriation for non-white immigrants. He later left this club. His ideology has moved from far right to the center, apparently at least partly due to his marriage to a relatively progressive woman, Sally Illman. He changed his attitude and view concerning, for example, non-white immigrants and gays and lesbians (http://news.bbc.co.uk/2/hi/uk_news/politics/8114399.stm: accessed on September 1, 2009). Regarding this example, I gratefully acknowledge the helpful information provided by a referee.

a role in whether males consider women's empowerment important. (2) This spouse effect is observed for conservative males but not for progressive-neutral males. (3) These results are unchanged when the endogeneity bias caused by spouse's political interest is controlled for. Based on these results, it is argued that interaction of political preferences among family members plays a critical role in determining views regarding gender issues.

Compared with the existing literature, the primary contribution of this paper is twofold. First, the present study provides an understanding of the effect of family structure on an individual's political view. Second, it elucidates the interaction effect of individuals and their family members' political preferences. This paper, however, did not explore the effect of female spouses on male spouses regarding various political and economic issues such as optimal size of government, public spending, and social welfare. These issues should be researched to explore the questions of how and to what extent female views are reflected in economic policy through interaction within the family. In addition, this paper did not present a theoretical framework on which to base results. Finally, the sample size was small in this study, and larger samples are recommended in future studies.

References

Abrams, B.A., & Settle, R.F. (1998).Women's suffrage and the growth of the welfare state. *Public Choice,* 100, 289-300.

Aidt, T.S., & Dallal, B. (2008).Female voting power: the contribution of women's suffrage to the growth of social spending in Western Europe (1869-1960). *Public Choice,* 134, 391-417.

Bertrand, M., Luttemer, E.F.P., & Mullainathan, S. (2000). Network effects and welfare cultures. *Quarterly Journal of Economics,* 115, 1019-1055.

Breyer, F., & v.d. Schulenburg, J.M.G. (1990).Family ties and social security in a democracy. *Public Choice,* 67, 155-167.

Cebula, R.J., & Meads, H. (2008). An inquiry into the contemporary differential between female and male voter turnouts. *Atlantic Economic Journal,* 36, 301-313.

Edlund, L.C., & Pande, R. (2002).Why have women become left-wing? The political gender gap and the decline in marriage. *Quarterly Journal of Economics,* 117, 917-961.

Fernandez, R., Fogli, A., & Olivetti, C. (2004). Mother's and sons: Preference formation and female labor force dynamics. *Quarterly Journal of Economics,* 119, 1249-1299.

Funk, P. & Gathmann, C. (2008). Gender gaps in policy making: Evidence from direct democracy in Switzerland. Economic Working Papers 1123, Department of Economics and Business, Universitat Pompeu Febra.

Goldin, C. (1990). *Understanding the gender gap: an economic history of*

American women. Cambridge: Cambridge University Press.

Hendry, J. (1981). *Marriage in Changing Japan*. Tuttle Publishers, Tokyo.

Kawaguchi, D. & Miyazaki, J. (2009). Working mothers and sons' preferences regarding female labor supply: Direct evidence from stated preferences. *Journal of Population Economics*, 22, 115-130.

Lott, L.R., & Kenny, L.W. (1999). Did Women's suffrage change the size and scope of government? *Journal of Political Economy*, 107, 1163-1198.

Miller, G. (2008). Women's suffrage, political responsiveness, and child survival in American history. *Quarterly Journal of Economics,* 123, 1287-1327.

Sacerdote, B. (2007). How large are the effects from changes in family environment? A study of Korean American adoptees. *Quarterly Journal of Economics,* 122, 119-157.

Washington, E.L. (2008). Female socialization: How daughters affect their legislator father's voting on women's issues. *American Economic Review,* 98, 311-332.

Warner, R. L. (1991). Does the sex of your child matter? Support for feminism among women and men in the United States and Canada. *Journal of marriage and the Family,* 53, 1051-1056.

Warner, R. L. & Steel B.S. (1999).Child rearing as a mechanism for social change: The relationship of child gender to parents' commitment to gender equity. *Gender and Society,* 13, 503-517.

TABLE 1
Sample Construction (Numbers in Samples)

	All		Males with spouses whose ages were available	
Original Sample	1618		746	
Males	749		640	
Views about women's empowerment and respondent characteristics available [a]	478	(I) [b]	472	
Spouse's interest in politics available	432	(I) [b]	428	(II) [d]
Male's political position available	419	(I) [b,c]	415	(II) [d]
Male's political position progressive (Political position value [0-4])	73	(I) [c]	71	(II) [d]
Male's political position progressive-neutral (Political position value [0-5])	239	(I) [b, c]	235	(II) [d]
Male's political position conservative (Political position value [6-10])	180	(I) [b, c]	180	(II) [d]

a. Individual characteristics included male's age, household income, education, and marital status. In addition, the spouse was female.
b. (I) Sample was used for the estimation reported in Table 3.
c. (I) Sample was used in Table 2.
d. (II) Sample was used for the estimation reported in Tables 4 and 5.

TABLE 2

Comparison Between Progressive-Neutral and Conservative Males

	Progressive-Neutral	Conservative	t-value
Women's empowerment considered important (Yes = 1, No = 0	0.24	0.19	1.74*
Spouse interested in politics (Yes = 1, No = 0	0.23	0.21	0.33
Average age	51.5	57.5	5.16**
Average household income (millions of yen)	612	657	1.41
Average years of education	12.2	11.7	2.24*

In the t-value column for the mean comparison test, * and ** denote significance of difference at the 5% and 1% levels, respectively.

TABLE 3
(A) Probit Model Estimations

Political position	0-10 All	0-3 Prog	0-4 Prog	0-5 Prog-Neutral	0-6 Prog-Neutral	6-10 Conser	7-10 Conser
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Spouse dummy	-0.03	-0.09	-0.25	-0.16	-0.09	0.11	-0.65
	(-0.14)	(-0.15)	(-0.43)	(-0.48)	(-0.29)	(0.21)	(-1.00)
Ln (age)	0.07	-2.38***	-0.49	-0.07	-0.14	0.98	1.77**
	(0.29)	(-2.60)	(-0.78)	(-0.02)	(-0.46)	(1.50)	(3.11)
Ln (household income)	0.11	0.38	-0.20	0.12	0.09	0.53*	0.39
	(0.91)	(0.87)	(-0.54)	(0.76)	(0.58)	(1.95)	(1.48)
Ln (years of education)	-0.17	-3.01*	-0.59	-0.64	-0.43	-0.06	0.50
	(-0.59)	(-1.94)	(-0.79)	(-1.58)	(-1.14)	(-0.12)	(0.95)
Constant	-1.14	13.3***	4.21	1.03	0.88	-7.86*	-11.1***
	(-0.75)	(2.65)	(1.36)	(0.53)	(0.50)	(-2.11)	(-3.27)
Obs	478	41	78	262	310	194	160
Wald chi-square	17.8	8.22	3.04	17.4	11.3	28.4	39.7

(B) Probit Model Estimations

Political position	0-10 All	0-3 Prog	0-4 Prog	0-5 Prog-Neutral	0-6 Prog-Neutral	6-10 Conser	7-10 Conser
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Spouse dummy	0.12	-0.13	-0.17	0.26	0.21	0.15	-1.18
	(0.45)	(-0.20)	(-0.25)	(0.67)	(0.63)	(0.27)	(-1.60)
Spouse dummy	0.28*	0.16	0.58	0.15	0.21	0.54*	0.85**
Interest in politics dummy	(1.72)	(0.27)	(1.60)	(0.67)	(1.06)	(1.97)	(2.52)
Ln (age)	0.08	-2.43*	-0.38	-0.03	-0.11	0.90	2.00***
	(0.30)	(-2.27)	(-0.59)	(-0.10)	(-0.33)	(1.34)	(2.92)
Ln (household income)	0.18	0.36	-0.12	0.20	0.15	0.62**	0.64**
	(1.34)	(0.80)	(-0.33)	(1.10)	(0.91)	(2.15)	(2.16)
Ln (years of education)	-0.19	-2.95*	-0.48	-0.71*	-0.47	-0.06	0.61
	(-0.62)	(-1.82)	(-0.61)	(-1.69)	(-1.19)	(-0.12)	(0.98)
Constant	-1.64	13.5**	2.71	0.56	0.41	-8.29*	-13.7***
	(-0.99)	(2.42)	(0.82)	(0.26)	(0.21)	(-2.13)	(-3.48)
Obs	432	39	73	239	282	180	143
Wald chi-square	23.5	7.27	3.99	18.2	13.4	33.4	41.1

Not reported are city size and area dummies, which are included in all estimations except. Values in parentheses are z-statistics calculated by robust standard errors. Based on two-tailed rejection regions, * and ** denote significance at the 10% and 5% levels, respectively. With the exception of (2), (3), (9) and (10), city size and area dummies are included, but not reported. *Women's empowerment dummy* was the dependent variable.

TABLE 4
Probit Model

| Political position	0-10 All	0-3 Prog	0-4 Prog	0-5 Prog-Neutral	0-6 Prog-Neutral	6-10 Conser	7-10 Conser
	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Interest in politics dummy	0.28*	0.34	0.60*	0.16	0.20	0.45*	0.96***
	(1.79)	(0.51)	(1.70)	(0.75)	(1.02)	(1.72)	(3.01)
Ln (age)	0.15	-3.00*	-0.39	0.04	-0.03	1.07*	1.92***
	(0.56)	(-2.27)	(-0.58)	(0.13)	(-0.10)	(1.66)	(1.66)
Ln (household income)	0.25*	0.60	-0.04	0.29	0.22	0.62**	0.64**
	(1.82)	(1.17)	(-0.13)	(1.60)	(1.33)	(2.14)	(2.04)
Ln (years of education)	-0.27	-4.31*	-0.65	-0.88**	-0.56	-0.01	0.53
	(-0.86)	(-1.97)	(-0.81)	(-2.03)	(-1.40)	(-0.03)	(0.87)
Constant	-2.13	17.1**	2.53	-0.11	-0.17	-8.63*	-14.3***
	(-1.34)	(2.32)	(0.75)	(-0.05)	(-0.09)	(-2.26)	(-3.31)
Obs	428	38	71	235	278	180	143
Wald chi-square	24.6	6.75	4.56	19.7	13.6	29.4	36.3

Not reported are city size and area dummies, which are included in all estimations except. Samples were limited to males with a spouse. Values in parentheses are z-statistics calculated by robust standard errors. Based on two-tailed rejection regions,*, ** and *** denote significance at the 10%, 5% and 1% levels, respectively. With the exception of (16) and (17), city size and area dummies are included, but not reported. *Women's empowerment dummy* was the dependent variable

TABLE 5
IV Probit Model

Political position	0-10 All	0-3 Prog	0-4 Prog	0-5 Prog- Neutral	0-6 Prog- Neutral	6-10 Conser	7-10 Conser
	(22)	(23)	(24)	(25)	(26)	(27)	(28)
Interest in politics dummy	1.20 (0.54)	-10.6 (-0.13)	-0.52 (-0.03)	-1.81 (-0.79)	-0.75 (-0.27)	2.27*** (2.66)	2.82*** (12.6)
Ln (age)	0.04 (0.12)	-0.003 (-0.00)	0.04 (0.01)	0.54 (0.95)	0.21 (0.28)	1.05* (1.87)	1.21 (1.22)
Ln (household income)	0.22 (1.30)	2.88 (0.16)	0.03 (0.03)	0.27 (1.16)	0.23 (1.42)	0.51 (1.64)	0.42 (1.29)
Ln (years of education)	-0.34 (-1.08)	-9.00 (-0.25)	-0.89 (-0.26)	-0.21 (-0.16)	-0.33 (-0.39)	0.16 (0.36)	0.28 (0.55)
Constant	-1.50 (-0.59)	6.08 (0.07)	1.27 (0.07)	-3.61 (-0.88)	-1.73 (-0.36)	-8.64* (-2.20)	-9.30*** (-4.31)
Obs	428	38	71	235	278	180	143
Wald chi-square	31.3	1.34	1.32	57.8	13.6	117.1	191.3

Not reported are city size and area dummies, which are included in all estimations except. Samples were limited to males with a spouse. Values in parentheses are z-statistics calculated by robust standard errors. Based on two-tailed rejection regions,*, ** and *** denote significance at the 10%, 5% and 1% levels, respectively. With the exception of (23) and (24), city size and area dummies are included, but not reported. *Interest in politics dummy* was treated as an endogenous variable and thus instrumented. Age of spouse was used as an instrumental variable. *Women's empowerment dummy* was the dependent variable.

FIGURE 1
Distribution of Political Position
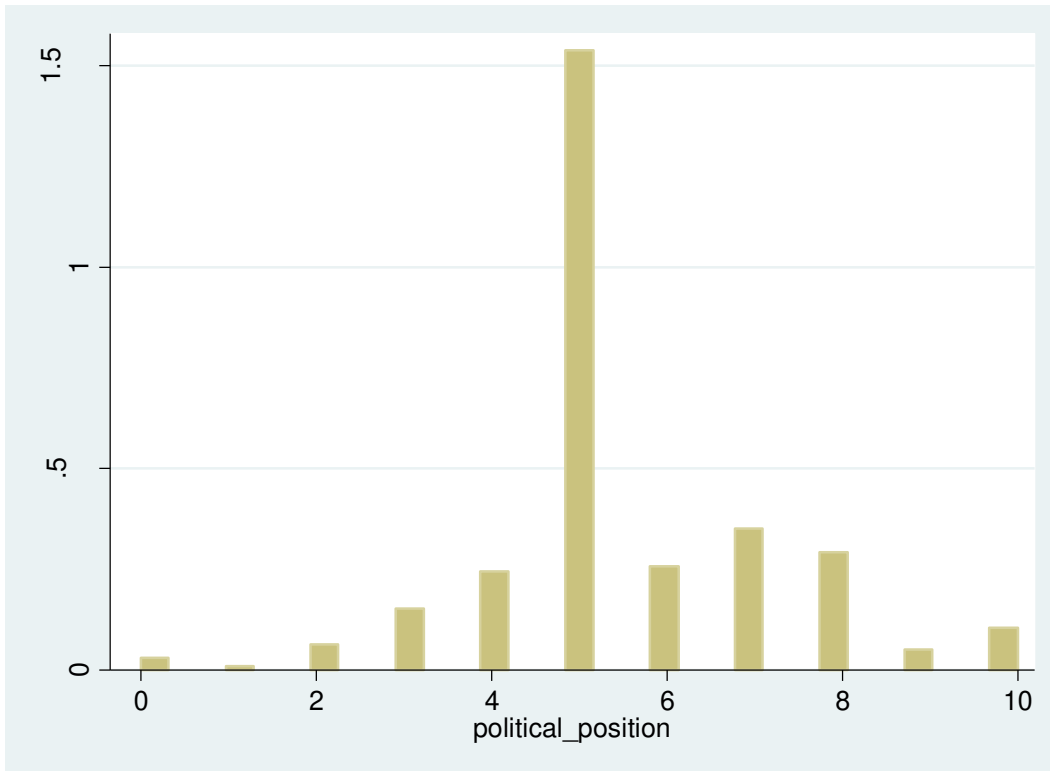
Values range from 0 (progressive) to 10 (conservative).