Bound by Borders: Voter Mobilization through Social Networks

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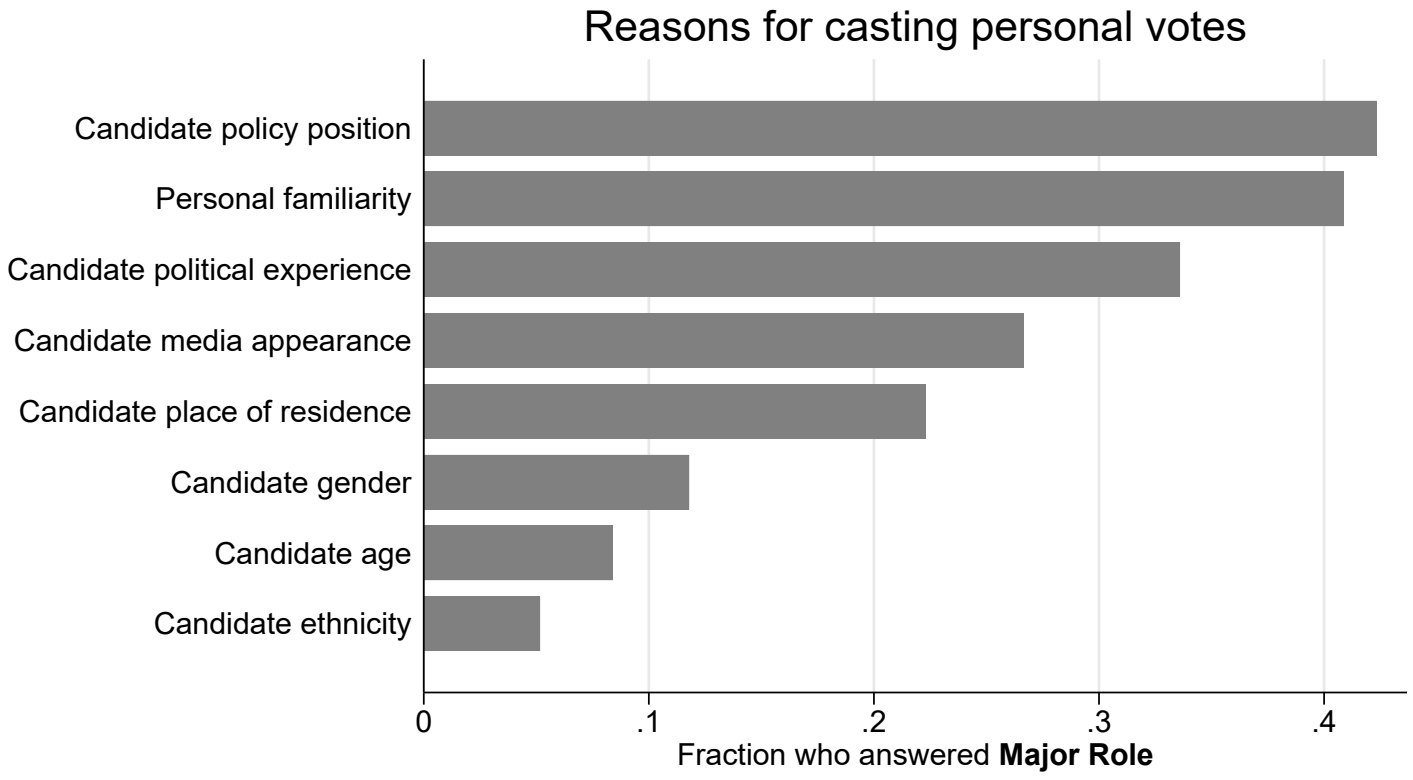
'Personal familiarity' plays a major role in local elections



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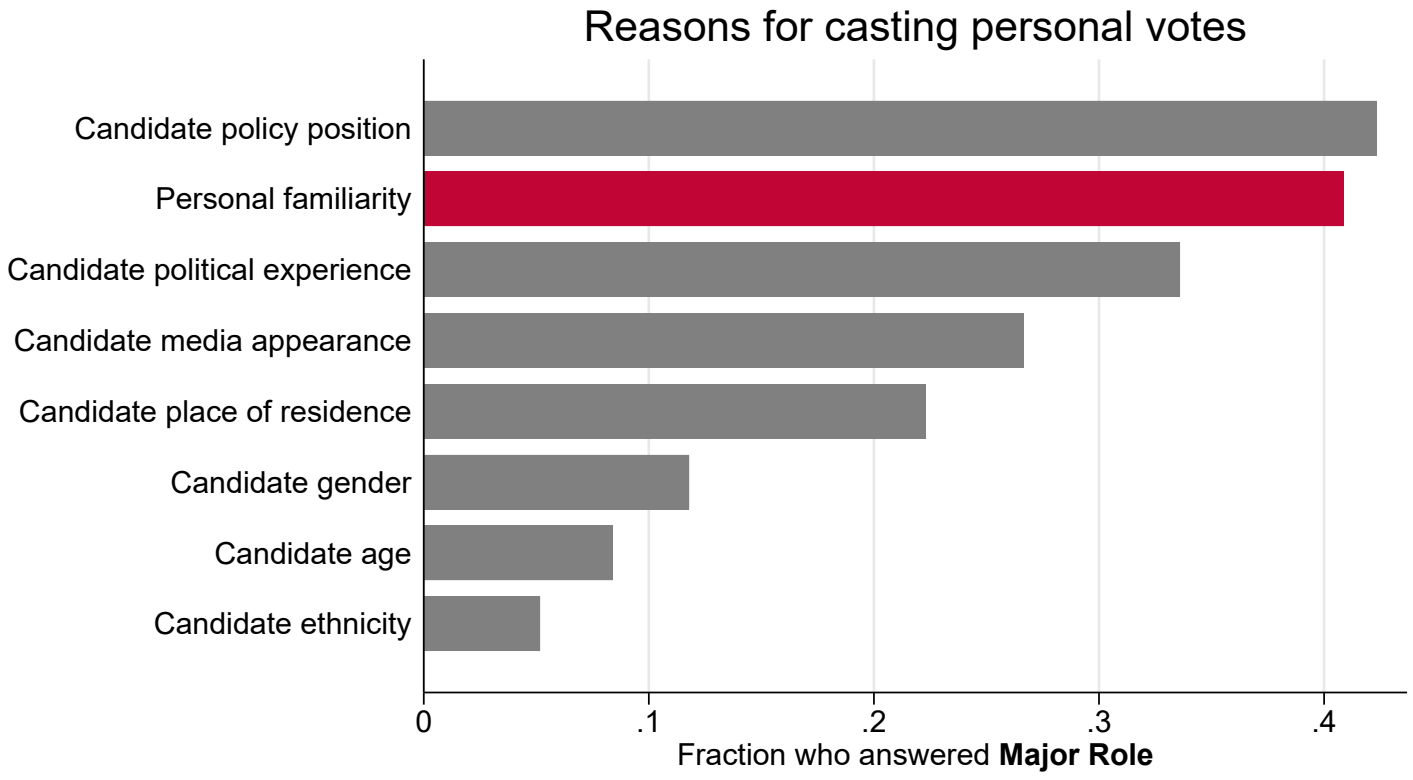

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Much of the literature assumes that activating social and economic networks is a central strategy for political mobilization (see, e.g., Cox and Munger, 1989; Uhlaner, 1989).

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- Signal relevant information

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We study **larger** networks that reach **across district boundaries** using rich administrative data from Norway

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  - Effects $\nearrow$ when: network size $\searrow$, distance $\searrow$, viability $\nearrow$
  - Sharp drop-off in mobilization impulse as networks cross district borders

Contribution

The paradox of voting (Downs, 1956)

$$P \times B > C$$

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Two schools of thought on turnout:

1. Individual decisions, e.g., civic duty (Riker and Ordeshook, 1968), altruism (Fowler, 2006); resources (Brady et. al, 1995)

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2. Strategic mobilization (e.g., Arceneaux and Green, 2009; Cox and Munger, 1989; Shachar and Nalebuff, 1999)

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'The jury is still out on what the foundations of micro-level turnout are' (Smets and van Ham, 2013, p. 345)

Outline

- Intro
- Institutional setting
- Data & network classification
- Empirical specification
- Results: Baseline
- Results: Distance to border
- Results: Why do immigrants mobilize more?
- Conclusion

Institutional Setting: Norway

Three levels of government: local, regional, national

- Local level is responsible for key welfare services – employ 17 percent of the labor force

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- Number of seats determined by party votes
- Candidates determined by ex-post rank on party lists

Example: Oslo Labor Party (2015)

Rank ex-ante	Candidate
1	**Raymond Johansen**
2	**Tone Tellevik Dahl**
3	**Rina Mariann Hansen**
4	**Frode Jacobsen**
5	**Anders Ørnø Røberg Larsen**
6	**Khamshajiny Gunaratnam**
7	**Andreas Halse**
8	**Victoria Marie Evensen**
9	**Didrik Beck**
10	**Julie Lødrup**
11	Rune Gerhardsen
12	Turid Birkeland
13	Abdullah Alsabeehg
14	Susann S Jørgensen
15	Dag Bayegan Harlem
16	Roja Darian
17	Frode Jarl Kyvåg
18	Mari Morken
19	Per Anders Torvik Langerød
20	Gro Balaas
21	Jon Reidar Øyan
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65	Thorvald Stoltenberg

Example: Oslo Labor Party (2015)

Rank ex-ante	Candidate	Votes
1	**Raymond Johansen**	**23,311**
2	**Tone Tellevik Dahl**	**5,988**
3	**Rina Mariann Hansen**	**3,076**
4	**Frode Jacobsen**	**2,701**
5	**Anders Ørnø Røberg Larsen**	**3,131**
6	**Khamshajiny Gunaratnam**	**4,031**
7	**Andreas Halse**	**2,144**
8	**Victoria Marie Evensen**	**2,675**
9	**Didrik Beck**	**1,607**
10	**Julie Lødrup**	**2,314**
11	Rune Gerhardsen	3,340
12	Turid Birkeland	3,058
13	Abdullah Alsabeehg	3,796
14	Susann S Jørgensen	1,419
15	Dag Bayegan Harlem	927
16	Roja Darian	1,221
17	Frode Jarl Kyvåg	4,490
18	Mari Morken	1,704
19	Per Anders Torvik Langerød	1,641
20	Gro Balaas	1,576
21	Jon Reidar Øyan	1,596
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Rank ex-ante	Candidate	Votes	Bonus
1	**Raymond Johansen**	**23,311**	**25,608**
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9	**Didrik Beck**	**1,607**	**25,608**
10	**Julie Lødrup**	**2,314**	**25,608**
11	Rune Gerhardsen	3,340	0
12	Turid Birkeland	3,058	0
13	Abdullah Alsabeehg	3,796	0
14	Susann S Jørgensen	1,419	0
15	Dag Bayegan Harlem	927	0
16	Roja Darian	1,221	0
17	Frode Jarl Kyvåg	4,490	0
18	Mari Morken	1,704	0
19	Per Anders Torvik Langerød	1,641	0
20	Gro Balaas	1,576	0
21	Jon Reidar Øyan	1,596	0
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65	Thorvald Stoltenberg	3,857	0

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Rank ex-ante	Candidate	Votes	Bonus	Rank ex-post
1	**Raymond Johansen**	**23,311**	**25,608**	**1**
2	**Tone Tellevik Dahl**	**5,988**	**25,608**	**2**
3	**Rina Mariann Hansen**	**3,076**	**25,608**	**5**
4	**Frode Jacobsen**	**2,701**	**25,608**	**6**
5	**Anders Ørnø Røberg Larsen**	**3,131**	**25,608**	**4**
6	**Khamshajiny Gunaratnam**	**4,031**	**25,608**	**3**
7	**Andreas Halse**	**2,144**	**25,608**	**9**
8	**Victoria Marie Evensen**	**2,675**	**25,608**	**7**
9	**Didrik Beck**	**1,607**	**25,608**	**10**
10	**Julie Lødrup**	**2,314**	**25,608**	**8**
11	Rune Gerhardsen	3,340	0	18
12	Turid Birkeland	3,058	0	20
13	Abdullah Alsabeehg	3,796	0	15
14	Susann S Jørgensen	1,419	0	32
15	Dag Bayegan Harlem	927	0	44
16	Roja Darian	1,221	0	38
17	Frode Jarl Kyvåg	4,490	0	12
18	Mari Morken	1,704	0	26
19	Per Anders Torvik Langerød	1,641	0	28
20	Gro Balaas	1,576	0	31
21	Jon Reidar Øyan	1,596	0	30
...	...	...	...	...
65	Thorvald Stoltenberg	3,857	0	14

Example: Oslo Labor Party (2015)

Rank ex-ante	Candidate	Votes	Bonus	Rank ex-post ▼
1	**Raymond Johansen**	**23,311**	**25,608**	**1**
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7	**Andreas Halse**	**2,144**	**25,608**	**9**
9	**Didrik Beck**	**1,607**	**25,608**	**10**
33	Geir Lippestad	7,470	0	11
17	Frode Jarl Kyvåg	4,490	0	12
23	Mobashar Banaras	4,014	0	13
65	Thorvald Stoltenberg	3,857	0	14
13	Abdullah Alsabeehg	3,796	0	15
43	Khalid Mahmood	3,652	0	16
26	Prableen Kaur	3,457	0	17
11	Rune Gerhardsen	3,340	0	18
29	Nasir Mushtaq Ahmed	3,217	0	19
12	Turid Birkeland	3,058	0	20
24	Birgit Lovise Røkkum Skarstein	2,722	0	21
...	...	...	...	...
65	Henrik Hovland	411	0	65

Example: Oslo Labor Party (2015)

Rank ex-ante	Candidate	Votes	Bonus	Rank ex-post ▼	Elected
1	**Raymond Johansen**	**23,311**	**25,608**	**1**	**Yes**
2	**Tone Tellevik Dahl**	**5,988**	**25,608**	**2**	**Yes**
6	**Khamshajiny Gunaratnam**	**4,031**	**25,608**	**3**	**Yes**
5	**Anders Ørnø Røberg Larsen**	**3,131**	**25,608**	**4**	**Yes**
3	**Rina Mariann Hansen**	**3,076**	**25,608**	**5**	**Yes**
4	**Frode Jacobsen**	**2,701**	**25,608**	**6**	**Yes**
8	**Victoria Marie Evensen**	**2,675**	**25,608**	**7**	**Yes**
10	**Julie Lødrup**	**2,314**	**25,608**	**8**	**Yes**
7	**Andreas Halse**	**2,144**	**25,608**	**9**	**Yes**
9	**Didrik Beck**	**1,607**	**25,608**	**10**	**Yes**
33	Geir Lippestad	7,470	0	11	Yes
17	Frode Jarl Kyvåg	4,490	0	12	Yes
23	Mobashar Banaras	4,014	0	13	Yes
65	Thorvald Stoltenberg	3,857	0	14	Yes
13	Abdullah Alsabeehg	3,796	0	15	Yes
43	Khalid Mahmood	3,652	0	16	Yes
26	Prableen Kaur	3,457	0	17	Yes
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29	Nasir Mushtaq Ahmed	3,217	0	19	Yes
12	Turid Birkeland	3,058	0	20	Yes
24	Birgit Lovise Røkkum Skarstein	2,722	0	21	No
...	...	...	...	...	...
65	Henrik Hovland	411	0	65	No

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Rank ex-ante	Candidate	Votes	Bonus	Rank ex-post ▼	Change
1	**Raymond Johansen**	**23,311**	**25,608**	**1**	**0**
2	**Tone Tellevik Dahl**	**5,988**	**25,608**	**2**	**0**
6	**Khamshajiny Gunaratnam**	**4,031**	**25,608**	**3**	**3**
5	**Anders Ørnø Røberg Larsen**	**3,131**	**25,608**	**4**	**1**
3	**Rina Mariann Hansen**	**3,076**	**25,608**	**5**	**-2**
4	**Frode Jacobsen**	**2,701**	**25,608**	**6**	**-2**
8	**Victoria Marie Evensen**	**2,675**	**25,608**	**7**	**1**
10	**Julie Lødrup**	**2,314**	**25,608**	**8**	**2**
7	**Andreas Halse**	**2,144**	**25,608**	**9**	**-2**
9	**Didrik Beck**	**1,607**	**25,608**	**10**	**-1**
33	Geir Lippestad	7,470	0	11	22
17	Frode Jarl Kyvåg	4,490	0	12	5
23	Mobashar Banaras	4,014	0	13	10
65	Thorvald Stoltenberg	3,857	0	14	51
13	Abdullah Alsabeehg	3,796	0	15	-2
43	Khalid Mahmood	3,652	0	16	27
26	Prableen Kaur	3,457	0	17	9
11	Rune Gerhardsen	3,340	0	18	-7
29	Nasir Mushtaq Ahmed	3,217	0	19	10
12	Turid Birkeland	3,058	0	20	-8
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65	Henrik Hovland	411	0	65	-12

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65	Thorvald Stoltenberg	3,857	0	14	51
64	Eskil Pedersen	2,360	0	23	41
61	Bashe Musse	2,199	0	24	37
57	Munir Jaber	1,637	0	29	28
43	Khalid Mahmood	3,652	0	16	27
33	Geir Lippestad	7,470	0	11	22
40	Fatima Ali Madar	1,806	0	25	15
62	Monica Semb Sætre	832	0	47	15
41	Ulrik Imtiaz Rolfsen	1,704	0	27	14
23	Mobashar Banaras	4,014	0	13	10
29	Nasir Mushtaq Ahmed	3,217	0	19	10
51	Arshad Mubarak Ali	1,074	0	42	9
26	Prableen Kaur	3,457	0	17	9
60	Marianne Andenæs	733	0	52	8
45	Andreas Olsen	1,137	0	39	6
39	Elvis Chi Nwosu	1,398	0	34	5
17	Frode Jarl Kyvåg	4,490	0	12	5
56	Lene Løken	745	0	51	5
38	Zaineb Al Samarai	1,419	0	33	5
24	Birgit Lovise Røkkum Skarstein	2,722	0	21	3
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3) Driving distance between BSU centroids (Institute of Transport Economics)

Three types of static networks

Summary Stats Size distributions

Three types of static networks

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Family

- **Narrow**: Mother, father, sibling, children
- **Broad**: Mother, father, sibling, children, grandparents, grandchildren, aunts, uncles, nieces, nephews and cousins

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Co-workers in SME's ($\leq$ 100 employees)

- **Narrow**: Co-worker at the same workplace and age group
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Immigrants

- **Narrow**: Country of birth + occupation (3-digit ISCO)
- **Broad**: Country of birth + occupation (2-digit ISCO)

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- **Narrow**: Country of birth + occupation (3-digit ISCO)
  - 231 University and higher education teachers
  - 234 Primary school and early childhood teachers
- **Broad**: Country of birth + occupation (2-digit ISCO)
  - 23 Teaching professionals

Three types of static networks

Summary Stats Size distributions

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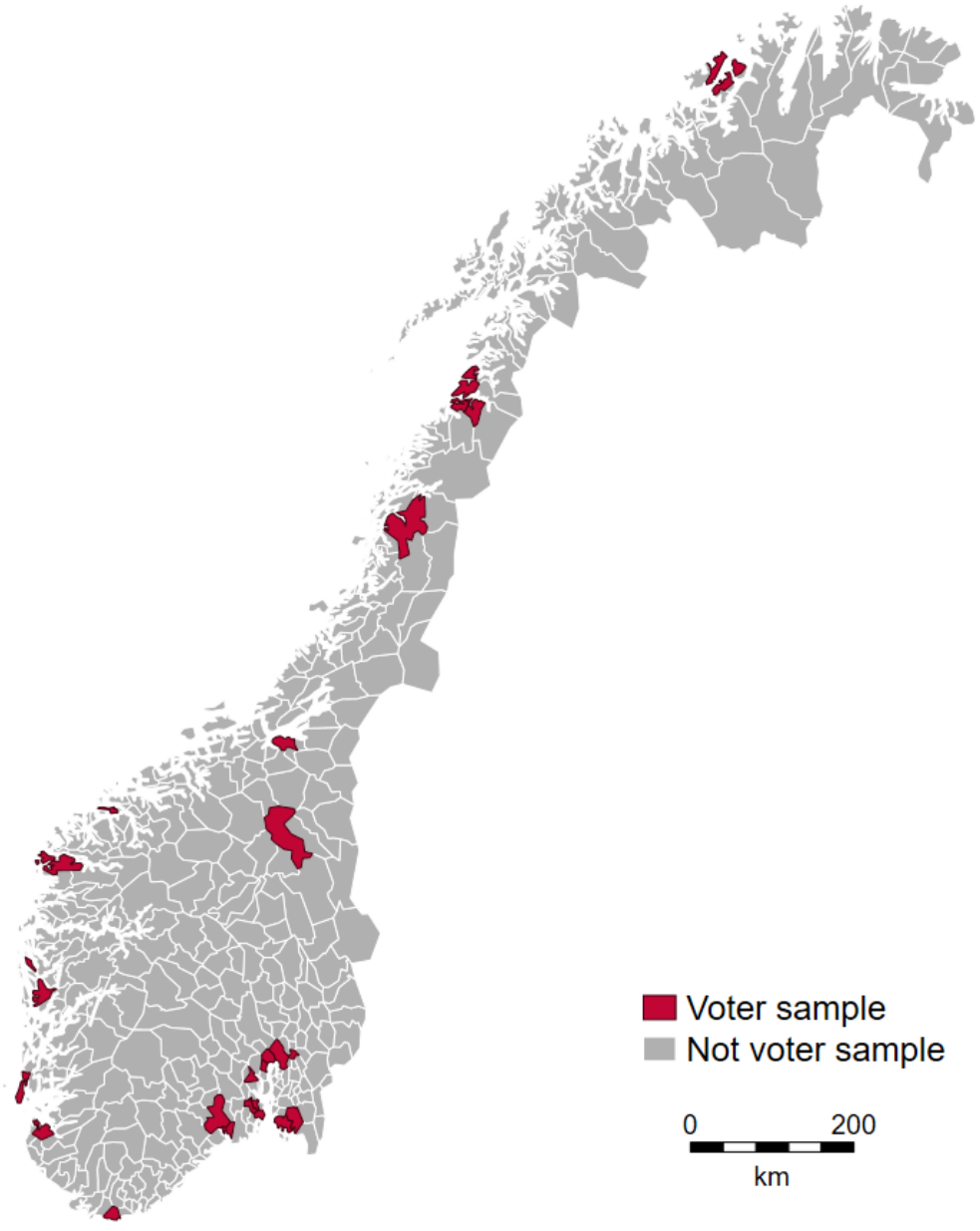
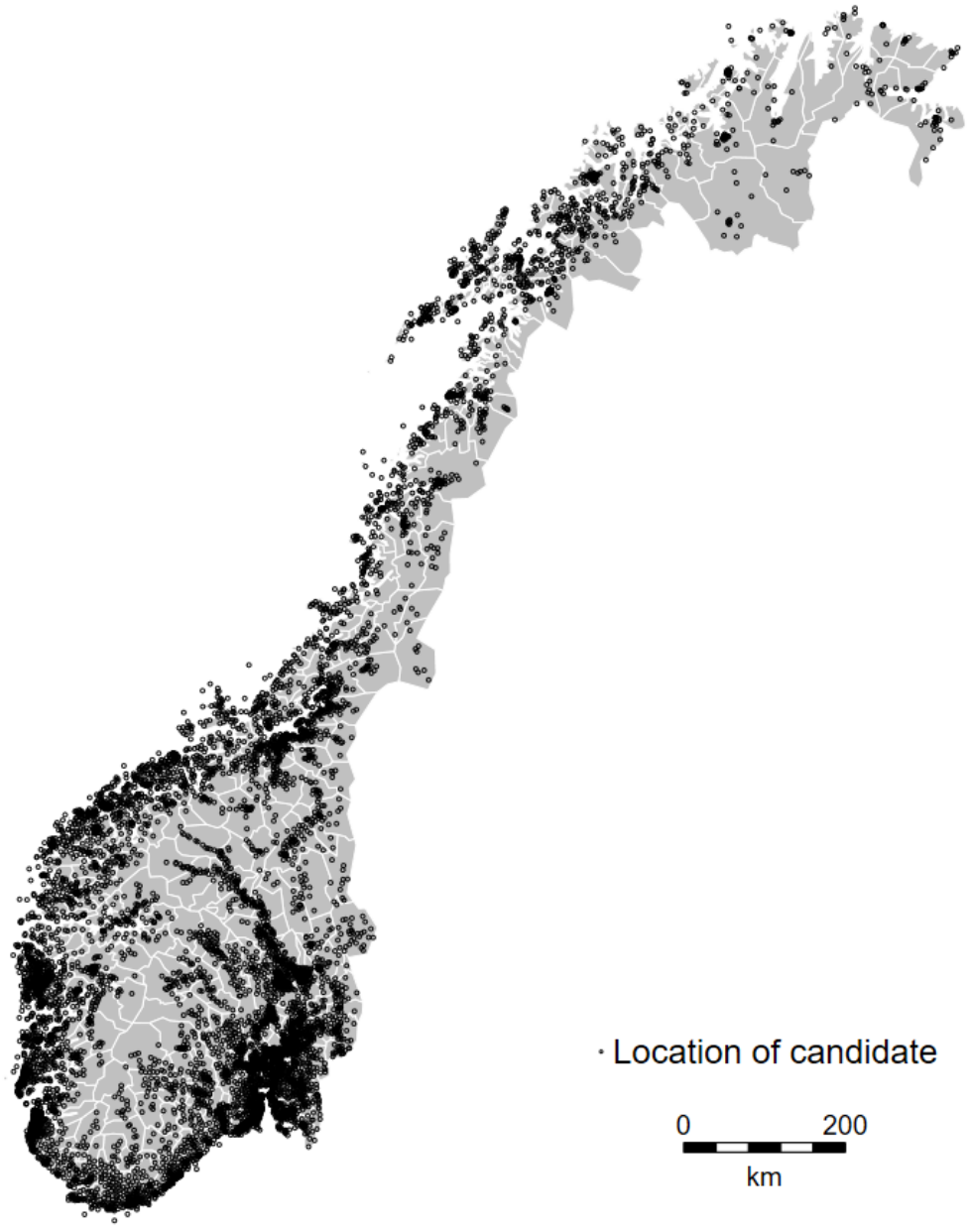
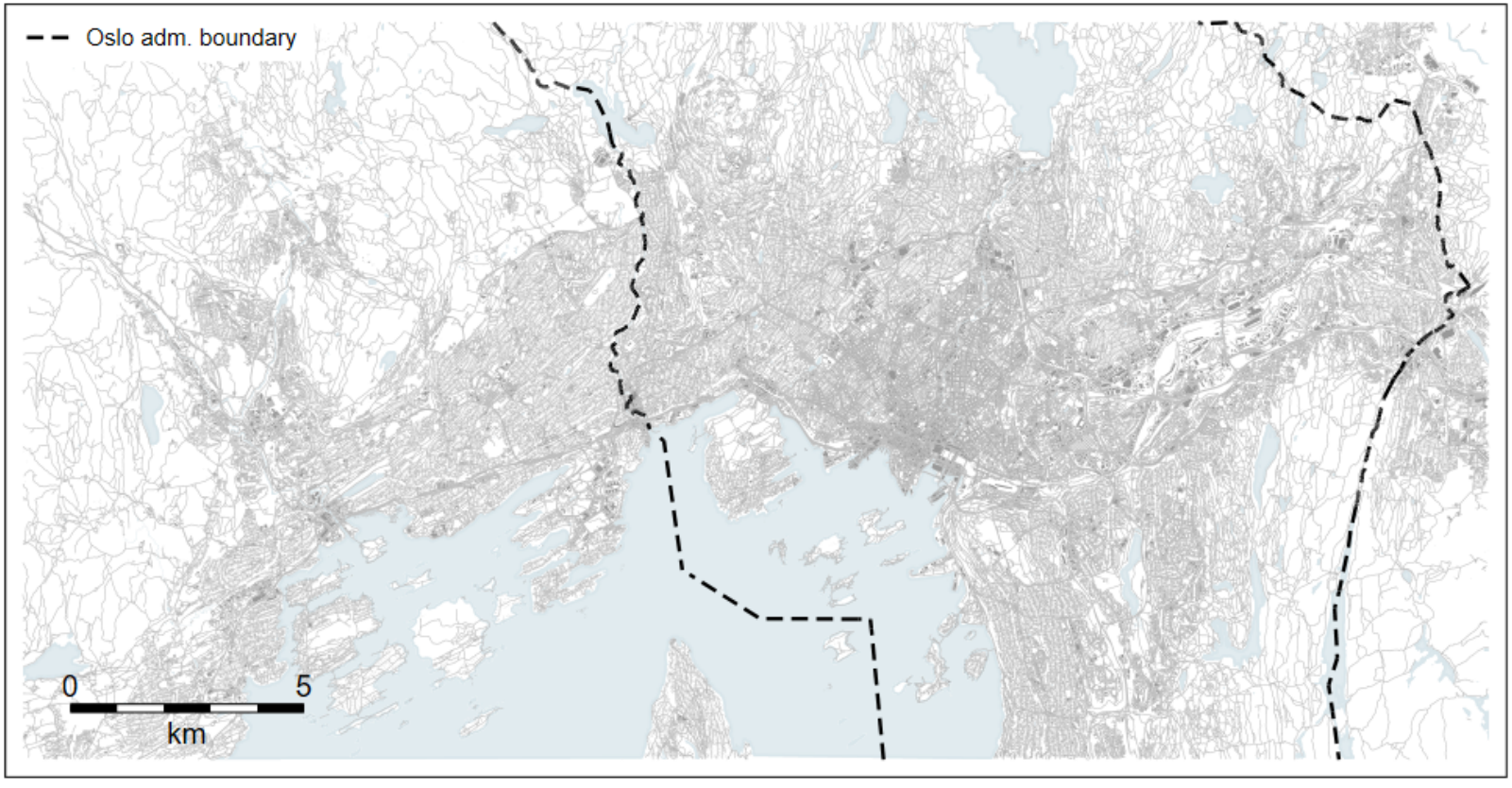
0
200
km


Voter sample
Not voter sample
0
200
km


· Location of candidate
0
200
km

0
200
km

Close-up of Oslo region



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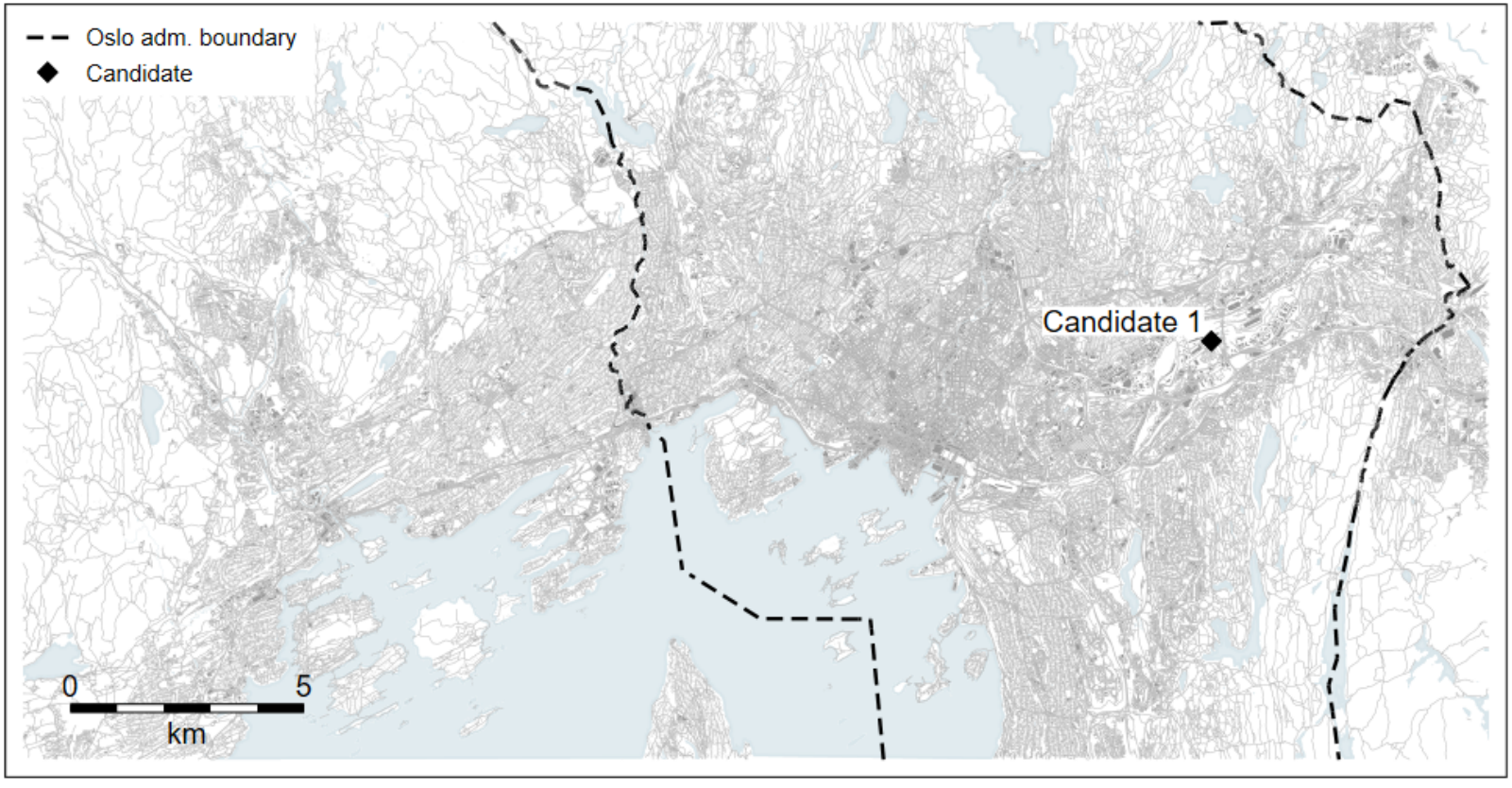

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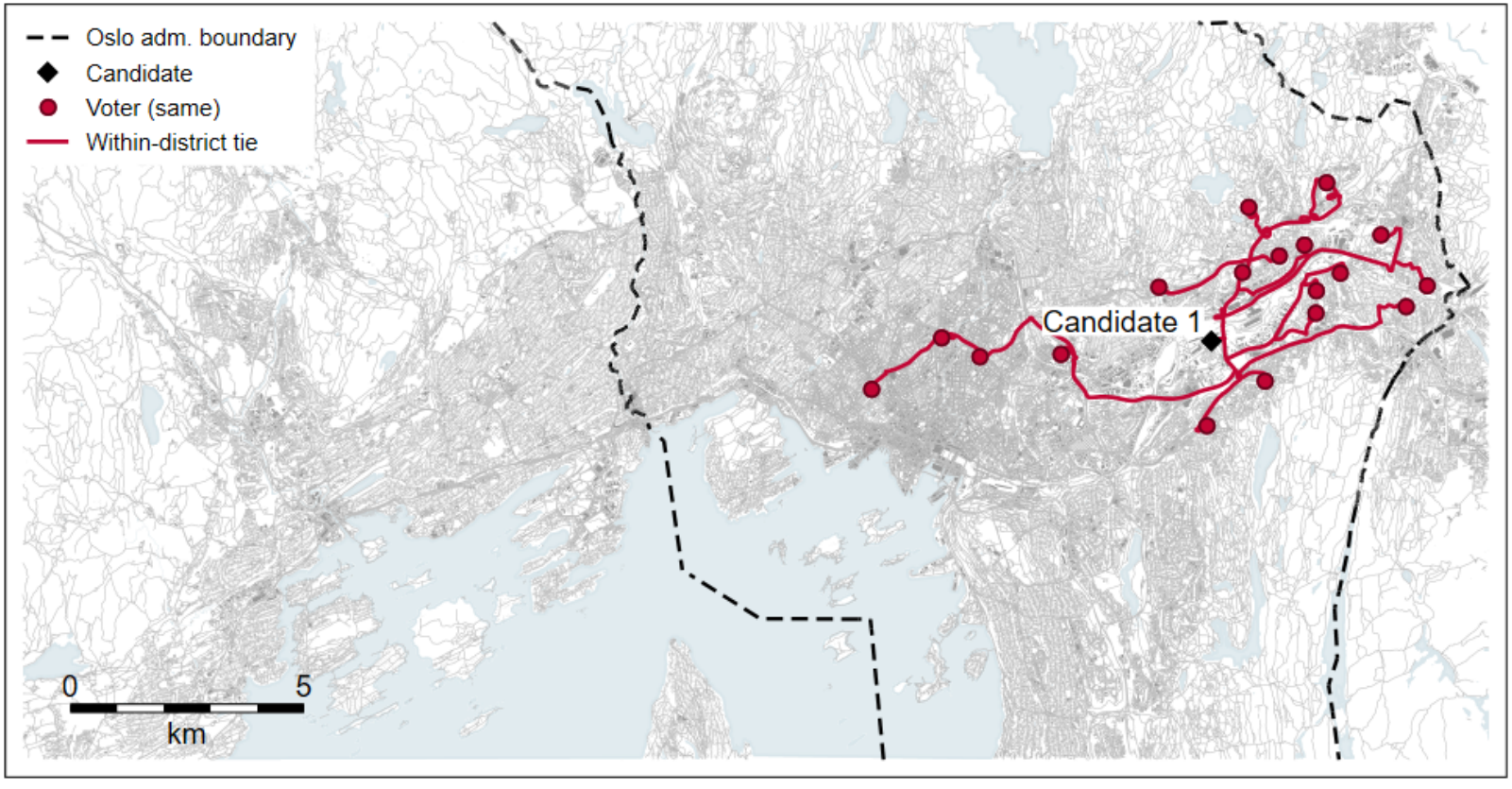

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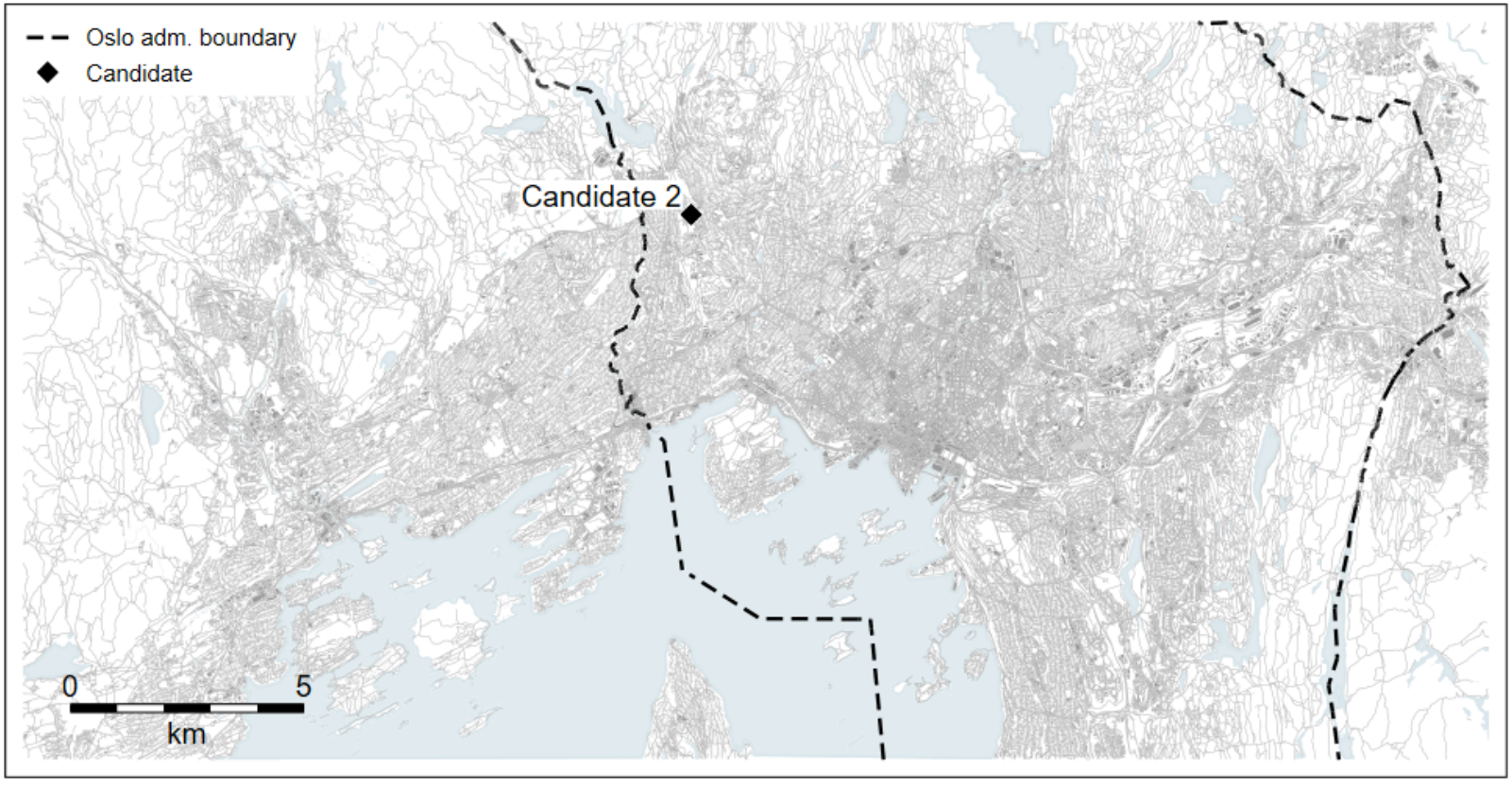

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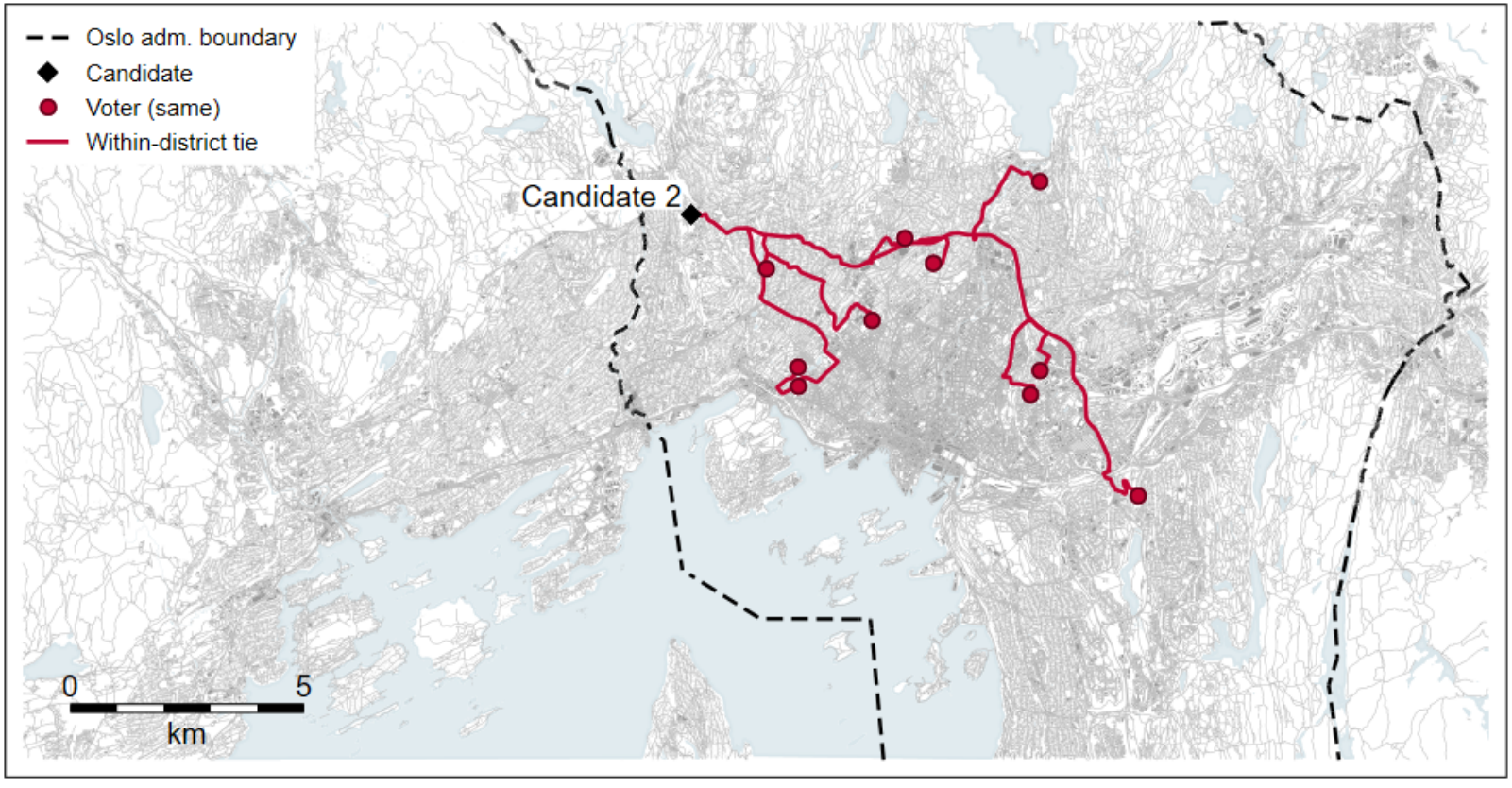

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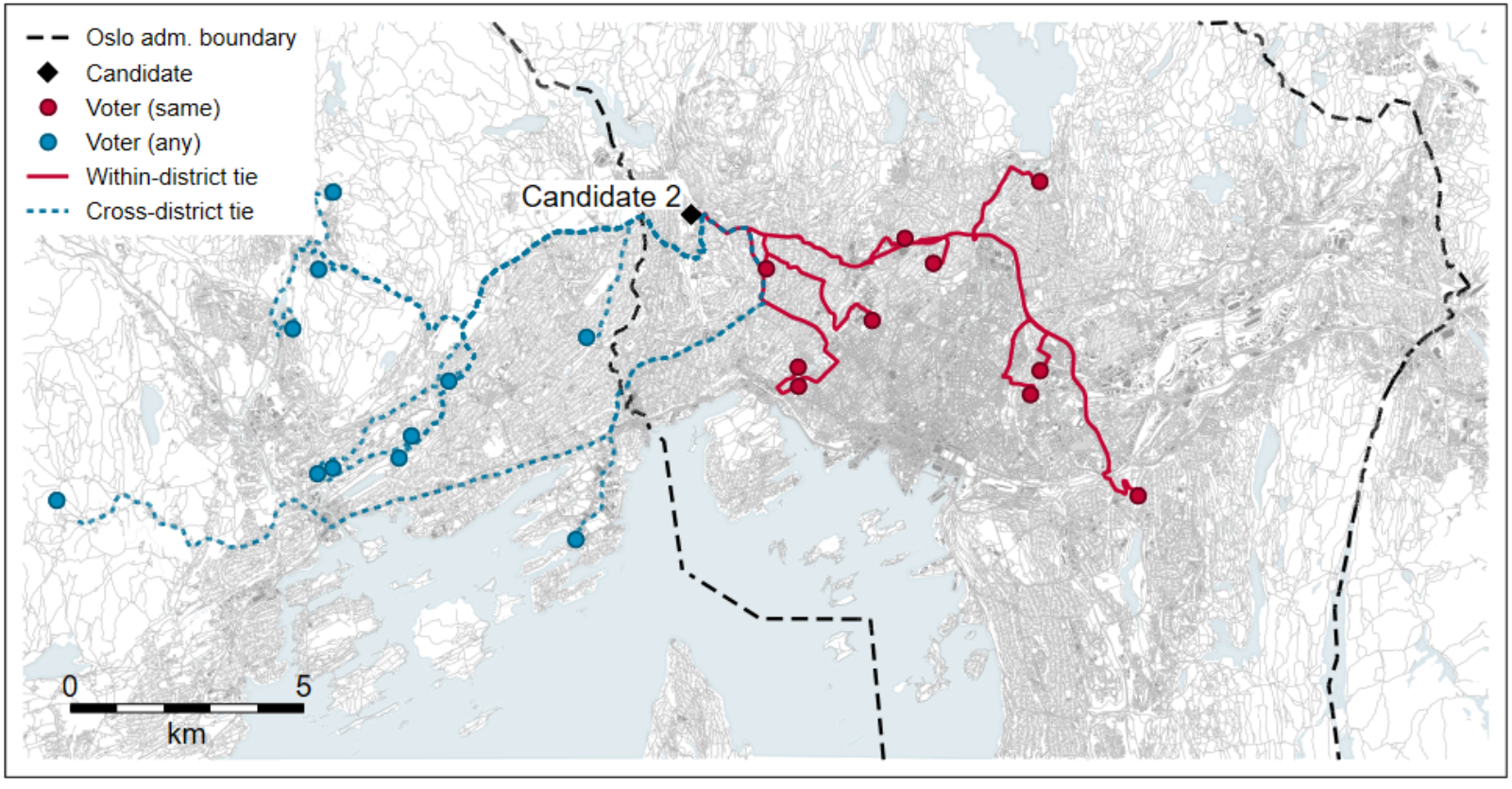

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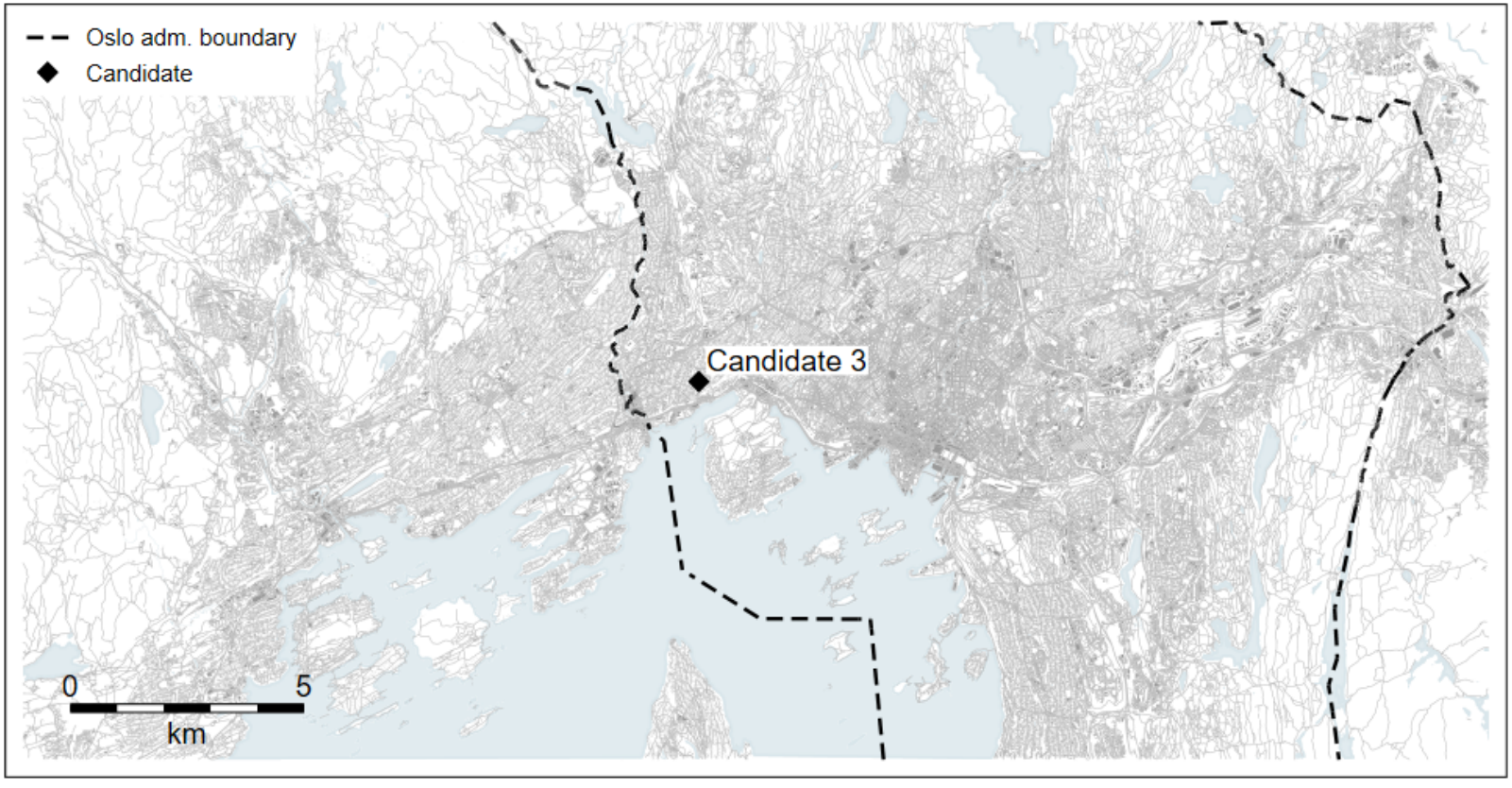

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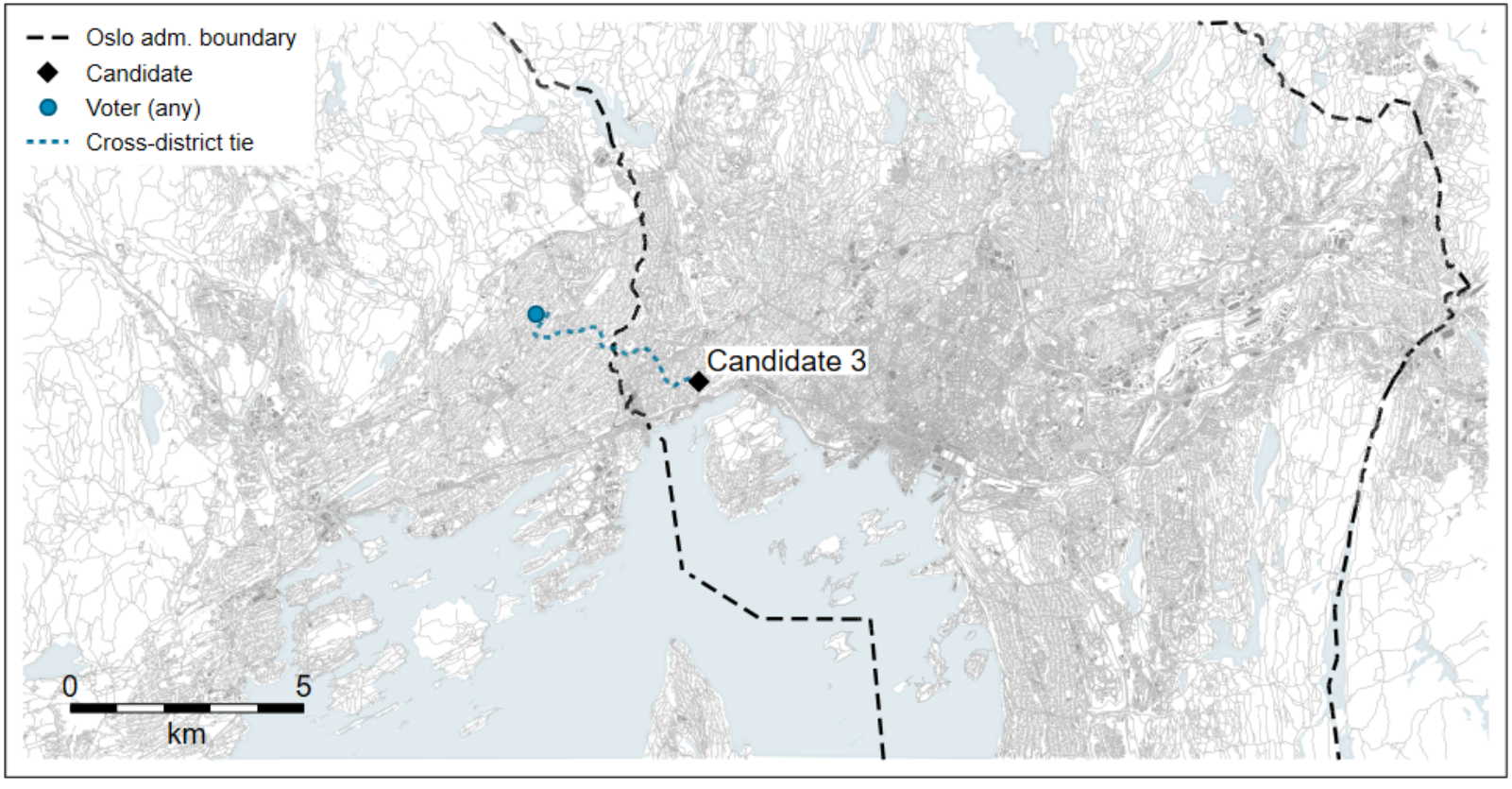

Empirical specification

$$Turnout_{ibt} = \alpha_{ib} + \lambda_t + \beta AnyDistrict_{it} + \gamma SameDistrict_{it} + \varepsilon_{ibt}$$

- $Turnout = 1$ if voter i, who resides in BSU b, voted in year t
- $AnyDistrict = 1$ if a member of i's network ran for office at t
- $SameDistrict = 1$ if a member of i's network ran for office at t in i's district

Expectation: $\beta \approx 0, \gamma > 0$

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Inference is drawn from voters who have a network member entering or exiting politics. Voters that move do not contribute to identification (because of α_{ib}).

Results

Table: Baseline results

	Family		Co-workers		Immigrants	
	(1) Close	(2) Extended	(3) Age-estbl.	(4) Estbl.	(5) 3-digit	(6) 2-digit
No candidate in network						
Any District						
Same District						
Observations	2,801,126	2,801,126	1,087,562	1,087,562	239,810	239,810
Clusters	3,733	3,733	3,702	3,702	3,535	3,535
Mean turnout (%)	66.56	66.56	66.50	66.50	41.19	41.19

geo-time FE
Placebo simulations
Split by family type
Split by estbl. size
Split by region of origin

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No candidate in network	ref.	ref.				
Any District	0.006	0.002				
	(0.003)	(0.002)				
Same District	0.026	0.015				
	(0.005)	(0.004)				
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Any District	0.006	0.002	-0.001	-0.003		
	(0.003)	(0.002)	(0.003)	(0.002)		
Same District	0.026	0.015	0.014	0.010		
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	(0.003)	(0.002)	(0.003)	(0.002)	(0.004)	(0.004)
Same District	0.026	0.015	0.014	0.010	0.045	0.036
	(0.005)	(0.004)	(0.005)	(0.004)	(0.012)	(0.010)
Observations	2,801,126	2,801,126	1,087,562	1,087,562	239,810	239,810
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Table: Two-Step Mobilization

	Co-workers and families			Immigrants and families		
	(1) Candidate → co-wkr.→ family	(2) Candidate → fam.→ co-worker	(3) Pooled	(4) Candidate → imm.→ family	(5) Candidate → fam.→ immigrant	(6) Pooled
No candidate in network						
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Same District	0.006	0.003				
	(0.004)	(0.004)				
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	(0.002)	(0.002)	(0.001)			
Same District	0.006	0.003	0.005			
	(0.004)	(0.004)	(0.003)			
Observations	2,801,126	2,801,126	2,801,126	2,801,126	2,801,126	2,801,126
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No candidate in network	ref.	ref.	ref.	ref.	ref.	ref.
Any District	0.001	-0.003	-0.001	-0.002	0.006	0.003
	(0.002)	(0.002)	(0.001)	(0.006)	(0.004)	(0.004)
Same District	0.006	0.003	0.005	0.015	0.018	0.019
	(0.004)	(0.004)	(0.003)	(0.013)	(0.011)	(0.008)
Observations	2,801,126	2,801,126	2,801,126	2,801,126	2,801,126	2,801,126
Clusters	3,733	3,733	3,733	3,733	3,733	3,733
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Overall consequences of social networks for political behavior is likely larger than our estimates indicate

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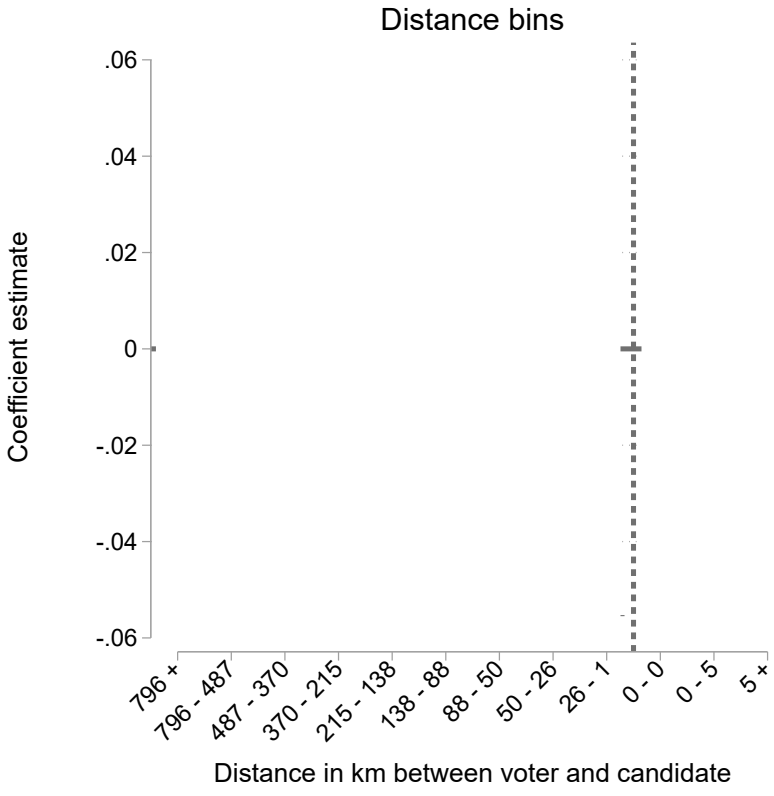
- Party switching

Next: How do district boundaries shape the mobilization impulse?

Family Networks: Effects Over Distance and Across Boundaries



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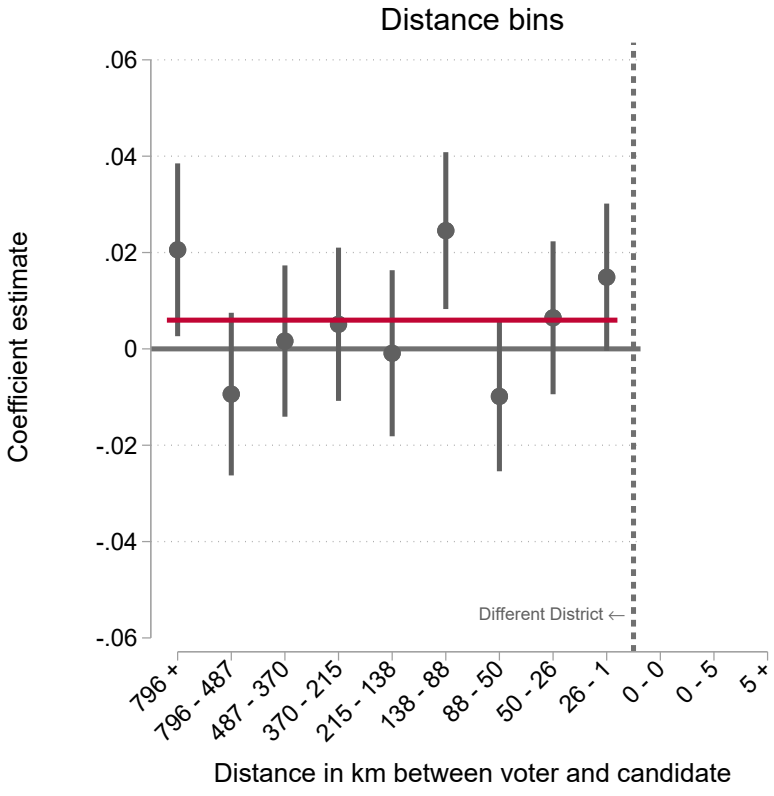

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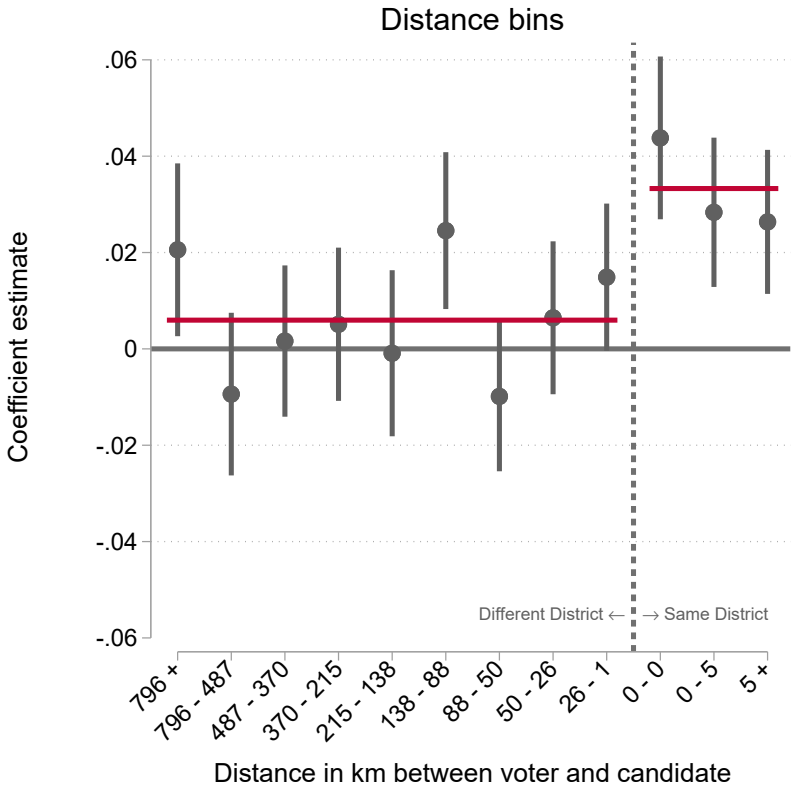

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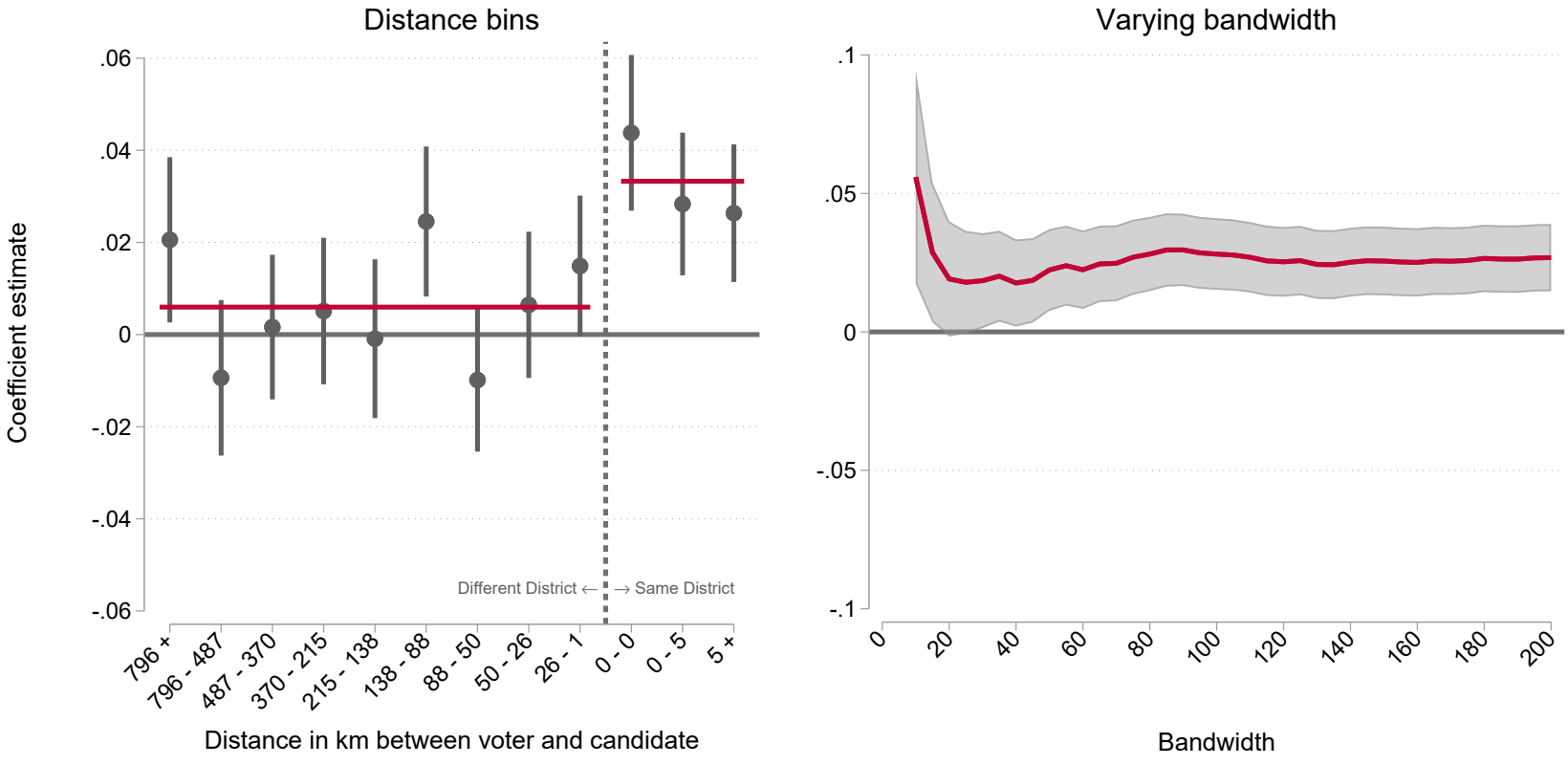
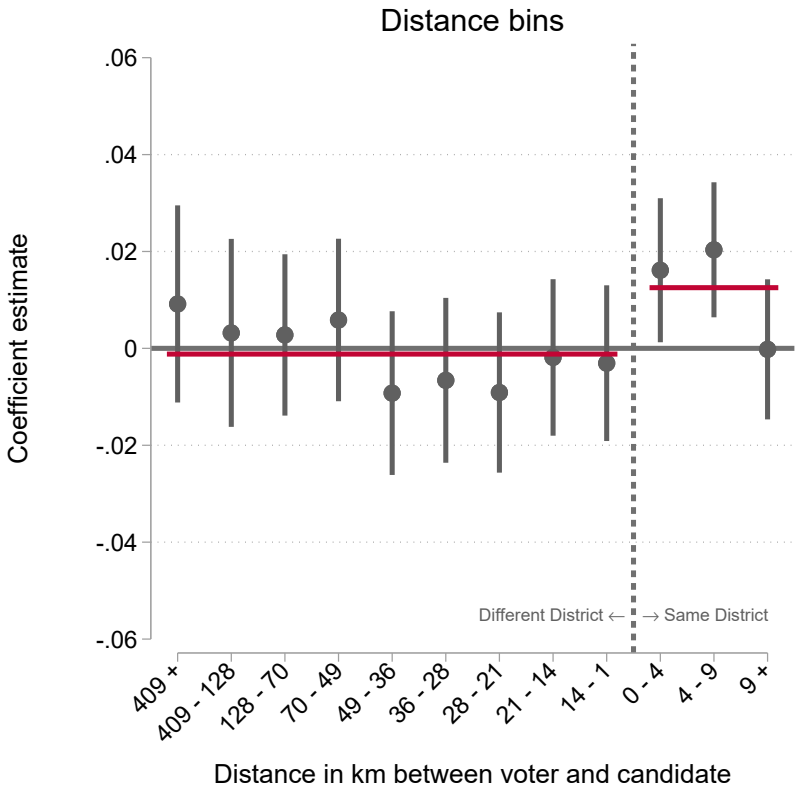
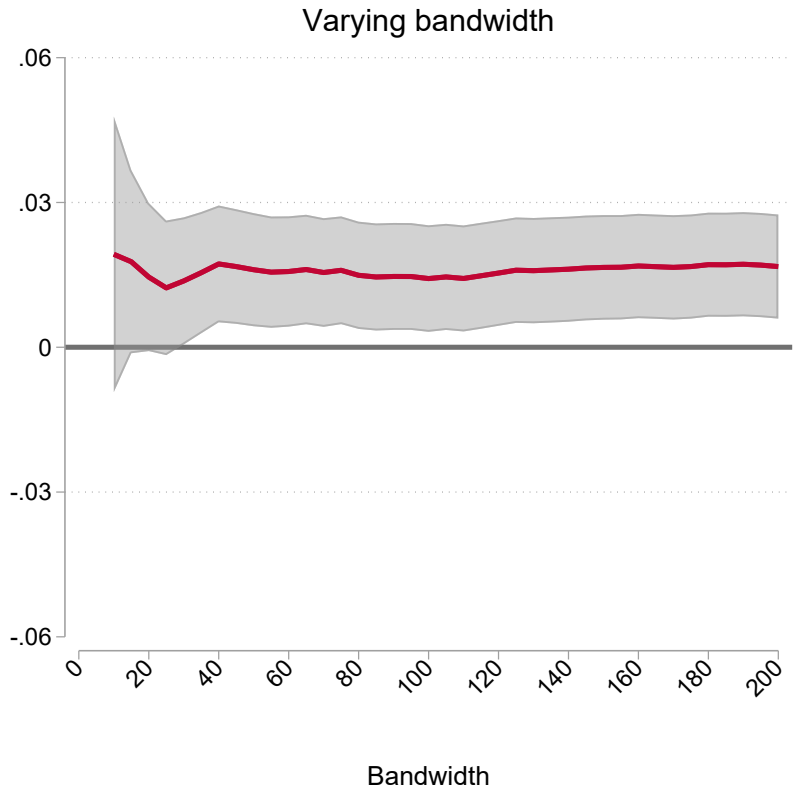
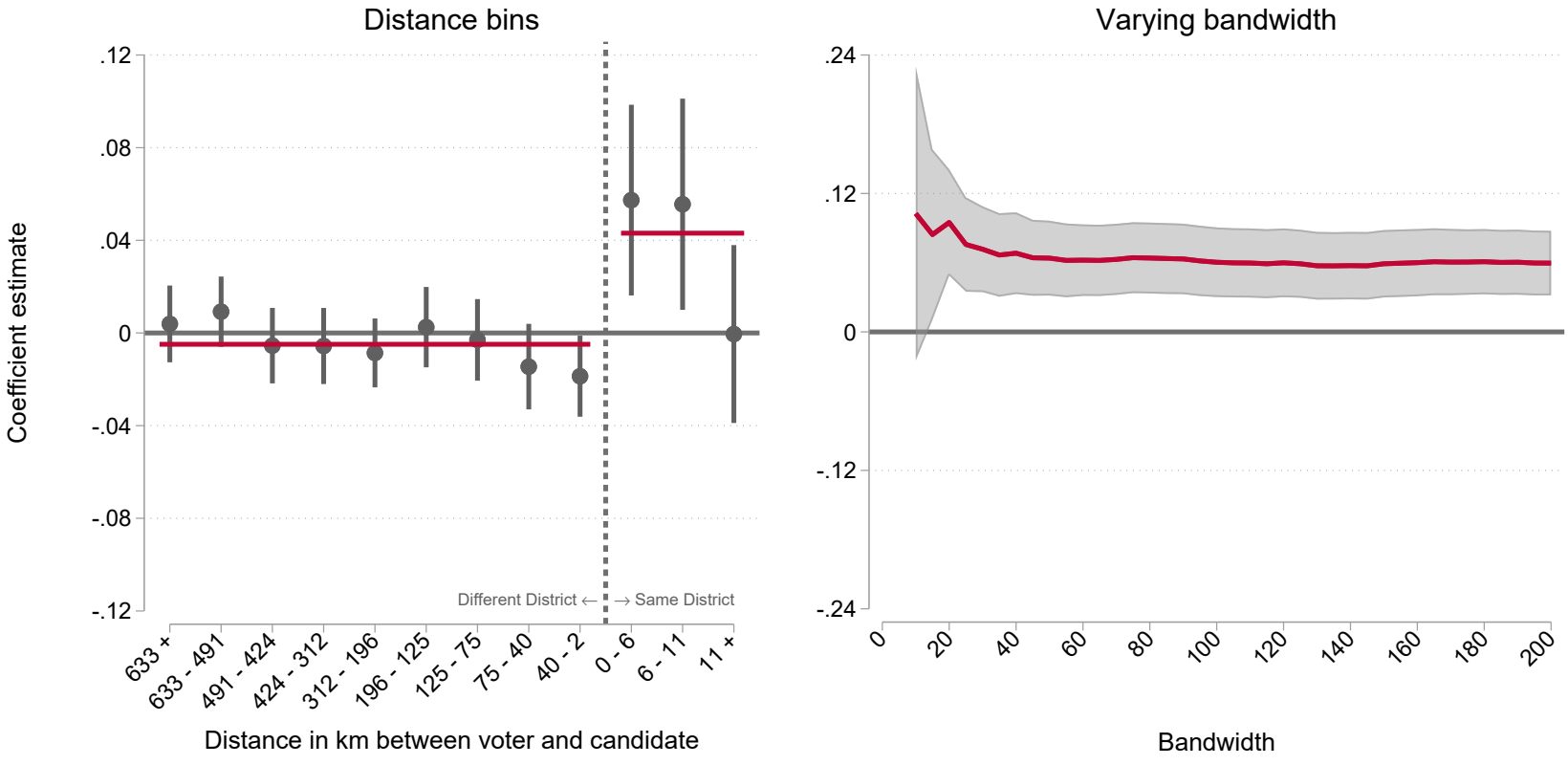


Co-worker Networks: Effects Over Distance and Across Boundaries





Immigrant Networks: Effects Over Distance and Across Boundaries



Why are immigrants mobilized more?

Table: Family effects split by Natives vs. Immigrants

	Natives		Immigrants	
	(1) Close	(2) Extended	(3) Close	(4) Extended
No candidate in network	ref.	ref.	ref.	ref.
Any District	0.006	0.002	0.023	0.027
	(0.003)	(0.002)	(0.028)	(0.026)
Same District	0.021	0.012	0.139	0.127
	(0.005)	(0.004)	(0.043)	(0.041)
Observations	2,301,710	2,301,710	408,566	408,566
Clusters	3,723	3,723	3,601	3,601
Mean turnout (%)	71.59	71.59	39.39	39.39

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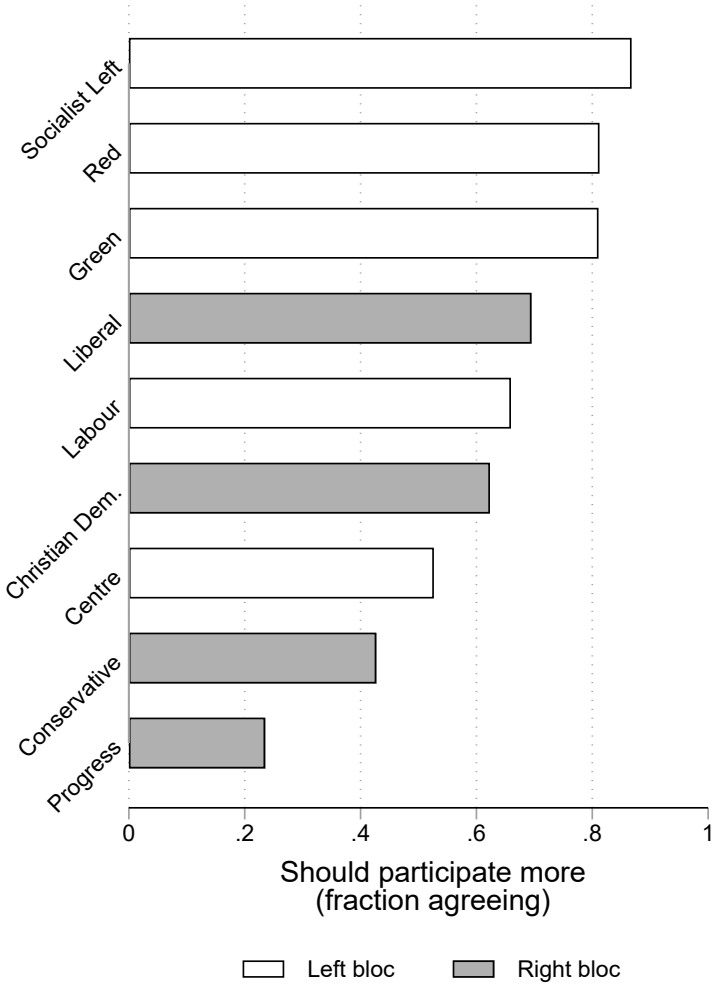
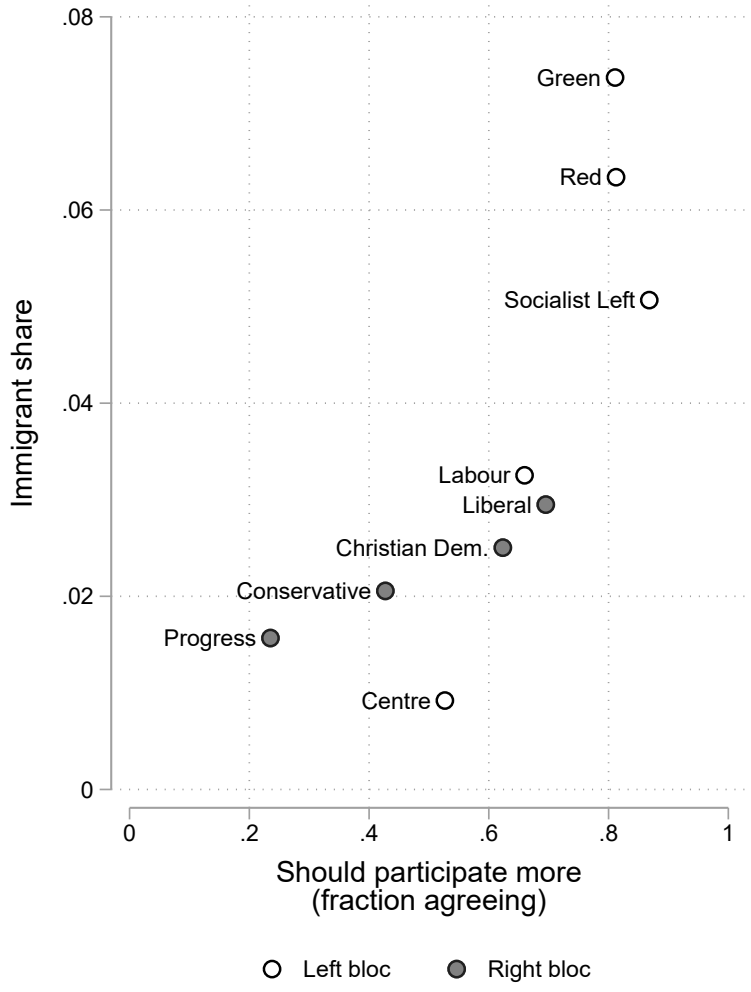
Mean turnout (%)	71.59	71.59	39.39	39.39

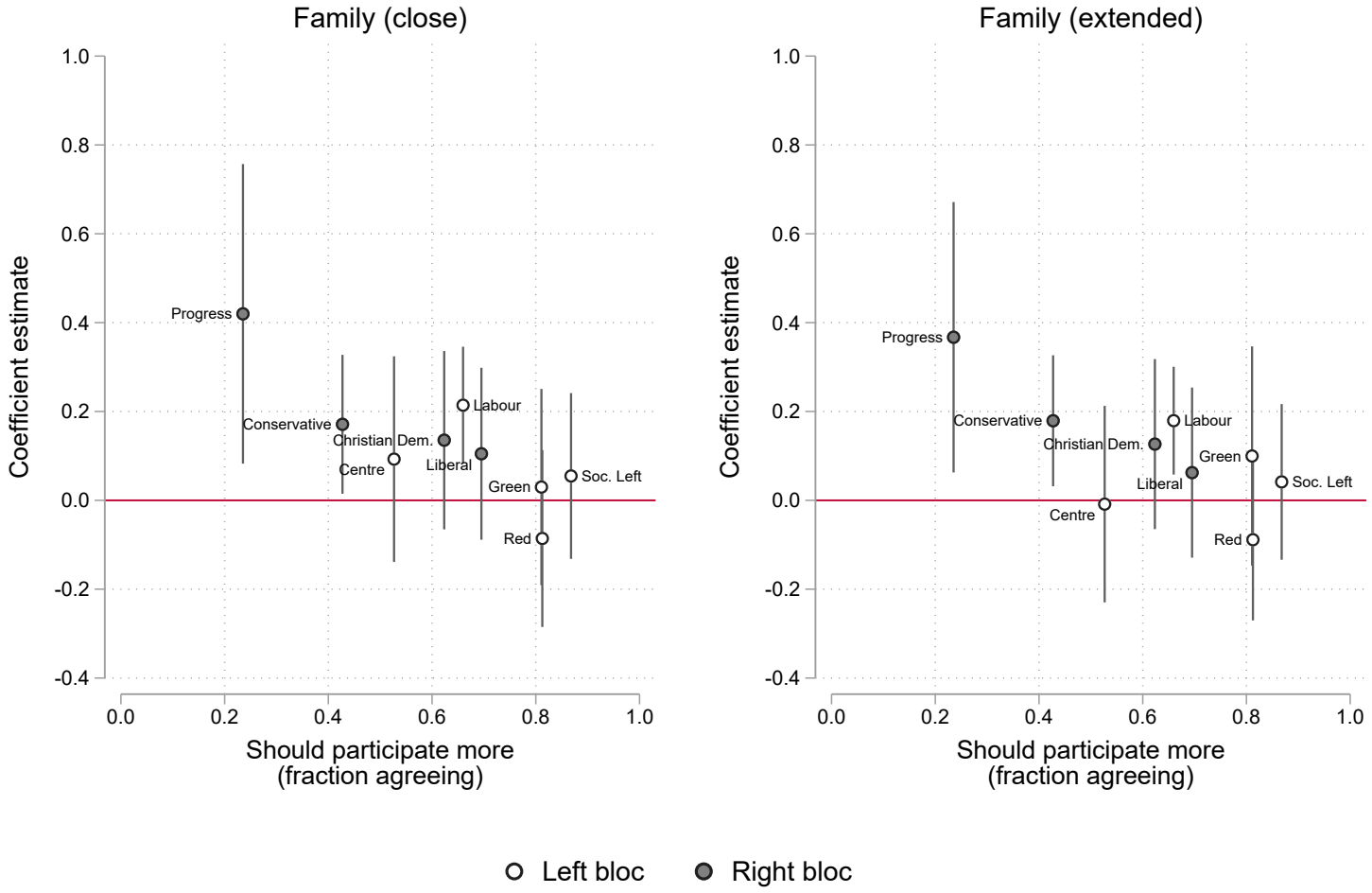
Family mobilization several times greater for immigrants. A 'Jackie and Jill' effect? (Anzia and Berry, 2011)

Survey evidence on attitudes toward immigrants, by party





Mobilization effects negatively correlated with attitudes toward immigrants



Conclusion

> *"The entire act of voting appears to be assisted by interactions with friends, neighbors and family members."* (Nickerson, 2008)

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Difficult to convert votes into seats when group members are spread inefficiently across districts (e.g., Rodden, 2019; Taylor & Johnston, 1979)

Nettavisen Nyheter.

Nyheter Økonomi Sport Livsstil Norsk debatt Meny

Valg 2011

Slik kapret Khalid plass i bystyret

ANNONSE

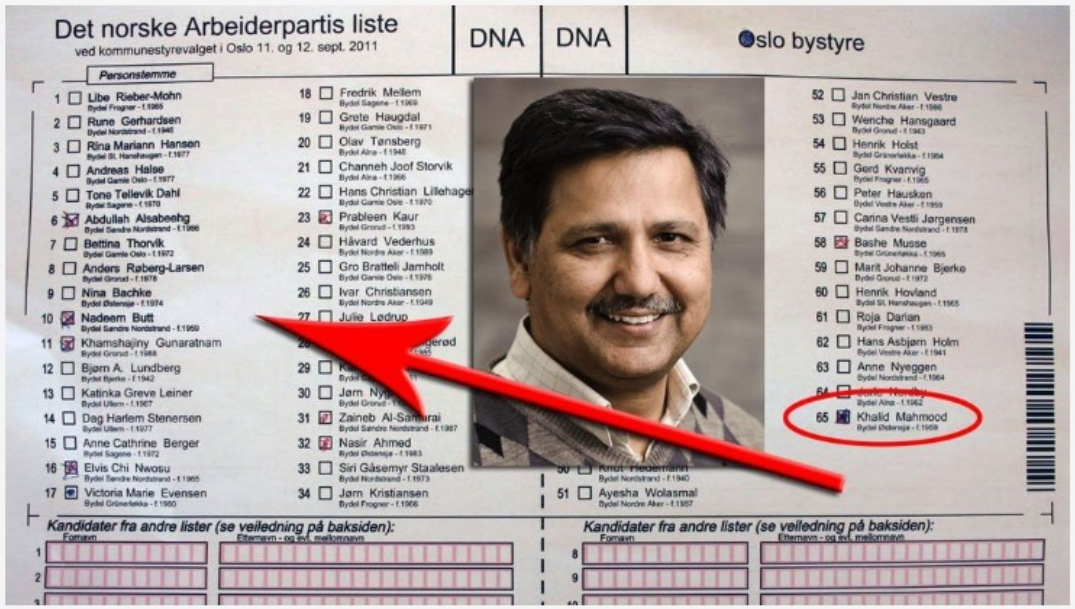

Foto: (Montasje/Mediehuset Nettavisen)

Sto på 65. plass på Aps liste, men sikret seg 3362 personstemmer - og fast plass i bystyret.

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Khalid Mahmood (Norwegian politician)

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From Wikipedia, the free encyclopedia

For other people named Khalid Mahmood, see Khalid Mahmood (disambiguation).

Khalid Chaudry Mahmood (born 12 April 1959) is a Pakistani Norwegian politician for the Labour Party.

Khalid Chaudry Mahmood	
Born	12th of April, 1959 Mehta Losar, Punjab, Pakistan
Nationality	Norwegian
Alma mater	University of Oslo
Occupation	Politician

Born in Pakistan, he migrated to Norway as a teenager and studied economics at the University of Oslo. Mahmood has also worked as a journalist, author and been on the board of several organisations. In 1983 he was elected to serve in Oslo city council. He was re-elected in 1987, not in 1991 but again in 1995.[1] Having originally represented the Conservative Party, he joined the Labour Party in 1995. He left the Conservative Party in protest against a proposal to introduce financial reports regarding the immigrant population.[2] He was re-elected to the city council in 1999, 2003, 2007 and 2011. In 2011, he was placed on the last spot on the Labour electoral list, but was elected due to getting most personal votes of all candidates.[3] In 2015, he was named the longes sitting city council representative, having been elected for eight periods.[4]

He also served as a deputy representative to the Norwegian Parliament from 2005.[5]

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Occupation Politician

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Table: Municipality-Level Summary Statistics

	Included municipalities		Excluded municipalities	
	Mean	SD	Mean	SD
Population	84,571	132,625	7,572	9,428
Vote-eligible population	66,784	106,118	5,975	7,409
Pre-school age (percent)	7.24	0.70	6.47	1.28
School age (percent)	12.28	0.98	12.15	1.43
66 years and older (percent)	15.03	2.48	18.35	3.58
Women (percent)	49.72	0.73	49.12	1.04
Unemployed (percent)	2.52	0.60	2.01	0.71
Immigrants (percent)	13.68	4.65	9.24	3.41
Turnout (percent)	58.36	4.01	63.12	6.07
N	25		403	

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Table: Networks Summary Statistics

Panel A: 2015	Family (N = 1,400,563)		Co-workers (N = 543,781)		Immigrants (N = 119,905)	
	Close	Extended	Age-estbl.	Estbl.	3-digit	2-digit
Number of unique networks	1,400,563	1,400,563	171,716	97,443	8,372	4,167
Voters with $AnyDistrict = 1$	40,656	115,058	36,357	77,072	47,190	64,092
Voters with $SameDistrict = 1$	9,664	18,533	12,154	26,463	3,049	4,899
Network size (average)	4.85	14.92	3.17	5.58	14.32	28.77
Distance (km) $\|AnyDistrict = 1$	260.17	309.94	85.43	79.79	324.81	297.09
Distance (km) $\|SameDistrict = 1$	4.59	6.14	8.28	7.97	9.13	9.12

Panel B: 2019	Family (N = 1,400,563)		Co-workers (N = 543,781)		Immigrants (N = 119,905)	
	Close	Extended	Age-estbl.	Estbl.	3-digit	2-digit
Number of unique networks	1,400,563	1,400,563	171,716	97,443	8,372	4,167
Voters with $AnyDistrict = 1$	36,961	111,096	36,563	79,485	48,917	64,676
Voters with $SameDistrict = 1$	8,914	17,768	11,522	25,680	2,173	3,619
Network size (average)	4.85	14.92	3.17	5.58	14.32	28.77
Distance (km) $\|AnyDistrict = 1$	269.69	325.17	109.68	100.45	352.43	307.85
Distance (km) $\|SameDistrict = 1$	4.95	6.40	8.38	8.04	8.96	9.09

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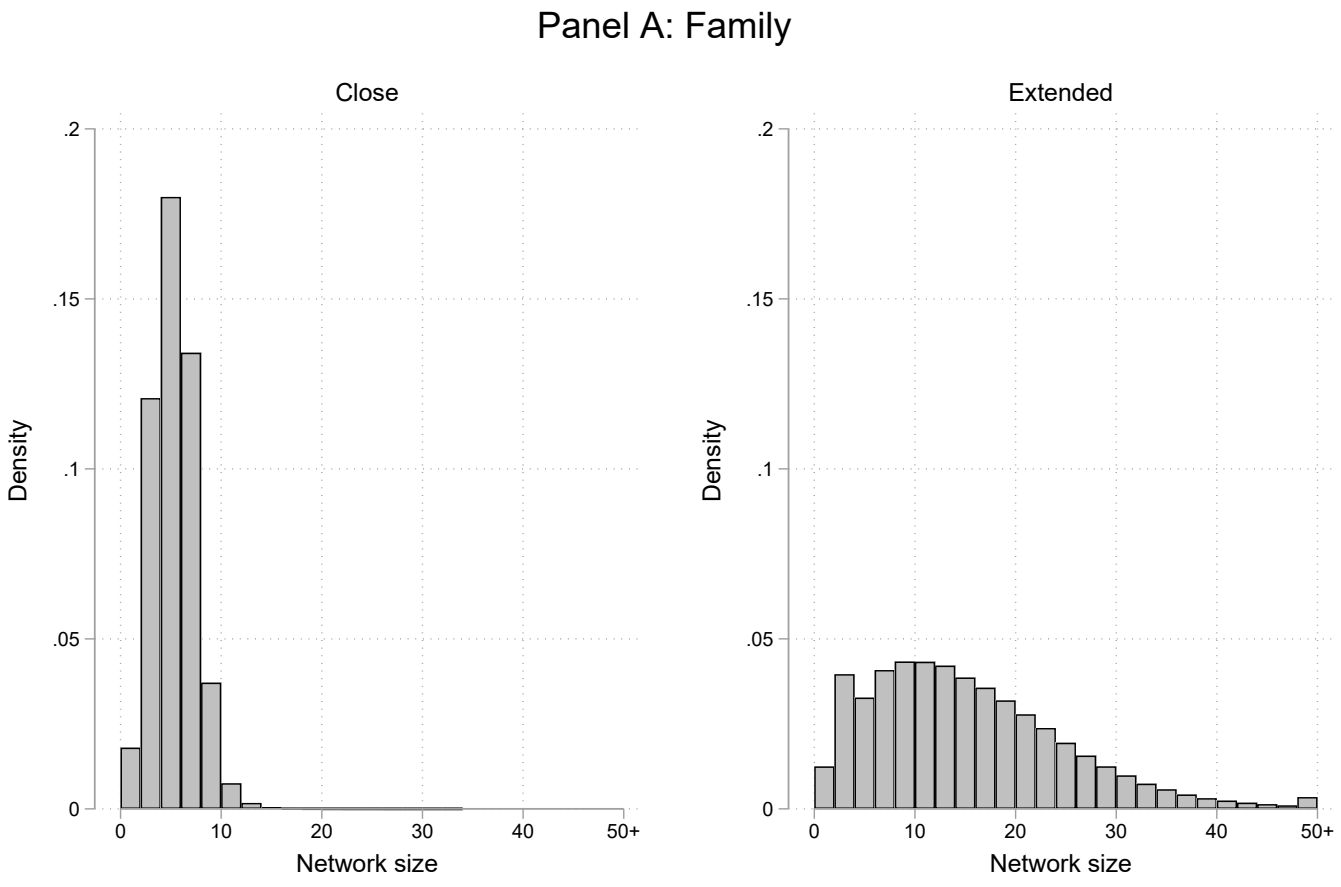
Network Size Distributions



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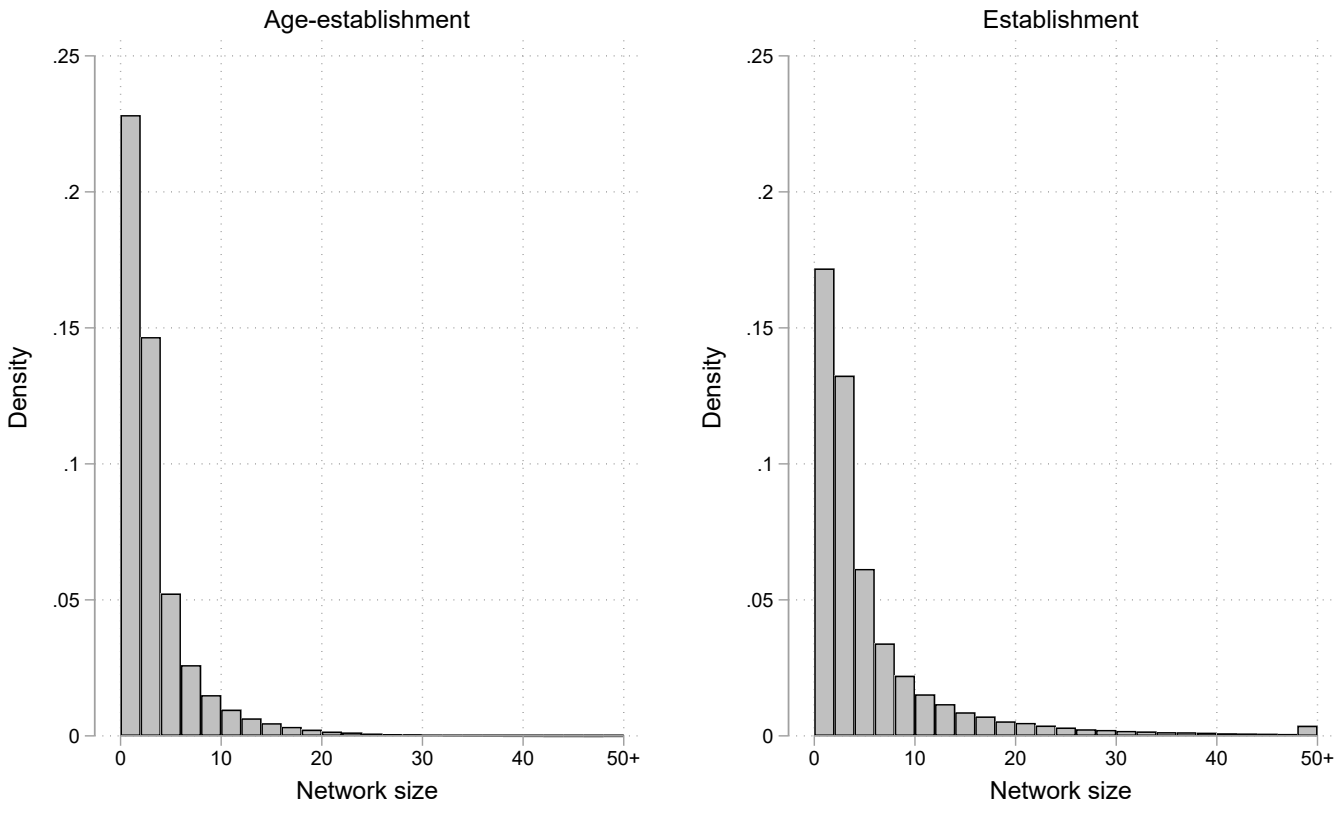
Network Size Distributions

Panel B: Co-workers



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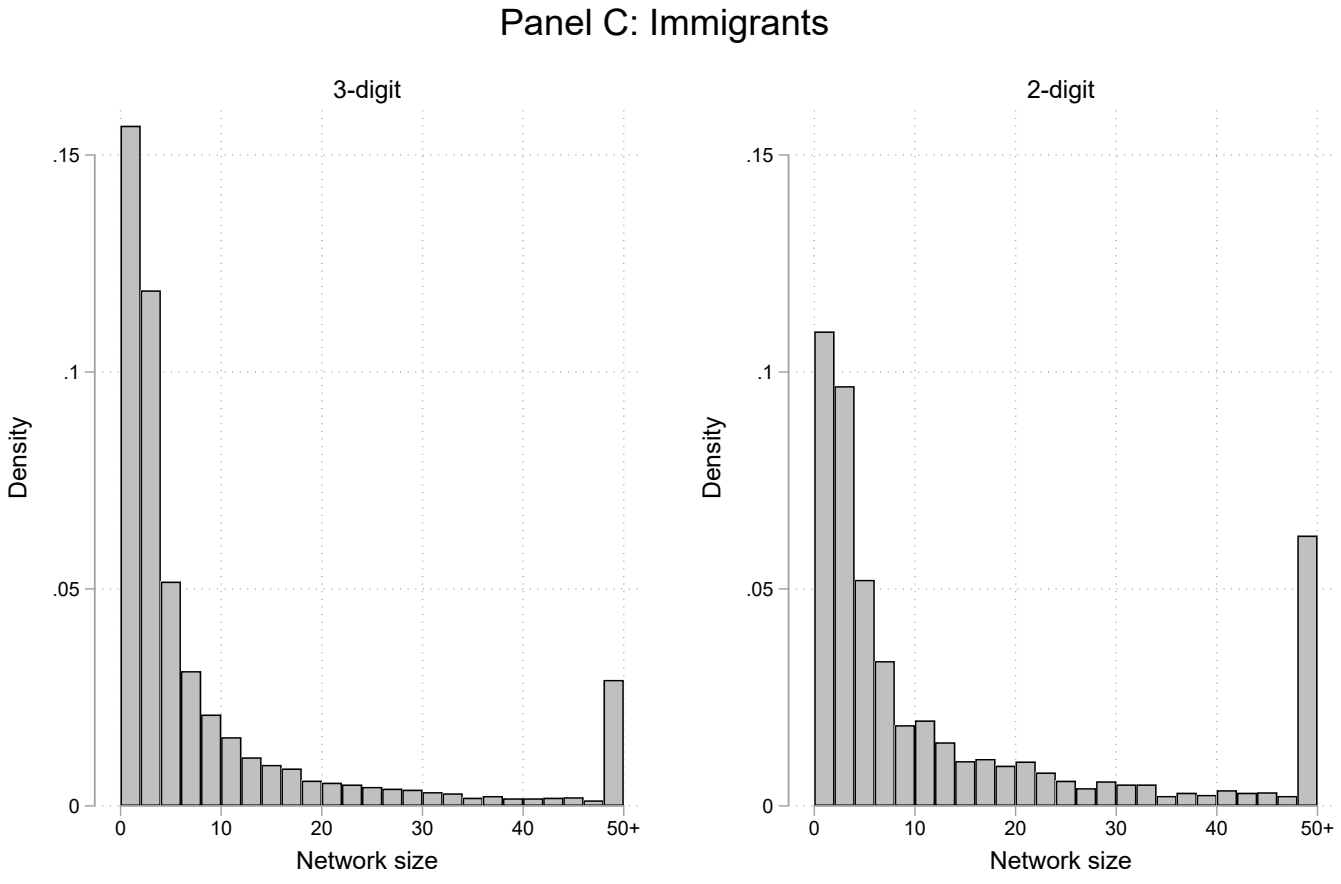
Network Size Distributions



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Definition of BSU

"The purpose of dividing the municipalities in basic statistical units is to establish small, stable geographical units giving a flexible basis for presentation of regional statistics. Basic statistical units are geographically coherent and shall be as homogeneous as possible with respect to natural conditions, economic base, communication and building structure." (Statistics Norway, 2022)

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Map of Oslo BSU's

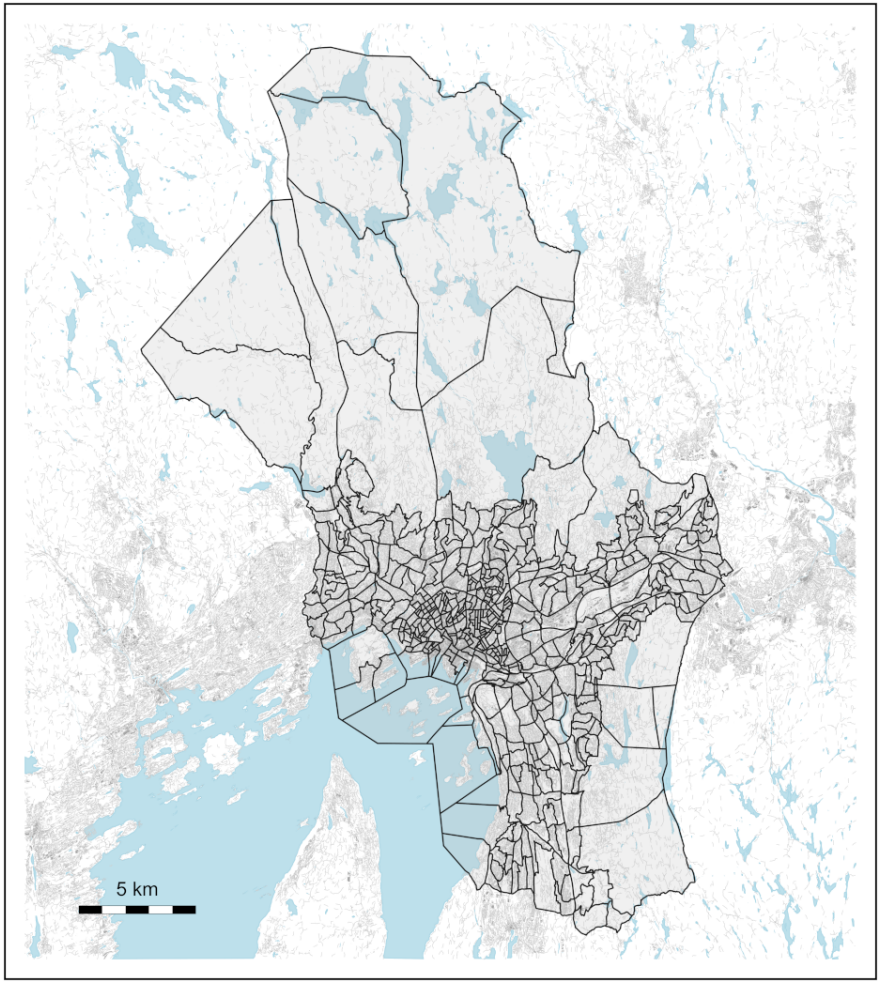

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Table: Baseline with BSU-year fixed effects

	Family		Co-workers		Immigrants	
	(1) Close	(2) Extended	(3) Age-estbl.	(4) Estbl.	(5) 3-digit	(6) 2-digit
No candidate in network	ref.	ref.	ref.	ref.	ref.	ref.
Any District	0.006	0.002	-0.000	-0.002	-0.004	-0.006
	(0.003)	(0.002)	(0.003)	(0.002)	(0.004)	(0.004)
Same District	0.027	0.016	0.013	0.009	0.039	0.033
	(0.005)	(0.004)	(0.005)	(0.004)	(0.012)	(0.009)
Observations	2,029,996	2,029,996	752,908	752,908	150,494	150,494
Clusters	3,683	3,683	3,624	3,624	3,241	3,241
Mean turnout (%)	66.56	66.56	66.50	66.50	41.19	41.19

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Distribution of simulation results

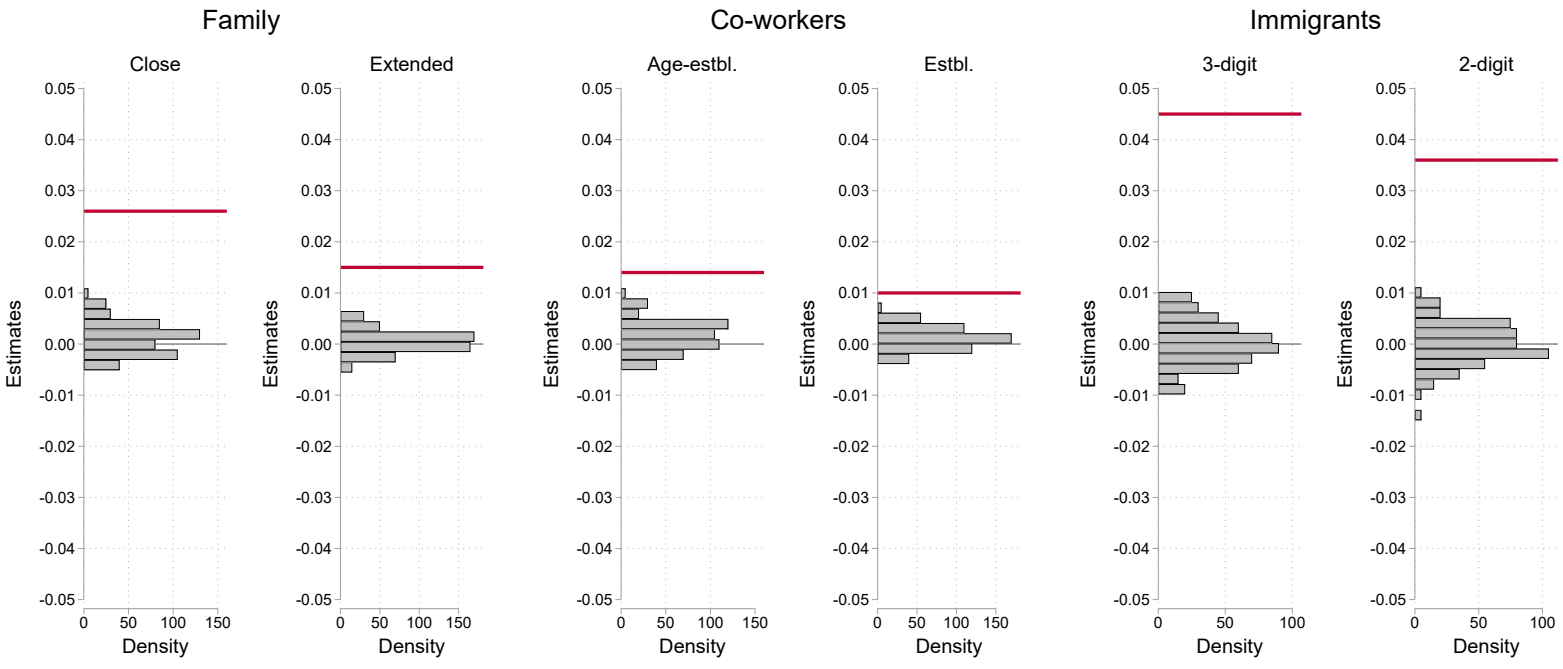

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Table: Split by family type

	(1) Parents	(2) Siblings	(3) Children	(4) Grandpar.	(5) Grandch.	(6) Nieces & nephews	(7) Aunts & uncles	(8) Cousins
No network candidate	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Any District	0.006	0.007	0.002	-0.030	-0.009	0.004	-0.002	-0.000
	(0.005)	(0.004)	(0.006)	(0.019)	(0.011)	(0.003)	(0.004)	(0.003)
Same District	0.032	0.012	0.035	0.006	0.001	0.008	0.003	-0.003
	(0.012)	(0.008)	(0.009)	(0.044)	(0.019)	(0.009)	(0.013)	(0.010)
Observations	2,801,126	2,801,126	2,801,126	2,801,126	2,801,126	2,801,126	2,801,126	2,801,126
Clusters	3,733	3,733	3,733	3,733	3,733	3,733	3,733	3,733
Mean turnout (%)	66.56	66.56	66.56	66.56	66.56	66.56	66.56	66.56

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Table: Split by number of co-workers

	2-5 co-workers		6-15 co-workers		16+ co-workers	
	(1) Age-estbl.	(2) Estbl.	(3) Age-estbl.	(4) Estbl.	(5) Age-estbl.	(6) Estbl.
No network candidate	ref.	ref.	ref.	ref.	ref.	ref.
Any District	-0.003	-0.006	-0.001	-0.005	0.001	-0.002
	(0.007)	(0.008)	(0.005)	(0.005)	(0.005)	(0.003)
Same District	0.028	0.040	0.016	0.017	0.005	0.006
	(0.014)	(0.017)	(0.008)	(0.009)	(0.008)	(0.004)
Observations	478,054	245,446	422,968	352,094	186,540	490,022
Clusters	3,681	3,640	3,644	3,647	3,555	3,657
Mean turnout (%)	64.72	64.39	66.60	63.91	70.85	69.42

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Table: Split by country of origin

	Europe inc. Russia		Africa		Asia		North America		South America	
	(1) 3-digit	(2) 2-digit	(3) 3-digit	(4) 2-digit	(5) 3-digit	(6) 2-digit	(7) 3-digit	(8) 2-digit	(9) 3-digit	(10) 2-digit
No network candidate	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Any District	-0.007	-0.007	0.011	0.025	-0.007	-0.008	0.028	0.007	0.053	0.026
	(0.005)	(0.005)	(0.019)	(0.017)	(0.008)	(0.008)	(0.031)	(0.032)	(0.028)	(0.026)
Same District	0.040	0.008	0.079	0.057	0.039	0.056	-0.101	-0.033	-0.080	-0.047
	(0.021)	(0.015)	(0.025)	(0.022)	(0.018)	(0.015)	(0.355)	(0.124)	(0.058)	(0.039)
Observations	113,928	113,928	29,474	29,474	80,822	80,822	6,034	6,034	8,590	8,590
Clusters	3,453	3,453	2,479	2,479	3,134	3,134	1,710	1,710	1,880	1,880
Mean turnout (%)	33.92	33.92	48.55	48.55	46.76	46.76	54.52	54.52	49.44	49.44

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