Appendix

Table A1: The Government of Canada organizations divided by departments and agency type.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Depts** | **Administrative agencies** | **Adjudicative****Agencies** | **Regulatory agencies** | **Enforcement agencies** | **Parliamentary agencies** |
| ESDC – 002DoD – 003FOC – 005HC – 006PSPC – 007Agr – 009ISEDC – 010ECCC – 011TC – 012IRC – 013GA – 014NRC – 015INAC – 017VA – 018DoJ – 019Herit – 020FIN – 024TBS – 026PCO – 028WED – 043PSafe – 053InfC – 082SOW – 140 | CRA – 001 Stats – 008 PSC – 021 CAS – 030 ACOA – 032CSA – 033 EDQR – 034 SSC – 037 TSBC – 039PHAC – 070 LAC – 074 FTRA – 087 Parks – 088 ATSS – 091 NFB – 092 FDev– 093 CICC – 103  | IRB – 023 CRTC – 031 PBC – 036 CHRC – 041 MPCC – 101 CRBC – 105 IJC – 107 NFPC – 109 PMPR -111 CRCC – 114 MGER – 119 RPER – 125 VRAB – 150  | CGC – 025 CEAA – 047 CTA – 054 NEB – 075CFIA - 086OCLC – 139 IOG – 149  | CSC – 004 RCMP – 016 ODPP – 046 CBSA – 083 CSEC – 089  | OCEO – 040 OCOL – 042 OAG – 052 OGG – 073 OPC – 080 OCJA – 110 OPSI – 143 OCI – 147 OICA – 151  |
| N = 134,191 | N = 68,226 | N = 2,650 | N = 2,154 | N = 47,177 | N = 1,920 |

Note: See the PSES 2017 survey guide for acronym definitions. The numbers are the codes given to each organization in the survey guide book.

Table A2: Covariates used for matching methods and subsequent regressions

|  |  |  |
| --- | --- | --- |
| **Variable** | **Original codes** | **Transformed codes to dummy** |
| gender | M (1); F (2); Other (3); NS (9) | M (1); rest (0) |
| age\_group | <24 (1); 25-29 (2); 30-34 (3); 35-39 (4); 40-44 (5); 45-49 (6); 50-54 (7); 55-59 (8); 60+ (9); NS (99) | <24, 25-29, 30-34, 35-39 (1); rest (0) |
| like\_job | SA (1)-SD (5); n/a (6), DK (97), NS (99) | SA, A (1); rest (0) |
| occ\_groups | Executive (1); Scientific and Professional (2); Administration and Foreign Services (3); Technical (4); Administrative Support (5); Operational (6); Other (7); NS (99) | Executive; Scientific and Professional; Administration and Foreign Services (1); rest (0) |
| region | Atlantic (1); Quebec, excl NCR (2); Ontario, excl NCR (3); Prairies, Nunavut, NWT (4); BC, Yukon (5); National Capital Region (6); Outside Canada (7); NS (99) | NCR (1); rest (0) |

Figure A1:



Figure A2:



Figure A3:



Table A3: *New idea support* logistic regression results (matched data)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Intercept | 0.27\*\*\*(0.26-0.28) | 0.28\*\*\*(0.26-0.29) | 0.24\*\*\*(0.19-0.31) | 0.24\*\*\*(0.18-0.31) | 0.24\*\*\*(0.16-0.35) | -0.26\*\*\*(0.25-0.28) |
| Agency (all) | 0.91\*\*\*(0.89-0.93) | - | - | - | - | - |
| Administrativeagency | - | 1.05\*\*\*(1.03-1.08) | - | - | - | - |
| Regulatoryagency | - | - | 1.69\*\*\*(1.46-1.96) | - | - | - |
| Adjudicative agency | - | - | - | 1.28\*\*\*(1.12-1.46) | - | - |
| Parliamentaryagency | - | - | - | - | 1.55\*\*\*(1.32-1.83) | - |
| Enforcement agency | - | - | - | - | - | 0.71\*\*\*(0.69-0.74) |
| gender (male) | 0.99(0.97-1.01) | 0.99(0.96-1.08) | 0.98(0.85-1.13) | 0.87\*(0.75-0.99) | 1.11(0.94-1.31) | 1.05\*(1.01-1.08) |
| age\_group(young) | 0.83\*\*\*(0.81-0.85) | 0.82\*\*\*(0.79-0.84) | 0.81\*\* (0.69-0.94) | 0.79\*\*(0.69-0.91) | 0.83\*(0.70-0.97) | 0.85\*\*\*(0.82-0.88) |
| like\_job(like) | 5.92\*\*\*(5.76-6.08) | 5.76\*\*\*(5.56-5.97) | 6.18\*\*\*(5.09-7.53) | 6.22\*\*\*(5.11-7.61) | 5.96\*\*\*(4.83-7.41) | 5.92\*\*\*(5.64-6.21) |
| occ\_group(policy/advice) | 1.20\*\*\*(1.17-1.23) | 1.12\*\*\*(1.09-1.16) | 1.32\*\*(1.11-1.56) | 1.27\*\*(1.09-1.47) | 1.14(0.95-1.38) | 1.29\*\*\*(1.24-1.34) |
| region(NCR) | 1.40\*\*\*(1.36-1.43) | 1.39\*\*\*(1.36-1.43) | 1.44\*\*\*(1.24-1.66) | 1.65\*\*\*(1.42-1.89) | 1.38\*(1.03-1.84) | 1.45\*\*\*(1.39-1.51) |
| Matching N | treated (84,470); unmatched (5,604) | treated (51,684); unmatched (71,176) | treated (1,802); unmatched (170,940) | treated (2,001); unmatched (170,542) | treated (1,465); unmatched (171,614) | treated (43,221); unmatched (88,102) |

Note: Odds ratios, confidence intervals in brackets for 95%. \*p<.05; \*\*p<.01; \*\*\*p<.001

Table A4: *Encouraged innovation* logistic regression results (matched data)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Intercept | 0.32\*\*\* | 0.32\*\*\*(0.30-0.33) | 0.35\*\*\*(0.27-0.44) | 0.27\*\*\*(0.21-0.36) | 0.31\*\*\*(0.20-0.48) | 0.30\*\*\*(0.29-0.32) |
| Agency (all) | 0.86\*\*\*(0.84-0.88) | - | - | - | - | - |
| Administrativeagency | - | 1.02\*(0.99-1.05) | - | - | - | - |
| Regulatoryagency | - | - | 1.35\*\*\*(1.15-1.59) | - | - | - |
| Adjudicative agency | - | - | - | 1.22\*\*\*(1.05-1.41) | - | - |
| Parliamentaryagency | - | - | - | - | 1.24\*\*\*(1.03-1.49) | - |
| Enforcement agency | - | - | - | - | - | 0.67\*\*\*(0.65-0.70) |
| gender (male) | 1.15\*\*\*(1.12-1.17) | 1.11\*\*\*(-1.08-1.15) | 1.17\*\*\*(1.00-1.38) | 1.070.92-1.25) | 1.17(0.97-1.42) | 1.26\*\*\*(1.21-1.31) |
| age\_group(young) | 0.87\*\*\*(0.85-0.89) | 0.86\*\*\*(0.83-0.89) | 0.87(0.74-1.03) | 0.88(0.75-1.04) | 0.94(0.78-1.14) | 0.87\*\*\*(0.84-0.91) |
| like\_job(like) | 8.25\*\*\*(8.03-8.47) | 7.99\*\*\*(7.72-8.27) | 8.15\*\*\*(6.76-9.85) | 8.75\*\*\*(7.22-10.65) | 9.65\*\*\*(7.79-11.99) | 8.28\*\*\*(7.91-8.67) |
| occ\_group(policy/advice) | 1.16\*\*\*(1.14-1.19) | 1.09\*\*\*(1.06-1.13) | 1.32\*\*\*(1.09-1.59) | 1.16(0.98-1.37) | 1.11(0.89-1.38) | 1.26\*\*\*(1.21-1.31) |
| region(NCR) | 1.65\*\*\*(1.61-1.69) | 1.68\*\*\*(1.63-1.74) | 1.23\*\*\*(1.05-1.44) | 1.86\*\*\*(1.59-2.19) | 1.33(0.95-1.84) | 1.78\*\*\*(1.69-1.86) |
| Matching N | treated (84,470); unmatched (5,604) | treated (51,684); unmatched (71,176) | treated (1,802); unmatched (170,940) | treated (2,001); unmatched (170,542) | treated (1,465); unmatched (171,614) | treated (43,221); unmatched (88,102) |

Note: Odds ratios, confidence intervals in brackets for 95%. \*p<.05; \*\*p<.01; \*\*\*p<.001

Table A5: *Changing priorities* logistic regression results (matched data)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Intercept | 0.82\*\*\*(0.79-0.85) | 0.80\*\*\*(0.77-84) | 0.75\*\*\*(0.60-0.93) | 0.98(0.77-1.25) | 0.65\*\*\*(0.44-0.96) | 0.82\*\*\*(0.78-0.87) |
| Agency (all) | 1.07\*\*\*(1.05-1.07) | - | - | - | - | - |
| Administrativeagency | - | 0.88\*\*\*(0.86-0.90) | - | - | - | - |
| Regulatoryagency | - | - | 0.87(0.76-1.00) | - | - | - |
| Adjudicative agency | - | - | - | 0.82\*\*\*(0.72-0.94) | - | - |
| Parliamentaryagency | - | - | - | - | 0.66\*\*\*(0.56-0.78) | - |
| Enforcement agency | - | - | - | - | - | 1.40\*\*\*(1.36-1.46) |
| gender (male) | 0.99(0.97-1.01) | 1.02(0.99-1.04) | 1.15(0.99-1.33) | 0.97(0.85-1.12) | 1.22\*\*\*(1.03-1.43) | 0.91\*\*\*(0.88-0.95) |
| age\_group(young) | 1.28\*\*\*(1.25-1.29) | 1.32\*\*\*(1.28-1.36) | 1.36\*\*\*(1.17-1.58) | 1.22\*\*\*(1.05-1.41) | 1.25\*\*\*(1.06-1.47) | 1.23\*\*\*(1.19-1.28) |
| like\_job(like) | 0.43\*\*\*(0.41-0.44) | 0.44\*\*\*(0.42-0.46) | 0.47\*\*\*(0.39-0.56) | 0.38\*\*\*(0.32-0.46) | 0.46\*\*\*(0.38-0.56) | 0.43\*\*\*(0.41-0.45) |
| occ\_group(policy/advice) | 1.08\*\*\*(1.05-1.10) | 1.11\*\*\*(1.08-1.14) | 0.92(0.78-1.08) | 1.11(0.95-1.30) | 1.14(0.94-1.38) | 1.13\*\*\*(1.09-1.17) |
| region(NCR) | 0.98\*\*\*(0.96-0.99) | 1.01(0.98-1.03) | 0.87(0.75-1.00) | 0.85\*\*\*(0.74-0.99) | 1.09(0.81-1.48) | 0.98(0.94-1.02) |
| Matching N | treated (84,470); unmatched (5,604) | treated (51,684); unmatched (71,176) | treated (1,802); unmatched (170,940) | treated (2,001); unmatched (170,542) | treated (1,465); unmatched (171,614) | treated (43,221); unmatched (88,102) |

Note: Odds ratios, confidence intervals in brackets for 95%. \*p<.05; \*\*p<.01; \*\*\*p<.001

Table A6: *Lack stability* logistic regression results (matched data)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Intercept | 0.99(0.96-1.03) | 1.03(0.98-1.08) | 1.29\*\*\*(1.03-1.63) | 1.48\*\*\*(1.15-1.90) | 0.67(0.43-1.02) | 0.97(0.92-1.02) |
| Agency (all) | 1.22\*\*\*(1.19-1.24) | - | - | - | - | - |
| Administrativeagency | - | 0.88\*\*\*(0.86-0.91) | - | - | - | - |
| Regulatoryagency | - | - | 0.62\*\*\*(0.52-0.72) | - | - | - |
| Adjudicative agency | - | - | - | 0.94(0.81-1.09) | - | - |
| Parliamentaryagency | - | - | - | - | 0.57\*\*\*(0.47-0.68) | - |
| Enforcement agency | - | - | - | - | - | 1.76\*\*\*(1.70-1.83) |
| gender (male) | 0.91\*\*\*(0.89-0.93) | 0.93\*\*\*(0.91-0.96) | 1.04(0.90-1.22) | 0.87(0.74-1.01) | 0.90(0.75-1.07) | 0.85\*\*\*(0.82-0.88) |
| age\_group(young) | 1.26\*\*\*(1.23-1.28) | 1.26\*\*\*(1.23-1.30) | 1.31\*\*\*(1.11-1.54) | 1.17\*\*\*(1.01-1.37) | 1.06(0.89-1.27) | 1.19\*\*\*(1.15-1.24) |
| like\_job(like) | 0.31\*\*\*(0.30-0.32) | 0.32\*\*\*(0.31-0.33) | 0.28\*\*\*(0.24-0.34) | 0.26\*\*\*(0.21-0.30) | 0.34\*\*\*(0.28-0.42) | 0.32\*\*\*(0.30-0.33) |
| occ\_group(policy/advice) | 0.93\*\*\*(0.91-0.95) | 0.98(0.95-1.01) | 0.92(0.77-1.10) | 0.86(0.73-1.01) | 1.09(0.89-1.35) | 0.99(0.96-1.04) |
| region(NCR) | 0.81\*\*\*(0.79-0.83) | 0.83\*\*\*(0.80-0.85) | 0.62\*\*\*(0.53-0.72) | 0.73\*\*\*(0.62-0.85) | 1.36(0.97-1.95) | 0.86\*\*\*(0.82-0.90) |
| Matching N | treated (84,470); unmatched (5,604) | treated (51,684); unmatched (71,176) | treated (1,802); unmatched (170,940) | treated (2,001); unmatched (170,542) | treated (1,465); unmatched (171,614) | treated (43,221); unmatched (88,102) |

Note: Odds ratios, confidence intervals in brackets for 95%. \*p<.05; \*\*p<.01; \*\*\*p<.001

Table A7: *Approval stages* logistic regression results (matched data)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Intercept | 1.13\*\*\*(1.09-1.17) | 1.02(0.98-1.07) | 1.10(0.89-1.37) | 1.05(0.82-1.35) | 1.12(0.76-1.63) | 1.01(0.96-1.06) |
| Agency (all) | 0.86\*\*\*(0.84-0.88) | - | - | - | - | - |
| Administrativeagency | - | 0.77\*\*\*(0.75-0.79) | - | - | - | - |
| Regulatoryagency | - | - | 0.90(0.78-1.04) | - | - | - |
| Adjudicative agency | - | - | - | 0.44\*\*\*(0.38-0.51) | - | - |
| Parliamentaryagency | - | - | - | - | 0.51\*\*\*(0.44-0.60) | - |
| Enforcement agency | - | - | - | - | - | 1.26\*\*\*(1.21-1.30) |
| gender (male) | 0.80\*\*\*(0.79-0.82) | 0.81\*\*\*(0.79-0.83) | 0.87(0.76-1.00) | 0.88(0.77-1.02) | 0.85\*\*(0.72-0.99) | 0.77\*\*\*(0.74-0.79) |
| age\_group(young) | 1.25\*\*\*(1.23-1.28) | 1.25\*\*\*(1.22-1.28) | 1.08(0.94-1.25) | 1.39\*\*\*(1.20-1.62) | 1.33\*\*\*(1.14-1.57) | 1.24\*\*\*(1.19-1.28) |
| like\_job(like) | 0.48\*\*\*(0.47-0.49) | 0.49\*\*\*(0.48-0.51) | 0.48\*\*\*(0.40-0.57) | 0.42\*\*\*(0.35-0.50) | 0.43\*\*\*(0.35-0.52) | 0.47\*\*\*(0.45-0.48) |
| occ\_group(policy/advice) | 1.08\*\*\*(1.06-1.10) | 1.15\*\*\*(1.12-1.19) | 1.09(0.93-1.28) | 0.97(0.83-1.14) | 0.99(0.83-1.19) | 1.12\*\*\*(1.08-1.16) |
| region(NCR) | 1.09\*\*\*(1.07-1.12) | 1.16\*\*\*(1.12-1.19) | 0.96(0.83-1.10) | 1.18\*\*\*(1.01-1.36) | 1.23(0.92-1.67) | 1.13\*\*\*(1.09-1.18) |
| Matching N | treated (84,470); unmatched (5,604) | treated (51,684); unmatched (71,176) | treated (1,802); unmatched (170,940) | treated (2,001); unmatched (170,542) | treated (1,465); unmatched (171,614) | treated (43,221); unmatched (88,102) |

Note: Odds ratios, confidence intervals in brackets for 95%. \*p<.05; \*\*p<.01; \*\*\*p<.001

Table A8: *Unnecessary processes* logistic regression results (matched data)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Intercept | 1.21\*\*\*(1.17-1.25) | 1.13\*\*\*(1.08-1.18) | 1.28\*\*\*(1.02-1.59) | 1.32\*\*\*(1.03-1.69) | 1.12(0.76-1.65) | 1.08\*\*\*(1.03-1.14) |
| Agency (all) | 0.85\*\*\*(0.83-0.87) | - | - | - | - | - |
| Administrativeagency | - | 0.76\*\*\*(0.74-0.78) | - | - | - | - |
| Regulatoryagency | - | - | 0.74\*\*\*(0.64-0.86) | - | - | - |
| Adjudicative agency | - | - | - | 0.65\*\*\*(0.56-0.75) | - | - |
| Parliamentaryagency | - | - | - | - | 0.55\*\*\*(0.46-0.64) | - |
| Enforcement agency | - | - | - | - | - | 1.22\*\*\*(1.17-1.26) |
| gender (male) | 0.80\*\*\*(0.84-0.87) | 0.81\*\*\*(0.79-0.83) | 0.84\*\*\*(0.72-0.97) | 0.82\*\*\*(0.71-0.95) | 0.89(0.76-1.06) | 0.77\*\*\*(0.74-0.80) |
| age\_group(young) | 1.34\*\*\*(1.31-1.37) | 1.35\*\*\*(1.31-1.39) | 1.25\*\*\*(1.07-1.45) | 1.52\*\*\*(1.30-1.76) | 1.44\*\*\*(1.22-1.71) | 1.27\*\*\*(1.22-1.32) |
| like\_job(like) | 0.38\*\*\*(0.37-0.39) | 0.39\*\*\*(0.38-0.41) | 0.35\*\*\*(0.29-0.41) | 0.31\*\*\*(0.26-0.37) | 0.36\*\*\*(0.29-0.44) | 0.39\*\*\*(0.37-0.40) |
| occ\_group(policy/advice) | 1.26\*\*\*(1.24-1.29) | 1.31\*\*\*(1.27-1.35) | 1.12(0.95-1.32) | 0.99(0.84-1.16) | 1.10(0.91-1.34) | 1.26\*\*\*(1.22-1.31) |
| region(NCR) | 0.84\*\*\*(0.82-0.86) | 0.86\*\*\*(0.84-0.88) | 0.81\*\*\*(0.70-0.93) | 0.82\*\*\*(0.70-0.95) | 0.88(0.65-1.19) | 0.90\*\*\*(0.87-0.94) |
| Matching N | treated (84,470); unmatched (5,604) | treated (51,684); unmatched (71,176) | treated (1,802); unmatched (170,940) | treated (2,001); unmatched (170,542) | treated (1,465); unmatched (171,614) | treated (43,221); unmatched (88,102) |

Note: Odds ratios, confidence intervals in brackets for 95%. \*p<.05; \*\*p<.01; \*\*\*p<.001