**Appendix 1.** Socioeconomic inequality in the prevalence of overweight in Iranian children and adolescents: the weight disorders survey of the CASPIAN-IV study.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **province** | **Q1**  **(95% CI)** | **Q2**  **(95% CI** | **Q3**  **(95% CI)** | **Q4**  **(95% CI)** | **Q5**  **(95% CI)** | **Total**  **(95% CI)** | **SII**  **(95% CI)** | **CCI**  **(SE)** |
| Ardebil | 10.42 (5.69,18.32) | 12.3 (7.54,19.42) | 16.79 (11.31,24.22) | 10.71 (6.18,17.95) | 16.67 (10.11,26.23) | 13.39 (10.78,16.53) | -0.05 (-0.19, 0.1) | 0.05 (0.06) |
| Bushehr | 14.29 (9.29,21.33) | 13.57 (8.82,20.32) | 15.72 (10.84,22.25) | 15.19 (10.38,21.68) | 13.64 (9.05,20.03) | 14.52 (12.16,17.24) | 0.00 (-0.06,0.05) | 0.00 (0.05) |
| Ch. Mahal | 5.58 (3.33,9.20) | 6.13 (3.79,9.78) | 11.19 (7.93,15.57) | 12.19 (8.83,16.58) | 14.95 (10.77,20.39) | 9.90 (8.37,11.67) | -0.12 (-0.17,-0.06) | 0.19 (0.04) |
| EastAzar. | 5.556 (2.66,11.23) | 9.28 (4.89,16.92) | 13.21 (6.41,25.27) | 19.4 (11.59,30.66) | 12.5 (7.04,21.22) | 10.9 (8.28,14.23) | -0.13 (-0.32,0.06) | 0.19 (0.07) |
| Fars | 8.42 (5.22,13.31) | 9.16 (6.21,13.31) | 11.68 (8.46,15.92) | 10.63 (7.61,14.65) | 14.41 (10.42,19.59) | 10.92 (9.32,12.76) | -0.06 (-0.12,-0.01) | 0.09 (0.04) |
| Gilan | 7.35 (4.00,13.14) | 8.37 (5.27,13.06) | 12.64 (9.21,17.1) | 19.73 (15.56,24.68) | 18.3 (14.35,23.04) | 14.47 (12.6,16.57) | -0.17 (-0.30,-0.04) | 0.17 (0.04) |
| Golestan | 6.69 (4.40,10.04) | 9.43 (6.67,13.18) | 12.08 (8.67,16.59) | 10.66 (7.05,15.8) | 15.9 (11.4,21.73) | 10.47 (8.91,12.27) | -0.09 (-0.17,-0.01) | 0.15 (0.04) |
| Hamedan | 4.62 (2.58,8.16) | 9.66 (6.98,13.22) | 9.31 (6.46,13.24) | 14.86 (10.76,20.18) | 11.93 (7.91,17.62) | 9.86 (8.34,11.62) | -0.09 (-0.20,0.02) | 0.15 (0.04) |
| Hormozgan | 2.35 (1.06,5.15) | 3.96 (1.99,7.73) | 6.15 (3.10,11.84) | 13.95 (8.09,23.01) | 18.52 (7.91,37.56) | 5.57 (4.09,7.54) | -0.16 (-0.31,-0.01) | 0.37 (0.08) |
| Ilam | 7.77 (5.17,11.53) | 9.22 (6.02,13.86) | 11.82 (8.05,17.04) | 8.97 (5.92,13.38) | 13.13 (9.53,17.82) | 10.12 (8.53,11.96) | -0.06 (-0.14, 0.03) | 0.09 (0.05) |
| Isfahan | 7.22 (3.48,14.38) | 13.74 (9.45,19.55) | 17.09 (13.32,21.65) | 11.04 (8.10,14.88) | 14.14 (10.66,18.54) | 13.45 (11.66,15.48) | -0.04 (-0.25,0.17) | 0.01 (0.04) |
| Kerman | 2.11 (0.95,4.63) | 7.73 (4.79,12.25) | 6.85 (4.17,11.06) | 7.92 (4.91,12.55) | 10.94 (7.71,15.31) | 6.97 (5.64,8.57) | -0.1 (-0.18,-0.01) | 0.23 (0.05) |
| Kermanshah | 9.09 (6.11,13.32) | 8.13 (5.46,11.94) | 13.39 (9.62,18.33) | 14.47 (10.52,19.58) | 19.63 (14.89,25.44) | 12.61 (10.87,14.59) | -0.13 (-0.22,-0.04) | 0.17 (0.04) |
| Khorasan | 6.88 (3.85,12) | 4.37 (2.43,7.72) | 9.49 (6.44,13.77) | 10.42 (7.24,14.78) | 14.83 (11.02,19.66) | 9.44 (7.90,11.24) | -0.11 (-0.21,-0.02) | 0.20 (0.05) |
| Khozestan | 11.29 (7.47,16.71) | 9.92 (5.71,16.67) | 14.19 (9.52,20.63) | 15.33 (10.4,22.04) | 17.19 (11.58,24.75) | 13.51 (11.23,16.18) | -0.08 (-0.16,-0.01) | 0.10 (0.05) |
| Koh&Boyer | 7.10 (4.76,10.46) | 9.01 (5.95,13.43) | 12.68 (8.83,17.86) | 13.23 (9.09,18.85) | 14.14 (10.62,18.59) | 10.99 (9.37,12.84) | -0.10 (-0.14, -0.05) | 0.14 (0.04) |
| Kordestan | 8.64 (6.14,12.02) | 11.99 (8.95,15.88) | 10.79 (7.45,15.38) | 14.29 (9.98,20.04) | 16.54 (11.14,23.86) | 11.63 (9.97,13.52) | -0.08 (-0.14,-0.01) | 0.11 (0.04) |
| Lorestan | 8.94 (5.54,14.11) | 7.38 (3.88,13.59) | 10.31 (5.63,18.14) | 16.67 (11.22,24.04) | 13.92 (7.87,23.45) | 11.17 (8.89,13.93) | -0.08 (-0.22, 0.05) | 0.14 (0.06) |
| Markazi | 7.89 (4.15,14.51) | 7.53 (3.62,14.99) | 6.34 (2.39,15.78) | 12.2 (6.67,21.25) | 11.7 (6.59,19.95) | 9.19 (6.83,12.26) | -0.06 (-0.17, 0.06) | 0.10 (0.08) |
| Mazandaran | 9.86 (4.77,19.29) | 18.64 (12.59,26.71) | 16.19 (11.8,21.82) | 16.08 (12.4,20.6) | 19.1 (15.71,23.03) | 17.14 (15.07,19.43) | -0.09 (-0.31,0.13) | 0.05 (0.04) |
| Qazvin | 6.57 (3.85,10.98) | 10.93 (7.87,14.98) | 13.64 (10.12,18.13) | 10.48 (7.23,14.96) | 13.62 (9.79,18.63) | 11.27 (9.64,13.13) | -0.06 (-0.18,0.05) | 0.08 (0.04) |
| Qom | 9.91 (5.57,17.03) | 10.96 (7.45,15.84) | 17.95 (13.54,23.41) | 17.19 (13.04,22.32) | 16.67 (12.63,21.67) | 15.22 (13.2,17.49) | -0.10 (-0.24,0.04) | 0.08 (0.04) |
| Semnan | 6.42 (3.09,12.87) | 11.52 (7.46,17.36) | 11.28 (7.95,15.78) | 17.58 (13.51,22.57) | 14.03 (10.7,18.18) | 13.17 (11.32,15.26) | -0.11 (-0.28,0.06) | 0.09 (0.04) |
| Sistan& B. | 4.40 (3.05,6.30) | 6.91 (4.45,10.58) | 8.82 (5.39,14.13) | 4.67 (1.96,10.75) | 9.30 (3.53,22.33) | 5.76 (4.59,7.21) | -0.03 (-0.12,.05) | 0.12 (0.06) |
| Tehran | 9.46 (4.57,18.56) | 13.39 (8.48,20.49) | 14.4 (10.56,19.33) | 17.48 (13.73,22) | 19.52 (16,23.6) | 16.62 (14.62,18.85) | -0.14 (-0.23,-0.05) | 0.09 (0.03) |
| West Azar. | 8.10 (5.68,11.42) | 9.96 (6.97,14.06) | 12.65 (9.08,17.35) | 16.26 (12.15,21.42) | 12.18 (7.9,18.32) | 11.44 (9.81,13.29) | -0.07 (-0.17,0.04) | 0.12 (0.04) |
| Yazd | 9.52 (3.61,22.84) | 11.29 (5.46,21.89) | 3.61 (1.17,10.66) | 5.83 (2.63,12.4) | 8.13 (4.77,13.51) | 7.33 (5.25,10.15) | 0.04 (-0.16,0.24) | -0.02 (0.10) |
| Zanjan | 7.29 (4.64,11.28) | 7.48 (5.06,10.92) | 9.64 (6.69,13.7) | 14.36 (10.03,20.14) | 12.37 (8.35,17.93) | 9.74 (8.20,11.53) | -0.08 (-0.15,-0.01) | 0.13 (0.05) |
| N.Khorasan | 8.77 (6.42,11.87) | 8.39 (5.81,11.96) | 11.5 (7.76,16.72) | 11.73 (7.77,17.33) | 14.47 (9.72,21.01) | 10.2 (8.65,11.98) | -0.06 (-0.12,0.00) | 0.10 (0.05) |
| Alborz | 13.92 (7.88,23.44) | 10.47 (6.69,16.01) | 16.36 (12.4,21.28) | 15.28 (11.92,19.38) | 15.64 (12.47,19.43) | 14.9 (13.07,16.94) | -0.05 (-0.18, 0.08) | 0.04 (0.04) |
| Iran(total) | 7.19 (6.58,7.86) | 9.34 (8.65,10.08) | 12.31 (11.52,13.14) | 13.61 (12.78,14.47) | 15.11 (14.25,16.02) | 11.51 (11.16,11.86) | -0.10 (-0.13,-0.07) | 0.14 (0.01) |

Q, quintile; CCI, concentration index; SII, slope index of inequality.

**Appendix 2.** Socioeconomic inequality in the prevalence of obesity in Iranian children and adolescents: the weight disorders survey of the CASPIAN-IV study.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| province | **Q1**  **(95% CI)** | **Q2**  **(95% CI** | **Q3**  **(95% CI)** | **Q4**  **(95% CI)** | **Q5**  **(95% CI)** | **Total**  **(95% CI)** | **SII**  **(95% CI)** | **CCI**  **(SE)** |
| Ardebil | 9.38 (4.94,17.08) | 8.20 (4.46,14.59) | 5.34 (2.56,10.81) | 12.5 (7.53,20.03) | 17.86 (11.04,27.57) | 10.09 (7.82,12.93) | -0.10 (-0.28,0.08) | 0.15 (0.08) |
| Bushehr | 10.53 (6.33,17.01) | 15.71 (10.57,22.73) | 13.84 (9.28,20.14) | 19.62 (14.14,26.57) | 20.78 (15.08,27.93) | 16.26 (13.78,19.1) | -0.12 (-0.22,-.03) | 0.12 (0.04) |
| Ch. Mahal | 3.98 (2.16,7.25) | 6.13 (3.79,9.78) | 4.85 (2.84,8.18) | 7.89 (5.25,11.69) | 11.21 (7.63,16.19) | 6.68 (5.43,8.19) | -0.08 (-0.15,-0.01) | 0.18 (0.06) |
| East Azar. | 15.08 (9.81,22.47) | 17.53 (11.16,26.44) | 13.21 (6.41,25.27) | 13.43 (7.12,23.9) | 18.18 (11.43,27.68) | 15.78 (12.62,19.55) | -0.01 (-0.14,0.13) | 0.01 (0.06) |
| Fars | 4.21 (2.12,8.20) | 3.44 (1.80,6.47) | 5.50 (3.39,8.79) | 6.98 (4.59,10.47) | 7.86 (5.01,12.14) | 5.66 (4.51,7.07) | -0.05 (-0.09,-0.02) | 0.15 (0.06) |
| Gilan | 14.71 (9.68,21.71) | 12.81 (8.87,18.16) | 15.52 (11.71,20.29) | 11.9 (8.67,16.14) | 14.38 (10.87,18.78) | 13.82 (11.99,15.87) | 0.01 (-0.08,0.10) | -0.01 (0.04) |
| Golestan | 6.05 (3.89,9.30) | 5.35 (3.35,8.44) | 6.42 (4.02,10.08) | 8.63 (5.43,13.45) | 14.36 (10.1,20.02) | 7.60 (6.28,9.18) | -0.09 (-0.20,0.03) | 0.18 (0.06) |
| Hamedan | 3.78 (1.98,7.11) | 6.53 (4.38,9.65) | 4.48 (2.62,7.57) | 4.96 (2.76,8.73) | 15.34 (10.73,21.46) | 6.50 (5.27,7.99) | -0.09 (-0.27,0.09) | 0.19 (0.06) |
| Hormozgan | 1.96 (0.82,4.63) | 1.98 (0.74,5.17) | 5.39 (2.58,10.88) | 6.98 (3.16,14.7) | 11.11 (3.62,29.4) | 3.57 (2.42,5.24) | -0.09 (-0.17,-0.01) | 0.32 (0.11) |
| Ilam | 2.83 (1.42,5.56) | 3.23 (1.54,6.62) | 4.93 (2.67,8.92) | 5.56 (3.25,9.34) | 9.65 (6.60,13.9) | 5.27 (4.14,6.69) | -0.08 (-0.15,-0.02) | 0.25 (0.07) |
| Isfahan | 2.06 (0.51,7.88) | 7.69 (4.61,12.58) | 7.60 (5.14,11.09) | 6.87 (4.60,10.12) | 11.18 (8.10,15.25) | 7.86 (6.48,9.50) | -0.08 (-0.20,0.04) | 0.13 (0.05) |
| Kerman | 1.76 (0.73,4.16) | 2.90 (1.31,6.31) | 3.65 (1.84,7.14) | 6.44 (3.77,10.77) | 11.32 (8.03,15.74) | 5.27 (4.13,6.70) | -0.12 (-0.21,-0.02) | 0.36 (0.06) |
| Kermanshah | 9.09 (6.11,13.32) | 8.48 (5.75,12.35) | 10.04 (6.82,14.55) | 9.79 (6.59,14.30) | 11.87 (8.21,16.87) | 9.76 (8.22,11.56) | -0.03 (-0.07,0.00) | 0.05 (0.05) |
| Khorasan | 3.75 (1.69,8.10) | 4.37 (2.43,7.72) | 4.35 (2.42,7.69) | 8.11 (5.34,12.12) | 10.27 (7.13,14.56) | 6.40 (5.14,7.95) | -0.09 (-0.14,-0.03) | 0.21 (0.06) |
| Khozestan | 8.60 (5.33,13.59) | 8.26 (4.50,14.7) | 13.55 (8.99,19.9) | 12 (7.68,18.26) | 17.97 (12.23,25.61) | 11.89 (9.75,14.44) | -0.11 (-0.22,0,00) | 0.14 (0.06) |
| Koh&Boyer | 2.78 (1.45,5.26) | 2.15 (0.89,5.06) | 4.23 (2.21,7.93) | 4.76 (2.49,8.90) | 4.71 (2.81,7.81) | 3.66 (2.75,4.86) | -0.03 (-0.07,0.01) | 0.14 (0.08) |
| Kordestan | 4.74 (2.96,7.49) | 4.39 (2.66,7.15) | 5.81 (3.47,9.57) | 6.35 (3.64,10.85) | 18.05 (12.39,25.53) | 6.49 (5.25,7.99) | -0.11 (-0.32,0.09) | 0.23 (0.06) |
| Lorestan | 4.47 (2.25,8.70) | 8.20 (4.46,14.59) | 12.37 (7.15,20.56) | 14.39 (9.36,21.49) | 7.60 (3.44,15.92) | 9.03 (6.99,11.59) | -0.06 (-0.25,0.12) | 0.17 (0.06) |
| Markazi | 11.4 (6.72,18.69) | 8.60 (4.35,16.31) | 11.11 (5.38,21.57) | 15.85 (9.42,25.46) | 14.89 (9.01,23.63) | 12.33 (9.58,15.74) | -0.07 (-0.19,0.06) | 0.09 (0.07) |
| Mazandaran | 11.27 (5.73,20.97) | 11.86 (7.15,19.05) | 10.48 (6.99,15.41) | 11.25 (8.19,15.28) | 18.43 (15.09,22.31) | 13.94 (12.06,16.06) | -0.11 (-0.25, 0.03) | 0.12 (0.04) |
| Qazvin | 9.09 (5.80,13.97) | 5.30 (3.27,8.48) | 5.94 (3.72,9.36) | 11.69 (8.44,16.33) | 22.55 (17.65,28.35) | 10.48 (8.91,12.29) | -0.16 (-0.41,0.08) | 0.25 (0.05) |
| Qom | 6.31 (3.03,12.65) | 13.7 (9.74,18.93) | 11.54 (8.03,16.31) | 12.5 (8.97,17.15) | 17.42 (13.3,22.49) | 13.1 (11.22,15.25) | -0.10 (-0.25,0.05) | 0.10 (0.04) |
| Semnan | 3.67 (1.38,9.38) | 5.46 (2.86,10.16) | 5.06 (2.96,8.52) | 6.59 (4.19,10.23) | 15.52 (12.02,19.81) | 8.43 (6.95,10.19) | -0.15 (-0.29,-0.01) | 0.28 (0.05) |
| Sistan& B. | 3.30 (2.16,5.01) | 1.46 (0.55,3.82) | 2.35 (0.88,6.11) | 6.54 (3.15,13.1) | 9.30 (3.53,22.33) | 3.25 (2.39,4.40) | -0.05 (-0.18,0.08) | 0.08 (0.09) |
| Tehran | 5.41 (2.04,13.55) | 8.66 (4.86,14.98) | 7.6 (4.90,11.61) | 12.88 (9.66,16.98) | 13.57 (10.61,17.2) | 11.11 (9.45,13.02) | -0.12 (-0.22,-0.02) | 0.13 (0.04) |
| West Azar. | 3.91 (2.33,6.50) | 4.63 (2.70,7.81) | 6.72 (4.22,10.55) | 11.79 (8.31,16.46) | 12.82 (8.42,19.05) | 7.19 (5.90,8.73) | -0.11 (-0.18,-0.04) | 0.26 (0.05) |
| Yazd | 0 | 11.29 (5.46,21.89) | 16.87 (10.23,26.54) | 11.65 (6.72,19.44) | 11.25 (7.19,17.18) | 11.33 (8.71,14.62) | -0.11 (-0.51,0.29) | 0.05(0.07) |
| Zanjan | 5.26 (3.08,8.86) | 5.61 (3.56,8.73) | 7.5 (4.94,11.23) | 7.45 (4.46,12.19) | 16.67 (11.97,22.74) | 7.94 (6.55,9.59) | -0.11 (-0.26,0.04) | 0.21 (0.06) |
| N.Khorasan | 3.56 (2.15,5.82) | 3.73 (2.13,6.45) | 6.00 (3.44,10.27) | 10.06 (6.42,15.4) | 7.24 (4.05,12.6) | 5.33 (4.23,6.71) | -0.06 (-0.14,0.02) | 0.20 (0.07) |
| Alborz | 5.06 (1.91,12.74) | 6.40 (3.57,11.19) | 7.06 (4.55,10.81) | 8.33 (5.89,11.67) | 12.09 (9.30,15.56) | 8.83 (7.41,10.5) | -0.10 (-0.13,-0.06) | 0.15 (0.05) |
| Iran(total) | 5.19 (4.67,5.76) | 6.26 (5.69,6.88) | 7.40 (6.78,8.07) | 9.43 (8.74,10.18) | 13.5 (12.68,14.37) | 8.35 (8.05,8.66) | -0.10 (-0.16,-0.04) | 0.19 (0.01) |

Q, quintile; CCI, concentration index; SII, slope index of inequality.

**Appendix 3.** Socioeconomic inequality in the prevalence of abdominal obesity in Iranian children and adolescents the weight disorders survey of the CASPIAN-IV study.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| province | **Q1**  **(95% CI)** | **Q2**  **(95% CI** | **Q3**  **(95% CI)** | **Q4**  **(95% CI)** | **Q5**  **(95% CI)** | **Total**  **(95% CI)** | **SII**  **(95% CI)** | **CCI**  **(SE)** |
| Ardebil | 29.17 (20.94,39.04) | 27.64 (20.45,36.22) | 20 (13.97,27.78) | 28.83 (21.15,37.95) | 29.41 (20.69,39.95) | 26.61 (23.05,30.49) | -0.01 (-0.22,0.20) | 0.00 (0.04) |
| Bushehr | 17.16 (11.67,24.53) | 24.29 (17.88,32.08) | 23.27 (17.34,30.48) | 22.78 (16.89,29.99) | 24.18 (18.04,31.61) | 22.45 (19.58,25.59) | -0.06 (-0.19,0.07) | 0.04 (0.04) |
| Ch. Mahal | 10.76 (7.48,15.24) | 12.64 (9.13,17.26) | 14.87 (11.09,19.65) | 18.35 (14.22,23.34) | 19.63 (14.83,25.50) | 15.16 (13.29,17.24) | -0.11 (-0.14,-0.08) | 0.12 (0.04) |
| East Azar**.** | 22.22 (15.78,30.34) | 26.8 (18.91,36.50) | 22.64 (13.30,35.83) | 29.41 (19.79,41.30) | 27.27 (18.97,37.52) | 25.46 (21.56,29.80) | -0.06 (-0.21,0.08) | 0.04 (0.04) |
| Fars | 11.52 (7.70,16.88) | 11.83 (8.44,16.34) | 15.46 (11.74,20.09) | 20.20 (16.04,25.11) | 16.16 (11.93,21.51) | 15.37 (13.49,17.46) | -0.08 (-0.21,0.04) | 0.09 (0.03) |
| Gilan | 22.79 (16.5,30.60) | 21.18 (16.1,27.35) | 23.47 (18.84,28.82) | 26.53 (21.79,31.88) | 26.06 (21.45,31.27) | 24.40 (22.07,26.90) | -0.06 (-0.13,0.01) | 0.04 (0.03) |
| Golestan | 12.42 (9.20,16.56) | 13.88 (10.49,18.15) | 16.98 (12.92,22.00) | 16.33 (11.78,22.19) | 23.59 (18.15,30.06) | 16.01 (14.10,18.12) | -0.11 (-0.22,0.00) | 0.11 (0.04) |
| Hamedan | 9.66 (6.50,14.13) | 19.03 (15.26,23.48) | 15.46 (11.74,20.09) | 21.62 (16.69,27.53) | 23.86 (18.13,30.72) | 17.59 (15.6,19.78) | -0.13 (-0.28,0.02) | 0.12 (0.03) |
| Hormozgan | 6.28 (3.87,10.01) | 5.94 (3.40,10.18) | 11.54 (7.07,18.28) | 20.93 (13.59,30.82) | 25.93 (12.87,45.34) | 9.71 (7.73,12.15) | -0.21 (-0.4,-0.01) | 0.27 (0.07) |
| Ilam | 8.51 (5.77,12.39) | 12.39 (8.63,17.47) | 14.29 (10.11,19.81) | 13.73 (9.88,18.79) | 21.71 (17.09,27.16) | 14.07 (12.21,16.16) | -0.14 (-0.26,-0.03) | 0.17 (0.04) |
| Isfahan | 14.29 (8.64,22.7) | 22.95 (17.42,29.61) | 22.15 (17.91,27.07) | 20.6 (16.60,25.27) | 19.14 (15.09,23.97) | 20.49 (18.32,22.83) | -0.02 (-0.22,0.18) | -0.01 (0.03) |
| Kerman | 4.91 (2.93,8.13) | 11.06 (7.46,16.1) | 10.00 (6.67,14.73) | 12.38 (8.50,17.68) | 17.74 (13.59,22.82) | 11.1 (9.43,13.03) | -0.14 (-0.24,-0.04) | 0.2 (0.04) |
| Kermanshah | 19.05 (14.66,24.38) | 16.96 (13.02,21.8) | 20.92 (16.22,26.55) | 22.55 (17.65,28.35) | 24.66 (19.39,30.80) | 20.60 (18.43,22.96) | -0.08 (-0.07,0.00) | 0.06 (0.03) |
| Khorasan | 11.88 (7.70,17.88) | 9.6 (6.51,13.93) | 14.62 (10.78,19.54) | 15.89 (11.91,20.88) | 21.76 (17.17,27.17) | 15.05 (13.12,17.20) | -0.14 (-0.24,-0.03) | 0.15 (0.04) |
| Khozestan | 14.97 (10.53,20.85) | 19.83 (13.65,27.91) | 24.18 (18.04,31.61) | 22.00 (16.07,29.35) | 21.88 (15.54,29.88) | 20.3 (17.55,23.36) | -0.08 (-0.22,0.06) | 0.07 (0.04) |
| Koh&Boyer | 7.69 (5.25,11.14) | 7.27 (4.56,11.38) | 7.98 (5.02,12.47) | 10.58 (6.93,15.84) | 14.48 (10.91,18.96) | 9.70 (8.18,11.46) | -0.08 (-0.19,0.02) | 0.15 (0.05) |
| Kordestan | 13.33 (10.19,17.26) | 13.99 (10.71,18.09) | 15.35 (11.33,20.48) | 18.09 (13.21,24.26) | 25.56 (18.86,33.66) | 15.89 (13.97,18.01) | -0.12 (-0.25,0.02) | 0.11 (0.04) |
| Lorestan | 10.00 (6.38,15.33) | 13.11 (8.18,20.36) | 20.62 (13.69,29.84) | 27.27 (20.34,35.51) | 17.72 (10.77,27.76) | 17.05 (14.26,20.25) | -0.14 (-0.40,0.12) | 0.17 (0.05) |
| Markazi | 14.91 (9.45,22.72) | 16.13 (9.95,25.09) | 23.08 (14.39,34.87) | 29.27 (20.43,40.01) | 17.02 (10.68,26.03) | 19.42 (16.00,23.36) | -0.14 (-0.26,-0.03) | 0.07 (0.05) |
| Mazandaran | 18.31 (10.93,29.05) | 27.97 (20.61,36.74) | 23.33 (18.10,29.54) | 24.19 (19.74,29.28) | 34.98 (30.68,39.53) | 28.23 (25.7,30.90) | -0.2 (-0.48,0.08) | 0.09 (0.03) |
| Qazvin | 15.66 (11.23,21.41) | 18.21 (14.25,22.98) | 20.7 (16.38,25.81) | 20.56 (15.98,26.06) | 31.91 (26.26,38.15) | 21.37 (19.20,23.72) | -0.16 (-0.33,0.00) | 0.12 (0.03) |
| Qom | 6.36 (3.06,12.76) | 16.44 (12.09,21.96) | 15.02 (10.98,20.21) | 16.08 (12.06,21.12) | 17.11 (13.02,22.16) | 15.19 (13.16,17.46) | -0.1 (-0.29,0.10) | 0.07 (0.04) |
| Semnan | 11.82 (6.98,19.31) | 16.36 (11.46,22.82) | 15.95 (11.96,20.96) | 20.8 (16.4,26.02) | 26.87 (22.38,31.88) | 19.98 (17.76,22.41) | -0.19 (-0.28,-0.11) | 0.14 (0.03) |
| Sistan& B. | 6.10 (4.89,8.25) | 3.636 (1.97,6.63) | 4.65 (2.34,9.03) | 10.28 (5.78,17.63) | 11.90 (5.04,25.61) | 5.91 (4.72,7.37) | -0.05 (-0.19,0.09) | 0.04 (0.07) |
| Tehran | 13.51 (7.42,23.35) | 18.9 (12.99,26.66) | 24.9 (19.91,30.65) | 26.52 (22.02,31.57) | 33.17 (28.82,37.83) | 26.9 (24.46,29.49) | -0.27 (-0.44,-0.09) | 0.11 (0.03) |
| West Azar. | 13.13 (10.00,17.04) | 11.03 (7.86,15.27) | 13.83 (10.10,18.67) | 23.36 (18.47,29.09) | 24.05 (18.02,31.33) | 16.07 (14.17,18.18) | -0.15 (-0.33,0.02) | 0.15 (0.04) |
| Yazd | 7.14 (2.31,20.00) | 20.97 (12.56,32.89) | 16.87 (10.23,26.53) | 11.76 (6.79,19.62) | 20.12 (14.66,26.98) | 16.56 (13.4,20.28) | -0.09 (-0.48,0.29) | 0.07 (0.06) |
| Zanjan | 12.10 (8.58,16.78) | 13.71 (10.36,17.93) | 17.14 (13.16,22.02) | 21.28 (16,27.72) | 27.96 (21.97,34.84) | 17.5 (15.47,19.73) | -0.18 (-0.27,-0.08) | 0.16 (0.03) |
| N.Khorasan | 14.22 (11.20,17.89) | 16.15 (12.52,20.59) | 23.50 (18.13,29.88) | 29.61 (23.37,36.71) | 31.58 (24.68,39.40) | 20.39 (18.27,22.7) | -0.21 (-0.33,-0.10) | 0.18 (0.03) |
| Alborz | 17.72 (10.78,27.75) | 15.12 (10.5,21.29) | 19.33 (15.04,24.50) | 21.17 (17.25,25.71) | 25.00 (21.10,29.35) | 21.03 (18.9,23.33) | -0.13 (-0.21,-0.04) | 0.09 (0.03) |
| Iran (total) | 11.98 (11.21,12.80) | 15.04 (14.19,15.94) | 17.53 (16.61,18.48) | 20.64 (19.66,21.66) | 24.21 (23.17,25.28) | 17.87 (17.46,18.3) | -0.15 (-0.17,-0.13) | 0.13 (0.01) |

Q, quintile; CCI, concentration index; SII, slope index of inequality.

**Appendix 4.** Concentration index of weight disorders at provincial level: the weight disorders survey of the CASPIAN IV study.  