

## S5 Appendix: Sentiment analysis results

### Base sets

#### Denmark

Sample size: 94,908 tweets

Sample size after cleaning: 94,288

Average positive score: 0.603 (sd=0.796)

Average negative score: -0.805 (sd=0.829)

| Neg | F | Pos    |        |       |       |       |
|-----|---|--------|--------|-------|-------|-------|
|     |   | 0      | 1      | 2     | 3     | 4     |
| 0   |   | 25,20% | 10,41% | 5,03% | 0,83% | 0,04% |
| -1  |   | 22,16% | 12,37% | 5,25% | 0,91% | 0,03% |
| -2  |   | 7,47%  | 4,19%  | 1,77% | 0,33% | 0,01% |
| -3  |   | 1,99%  | 1,10%  | 0,52% | 0,13% | 0,00% |
| -4  |   | 0,13%  | 0,08%  | 0,04% | 0,01% |       |

Figure A-0: Denmark, base set

#### Germany

Sample size: 100,000

Sample size after cleaning: 98,888

Avg. positive score: 0.385 (sd=0.649)

Avg. negative score: -0.604 (sd=0.939)

| Neg | F | Pos    |        |       |       |       |
|-----|---|--------|--------|-------|-------|-------|
|     |   | 0      | 1      | 2     | 3     | 4     |
| 0   |   | 46,91% | 13,63% | 4,92% | 0,29% | 0,00% |
| -1  |   | 9,32%  | 3,35%  | 1,16% | 0,07% | 0,00% |
| -2  |   | 10,12% | 3,39%  | 1,19% | 0,07% |       |
| -3  |   | 3,75%  | 1,18%  | 0,40% | 0,07% | 0,00% |
| -4  |   | 0,12%  | 0,04%  | 0,02% | 0,00% | 0,00% |

Figure B-0: Germany, base set

## The Netherlands

Sample size: 100,000

Sample size after cleaning: 99,161

Avg. pos. score: 0.424 (sd=0.722)

Avg. neg. score: -0.820 (sd=0.971)

| Neg | F | Pos    |       |       |       |       |
|-----|---|--------|-------|-------|-------|-------|
|     |   | 0      | 1     | 2     | 3     | 4     |
| 0   |   | 35,95% | 8,05% | 4,51% | 0,50% | 0,01% |
| -1  |   | 19,28% | 5,70% | 3,09% | 0,34% | 0,01% |
| -2  |   | 9,71%  | 2,90% | 1,69% | 0,19% | 0,01% |
| -3  |   | 5,09%  | 1,54% | 0,93% | 0,12% | 0,00% |
| -4  |   | 0,23%  | 0,09% | 0,04% | 0,01% | 0,00% |

Figure C-0: The Netherlands, base set

## Sweden

Sample size: 100,000 tweets

Sample size after cleaning: 99,197

Average positive score: 0.505 (sd=0.688)

Average negative score: -0.933 (sd=0.851)

| Neg | F | Pos    |        |       |       |       |
|-----|---|--------|--------|-------|-------|-------|
|     |   | 0      | 1      | 2     | 3     | 4     |
| 0   |   | 22,30% | 9,30%  | 2,35% | 0,26% | 0,01% |
| -1  |   | 25,18% | 14,19% | 3,62% | 0,37% | 0,02% |
| -2  |   | 9,85%  | 5,97%  | 1,71% | 0,18% | 0,00% |
| -3  |   | 2,16%  | 1,50%  | 0,50% | 0,06% | 0,01% |
| -4  |   | 0,22%  | 0,13%  | 0,10% | 0,01% |       |

Figure D-0: Sweden, base set

## Phase 1 (first case – March 10)

### Denmark

Sample size: 321

Sample size after cleaning: 318

Avg. pos. score: 0.513 (sd=0.764)

Avg. neg. score: -0.997 (sd=0.811)

| Neg | Pos | Pos    |        |       |       |
|-----|-----|--------|--------|-------|-------|
|     |     | 0      | 1      | 2     | 3     |
| 0   |     | 19,18% | 6,60%  | 1,57% | 0,63% |
| -1  |     | 29,87% | 12,89% | 5,35% | 1,26% |
| -2  |     | 10,69% | 3,77%  | 2,83% | 0,31% |
| -3  |     | 3,46%  | 1,26%  | 0,31% |       |

Figure A1: Denmark, Phase 1

### Germany

Sample size: 6125

Sample size after cleaning: 6061

Avg. pos. score: 0.347 (sd=0.622)

Avg. neg. score: -0.637 (sd=0.961)

| Neg | Pos | Pos    |        |       |       |
|-----|-----|--------|--------|-------|-------|
|     |     | 0      | 1      | 2     | 3     |
| 0   |     | 48,80% | 12,04% | 4,41% | 0,23% |
| -1  |     | 7,33%  | 2,38%  | 0,89% | 0,07% |
| -2  |     | 12,80% | 4,41%  | 1,45% | 0,02% |
| -3  |     | 3,91%  | 0,87%  | 0,25% | 0,02% |
| -4  |     | 0,10%  |        | 0,03% |       |

Figure B1: Germany, Phase 1

## The Netherlands

Sample size: 3347

Sample size after cleaning: 3322

Avg. pos. score: 0.450 (sd=0.740)

Avg. neg. score: -0.879 (sd=0.947)

| Neg | F | Pos    |       |       |       |       |
|-----|---|--------|-------|-------|-------|-------|
|     |   | 0      | 1     | 2     | 3     | 4     |
| 0   |   | 31,37% | 7,62% | 5,36% | 0,27% | 0,03% |
| -1  |   | 20,23% | 5,60% | 3,40% | 0,36% | 0,03% |
| -2  |   | 12,70% | 3,94% | 2,35% | 0,15% |       |
| -3  |   | 4,49%  | 1,02% | 0,72% | 0,15% |       |
| -4  |   | 0,12%  | 0,06% | 0,03% |       |       |

Figure C1: The Netherlands, Phase 1

## Sweden

Sample size: 591 tweets

Sample size after cleaning: 586

Average positive score: 0.515 (sd=0.701)

Average negative score: -1.003 (sd=0.784)

| Neg | F | Pos    |        |       |       |       |
|-----|---|--------|--------|-------|-------|-------|
|     |   | 0      | 1      | 2     | 3     | 4     |
| 0   |   | 14,16% | 8,70%  | 2,22% | 0,17% |       |
| -1  |   | 32,08% | 17,92% | 3,58% | 0,51% | 0,17% |
| -2  |   | 9,73%  | 3,58%  | 2,05% | 0,17% |       |
| -3  |   | 3,07%  | 1,54%  |       | 0,17% |       |
| -4  |   |        |        | 0,17% |       |       |

Figure D1: Sweden, Phase 1

## Phase 2 (March 11 – March 25)

### Denmark

Sample size: 2,492

Sample size after cleaning: 2,487

Avg. pos. score: 0.650 (sd=0.797)

Avg. neg. score: -0.914 (sd=0.814)

| Neg | F | Pos    |        |       |       |       |
|-----|---|--------|--------|-------|-------|-------|
|     |   | 0      | 1      | 2     | 3     | 4     |
| 0   |   | 19,14% | 9,93%  | 3,90% | 0,68% | 0,08% |
| -1  |   | 22,60% | 15,32% | 5,79% | 1,13% | 0,08% |
| -2  |   | 9,33%  | 5,71%  | 2,53% | 0,16% | 0,04% |
| -3  |   | 1,57%  | 1,09%  | 0,52% | 0,16% |       |
| -4  |   | 0,04%  | 0,12%  | 0,08% |       |       |

Figure A2: Denmark, Phase 2

### Germany

Sample size: 26,390

Sample size after cleaning: 26,205

Avg. pos. score: 0.375 (sd=0.651)

Avg. neg. score: -0.506 (sd=0.864)

| Neg | F | Pos    |        |       |       |       |
|-----|---|--------|--------|-------|-------|-------|
|     |   | 0      | 1      | 2     | 3     | 4     |
| 0   |   | 51,13% | 13,81% | 5,45% | 0,30% |       |
| -1  |   | 8,11%  | 2,40%  | 0,97% | 0,09% | 0,00% |
| -2  |   | 9,93%  | 3,01%  | 1,34% | 0,06% | 0,00% |
| -3  |   | 2,23%  | 0,76%  | 0,28% | 0,02% |       |
| -4  |   | 0,08%  | 0,01%  | 0,01% |       |       |

Figure B2: Germany, Phase 2

## The Netherlands

Sample size: 25,950

Sample size after cleaning: 25,811

Avg. pos. score: 0.524 (sd=0.780)

Avg. neg. score: -0.874 (sd=0.958)

| Neg | F | Pos    |       |       |       |       |
|-----|---|--------|-------|-------|-------|-------|
|     |   | 0      | 1     | 2     | 3     | 4     |
| 0   |   | 29,84% | 8,85% | 6,23% | 0,68% | 0,00% |
| -1  |   | 17,86% | 6,55% | 3,69% | 0,41% | 0,02% |
| -2  |   | 11,80% | 4,37% | 2,51% | 0,34% | 0,00% |
| -3  |   | 4,23%  | 1,47% | 0,80% | 0,09% |       |
| -4  |   | 0,18%  | 0,05% | 0,03% | 0,00% |       |

Figure C2: The Netherlands, Phase 2

## Sweden

Sample size: 2667 tweets

Sample size after cleaning: 2658

Average positive score: 0.552 (sd=0.712)

Average negative score: -0.964

(sd=0.820)

| Neg | F | Pos    |        |       |       |       |
|-----|---|--------|--------|-------|-------|-------|
|     |   | 0      | 1      | 2     | 3     | 4     |
| 0   |   | 18,17% | 9,56%  | 2,48% | 0,26% |       |
| -1  |   | 26,22% | 15,69% | 4,74% | 0,45% | 0,04% |
| -2  |   | 9,74%  | 6,43%  | 1,92% | 0,26% |       |
| -3  |   | 2,22%  | 0,87%  | 0,38% | 0,08% |       |
| -4  |   | 0,26%  | 0,15%  | 0,08% |       |       |

Figure D2: Sweden, Phase 2

## One month after

### Denmark

Sample size: 1,010

Sample size after cleaning: 1,005

Avg. pos. score: 0.618 (sd=0.782)

Avg. neg. score: -0.905 (sd=0.829)

| Neg | ☐ | 0      | 1      | 2     | 3     | 4     |
|-----|---|--------|--------|-------|-------|-------|
| 0   |   | 19,50% | 8,96%  | 5,47% | 0,60% | 0,10% |
| -1  |   | 23,88% | 15,22% | 5,07% | 0,70% |       |
| -2  |   | 9,35%  | 4,38%  | 2,09% | 0,20% |       |
| -3  |   | 2,29%  | 1,19%  | 0,70% | 0,10% |       |
| -4  |   | 0,10%  |        | 0,10% |       |       |

Figure A3: Denmark, Phase 3

### Germany

Sample size: 13,716

Sample size after cleaning: 13,623

Avg. pos. score: 0.343 (sd=0.621)

Avg. neg. score: -0.542 (sd=0.882)

| Neg | ☐ | 0      | 1      | Pos   | 2     | 3     | 4 |
|-----|---|--------|--------|-------|-------|-------|---|
| 0   |   | 50,79% | 12,93% | 4,45% | 0,24% | 0,03% |   |
| -1  |   | 8,89%  | 2,66%  | 0,97% | 0,06% | 0,01% |   |
| -2  |   | 11,31% | 3,09%  | 1,01% | 0,05% |       |   |
| -3  |   | 2,33%  | 0,76%  | 0,26% | 0,01% |       |   |
| -4  |   | 0,04%  | 0,01%  | 0,10% |       |       |   |

Figure B3: Germany, Phase 3

## The Netherlands

Sample size: 9,456

Sample size after cleaning: 9,396

Avg. pos. score: 0.535 (sd=0.794)

Avg. neg. score: -1.022 (sd=1.007)

| Neg | F | Pos    |       |       |       |       |
|-----|---|--------|-------|-------|-------|-------|
|     |   | 0      | 1     | 2     | 3     | 4     |
| 0   |   | 25,64% | 7,87% | 5,41% | 0,60% |       |
| -1  |   | 17,78% | 6,44% | 3,54% | 0,66% | 0,01% |
| -2  |   | 14,29% | 4,87% | 3,27% | 0,39% | 0,02% |
| -3  |   | 5,59%  | 1,92% | 1,10% | 0,15% | 0,01% |
| -4  |   | 0,30%  | 0,07% | 0,04% | 0,03% |       |

Figure C3: The Netherlands, Phase 3

## Sweden

Sample size: 1138 tweets

Sample size after cleaning: 1134

Average positive score: 0.599 (sd=0.756)

Average negative score: -1.047 (sd=0.799)

| Neg | F | Pos    |        |       |       |       |
|-----|---|--------|--------|-------|-------|-------|
|     |   | 0      | 1      | 2     | 3     | 4     |
| 0   |   | 13,93% | 7,58%  | 2,29% | 0,71% | 0,09% |
| -1  |   | 27,78% | 18,08% | 4,14% | 0,97% |       |
| -2  |   | 9,79%  | 7,23%  | 2,20% | 0,62% |       |
| -3  |   | 2,47%  | 1,50%  | 0,26% | 0,09% |       |
| -4  |   | 0,09%  | 0,18%  |       |       |       |

Figure D3: Sweden, Phase 3