**Online appendix**

1. **Scores for all indicators**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Case** | **MOS** | **UNSOS** | **POL** | **RES** |
|  | **Consumer-facing** | **Private regulation** | **Supply chain** | **High conc.** | **No leg. proposal** | **No elite allies** | **Perceived closed.** | **Expert group**  | **Salience** | **Focusing event** | **Financial resources (euros)** |
| eggs\_uk1 | 1 | 1 | 0 | 0.67 | 1 | 1 | 0 | 0.15 | 0.04 | 0 | 1913000 |
| eggs\_uk2 | 1 | 1 | 1 | 0.67 | 1 | 1 | 1 | 0.15 | 0.29 | 0 | 34106000 |
| eggs\_uk3 | 1 | 1 | 0 | 0.67 | 1 | 1 | 1 | 0.15 | 0.29 | 0 | 926257 |
| eggs\_uk4 | 1 | 1 | 1 | 0.67 | 1 | 0 | 0 | 0.15 | 0.01 | 0 | 8056000 |
| antib\_uk1 | 1 | 1 | 1 | 0.67 | 0 | 0 | 0 | 0.11 | 0 | 0.67 | 8500000 |
| antib\_uk2 | 1 | 1 | 1 | 0.67 | 1 | 1 | 0 | 0.11 | 0.55 | 0.67 | 1217000 |
| antib\_uk3 | 0 | 1 | 1 | 0.67 | 0 | 0 | 1 | 0.11 | 0.55 | 0 | 100000 |
| plas\_uk1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0.99 | 0.85 | 0.67 | 1009000 |
| plas\_uk2 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0.99 | 0.83 | 0.67 | 19000000 |
| plas\_uk3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0.99 | 0.52 | 0.67 | 2460000 |
| plas\_uk4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0.99 | 0.02 | 0.67 | 6500000 |
| digi\_uk1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0.64 | 0 | 0 | 460000 |
| digi\_uk2 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0.64 | 0.97 | 0 | 500000 |
| digi\_uk3 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0.64 | 0 | 0 | 2483000 |
| eggs\_it1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0.15 | 0.32 | 0 | 500000 |
| eggs\_it2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0.15 | 0.62 | 0 | 166000 |
| antib\_it1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0.11 | 0.53 | 0 | 500000 |
| antib\_it2 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0.11 | 0.53 | 0 | 5000000 |
| plas\_it1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0.99 | 0.29 | 0.67 | 8345907 |
| plas\_it2 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0.99 | 0.11 | 0.67 | 500000 |
| plas\_it3 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0.99 | 0.29 | 0.67 | 9500000 |
| plas\_it4 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0.99 | 0.08 | 0.67 | 5200000 |
| digi\_it1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0.64 | 0.99 | 0 | 300000 |
| digi\_it2 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0.64 | 1 | 1 | 5000000 |

**2. Calibration (histograms)**

## MOS

## UNSOS



## RES



## POL

## MARKET&COMB



## STATE&COMB



**2. Truth tables and solution expressions**

## STATE (~MARKET&COMB)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MOS | UNSOS | POL | RES | OUT | n | incl | PRI | cases |
| 0 | 0 | 1 | 1 | 1 | 4 | 0.83 | 0.72 | plas\_uk2,plas\_uk3, plas\_uk4,plas\_it4 |
| 0 | 1 | 1 | 1 | 1 | 4 | 0.80 | 0.61 | digi\_uk3,plas\_it1, plas\_it3,digi\_it2 |
| 0 | 0 | 1 | 0 | 1 | 2 | 1.00 | 1.00 | plas\_uk1,plas\_it2 |
| 0 | 1 | 0 | 0 | 1 | 2 | 0.85 | 0.59 | digi\_uk1,antib\_it1 |
| 0 | 1 | 1 | 0 | 1 | 2 | 0.80 | 0.56 | digi\_uk2,dig\_it1 |
| 1 | 0 | 1 | 1 | 0 | 2 | 0.79 | 0.51 | antib\_uk1,antib\_uk2 |
| 1 | 0 | 0 | 1 | 0 | 3 | 0.64 | 0.24 | eggs\_uk1,eggs\_uk4, antib\_it2 |
| 1 | 1 | 0 | 0 | 0 | 2 | 0.73 | 0.15 | eggs\_uk3,eggs\_it2 |
| 1 | 0 | 0 | 0 | 0 | 2 | 0.68 | 0.32 | antib\_uk3,eggs\_it1 |
| 1 | 1 | 0 | 1 | 0 | 1 | 0.73 | 0.15 | eggs\_uk2 |
| 0 | 0 | 0 | 0 | ? | 0 | - | - |  |
| 0 | 0 | 0 | 1 | ? | 0 | - | - |  |
| 0 | 1 | 0 | 1 | ? | 0 | - | - |  |
| 1 | 0 | 1 | 0 | ? | 0 | - | - |  |
| 1 | 1 | 1 | 0 | ? | 0 | - | - |  |
| 1 | 1 | 1 | 1 | ? | 0 | - | - |  |

Solution expressions cover 14 cases.

**Conservative solution**

~MOS\*POL + ~MOS\*UNSOS\*~RES + ~UNSOS\*POL\*RES 🡪 ~MARKET&COMB

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | CovU | Cases |
| ~MOS\*POL | 0.82 | 0.69 | 0.60 | 0.47 | plas\_uk1, plas\_uk2, plas\_uk3, plas\_uk4, plas\_it1, plas\_it2, plas\_it3, plas\_it4, digi\_uk2, digi\_uk3, digi\_it1, digi\_it2 |
| ~MOS\*UNSOS\*~RES | 0.69 | 0.45 | 0.24 | 0.11 | antib\_it1, digi\_uk1, digi\_uk2, digi\_it1 |
| Whole expression | 0.78 | 0.62 | 0.72 |  |  |

**Parsimonious and intermediate solutions**

~MOS 🡪 ~MARKET&COMB

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | Cases |
| ~MOS | 0.77 | 0.59 | 0.79 | antib\_it1, plas\_uk1, plas\_uk2, plas\_uk3, plas\_uk4, plas\_it1, plas\_it2, plas\_it3, plas\_it4, digi\_uk1, digi\_uk2, digi\_uk3, digi\_it1, digi\_it2 |



## MARKET&COMB

**Truth table**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MOS | UNSOS | POL | RES | OUT | n | incl | PRI | cases |
| 1 | 0 | 0 | 1 | 1 | 3 | 0.78 | 0.54 | eggs\_uk1,eggs\_uk4,antib\_it2 |
| 1 | 1 | 0 | 0 | 1 | 2 | 0.91 | 0.72 | eggs\_uk3,eggs\_it2 |
| 1 | 0 | 0 | 0 | 1 | 2 | 0.81 | 0.59 | antib\_uk3,eggs\_it1 |
| 1 | 1 | 0 | 1 | 1 | 1 | 0.86 | 0.56 | eggs\_uk2 |
| 0 | 1 | 1 | 1 | 0 | 4 | 0.64 | 0.32 | digi\_uk3,plas\_it1,plas\_it3,digi\_it2 |
| 0 | 0 | 1 | 1 | 0 | 4 | 0.52 | 0.23 | plas\_uk2,plas\_uk3,plas\_uk4,plas\_it4 |
| 0 | 1 | 0 | 0 | 0 | 2 | 0.78 | 0.41 | digi\_uk1,antib\_it1 |
| 0 | 1 | 1 | 0 | 0 | 2 | 0.75 | 0.44 | digi\_uk2,dig\_it1 |
| 1 | 0 | 1 | 1 | 0 | 2 | 0.74 | 0.40 | antib\_uk1,antib\_uk2 |
| 0 | 0 | 1 | 0 | 0 | 2 | 0.39 | 0.00 | plas\_uk1,plas\_it2 |
| 0 | 0 | 0 | 0 | ? | 0 | - | - |  |
| 0 | 0 | 0 | 1 | ? | 0 | - | - |  |
| 0 | 1 | 0 | 1 | ? | 0 | - | - |  |
| 1 | 0 | 1 | 0 | ? | 0 | - | - |  |
| 1 | 1 | 1 | 0 | ? | 0 | - | - |  |
| 1 | 1 | 1 | 1 | ? | 0 | - | - |  |

Solution terms cover 8 cases. Zero deviant cases in consistency.

**Conservative, intermediate and parsimonious solutions**

MOS\*~POL 🡪 MARKET&COMB

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | Cases |
| MOS\*~POL | 0.83 | 0.60 | 0.65 | eggs\_uk1, eggs\_uk2, eggs\_uk3, eggs\_uk4, eggs\_it1, eggs\_it2, antib\_uk3, antib\_it2 |



## MARKET (~STATE&COMB)

**Necessary conditions**

MOS (inclN 0.90, RoN 0.80, covN 0.73)

****~POL (inclN 0.85, RoN 0.69, covN 0.62)

**Truth table**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MOS | UNSOS | POL | RES | OUT | n | incl | PRI | cases |
| 1 | 1 | 0 | 0 | 1 | 2 | 0.91 | 0.72 | eggs\_uk3,eggs\_it2 |
| 1 | 0 | 0 | 0 | 1 | 2 | 0.81 | 0.59 | antib\_uk3,eggs\_it1 |
| 1 | 1 | 0 | 1 | 1 | 1 | 0.86 | 0.56 | eggs\_uk2 |
| 0 | 1 | 1 | 1 | 0 | 4 | 0.47 | 0 | digi\_uk3,plas\_it1, plas\_it3,digi\_it2 |
| 0 | 0 | 1 | 1 | 0 | 4 | 0.37 | 0 | plas\_uk2,plas\_uk3, plas\_uk4,plas\_it4 |
| 1 | 0 | 0 | 1 | 0 | 3 | 0.65 | 0.28 | eggs\_uk1,eggs\_uk4, antib\_it2 |
| 1 | 0 | 1 | 1 | 0 | 2 | 0.71 | 0.32 | antib\_uk1,antib\_uk2 |
| 0 | 1 | 0 | 0 | 0 | 2 | 0.63 | 0 | digi\_uk1,antib\_it1 |
| 0 | 1 | 1 | 0 | 0 | 2 | 0.55 | 0 | digi\_uk2,dig\_it1 |
| 0 | 0 | 1 | 0 | 0 | 2 | 0.39 | 0 | plas\_uk1,plas\_it2 |
| 0 | 0 | 0 | 0 | ? | 0 | - | - |  |
| 0 | 0 | 0 | 1 | ? | 0 | - | - |  |
| 0 | 1 | 0 | 1 | ? | 0 | - | - |  |
| 1 | 0 | 1 | 0 | ? | 0 | - | - |  |
| 1 | 1 | 1 | 0 | ? | 0 | - | - |  |
| 1 | 1 | 1 | 1 | ? | 0 | - | - |  |

5 cases covered by solution expressions.

**Conservative solution**

MOS\*UNSOS\*~POL + MOS\*~POL\*~RES 🡪 ~STATE&COMB

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | CovU | Cases |
| MOS\*UNSOS\*~POL | 0.86 | 0.62 | 0.32 | 0.13 | eggs\_uk2, eggs\_uk3, eggs\_it2 |
| MOS\*~POL\*~RES | 0.85 | 0.63 | 0.44 | 0.25 | eggs\_uk3, eggs\_it1, eggs\_it2, antib\_uk3 |
| Whole expression | 0.84 | 0.61 | 0.57 |  |  |

**Parsimonious solution**

Model 1: MOS\*UNSOS + MOS\*~RES 🡪 STATE&COMB

Model 2: MOS\*UNSOS + ~UNSOS\*~POL\*~RES 🡪 ~STATE&COMB

Model 3: MOS\*~RES + UNSOS\*~POL\*RES 🡪 ~STATE&COMB

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | Cases |
| MOS\*UNSOS | 0.84 | 0.56 | 0.35 | eggs\_uk2, eggs\_uk3, eggs\_it2 |
| MOS\*~RES | 0.83 | 0.60 | 0.56 | eggs\_uk3, eggs\_it1, eggs\_it2, antib\_uk3 |
| ~UNSOS\*~POL\*~RES | 0.75 | 0.53 | 0.26 | eggs\_it1, antib\_uk3 |
| UNSOS\*~POL\*RES | 0.79 | 0.42 | 0.19 | eggs\_uk2 |
| Model 1 | 0.81 | 0.56 | 0.62 |  |
| Model 2 | 0.80 | 0.54 | 0.62 |  |
| Model 3 | 0.81 | 0.55 | 0.61 |  |

**Intermediate solutions (model ambiguity)**

From parsimonious model 1:

MOS\*UNSOS + MOS\*~RES 🡪 ~STATE&COMB

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | CovU | Cases |
| MOS\*UNSOS | 0.84 | 0.55 | 0.36 | 0.16 | eggs\_uk2, eggs\_uk3, eggs\_it2 |
| MOS\*~RES | 0.83 | 0.60 | 0.46 | 0.26 | eggs\_uk3, eggs\_it1, eggs\_it2, antib\_uk3 |
| Whole expression | 0.81 | 0.56 | 0.62 |  |  |

From parsimonious model 2:

MOS\*UNSOS + MOS\*~POL\*~RES 🡪 ~STATE&COMB

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | CovU | Cases |
| MOS\*UNSOS | 0.84 | 0.55 | 0.36 | 0.17 | eggs\_uk2, eggs\_uk3, eggs\_it2 |
| MOS\*~POL\*~RES | 0.85 | 0.63 | 0.44 | 0.25 | eggs\_uk3, eggs\_it1, eggs\_it2, antib\_uk3 |
| Whole expression | 0.83 | 0.57 | 0.60 |  |  |

From parsimonious model 3:

MOS\*~RES + MOS\*UNSOS\*~POL 🡪 ~STATE&COMB

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | CovU | Cases |
| MOS\*~RES | 0.83 | 0.60 | 0.46 | 0.27 | eggs\_uk3, eggs\_it1, eggs\_it2, antib\_uk3 |
| MOS\*UNSOS\*~POL | 0.86 | 0.62 | 0.32 | 0.13 | eggs\_uk2, eggs\_uk3, eggs\_it2 |
| Whole expression | 0.82 | 0.59 | 0.59 |  |  |

****

## STATE&COMB

**Truth table**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MOS | UNSOS | POL | RES | OUT | n | incl | PRI | cases |
| 0 | 0 | 1 | 1 | 1 | 4 | 0.97 | 0.95 | plas\_uk2,plas\_uk3, plas\_uk4,plas\_it4 |
| 0 | 1 | 1 | 1 | 1 | 4 | 0.96 | 0.93 | digi\_uk3,plas\_it1, plas\_it3,digi\_it2 |
| 0 | 0 | 1 | 0 | 1 | 2 | 1 | 1 | plas\_uk1,plas\_it2 |
| 0 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | digi\_uk1,antib\_it1 |
| 0 | 1 | 1 | 0 | 1 | 2 | 1 | 1 | digi\_uk2,dig\_it1 |
| 1 | 0 | 1 | 1 | 1 | 2 | 0.82 | 0.59 | antib\_uk1,antib\_uk2 |
| 1 | 0 | 0 | 1 | 0 | 3 | 0.77 | 0.52 | eggs\_uk1,eggs\_uk4, antib\_it2 |
| 1 | 1 | 0 | 0 | 0 | 2 | 0.73 | 0.15 | eggs\_uk3,eggs\_it2 |
| 1 | 0 | 0 | 0 | 0 | 2 | 0.68 | 0.32 | antib\_uk3,eggs\_it1 |
| 1 | 1 | 0 | 1 | 0 | 1 | 0.73 | 0.15 | eggs\_uk2 |
| 0 | 0 | 0 | 0 | ? | 0 | - | - |  |
| 0 | 0 | 0 | 1 | ? | 0 | - | - |  |
| 0 | 1 | 0 | 1 | ? | 0 | - | - |  |
| 1 | 0 | 1 | 0 | ? | 0 | - | - |  |
| 1 | 1 | 1 | 0 | ? | 0 | - | - |  |
| 1 | 1 | 1 | 1 | ? | 0 | - | - |  |

Solution expressions cover 16 cases.

**Conservative solution**

~MOS\*POL + ~MOS\*UNSOS\*~RES + ~UNSOS\*POL\*RES 🡪 STATE&COMB

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | CovU | Cases |
| ~MOS\*POL | 0.98 | 0.96 | 0.59 | 0.23 | plas\_uk1, plas\_uk2, plas\_uk3, plas\_uk4, plas\_it1, plas\_it2, plas\_it3, plas\_it4, digi\_uk2, digi\_uk2, digi\_it1, digi\_it1 |
| ~MOS\*UNSOS\*~RES | 0.90 | 0.81 | 0.26 | 0.13 | antib\_it1, digi\_uk1, digi\_uk2, digi\_it1 |
| ~UNSOS\*POL\*RES | 0.83 | 0.72 | 0.27 | 0.05 | antib\_uk1, antib\_uk2, plas\_uk2, plas\_uk3, plas\_uk4, plas\_it4 |
| Whole expression | 0.89 | 0.81 | 0.76 |  |  |

**Parsimonious solution**

~MOS + POL => STATE&COMB

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | CovU | Cases |
| ~MOS | 0.92 | 0.87 | 0.78 | 0.19 | antib\_it1, plas\_uk1, plas\_uk2, plas\_uk3, plas\_uk4, plas\_it1, plas\_it2, plas\_it3, plas\_it4, digi\_uk1, digi\_uk2, digi\_uk3, digi\_it1, digi\_it2 |
| POL | 0.88 | 0.79 | 0.66 | 0.07 | antib\_uk1, antib\_uk2, plas\_uk1, plas\_uk2, plas\_uk3, plas\_uk4, plas\_it1, plas\_it2, plas\_it3, plas\_it3, digi\_uk2, digi\_uk3, digi\_it1, digi\_it2 |
| Whole expression | 0.85 | 0.75 | 0.85 |  |  |

**Intermediate solution**

~MOS + ~UNSOS\*POL 🡪 STATE&COMB

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expression | inclS | PRI | CovS | CovU | Cases |
| ~MOS | 0.92 | 0.87 | 0.78 | 0.49 | antib\_it1, plas\_uk1, plas\_uk2, plas\_uk3, plas\_uk4, plas\_it1, plas\_it2, plas\_it3, plas\_it4, digi\_uk1, digi\_uk2, digi\_uk3, digi\_it1, digi\_it2 |
| ~UNSOS\*POL | 0.85 | 0.76 | 0.36 | 0.06 | antib\_uk1, antib\_uk2, plas\_uk1, plas\_uk2, plas\_uk3, plas\_uk4, plas\_it2, plas\_it4 |
| Whole expression | 0.87 | 0.78 | 0.84 |  |  |

Two deviant cases in consistency remain: eggs\_uk1 and antib\_uk2. Eggs\_uk1 is a campaign using market strategies only, and is covered by the solution for MARKET&COMB below. Antib\_uk2 was a bit of a different campaign, as it was run by an NGO specialising in shareholder action; the campaign therefore focuses on shareholder actions and resolutions and did not use any other actions. This peculiarity can explain why the case is not covered by any solution expression.





**3. List of interviews**

1. UK environmental NGO, 07/05/2018, phone.
2. UK animal welfare NGO, 09/05/2018, Skype.
3. UK animal welfare NGO, 18/05/2018, Skype.
4. UK animal welfare NGO, 28/05/2018, phone.
5. UK animal welfare charity, 29/05/2018, phone.
6. UK animal welfare NGO, 30/05/2018, phone.
7. UK animal welfare NGO, 31/05/2018, Skype.
8. UK charity, 19/06/2018, Skype.
9. UK environmental NGO, 25/07/2018, Skype.
10. UK digital rights NGO, 27/07/2018, Skype.
11. UK human rights NGO, 20/08/2018, Skype.
12. Italian environmental NGO, 11/09/2018, phone.
13. UK environmental NGO, 10/10/2018, Skype.
14. Italian animal welfare NGO, 11/10/2018, Rome.
15. Italian environmental NGO, 11/10/2018, Rome.
16. Italian consumer organisation, 16/10/2018, Skype.
17. Italian environmental NGO, 24/10/2018, Skype.