Generated on 2016-10-09 23:50:40 by `gEcon` version 1.0.0 (2016-10-09)
Model name: `cge_calibr_iosam`

# Index sets

$$HH = \{\mathrm{l}, \mathrm{s}\}$$
$$SEC = \{\mathrm{A}, \mathrm{B}, \mathrm{C}\}$$

# 1 CONSUMER $h \in HH$

## 1.1 Optimisation problem

$$\max_{\left(D^{\langle s,h\rangle}\right)_{s\in SEC}} U^{\langle h\rangle} = \left(\sum_{s\in SEC} \alpha^{\langle s,h\rangle} {D^{\langle s,h\rangle}}^{\omega^{-1}(-1+\omega)}\right)^{\omega(-1+\omega)^{-1}} \tag{1.1}$$

s.t. :

$$INC^{\langle h\rangle} = \sum_{s\in SEC} p^{\langle s\rangle} D^{\langle s,h\rangle} \quad \left(\lambda^{\mathrm{CONSUMER}^{1}\langle h\rangle}\right) \tag{1.2}$$

## 1.2 Identities

$$INC^{\langle h\rangle} = CAP^{\langle h\rangle} + p^{\mathrm{k}} K^{\langle h\rangle} + p^{\mathrm{l}} L^{\langle h\rangle} \tag{1.3}$$

## 1.3 First order conditions

$$s \in SEC: \quad \lambda^{\mathrm{CONSUMER}^{1}\langle h\rangle} p^{\langle s\rangle} + \alpha^{\langle s,h\rangle} {D^{\langle s,h\rangle}}^{-1+\omega^{-1}(-1+\omega)} \left(\sum_{s\in SEC} \alpha^{\langle s,h\rangle} {D^{\langle s,h\rangle}}^{\omega^{-1}(-1+\omega)}\right)^{-1+\omega(-1+\omega)^{-1}} = 0 \quad \left(D^{\langle s,h\rangle}\right) \tag{1.4}$$

# 2 SECTOR $s \in SEC$

## 2.1 Optimisation problem

$$\max_{Y^{\langle s\rangle},K^{\langle s\rangle},L^{\langle s\rangle},Y^{\mathrm{VA}\langle s\rangle},Y^{\mathrm{INT}\langle s\rangle}} \pi^{\langle s\rangle} = -p^{\mathrm{kc}}K^{\langle s\rangle} - p^{\mathrm{lc}}L^{\langle s\rangle} + p^{\langle s\rangle}Y^{\langle s\rangle} - Y^{\mathrm{INT}\langle s\rangle}\left(\sum_{si\in SEC}\beta^{\mathrm{x}\langle si,s\rangle^{-1}}p^{\langle si\rangle}\right) \tag{2.1}$$

s.t. :

$$Y^{\langle s\rangle} = Y^{\mathrm{VA}\langle s\rangle} \quad \left(\lambda^{\mathrm{SECTOR}^1\langle s\rangle}\right) \tag{2.2}$$

$$Y^{\langle s\rangle} = Y^{\mathrm{INT}\langle s\rangle} \quad \left(\lambda^{\mathrm{SECTOR}^2\langle s\rangle}\right) \tag{2.3}$$

$$Y^{\mathrm{VA}\langle s\rangle} = \gamma^{\mathrm{yva}\langle s\rangle}K^{\langle s\rangle^{\beta^{\mathrm{k}\langle s\rangle}}}L^{\langle s\rangle^{\beta^{\mathrm{l}\langle s\rangle}}} \quad \left(\lambda^{\mathrm{SECTOR}^3\langle s\rangle}\right) \tag{2.4}$$

## 2.2 Identities

$$si \in SEC: \quad X^{\langle si,s\rangle} = \beta^{\mathrm{x}\langle si,s\rangle^{-1}}Y^{\mathrm{INT}\langle s\rangle} \tag{2.5}$$

## 2.3 First order conditions

$$-\lambda^{\mathrm{SECTOR}^1\langle s\rangle} - \lambda^{\mathrm{SECTOR}^2\langle s\rangle} + p^{\langle s\rangle} = 0 \quad \left(Y^{\langle s\rangle}\right) \tag{2.6}$$

$$-p^{\mathrm{kc}} + \beta^{\mathrm{k}\langle s\rangle}\gamma^{\mathrm{yva}\langle s\rangle}\lambda^{\mathrm{SECTOR}^3\langle s\rangle}K^{\langle s\rangle^{-1+\beta^{\mathrm{k}\langle s\rangle}}}L^{\langle s\rangle^{\beta^{\mathrm{l}\langle s\rangle}}} = 0 \quad \left(K^{\langle s\rangle}\right) \tag{2.7}$$

$$-p^{\mathrm{lc}} + \beta^{\mathrm{l}\langle s\rangle}\gamma^{\mathrm{yva}\langle s\rangle}\lambda^{\mathrm{SECTOR}^3\langle s\rangle}K^{\langle s\rangle^{\beta^{\mathrm{k}\langle s\rangle}}}L^{\langle s\rangle^{-1+\beta^{\mathrm{l}\langle s\rangle}}} = 0 \quad \left(L^{\langle s\rangle}\right) \tag{2.8}$$

$$\lambda^{\mathrm{SECTOR}^1\langle s\rangle} - \lambda^{\mathrm{SECTOR}^3\langle s\rangle} = 0 \quad \left(Y^{\mathrm{VA}\langle s\rangle}\right) \tag{2.9}$$

$$\lambda^{\mathrm{SECTOR}^2\langle s\rangle} - \sum_{si\in SEC}\beta^{\mathrm{x}\langle si,s\rangle^{-1}}p^{\langle si\rangle} = 0 \quad \left(Y^{\mathrm{INT}\langle s\rangle}\right) \tag{2.10}$$

### 2.4 First order conditions after reduction

$$-p^{\mathrm{kc}} + \beta^{\mathrm{k}\langle s\rangle}\gamma^{\mathrm{yva}\langle s\rangle}\left(p^{\langle s\rangle} - \sum_{si\in SEC}\beta^{\mathrm{x}\langle si,s\rangle^{-1}}p^{\langle si\rangle}\right)K^{\langle s\rangle^{-1+\beta^{\mathrm{k}\langle s\rangle}}}L^{\langle s\rangle^{\beta^{\mathrm{l}\langle s\rangle}}} = 0 \quad \left(K^{\langle s\rangle}\right) \tag{2.11}$$

$$-p^{\mathrm{lc}} + \beta^{\mathrm{l}\langle s\rangle}\gamma^{\mathrm{yva}\langle s\rangle}\left(p^{\langle s\rangle} - \sum_{si\in SEC}\beta^{\mathrm{x}\langle si,s\rangle^{-1}}p^{\langle si\rangle}\right)K^{\langle s\rangle^{\beta^{\mathrm{k}\langle s\rangle}}}L^{\langle s\rangle^{-1+\beta^{\mathrm{l}\langle s\rangle}}} = 0 \quad \left(L^{\langle s\rangle}\right) \tag{2.12}$$

# 3 EQUILIBRIUM

## 3.1 Identities

$$p^{\mathrm{l}} = 1 \tag{3.1}$$

$$s \in SEC: \quad p^{\langle s\rangle} = 1 \tag{3.2}$$

$$KS = \sum_{s\in SEC} K^{\langle s\rangle} \tag{3.3}$$

$$KS = ks^{\mathrm{data}} \tag{3.4}$$

$$h \in HH: \quad K^{\langle h\rangle} = ouc^{\langle h\rangle}\,scale^{\langle h\rangle^{-1}}KS \tag{3.5}$$

$$LS = ls^{\mathrm{data}} \tag{3.6}$$

$$h \in HH: \quad L^{\langle h\rangle} = ouw^{\langle h\rangle}\,scale^{\langle h\rangle^{-1}}LS \tag{3.7}$$

$$p^{\mathrm{kc}} = p^{\mathrm{k}} \tag{3.8}$$

$$p^{\mathrm{lc}} = p^{\mathrm{l}} \tag{3.9}$$

$$\Pi = \sum_{s\in SEC} \pi^{\langle s\rangle} \tag{3.10}$$

$$K^{\mathrm{f}} = \Pi + ouc^{\mathrm{f}}KS \tag{3.11}$$

$$h \in HH: \quad CAP^{\langle h\rangle} = ouf^{\langle h\rangle}\,scale^{\langle h\rangle^{-1}}K^{\mathrm{f}} \tag{3.12}$$

# 4 Equilibrium relationships (before expansion and reduction)

$$1 - p^{\mathrm{l}} = 0 \tag{4.1}$$

$$ks^{\mathrm{data}} - KS = 0 \tag{4.2}$$

$$ls^{\mathrm{data}} - LS = 0 \tag{4.3}$$

$$p^{\mathrm{k}} - p^{\mathrm{kc}} = 0 \tag{4.4}$$

$$p^{\mathrm{l}} - p^{\mathrm{lc}} = 0 \tag{4.5}$$

$$-KS + \sum_{s \in SEC} K^{\langle s \rangle} = 0 \tag{4.6}$$

$$-\Pi + \sum_{s \in SEC} \pi^{\langle s \rangle} = 0 \tag{4.7}$$

$$-K^{\mathrm{f}} + \Pi + ownc^{\mathrm{f}} KS = 0 \tag{4.8}$$

$$h \in HH: \quad -CAP^{\langle h \rangle} + ownf^{\langle h \rangle} scale^{\langle h \rangle^{-1}} K^{\mathrm{f}} = 0 \tag{4.9}$$

$$h \in HH: \quad -INC^{\langle h \rangle} + \sum_{s \in SEC} p^{\langle s \rangle} D^{\langle s,h \rangle} = 0 \tag{4.10}$$

$$h \in HH: \quad -K^{\langle h \rangle} + ownc^{\langle h \rangle} scale^{\langle h \rangle^{-1}} KS = 0 \tag{4.11}$$

$$h \in HH: \quad -L^{\langle h \rangle} + ownw^{\langle h \rangle} scale^{\langle h \rangle^{-1}} LS = 0 \tag{4.12}$$

$$h \in HH: \quad U^{\langle h \rangle} - \left( \sum_{s \in SEC} \alpha^{\langle s,h \rangle} D^{\langle s,h \rangle^{\omega^{-1}(-1+\omega)}} \right)^{\omega(-1+\omega)^{-1}} = 0 \tag{4.13}$$

$$h \in HH: \quad CAP^{\langle h \rangle} - INC^{\langle h \rangle} + p^{\mathrm{k}} K^{\langle h \rangle} + p^{\mathrm{l}} L^{\langle h \rangle} = 0 \tag{4.14}$$

$$h \in HH: \quad s \in SEC: \quad \lambda^{\mathrm{CONSUMER}^1 \langle h \rangle} p^{\langle s \rangle} + \alpha^{\langle s,h \rangle} D^{\langle s,h \rangle^{-1+\omega^{-1}(-1+\omega)}} \left( \sum_{s \in SEC} \alpha^{\langle s,h \rangle} D^{\langle s,h \rangle^{\omega^{-1}(-1+\omega)}} \right)^{-1+\omega(-1+\omega)^{-1}} = 0 \tag{4.15}$$

$$s \in SEC: \quad 1 - p^{\langle s \rangle} = 0 \tag{4.16}$$

$$s \in SEC: \quad - p^{\mathrm{kc}} + \beta^{\mathrm{k}\langle s \rangle} \gamma^{\mathrm{yva}\langle s \rangle} \left( p^{\langle s \rangle} - \sum_{si \in SEC} \beta^{\mathrm{x}\langle si,s \rangle^{-1}} p^{\langle si \rangle} \right) K^{\langle s \rangle^{-1+\beta^{\mathrm{k}\langle s \rangle}}} L^{\langle s \rangle^{\beta^{\mathrm{l}\langle s \rangle}}} = 0 \tag{4.17}$$

$$s \in SEC: \quad - p^{\mathrm{lc}} + \beta^{\mathrm{l}\langle s \rangle} \gamma^{\mathrm{yva}\langle s \rangle} \left( p^{\langle s \rangle} - \sum_{si \in SEC} \beta^{\mathrm{x}\langle si,s \rangle^{-1}} p^{\langle si \rangle} \right) K^{\langle s \rangle^{\beta^{\mathrm{k}\langle s \rangle}}} L^{\langle s \rangle^{-1+\beta^{\mathrm{l}\langle s \rangle}}} = 0 \tag{4.18}$$

$$s \in SEC: \quad - Y^{\langle s \rangle} + Y^{\mathrm{VA}\langle s \rangle} = 0 \tag{4.19}$$

$$s \in SEC: \quad - Y^{\langle s \rangle} + Y^{\mathrm{INT}\langle s \rangle} = 0 \tag{4.20}$$

$$s \in SEC: \quad - Y^{\mathrm{VA}\langle s \rangle} + \gamma^{\mathrm{yva}\langle s \rangle} K^{\langle s \rangle^{\beta^{\mathrm{k}\langle s \rangle}}} L^{\langle s \rangle^{\beta^{\mathrm{l}\langle s \rangle}}} = 0 \tag{4.21}$$

$$s \in SEC: \quad \pi^{\langle s \rangle} + p^{\mathrm{kc}} K^{\langle s \rangle} + p^{\mathrm{lc}} L^{\langle s \rangle} - p^{\langle s \rangle} Y^{\langle s \rangle} + Y^{\mathrm{INT}\langle s \rangle} \left( \sum_{si \in SEC} \beta^{\mathrm{x}\langle si,s \rangle^{-1}} p^{\langle si \rangle} \right) = 0 \tag{4.22}$$

$$s \in SEC: \quad si \in SEC: \quad - X^{\langle si,s \rangle} + \beta^{\mathrm{x}\langle si,s \rangle^{-1}} Y^{\mathrm{INT}\langle s \rangle} = 0 \tag{4.23}$$

# 5 Equilibrium relationships (after expansion and reduction)

$$1 - p^{\mathrm{l}} = 0 \tag{5.1}$$

$$1 - p^{\langle \mathrm{A} \rangle} = 0 \tag{5.2}$$

$$1 - p^{\langle \mathrm{B} \rangle} = 0 \tag{5.3}$$

$$1 - p^{\langle \mathrm{C} \rangle} = 0 \tag{5.4}$$

$$ks^{\mathrm{data}} - KS = 0 \tag{5.5}$$

$$ls^{\mathrm{data}} - LS = 0 \tag{5.6}$$

$$p^{\mathrm{k}} - p^{\mathrm{kc}} = 0 \tag{5.7}$$

$$p^{\mathrm{l}} - p^{\mathrm{lc}} = 0 \tag{5.8}$$

$$-p^{\mathrm{kc}} + \beta^{\mathrm{k}\langle \mathrm{A} \rangle} \gamma^{\mathrm{yva}\langle \mathrm{A} \rangle} \left( p^{\langle \mathrm{A} \rangle} - \beta^{\mathrm{x}\langle \mathrm{A,A} \rangle^{-1}} p^{\langle \mathrm{A} \rangle} - \beta^{\mathrm{x}\langle \mathrm{B,A} \rangle^{-1}} p^{\langle \mathrm{B} \rangle} - \beta^{\mathrm{x}\langle \mathrm{C,A} \rangle^{-1}} p^{\langle \mathrm{C} \rangle} \right) K^{\langle \mathrm{A} \rangle^{-1+\beta^{\mathrm{k}\langle \mathrm{A} \rangle}}} L^{\langle \mathrm{A} \rangle^{\beta^{\mathrm{l}\langle \mathrm{A} \rangle}}} = 0 \tag{5.9}$$

$$-p^{\mathrm{kc}} + \beta^{\mathrm{k}\langle \mathrm{B} \rangle} \gamma^{\mathrm{yva}\langle \mathrm{B} \rangle} \left( p^{\langle \mathrm{B} \rangle} - \beta^{\mathrm{x}\langle \mathrm{A,B} \rangle^{-1}} p^{\langle \mathrm{A} \rangle} - \beta^{\mathrm{x}\langle \mathrm{B,B} \rangle^{-1}} p^{\langle \mathrm{B} \rangle} - \beta^{\mathrm{x}\langle \mathrm{C,B} \rangle^{-1}} p^{\langle \mathrm{C} \rangle} \right) K^{\langle \mathrm{B} \rangle^{-1+\beta^{\mathrm{k}\langle \mathrm{B} \rangle}}} L^{\langle \mathrm{B} \rangle^{\beta^{\mathrm{l}\langle \mathrm{B} \rangle}}} = 0 \tag{5.10}$$

$$-p^{\mathrm{kc}} + \beta^{\mathrm{k}\langle \mathrm{C} \rangle} \gamma^{\mathrm{yva}\langle \mathrm{C} \rangle} \left( p^{\langle \mathrm{C} \rangle} - \beta^{\mathrm{x}\langle \mathrm{A,C} \rangle^{-1}} p^{\langle \mathrm{A} \rangle} - \beta^{\mathrm{x}\langle \mathrm{B,C} \rangle^{-1}} p^{\langle \mathrm{B} \rangle} - \beta^{\mathrm{x}\langle \mathrm{C,C} \rangle^{-1}} p^{\langle \mathrm{C} \rangle} \right) K^{\langle \mathrm{C} \rangle^{-1+\beta^{\mathrm{k}\langle \mathrm{C} \rangle}}} L^{\langle \mathrm{C} \rangle^{\beta^{\mathrm{l}\langle \mathrm{C} \rangle}}} = 0 \tag{5.11}$$

$$-p^{\mathrm{lc}} + \beta^{\mathrm{l}\langle \mathrm{A} \rangle} \gamma^{\mathrm{yva}\langle \mathrm{A} \rangle} \left( p^{\langle \mathrm{A} \rangle} - \beta^{\mathrm{x}\langle \mathrm{A,A} \rangle^{-1}} p^{\langle \mathrm{A} \rangle} - \beta^{\mathrm{x}\langle \mathrm{B,A} \rangle^{-1}} p^{\langle \mathrm{B} \rangle} - \beta^{\mathrm{x}\langle \mathrm{C,A} \rangle^{-1}} p^{\langle \mathrm{C} \rangle} \right) K^{\langle \mathrm{A} \rangle^{\beta^{\mathrm{k}\langle \mathrm{A} \rangle}}} L^{\langle \mathrm{A} \rangle^{-1+\beta^{\mathrm{l}\langle \mathrm{A} \rangle}}} = 0 \tag{5.12}$$

$$-p^{\mathrm{lc}} + \beta^{\mathrm{l}\langle \mathrm{B} \rangle} \gamma^{\mathrm{yva}\langle \mathrm{B} \rangle} \left( p^{\langle \mathrm{B} \rangle} - \beta^{\mathrm{x}\langle \mathrm{A,B} \rangle^{-1}} p^{\langle \mathrm{A} \rangle} - \beta^{\mathrm{x}\langle \mathrm{B,B} \rangle^{-1}} p^{\langle \mathrm{B} \rangle} - \beta^{\mathrm{x}\langle \mathrm{C,B} \rangle^{-1}} p^{\langle \mathrm{C} \rangle} \right) K^{\langle \mathrm{B} \rangle^{\beta^{\mathrm{k}\langle \mathrm{B} \rangle}}} L^{\langle \mathrm{B} \rangle^{-1+\beta^{\mathrm{l}\langle \mathrm{B} \rangle}}} = 0 \tag{5.13}$$

$$-p^{\mathrm{lc}} + \beta^{\mathrm{l}\langle \mathrm{C} \rangle} \gamma^{\mathrm{yva}\langle \mathrm{C} \rangle} \left( p^{\langle \mathrm{C} \rangle} - \beta^{\mathrm{x}\langle \mathrm{A,C} \rangle^{-1}} p^{\langle \mathrm{A} \rangle} - \beta^{\mathrm{x}\langle \mathrm{B,C} \rangle^{-1}} p^{\langle \mathrm{B} \rangle} - \beta^{\mathrm{x}\langle \mathrm{C,C} \rangle^{-1}} p^{\langle \mathrm{C} \rangle} \right) K^{\langle \mathrm{C} \rangle^{\beta^{\mathrm{k}\langle \mathrm{C} \rangle}}} L^{\langle \mathrm{C} \rangle^{-1+\beta^{\mathrm{l}\langle \mathrm{C} \rangle}}} = 0 \tag{5.14}$$

$$-CAP^{\langle \mathrm{l} \rangle} + ovf^{\langle \mathrm{l} \rangle} scale^{\langle \mathrm{l} \rangle^{-1}} K^{\mathrm{f}} = 0 \tag{5.15}$$

$$-CAP^{\langle \mathrm{s} \rangle} + ovf^{\langle \mathrm{s} \rangle} scale^{\langle \mathrm{s} \rangle^{-1}} K^{\mathrm{f}} = 0 \tag{5.16}$$

$$-K^{\langle \mathrm{l} \rangle} + ouc^{\langle \mathrm{l} \rangle} scale^{\langle \mathrm{l} \rangle^{-1}} KS = 0 \tag{5.17}$$

$$-K^{\langle \mathrm{s} \rangle} + ouc^{\langle \mathrm{s} \rangle} scale^{\langle \mathrm{s} \rangle^{-1}} KS = 0 \tag{5.18}$$

$$-L^{\langle \mathrm{l} \rangle} + ouw^{\langle \mathrm{l} \rangle} scale^{\langle \mathrm{l} \rangle^{-1}} LS = 0 \tag{5.19}$$

$$-L^{\langle \mathrm{s} \rangle} + ouw^{\langle \mathrm{s} \rangle} scale^{\langle \mathrm{s} \rangle^{-1}} LS = 0 \tag{5.20}$$

$$U^{\langle \mathrm{l} \rangle} - \left( \alpha^{\langle \mathrm{A,l} \rangle} D^{\langle \mathrm{A,l} \rangle^{\omega^{-1}(-1+\omega)}} + \alpha^{\langle \mathrm{B,l} \rangle} D^{\langle \mathrm{B,l} \rangle^{\omega^{-1}(-1+\omega)}} + \alpha^{\langle \mathrm{C,l} \rangle} D^{\langle \mathrm{C,l} \rangle^{\omega^{-1}(-1+\omega)}} \right)^{\omega(-1+\omega)^{-1}} = 0 \tag{5.21}$$

$$U^{\langle \mathrm{s} \rangle} - \left( \alpha^{\langle \mathrm{A,s} \rangle} D^{\langle \mathrm{A,s} \rangle^{\omega^{-1}(-1+\omega)}} + \alpha^{\langle \mathrm{B,s} \rangle} D^{\langle \mathrm{B,s} \rangle^{\omega^{-1}(-1+\omega)}} + \alpha^{\langle \mathrm{C,s} \rangle} D^{\langle \mathrm{C,s} \rangle^{\omega^{-1}(-1+\omega)}} \right)^{\omega(-1+\omega)^{-1}} = 0 \tag{5.22}$$

$$-X^{\langle \mathrm{A,A} \rangle} + \beta^{\mathrm{x}\langle \mathrm{A,A} \rangle^{-1}} Y^{\mathrm{INT}\langle \mathrm{A} \rangle} = 0 \tag{5.23}$$

$$-X^{\langle \mathrm{A,B} \rangle} + \beta^{\mathrm{x}\langle \mathrm{A,B} \rangle^{-1}} Y^{\mathrm{INT}\langle \mathrm{B} \rangle} = 0 \tag{5.24}$$

$$-X^{\langle \mathrm{A,C} \rangle} + \beta^{\mathrm{x}\langle \mathrm{A,C} \rangle^{-1}} Y^{\mathrm{INT}\langle \mathrm{C} \rangle} = 0 \tag{5.25}$$

$$-X^{\langle \mathrm{B,A} \rangle} + \beta^{\mathrm{x}\langle \mathrm{B,A} \rangle^{-1}} Y^{\mathrm{INT}\langle \mathrm{A} \rangle} = 0 \tag{5.26}$$

$$-X^{\langle \mathrm{B,B} \rangle} + \beta^{\mathrm{x}\langle \mathrm{B,B} \rangle^{-1}} Y^{\mathrm{INT}\langle \mathrm{B} \rangle} = 0 \tag{5.27}$$

$$-X^{\langle \mathrm{B,C} \rangle} + \beta^{\mathrm{x}\langle \mathrm{B,C} \rangle^{-1}} Y^{\mathrm{INT}\langle \mathrm{C} \rangle} = 0 \tag{5.28}$$

$$-X^{\langle \mathrm{C,A} \rangle} + \beta^{\mathrm{x}\langle \mathrm{C,A} \rangle^{-1}} Y^{\mathrm{INT}\langle \mathrm{A} \rangle} = 0 \tag{5.29}$$

$$-X^{\langle \mathrm{C,B} \rangle} + \beta^{\mathrm{x}\langle \mathrm{C,B} \rangle^{-1}} Y^{\mathrm{INT}\langle \mathrm{B} \rangle} = 0 \tag{5.30}$$

$$-X^{\langle \mathrm{C,C} \rangle} + \beta^{\mathrm{x}\langle \mathrm{C,C} \rangle^{-1}} Y^{\mathrm{INT}\langle \mathrm{C} \rangle} = 0 \tag{5.31}$$

$$-Y^{\langle \mathrm{A} \rangle} + Y^{\mathrm{VA}\langle \mathrm{A} \rangle} = 0 \tag{5.32}$$

$$-Y^{\langle \mathrm{A} \rangle} + Y^{\mathrm{INT}\langle \mathrm{A} \rangle} = 0 \tag{5.33}$$

$$-Y^{\langle \mathrm{B} \rangle} + Y^{\mathrm{VA}\langle \mathrm{B} \rangle} = 0 \tag{5.34}$$

$$-Y^{\langle \mathrm{B} \rangle} + Y^{\mathrm{INT}\langle \mathrm{B} \rangle} = 0 \tag{5.35}$$

$$-Y^{\langle \mathrm{C} \rangle} + Y^{\mathrm{VA}\langle \mathrm{C} \rangle} = 0 \tag{5.36}$$

$$-Y^{\langle \mathrm{C} \rangle} + Y^{\mathrm{INT}\langle \mathrm{C} \rangle} = 0 \tag{5.37}$$

$$-Y^{\mathrm{VA}\langle \mathrm{A}\rangle} + \gamma^{\mathrm{yva}\langle \mathrm{A}\rangle} K^{\langle \mathrm{A}\rangle \beta^{\mathrm{k}\langle \mathrm{A}\rangle}} L^{\langle \mathrm{A}\rangle \beta^{\mathrm{l}\langle \mathrm{A}\rangle}} = 0 \tag{5.38}$$

$$-Y^{\mathrm{VA}\langle \mathrm{B}\rangle} + \gamma^{\mathrm{yva}\langle \mathrm{B}\rangle} K^{\langle \mathrm{B}\rangle \beta^{\mathrm{k}\langle \mathrm{B}\rangle}} L^{\langle \mathrm{B}\rangle \beta^{\mathrm{l}\langle \mathrm{B}\rangle}} = 0 \tag{5.39}$$

$$-Y^{\mathrm{VA}\langle \mathrm{C}\rangle} + \gamma^{\mathrm{yva}\langle \mathrm{C}\rangle} K^{\langle \mathrm{C}\rangle \beta^{\mathrm{k}\langle \mathrm{C}\rangle}} L^{\langle \mathrm{C}\rangle \beta^{\mathrm{l}\langle \mathrm{C}\rangle}} = 0 \tag{5.40}$$

$$\lambda^{\mathrm{CONSUMER}^{1}\langle \mathrm{l}\rangle} p^{\langle \mathrm{A}\rangle} + \alpha^{\langle \mathrm{A,l}\rangle} D^{\langle \mathrm{A,l}\rangle -1+\omega^{-1}(-1+\omega)} \left( \alpha^{\langle \mathrm{A,l}\rangle} D^{\langle \mathrm{A,l}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{B,l}\rangle} D^{\langle \mathrm{B,l}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{C,l}\rangle} D^{\langle \mathrm{C,l}\rangle \omega^{-1}(-1+\omega)} \right)^{-1+\omega(-1+\omega)^{-1}} = 0 \tag{5.41}$$

$$\lambda^{\mathrm{CONSUMER}^{1}\langle \mathrm{l}\rangle} p^{\langle \mathrm{B}\rangle} + \alpha^{\langle \mathrm{B,l}\rangle} D^{\langle \mathrm{B,l}\rangle -1+\omega^{-1}(-1+\omega)} \left( \alpha^{\langle \mathrm{A,l}\rangle} D^{\langle \mathrm{A,l}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{B,l}\rangle} D^{\langle \mathrm{B,l}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{C,l}\rangle} D^{\langle \mathrm{C,l}\rangle \omega^{-1}(-1+\omega)} \right)^{-1+\omega(-1+\omega)^{-1}} = 0 \tag{5.42}$$

$$\lambda^{\mathrm{CONSUMER}^{1}\langle \mathrm{l}\rangle} p^{\langle \mathrm{C}\rangle} + \alpha^{\langle \mathrm{C,l}\rangle} D^{\langle \mathrm{C,l}\rangle -1+\omega^{-1}(-1+\omega)} \left( \alpha^{\langle \mathrm{A,l}\rangle} D^{\langle \mathrm{A,l}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{B,l}\rangle} D^{\langle \mathrm{B,l}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{C,l}\rangle} D^{\langle \mathrm{C,l}\rangle \omega^{-1}(-1+\omega)} \right)^{-1+\omega(-1+\omega)^{-1}} = 0 \tag{5.43}$$

$$\lambda^{\mathrm{CONSUMER}^{1}\langle \mathrm{s}\rangle} p^{\langle \mathrm{A}\rangle} + \alpha^{\langle \mathrm{A,s}\rangle} D^{\langle \mathrm{A,s}\rangle -1+\omega^{-1}(-1+\omega)} \left( \alpha^{\langle \mathrm{A,s}\rangle} D^{\langle \mathrm{A,s}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{B,s}\rangle} D^{\langle \mathrm{B,s}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{C,s}\rangle} D^{\langle \mathrm{C,s}\rangle \omega^{-1}(-1+\omega)} \right)^{-1+\omega(-1+\omega)^{-1}} = 0 \tag{5.44}$$

$$\lambda^{\mathrm{CONSUMER}^{1}\langle \mathrm{s}\rangle} p^{\langle \mathrm{B}\rangle} + \alpha^{\langle \mathrm{B,s}\rangle} D^{\langle \mathrm{B,s}\rangle -1+\omega^{-1}(-1+\omega)} \left( \alpha^{\langle \mathrm{A,s}\rangle} D^{\langle \mathrm{A,s}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{B,s}\rangle} D^{\langle \mathrm{B,s}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{C,s}\rangle} D^{\langle \mathrm{C,s}\rangle \omega^{-1}(-1+\omega)} \right)^{-1+\omega(-1+\omega)^{-1}} = 0 \tag{5.45}$$

$$\lambda^{\mathrm{CONSUMER}^{1}\langle \mathrm{s}\rangle} p^{\langle \mathrm{C}\rangle} + \alpha^{\langle \mathrm{C,s}\rangle} D^{\langle \mathrm{C,s}\rangle -1+\omega^{-1}(-1+\omega)} \left( \alpha^{\langle \mathrm{A,s}\rangle} D^{\langle \mathrm{A,s}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{B,s}\rangle} D^{\langle \mathrm{B,s}\rangle \omega^{-1}(-1+\omega)} + \alpha^{\langle \mathrm{C,s}\rangle} D^{\langle \mathrm{C,s}\rangle \omega^{-1}(-1+\omega)} \right)^{-1+\omega(-1+\omega)^{-1}} = 0 \tag{5.46}$$

$$-K^{\mathrm{f}} + \Pi + \alpha \iota \kappa^{\mathrm{f}} KS = 0 \tag{5.47}$$

$$-KS + K^{\langle \mathrm{A}\rangle} + K^{\langle \mathrm{B}\rangle} + K^{\langle \mathrm{C}\rangle} = 0 \tag{5.48}$$

$$-\Pi + \pi^{\langle \mathrm{A}\rangle} + \pi^{\langle \mathrm{B}\rangle} + \pi^{\langle \mathrm{C}\rangle} = 0 \tag{5.49}$$

$$CAP^{\langle \mathrm{l}\rangle} - INC^{\langle \mathrm{l}\rangle} + p^{\mathrm{k}} K^{\langle \mathrm{l}\rangle} + p^{\mathrm{l}} L^{\langle \mathrm{l}\rangle} = 0 \tag{5.50}$$

$$CAP^{\langle \mathrm{s}\rangle} - INC^{\langle \mathrm{s}\rangle} + p^{\mathrm{k}} K^{\langle \mathrm{s}\rangle} + p^{\mathrm{l}} L^{\langle \mathrm{s}\rangle} = 0 \tag{5.51}$$

$$-INC^{\langle \mathrm{l} \rangle} + p^{\langle \mathrm{A} \rangle} D^{\langle \mathrm{A,l} \rangle} + p^{\langle \mathrm{B} \rangle} D^{\langle \mathrm{B,l} \rangle} + p^{\langle \mathrm{C} \rangle} D^{\langle \mathrm{C,l} \rangle} = 0 \tag{5.52}$$

$$-INC^{\langle \mathrm{s} \rangle} + p^{\langle \mathrm{A} \rangle} D^{\langle \mathrm{A,s} \rangle} + p^{\langle \mathrm{B} \rangle} D^{\langle \mathrm{B,s} \rangle} + p^{\langle \mathrm{C} \rangle} D^{\langle \mathrm{C,s} \rangle} = 0 \tag{5.53}$$

$$\pi^{\langle \mathrm{A} \rangle} + p^{\mathrm{kc}} K^{\langle \mathrm{A} \rangle} + p^{\mathrm{lc}} L^{\langle \mathrm{A} \rangle} - p^{\langle \mathrm{A} \rangle} Y^{\langle \mathrm{A} \rangle} + Y^{\mathrm{INT}\langle \mathrm{A} \rangle} \left( \beta^{\mathrm{x}\langle \mathrm{A,A} \rangle^{-1}} p^{\langle \mathrm{A} \rangle} + \beta^{\mathrm{x}\langle \mathrm{B,A} \rangle^{-1}} p^{\langle \mathrm{B} \rangle} + \beta^{\mathrm{x}\langle \mathrm{C,A} \rangle^{-1}} p^{\langle \mathrm{C} \rangle} \right) = 0 \tag{5.54}$$

$$\pi^{\langle \mathrm{B} \rangle} + p^{\mathrm{kc}} K^{\langle \mathrm{B} \rangle} + p^{\mathrm{lc}} L^{\langle \mathrm{B} \rangle} - p^{\langle \mathrm{B} \rangle} Y^{\langle \mathrm{B} \rangle} + Y^{\mathrm{INT}\langle \mathrm{B} \rangle} \left( \beta^{\mathrm{x}\langle \mathrm{A,B} \rangle^{-1}} p^{\langle \mathrm{A} \rangle} + \beta^{\mathrm{x}\langle \mathrm{B,B} \rangle^{-1}} p^{\langle \mathrm{B} \rangle} + \beta^{\mathrm{x}\langle \mathrm{C,B} \rangle^{-1}} p^{\langle \mathrm{C} \rangle} \right) = 0 \tag{5.55}$$

$$\pi^{\langle \mathrm{C} \rangle} + p^{\mathrm{kc}} K^{\langle \mathrm{C} \rangle} + p^{\mathrm{lc}} L^{\langle \mathrm{C} \rangle} - p^{\langle \mathrm{C} \rangle} Y^{\langle \mathrm{C} \rangle} + Y^{\mathrm{INT}\langle \mathrm{C} \rangle} \left( \beta^{\mathrm{x}\langle \mathrm{A,C} \rangle^{-1}} p^{\langle \mathrm{A} \rangle} + \beta^{\mathrm{x}\langle \mathrm{B,C} \rangle^{-1}} p^{\langle \mathrm{B} \rangle} + \beta^{\mathrm{x}\langle \mathrm{C,C} \rangle^{-1}} p^{\langle \mathrm{C} \rangle} \right) = 0 \tag{5.56}$$

# 6 Calibrating equations

$$-k^{\mathrm{f}^{\mathrm{data}}} + K^{\mathrm{f}} = 0 \tag{6.1}$$

$$-l^{\mathrm{data}\langle \mathrm{A} \rangle} + L^{\langle \mathrm{A} \rangle} = 0 \tag{6.2}$$

$$-l^{\mathrm{data}\langle \mathrm{B} \rangle} + L^{\langle \mathrm{B} \rangle} = 0 \tag{6.3}$$

$$-l^{\mathrm{data}\langle \mathrm{C} \rangle} + L^{\langle \mathrm{C} \rangle} = 0 \tag{6.4}$$

$$-x^{\mathrm{data}\langle \mathrm{A,A} \rangle} + X^{\langle \mathrm{A,A} \rangle} = 0 \tag{6.5}$$

$$-x^{\mathrm{data}\langle \mathrm{A,B} \rangle} + X^{\langle \mathrm{A,B} \rangle} = 0 \tag{6.6}$$

$$-x^{\mathrm{data}\langle \mathrm{A,C} \rangle} + X^{\langle \mathrm{A,C} \rangle} = 0 \tag{6.7}$$

$$-x^{\mathrm{data}\langle \mathrm{B,A} \rangle} + X^{\langle \mathrm{B,A} \rangle} = 0 \tag{6.8}$$

$$-x^{\mathrm{data}\langle \mathrm{B,B} \rangle} + X^{\langle \mathrm{B,B} \rangle} = 0 \tag{6.9}$$

$$-x^{\mathrm{data}\langle \mathrm{B,C} \rangle} + X^{\langle \mathrm{B,C} \rangle} = 0 \tag{6.10}$$

$$-x^{\mathrm{data}\langle \mathrm{C,A} \rangle} + X^{\langle \mathrm{C,A} \rangle} = 0 \tag{6.11}$$

$$-x^{\mathrm{data}\langle \mathrm{C,B} \rangle} + X^{\langle \mathrm{C,B} \rangle} = 0 \tag{6.12}$$

$$-x^{\mathrm{data}\langle \mathrm{C,C} \rangle} + X^{\langle \mathrm{C,C} \rangle} = 0 \tag{6.13}$$

$$-y^{\mathrm{data}\langle \mathrm{A} \rangle} + Y^{\mathrm{VA}\langle \mathrm{A} \rangle} = 0 \tag{6.14}$$

$$-y^{\mathrm{data}\langle \mathrm{B} \rangle} + Y^{\mathrm{VA}\langle \mathrm{B} \rangle} = 0 \tag{6.15}$$

$$-y^{\mathrm{data}\langle \mathrm{C} \rangle} + Y^{\mathrm{VA}\langle \mathrm{C} \rangle} = 0 \tag{6.16}$$

$$CAP^{\langle \mathrm{l} \rangle} - cap^{\mathrm{data}\langle \mathrm{l} \rangle} scale^{\langle \mathrm{l} \rangle^{-1}} = 0 \tag{6.17}$$

$$D^{\langle \mathrm{B,l} \rangle} - d^{\mathrm{data}\langle \mathrm{B,l} \rangle} scale^{\langle \mathrm{l} \rangle^{-1}} = 0 \tag{6.18}$$

$$D^{\langle \mathrm{B,s} \rangle} - d^{\mathrm{data}\langle \mathrm{B,s} \rangle} scale^{\langle \mathrm{s} \rangle^{-1}} = 0 \tag{6.19}$$

$$D^{\langle \mathrm{C,l} \rangle} - d^{\mathrm{data}\langle \mathrm{C,l} \rangle} scale^{\langle \mathrm{l} \rangle^{-1}} = 0 \tag{6.20}$$

$$D^{\langle \mathrm{C,s} \rangle} - d^{\mathrm{data}\langle \mathrm{C,s} \rangle} scale^{\langle \mathrm{s} \rangle^{-1}} = 0 \tag{6.21}$$

$$K^{\langle \mathrm{l} \rangle} - k^{\mathrm{data}\langle \mathrm{l} \rangle} scale^{\langle \mathrm{l} \rangle^{-1}} = 0 \tag{6.22}$$

$$K^{\langle \mathrm{s} \rangle} - k^{\mathrm{data}\langle \mathrm{s} \rangle} scale^{\langle \mathrm{s} \rangle^{-1}} = 0 \tag{6.23}$$

$$L^{\langle \mathrm{l} \rangle} - l^{\mathrm{data}\langle \mathrm{l} \rangle} scale^{\langle \mathrm{l} \rangle^{-1}} = 0 \tag{6.24}$$

$$-1 + \beta^{\mathrm{k}\langle \mathrm{A} \rangle} + \beta^{\mathrm{l}\langle \mathrm{A} \rangle} = 0 \tag{6.25}$$

$$-1 + \beta^{\mathrm{k}\langle \mathrm{B} \rangle} + \beta^{\mathrm{l}\langle \mathrm{B} \rangle} = 0 \tag{6.26}$$

$$-1 + \beta^{\mathrm{k}\langle \mathrm{C} \rangle} + \beta^{\mathrm{l}\langle \mathrm{C} \rangle} = 0 \tag{6.27}$$

$$-1 + \alpha w w^{\langle \mathrm{l} \rangle} + \alpha w w^{\langle \mathrm{s} \rangle} = 0 \tag{6.28}$$

$$-1 + \alpha w f^{\langle \mathrm{l} \rangle} + \alpha w f^{\langle \mathrm{s} \rangle} = 0 \tag{6.29}$$

$$-1 + \alpha^{\langle \mathrm{A,l} \rangle \omega} + \alpha^{\langle \mathrm{B,l} \rangle \omega} + \alpha^{\langle \mathrm{C,l} \rangle \omega} = 0 \tag{6.30}$$

$$-1 + \alpha^{\langle \mathrm{A,s} \rangle \omega} + \alpha^{\langle \mathrm{B,s} \rangle \omega} + \alpha^{\langle \mathrm{C,s} \rangle \omega} = 0 \tag{6.31}$$

# 7 Equilibrium values

| | Equilibrium value |
|---|---|
| $p^{\mathrm{k}}$ | 1 |
| $p^{\mathrm{l}}$ | 1 |
| $p^{\mathrm{kc}}$ | 1 |
| $p^{\mathrm{lc}}$ | 1 |
| $K^{\mathrm{f}}$ | 80.9217 |
| $KS$ | 163.4388 |
| $LS$ | 88.233 |
| $\Pi$ | 0 |
| $\lambda^{\mathrm{CONSUMER}^1\langle \mathrm{l}\rangle}$ | -1 |
| $\lambda^{\mathrm{CONSUMER}^1\langle \mathrm{s}\rangle}$ | -1 |
| $p^{\langle \mathrm{A}\rangle}$ | 1 |
| $p^{\langle \mathrm{B}\rangle}$ | 1 |
| $p^{\langle \mathrm{C}\rangle}$ | 1 |
| $\pi^{\langle \mathrm{A}\rangle}$ | 0 |
| $\pi^{\langle \mathrm{B}\rangle}$ | 0 |
| $\pi^{\langle \mathrm{C}\rangle}$ | 0 |
| $CAP^{\langle \mathrm{l}\rangle}$ | 5.1044 |
| $CAP^{\langle \mathrm{s}\rangle}$ | 6.0504 |
| $D^{\langle \mathrm{A,l}\rangle}$ | 9.9136 |
| $D^{\langle \mathrm{A,s}\rangle}$ | 4.044 |
| $D^{\langle \mathrm{B,l}\rangle}$ | 6.6431 |
| $D^{\langle \mathrm{B,s}\rangle}$ | 3.1495 |
| $D^{\langle \mathrm{C,l}\rangle}$ | 9.9581 |
| $D^{\langle \mathrm{C,s}\rangle}$ | 7.3678 |
| $INC^{\langle \mathrm{l}\rangle}$ | 26.5147 |
| $INC^{\langle \mathrm{s}\rangle}$ | 14.5613 |
| $K^{\langle \mathrm{l}\rangle}$ | 10.5158 |
| $K^{\langle \mathrm{s}\rangle}$ | 4.0454 |
| $K^{\langle \mathrm{A}\rangle}$ | 38.0989 |
| $K^{\langle \mathrm{B}\rangle}$ | 57.5316 |
| $K^{\langle \mathrm{C}\rangle}$ | 67.8083 |
| $L^{\langle \mathrm{l}\rangle}$ | 10.8945 |
| $L^{\langle \mathrm{s}\rangle}$ | 4.4655 |
| $L^{\langle \mathrm{A}\rangle}$ | 9.4287 |
| $L^{\langle \mathrm{B}\rangle}$ | 39.9867 |
| $L^{\langle \mathrm{C}\rangle}$ | 38.8177 |
| $U^{\langle \mathrm{l}\rangle}$ | 26.5147 |
| $U^{\langle \mathrm{s}\rangle}$ | 14.5613 |
| $X^{\langle \mathrm{A,A}\rangle}$ | 73.3234 |
| $X^{\langle \mathrm{A,B}\rangle}$ | 43.0305 |
| $X^{\langle \mathrm{A,C}\rangle}$ | 31.0471 |
| $X^{\langle \mathrm{B,A}\rangle}$ | 61.3203 |
| $X^{\langle \mathrm{B,B}\rangle}$ | 119.9318 |
| $X^{\langle \mathrm{B,C}\rangle}$ | 105.2489 |
| $X^{\langle \mathrm{C,A}\rangle}$ | 45.3241 |
| $X^{\langle \mathrm{C,B}\rangle}$ | 84.0875 |
| $X^{\langle \mathrm{C,C}\rangle}$ | 228.0633 |
| $Y^{\langle \mathrm{A}\rangle}$ | 227.4954 |
| $Y^{\langle \mathrm{B}\rangle}$ | 344.5681 |
| $Y^{\langle \mathrm{C}\rangle}$ | 470.9853 |
| $Y^{\mathrm{VA}\langle \mathrm{A}\rangle}$ | 227.4954 |
| $Y^{\mathrm{VA}\langle \mathrm{B}\rangle}$ | 344.5681 |
| $Y^{\mathrm{VA}\langle \mathrm{C}\rangle}$ | 470.9853 |
| $Y^{\mathrm{INT}\langle \mathrm{A}\rangle}$ | 227.4954 |
| $Y^{\mathrm{INT}\langle \mathrm{B}\rangle}$ | 344.5681 |
| $Y^{\mathrm{INT}\langle \mathrm{C}\rangle}$ | 470.9853 |

# 8 Model parameters

| | Value |
|---|---|
| $k^{\mathrm{f}^{\mathrm{data}}}$ | 80.9217 |
| $ks^{\mathrm{data}}$ | 163.4388 |
| $ls^{\mathrm{data}}$ | 88.233 |
| $\omega$ | 2 |
| $\alpha w c^{\mathrm{f}}$ | 0.4951 |
| $\alpha^{\langle \mathrm{A,l} \rangle}$ | 0.6115 |
| $\alpha^{\langle \mathrm{A,s} \rangle}$ | 0.527 |
| $\alpha^{\langle \mathrm{B,l} \rangle}$ | 0.5005 |
| $\alpha^{\langle \mathrm{B,s} \rangle}$ | 0.4651 |
| $\alpha^{\langle \mathrm{C,l} \rangle}$ | 0.6128 |
| $\alpha^{\langle \mathrm{C,s} \rangle}$ | 0.7113 |
| $\beta^{\mathrm{k}\langle \mathrm{A} \rangle}$ | 0.8016 |
| $\beta^{\mathrm{k}\langle \mathrm{B} \rangle}$ | 0.59 |
| $\beta^{\mathrm{k}\langle \mathrm{C} \rangle}$ | 0.6359 |
| $\beta^{\mathrm{l}\langle \mathrm{A} \rangle}$ | 0.1984 |
| $\beta^{\mathrm{l}\langle \mathrm{B} \rangle}$ | 0.41 |
| $\beta^{\mathrm{l}\langle \mathrm{C} \rangle}$ | 0.3641 |
| $\beta^{\mathrm{x}\langle \mathrm{A,A} \rangle}$ | 3.1026 |
| $\beta^{\mathrm{x}\langle \mathrm{A,B} \rangle}$ | 8.0075 |
| $\beta^{\mathrm{x}\langle \mathrm{A,C} \rangle}$ | 15.17 |
| $\beta^{\mathrm{x}\langle \mathrm{B,A} \rangle}$ | 3.7099 |
| $\beta^{\mathrm{x}\langle \mathrm{B,B} \rangle}$ | 2.873 |
| $\beta^{\mathrm{x}\langle \mathrm{B,C} \rangle}$ | 4.475 |
| $\beta^{\mathrm{x}\langle \mathrm{C,A} \rangle}$ | 5.0193 |
| $\beta^{\mathrm{x}\langle \mathrm{C,B} \rangle}$ | 4.0977 |
| $\beta^{\mathrm{x}\langle \mathrm{C,C} \rangle}$ | 2.0652 |
| $\alpha p^{\mathrm{data}\langle \mathrm{l} \rangle}$ | 20.4174 |
| $d^{\mathrm{data}\langle \mathrm{B,l} \rangle}$ | 26.5723 |
| $d^{\mathrm{data}\langle \mathrm{B,s} \rangle}$ | 31.4947 |
| $d^{\mathrm{data}\langle \mathrm{C,l} \rangle}$ | 39.8322 |
| $d^{\mathrm{data}\langle \mathrm{C,s} \rangle}$ | 73.6782 |
| $\gamma^{\mathrm{yva}\langle \mathrm{A} \rangle}$ | 7.8772 |
| $\gamma^{\mathrm{yva}\langle \mathrm{B} \rangle}$ | 6.9527 |
| $\gamma^{\mathrm{yva}\langle \mathrm{C} \rangle}$ | 8.5098 |
| $k^{\mathrm{data}\langle \mathrm{l} \rangle}$ | 42.0633 |
| $k^{\mathrm{data}\langle \mathrm{s} \rangle}$ | 40.4538 |
| $l^{\mathrm{data}\langle \mathrm{l} \rangle}$ | 43.5782 |
| $l^{\mathrm{data}\langle \mathrm{A} \rangle}$ | 9.4287 |
| $l^{\mathrm{data}\langle \mathrm{B} \rangle}$ | 39.9867 |
| $l^{\mathrm{data}\langle \mathrm{C} \rangle}$ | 38.8177 |
| $\alpha w c^{\langle \mathrm{l} \rangle}$ | 0.2574 |
| $\alpha w c^{\langle \mathrm{s} \rangle}$ | 0.2475 |
| $\alpha w w^{\langle \mathrm{l} \rangle}$ | 0.4939 |
| $\alpha w w^{\langle \mathrm{s} \rangle}$ | 0.5061 |
| $\alpha w f^{\langle \mathrm{l} \rangle}$ | 0.2523 |
| $\alpha w f^{\langle \mathrm{s} \rangle}$ | 0.7477 |
| $scale^{\langle \mathrm{l} \rangle}$ | 4 |
| $scale^{\langle \mathrm{s} \rangle}$ | 10 |
| $x^{\mathrm{data}\langle \mathrm{A,A} \rangle}$ | 73.3234 |
| $x^{\mathrm{data}\langle \mathrm{A,B} \rangle}$ | 43.0305 |
| $x^{\mathrm{data}\langle \mathrm{A,C} \rangle}$ | 31.0471 |
| $x^{\mathrm{data}\langle \mathrm{B,A} \rangle}$ | 61.3203 |
| $x^{\mathrm{data}\langle \mathrm{B,B} \rangle}$ | 119.9318 |
| $x^{\mathrm{data}\langle \mathrm{B,C} \rangle}$ | 105.2489 |