

# APPENDIX

## A. STRATEGIES

$R_{\min}$	0	0	0	0	500	500	0
$R_{\max}$	125	250	500	1000	1000	1000	2500
$\eta$	1	1	1	1	0.4	1	1
Market type	Both	Both	Both	Both	CDA	CALL	Both

Table 1: ZIR strategy combinations included in empirical game-theoretic analysis. Market type indicates whether the strategy is available in the CDA, CALL, or both.

## B. EQUILIBRIA

Env	Market	Welfare	FAST							SLOW						
			125	250	500	1000	1000*	1000‡	2500	125	250	500	1000	1000*	1000‡	2500
I	CALL	27288	0	.965	.035	0	–	0	0	.106	0	.894	0	–	0	0
I	CALL	26697	.212	0	.788	0	–	0	0	0	.037	0	.963	–	0	0
I	CDA	27261	0	0	1	0	0	–	0	.277	0	.723	0	0	–	0
I	CDA	26785	0	.064	.551	0	.385	–	0	0	0	1	0	0	–	0
I	CDA	25321	0	0	.422	.483	.095	–	0	0	0	0	0	1	–	0
I	CDA	26133	0	0	.383	0	.617	–	0	0	0	0	1	0	–	0
II	CALL	21050	.347	.120	0	0	–	0	.533	0	0	0	0	–	0	1
II	CDA	21242	0	0	.080	0	.920	–	0	0	0	0	0	0	–	1
III	CALL	19992	.510	0	0	0	–	0	.490	0	0	0	0	–	0	1
III	CALL	20441	0	0	0	1	–	0	0	.117	0	0	0	–	0	.883
III	CDA	19734	0	0	0	0	1	–	0	0	0	0	0	–	–	1
IV	CALL	18067	.236	0	0	0	–	0	.764	0	0	0	0	–	0	1

Table 2: Role-symmetric equilibria for the four strategic market choice games (one per environment),  $N_{\text{FAST}} = N_{\text{SLOW}} = 21$ , calculated from the (3, 3)-player DPR approximation. Each row of the table describes one equilibrium found, the selected market mechanism (CALL or CDA), the welfare (total surplus of all players), and the mixture probabilities of strategies for each role in the RSNE. The numeric column headings give  $R_{\max}$  values for the ZIR strategies, for each role. All strategies employ  $R_{\min} = 0$ , with the exception of the starred and double dagger (‡) values which use  $R_{\min} = 500$ . All strategies employ  $\eta = 1$ , except for the starred values which use  $\eta = 0.4$ . A dash indicates that a strategy is not available for the specified market type. There is at least one all-CALL RSNE in each environment; all but environment IV have at least one all-CDA equilibrium.

## C. COMPLETE SUBGAMES

Env	FAST							SLOW						
	125	250	500	1000	1000*	1000‡	2500	125	250	500	1000	1000*	1000‡	2500
I		CALL	Both		CDA					Both	CALL	CDA		
II	CALL				CDA		Both	CALL				CDA		Both
III	CALL			Both	CDA		Both	CALL			Both	CDA		Both
IV	Both						Both	Both						Both

Table 3: Each row of the table describes a complete subgame, one per environment, used to analyze the frequent call market’s basin of attraction. Each subgame includes the strategies played with the highest probabilities across all RSNE found in that environment. The numeric column headings give  $R_{\max}$  values for the ZIR strategies, for each role. All strategies employ  $R_{\min} = 0$ , with the exception of the starred and double dagger (‡) values which use  $R_{\min} = 500$ . All strategies employ  $\eta = 1$ , except for the starred values which use  $\eta = 0.4$ . Strategies in the table cells are specified according to the market type. The Environment III subgame has a  $6 \times 6$  strategy space, with three strategies per market, per role; the subgames for the three other environments each have a  $4 \times 4$  strategy space.