

## Extension - Same relative shocks

### Design

In previous treatments in the lab experiment, both H and L players receive the same absolute reduction in earnings (-100) in the case of a shock. This however implies automatically that L players are affected more by shocks in relative terms. While H players lose 25% of their initial earnings, L players lose 50%. This leads to the question – would we see the same differential effects of negative shocks across high and low income players if the shocks they experienced were the same in relative rather than absolute terms? We thus explore whether results are qualitatively robust to relative, instead of absolute shocks.

To keep comparability to our previous design, we look at a shock where both H and L players lose 50% of their income, while holding the distribution just prior to the allocation decision constant across both these new and all previous treatments (300-100).<sup>1</sup> As previously, each player might or might not suffer a shock and will be matched with another player who i) did suffer a shock, ii) did not suffer a shock, or iii) whose shock is unknown (incomplete information). Table 2 gives an overview of the new treatments and payoffs. In absolute terms, the shock to H players is now 3 times as large but it is identical in relative terms. Together with the previous treatments where shocks were identical in absolute terms, the additional treatment thus allows us to assess whether it matters if players suffer the same relative or absolute shocks.

	Pre-shock earnings ( $x_{h0}, x_{l0}$ )	Post-shock earnings ( $x_{h1}, x_{l1}$ )
<b>Full information</b>		
C1: No shock	300, 100	300, 100
T1: Shock to self	600, 100* / 300, 200**	300, 100
T2: Shock to other	300, 200* / 600, 100**	300, 100
T3: Shock to both	600, 200	300, 100
<b>Incomplete information</b>		
C2: No shock to self	300, ?* / ?, 100**	300, 100
T4: Shock to self	600, ?* / ?, 200**	300, 100

Table 1: Pre- and post-shock earnings across treatments

Note: \* Self/other from the perspective of  $H$  players. \*\* Self/other from the perspective of  $L$  players.

### Hypotheses

We expect to find qualitatively the same results as for the “same absolute shock” treatments. In particular, in line with H1 and H2 we expect that everything else being equal, a shock to own earnings results in higher allocations to oneself, while a shock to the other player results

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<sup>1</sup> We decided to focus on a 50% shock to both instead of a 25% shock, as the latter would be less convincing as a qualitative replication for our results for L players, while giving us similar information for H players.

in higher allocations to the other player. Similarly, in line with H4 we expect that if there is a self-serving bias in the perception of shocks, allocations under incomplete information should be closer to allocations where it is known that the other did not suffer a shock. Finally, in the “same absolute shock” treatments, we found that H and L players show different allocation behaviour and reactions to shocks. While H players react to shocks in the way described above and allocate earnings in line with individual contributions (300 for H, 100 for L players), L players do not react to shocks and are most likely to split earnings equally (200 for H, 200 for L players). We expect to observe the same qualitative pattern for “same relative shocks”.

### Data collection

Data collection follows exactly the same procedure as described in section 4. We again recruit 536 participants, split equally between H and L players as well as shock experience (see Table 2). Moreover, we still stratify participants with respect to their personal experience allowing for three different levels of shocks: 1) participants who became unemployed (large shock), 2) participants who were full-time employed and now work part-time (medium shock) and 3) participants who still work full-time (no shock).

	Same relative shock	
	h players	l players
Shock	134	134
No shock	134	134
Total N	536	

Table 2: Sample size