

The proof of proposition 3 has a problem. The statement ‘Reasoning along the same line ...’ near the end of the proof on page 1112 does not work. It is not possible to reason along the same line.

The reason is that for commodities 1 and 2, traders 1 and 2 are receivers, so they need to receive them when they still can. However, for commodities 3 and 4, they are givers. Even if they end up giving out too much in $t = 2$, it is not a problem, because traders 3 and 4, who are receiving them, still have a chance to meet each other in $t = 5$.

For example, consider the following matrix of excess demands at the beginning of $t=2$:

0.9	0.1	-0.2	-0.8
0.1	0.9	-0.8	-0.2
-0.8	-0.2	0.5	0.5
-0.2	-0.8	0.5	0.5
0	0	0	0

Consider trades in $t=2$ that results in the following matrix:

0.1	0	0	-0.1
0	0.1	-0.1	0
0	-0.1	0.3	-0.2
-0.1	0	-0.2	0.3
0	0	0	0

Such trades must not occur according to proposition 3 because the signs of (3, 4) and (4, 3) switch. The paper claims that after such trades, there can be no sequence of trades (not trading rule, but ‘trades’ – the paper argues that it is ‘physically impossible’ to complete trades) that can complete the trades. However, after offsetting trades in $t=3$ and $t=4$, the excess demands matrix becomes

0	0	0	0
0	0	0	0
0	0	0.2	-0.2
0	0	-0.2	0.2
0	0	0	0

In $t=5$, traders 3 and 4 can offset their positions and complete trades.