Erratum in Chen and Lux, Conputational Economics, 2018

Equation (3) of Chen and Lux, first line, defines

$$\pi^{+} = (N_c - n)(a + bn) = aN_c + bnN - an - bn^2$$
$$= aN + (bN - a)n - bn^2$$
(1)

There is a second equality in this line that states that

$$\pi^{+} = (1 - x) \left[2a/N + b(1 + x) \right] N^{2} \tag{2}$$

However, these two expressions for π^+ are not equal. To see this, we have that x = 2n/N - 1, so 1 + x = 2n/N and 1 - x = 2 - 2n/N. Substituting these into 2, we get

$$\pi^{+} = (2 - 2n/N) [2a/N + b(2n/N)] N^{2}$$

$$= (2 - 2n/N) [2a + 2bn] N$$

$$= 4aN + 4bnN - 4an - 4bn^{2}$$

$$= 4aN + (4bN - a)n - 4bn^{2}$$
(3)

We can see that the expression in eq. 3 is four times the expression in 1. A similar problem exists

for the expression in Equation 3 for π^- .