



Fig. 3. Equilibrium distribution $\{S_j\}$, ($\alpha = 1.1$, $\gamma = 0.4$).

Whether cities develop or decline depends on not only the advance of railway network, but also the model parameters (i.e. criteria of individual's activity). Figure 4 is a result whose parameter is $\alpha = 2.0$, and even *Osaka* area disappeared unfortunately. Since α measures the importance of attractiveness of activity zone, **high α accelerates the se-**

vere concentration to large cities. On the other hand, if we set $\gamma = 0.8$, we can describe a scenario that lots of cities coexists. γ measures the ease of long travel, and **high γ illustrates that individuals tend to visit nearby zones.** However, please note that it is only the result that **concentration to the metropolitan area is moderated.** If