

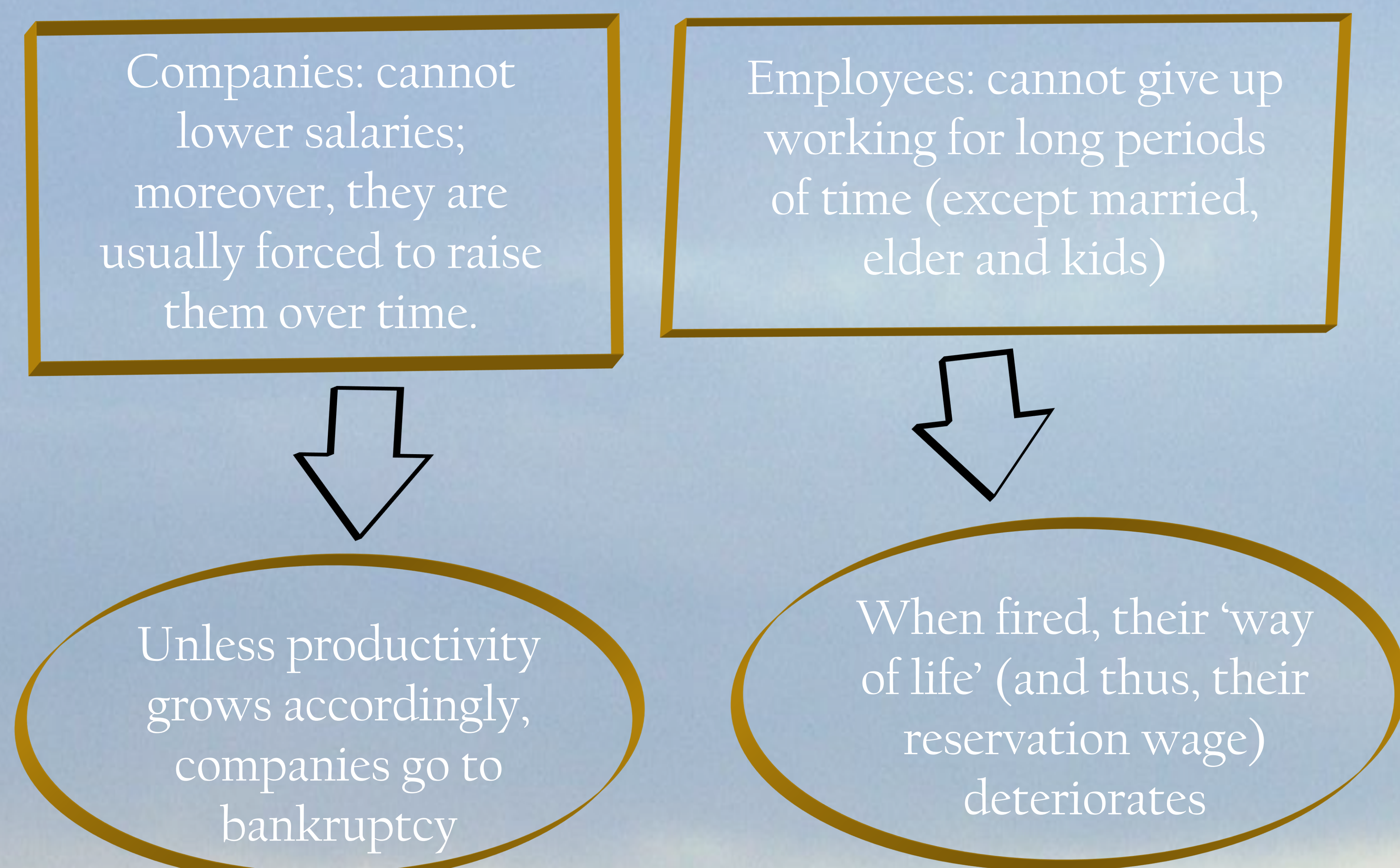
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### 1 Does labor market operate as a free market?

According to Piore, labor market is primarily a social institution, and as such, it works based on specific regulations.

Casares investigates two usual regulations:



American Heritage Dictionary

#### market economy

*n.* An economy that operates by voluntary exchange in a free market and is not planned or controlled by a central authority; a capitalistic economy.

### 2 Emergent property

These two constraints work along with another emergent property observed in field measurement: after unemployment, the reentry salary is most of the times lower than the exit salary.

### 3 So, under these conditions, how do salaries depend on this feature?

#### Model Parameters

##### Companies

Dismissals rate

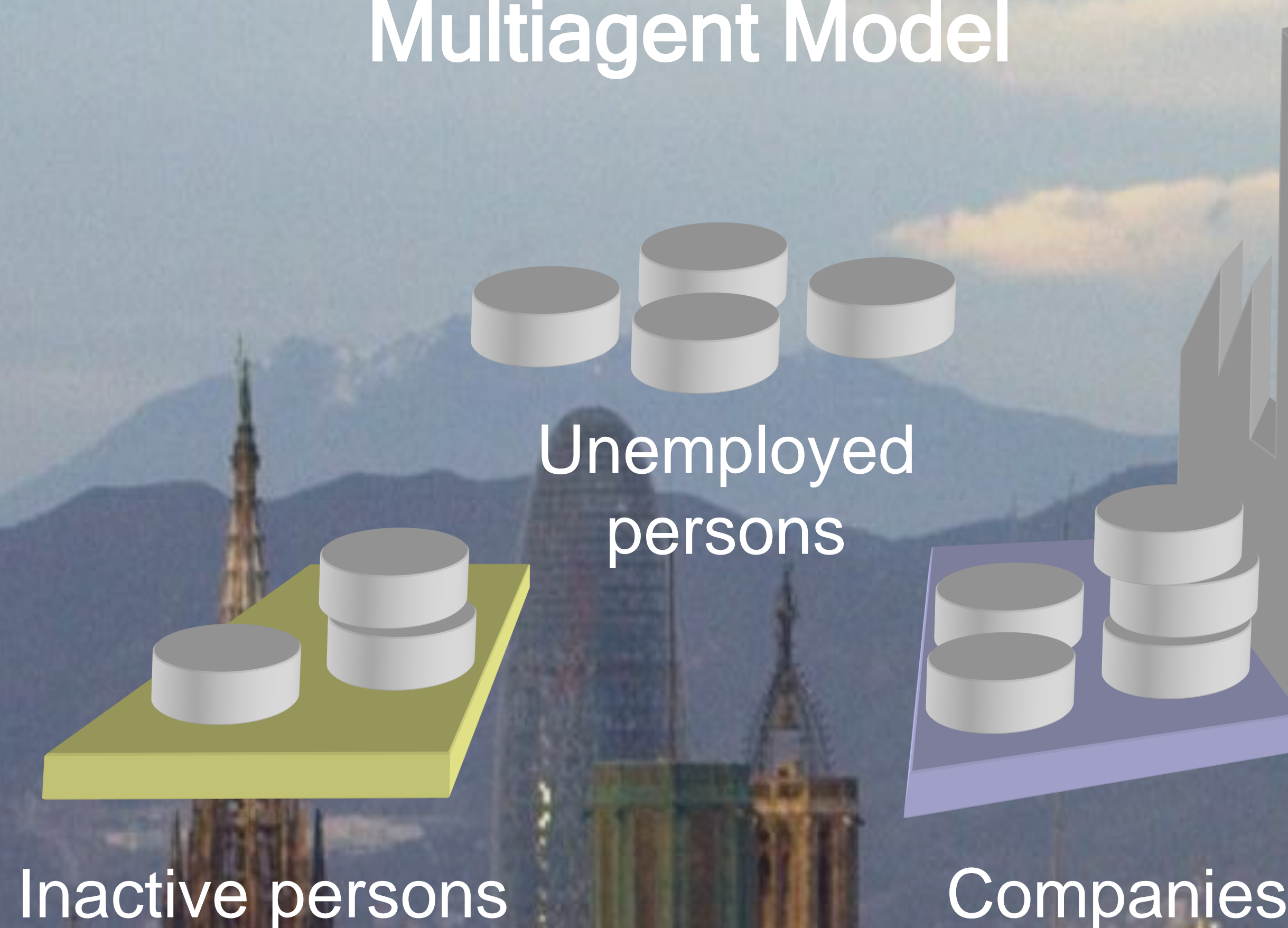
Minimum profit

##### Employees

Reservation wage decay

Time to discouragement

### 4 The Casares Town Multiagent Model



#### Basic rules

- Companies can fire employees every end of the year, based on the annual balance.
- Employees look for a job until they get one, or get discouraged (if their spouse has a job; otherwise they keep looking anyway).
- Companies and employees have a matching tag to resolve interviews (a five color tag).

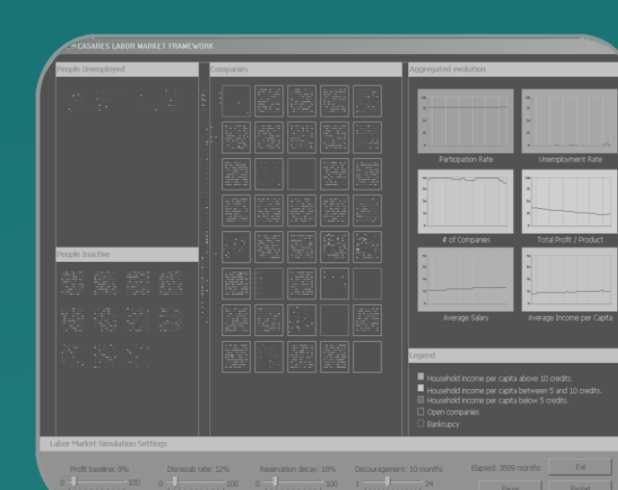
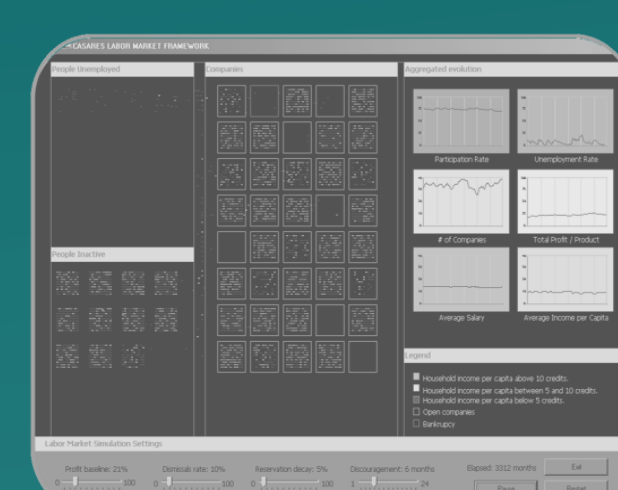
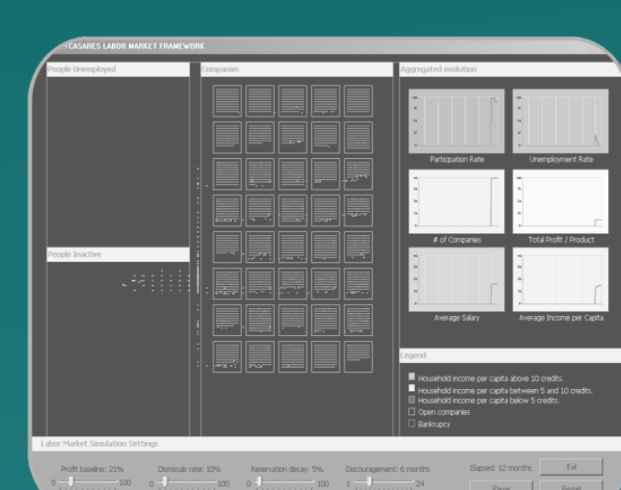
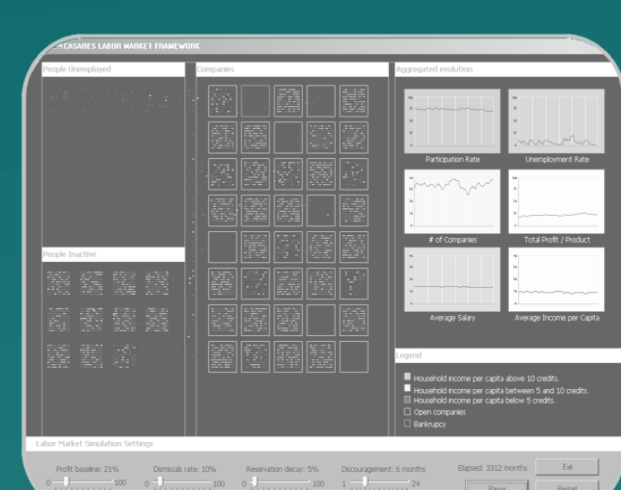
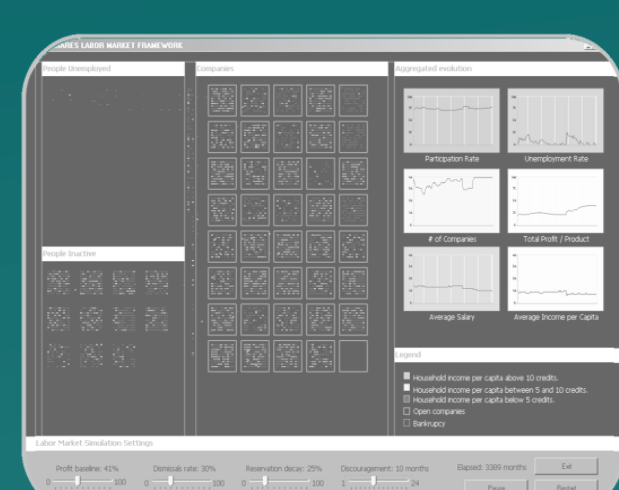
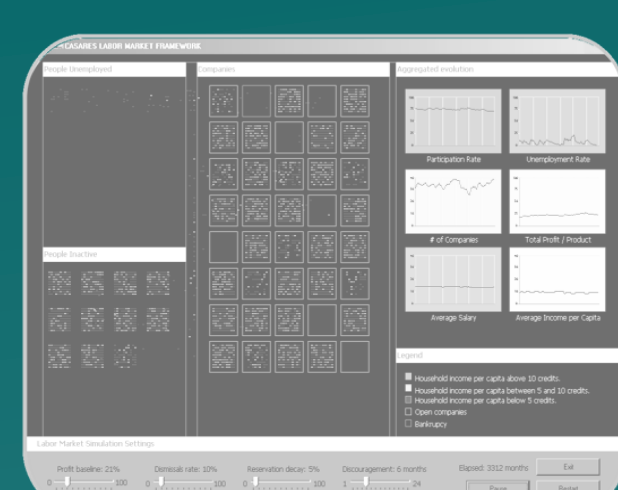
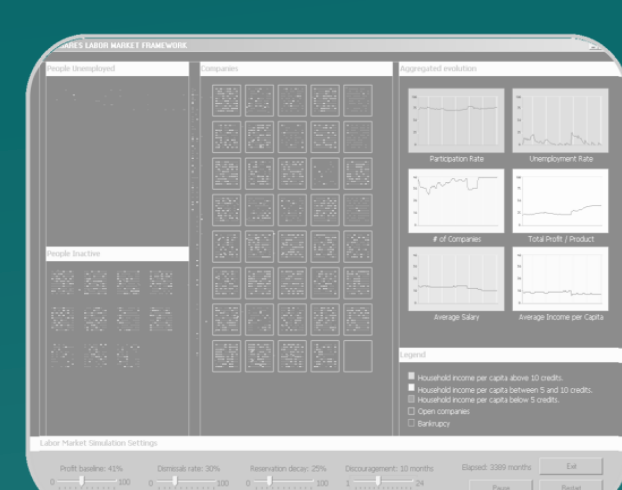
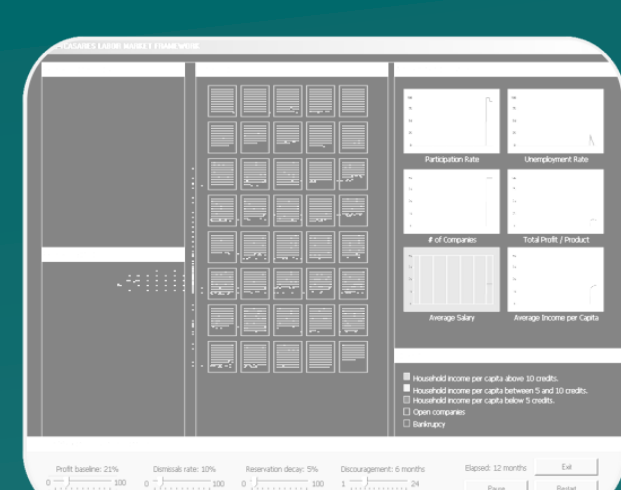
#### FAQs

1) Does the Casares town really exist?

No, Casares is an imaginary town created to reproduce specific features of labor market dynamics.

2) Why are dismissals made every end of the year?

At the beginning of times it was just another obscure Casares tradition; nowadays, it is a fact that companies do their balances only once in a year, and then is when they decide staff changes.



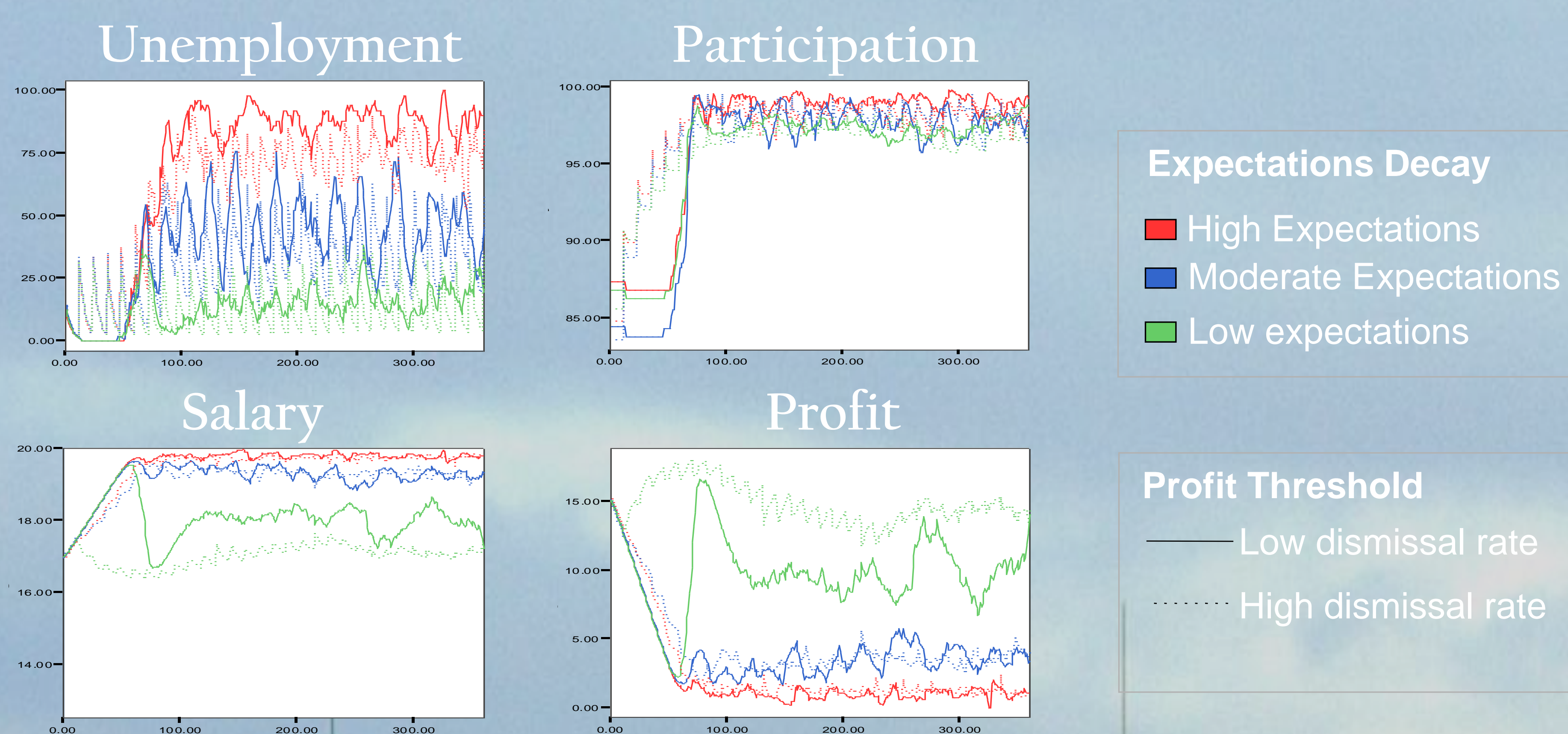


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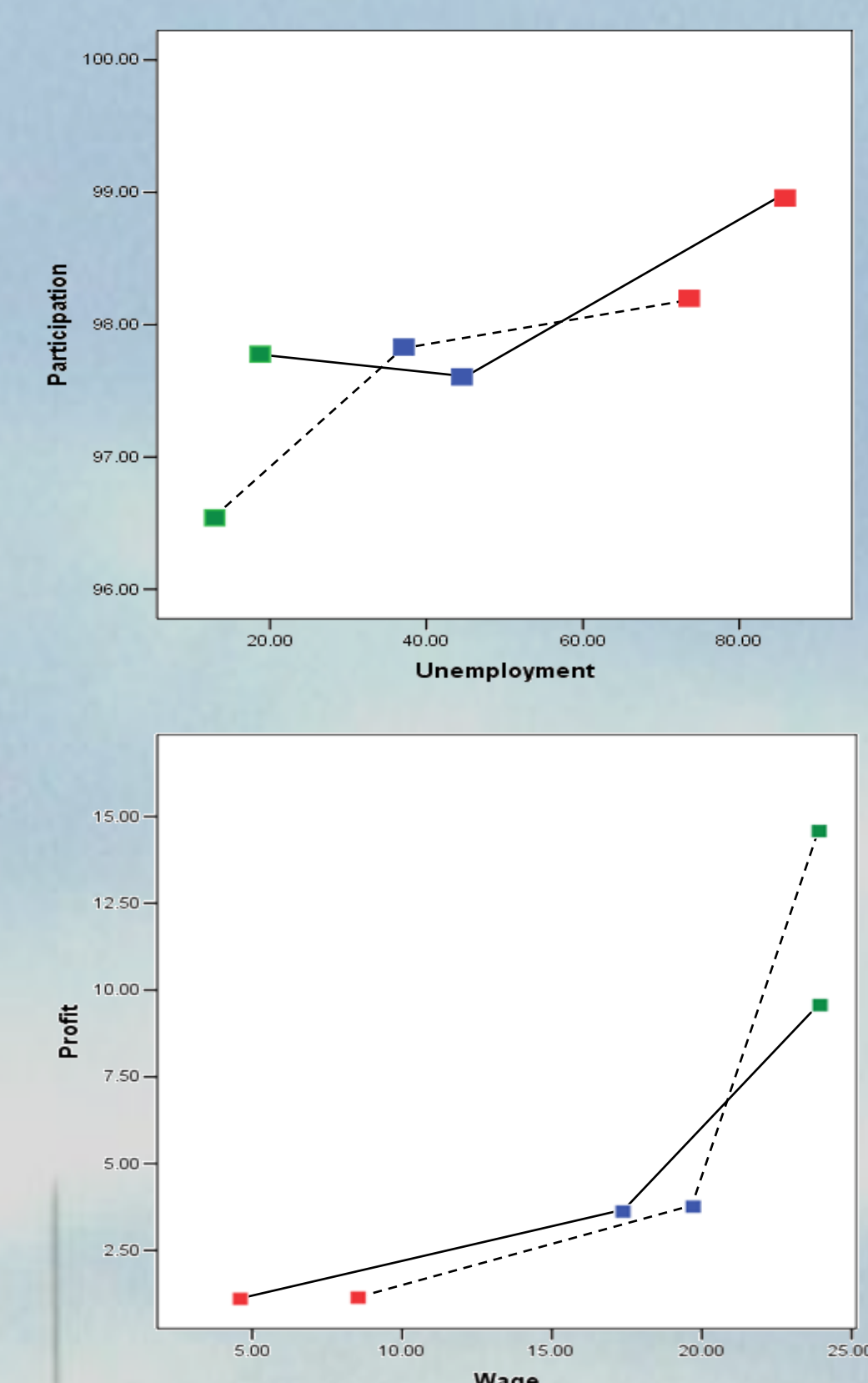
### 5 Parameters in the run

The following charts show output values for 360 months runs. Six scenarios are evaluated, based on two possible strategies for the companies and three possible strategies for the employees.



### 6 Strategy space

Placing the average values (last 60 months) at each scenario, maps of the strategies output can be created.



### 7 Reversibility

The visual simulator aims at exploring how the system moves from one position at the strategy space to another. The following figures, averaged by year, show evolutions where companies switch strategy at month 360.



Many of the transitions create equal 'crisis' on both switches (e.g. leaving low dismissal rates and going into a low dismissal rates policy). This behavior brings special meaning to strategy changes (moves) based on change payoffs

### 8 Conclusions

- Turnover and reservation wage decay can impact participation rates and salaries.
- A multiagent model can be useful to explore the relation between actors' strategies.
- Based on the system transition paths, 'players' can move out from their strategies for short period of times looking for benefits derived from specific transition effects.

### Acknowledgments

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