

# POWER DYNAMICS IN ORGANIZATIONS

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# POWER IN ORGANIZATIONS

Allocation of formal authority in firms is fixed: it resides at the top

But subordinates are routinely empowered to make decisions

Allocation of power is fluid and changes over time

# POWER DYNAMICS

Divisions gain power during times when their products are particularly important for the firm

Others dynamics conflict with an efficiency-based view of firms...

# ENTRENCHED POWER STRUCTURES

Sears's catalog division used its power to delay its closure

Microsoft's failure in mobile computing

# MICROSOFT'S FAILURE IN MOBILE COMPUTING



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*“Indeed, executives [at Microsoft] said, Microsoft failed repeatedly to jump on emerging technologies because of the company’s fealty to Windows and Office.”*

*“Windows was the god [...] Ideas about mobile computing with a user experience that was cleaner than with a P.C. were deemed unimportant by a few powerful people in that division, and they managed to kill the effort.”*

# A DYNAMIC THEORY OF POWER

Can power be earned? How is power lost? Why are some able to retain it even when using it in openly selfish ways?

# A DYNAMIC THEORY OF POWER

Can power be earned? How is power lost? Why are some able to retain it even when using it in openly selfish ways?

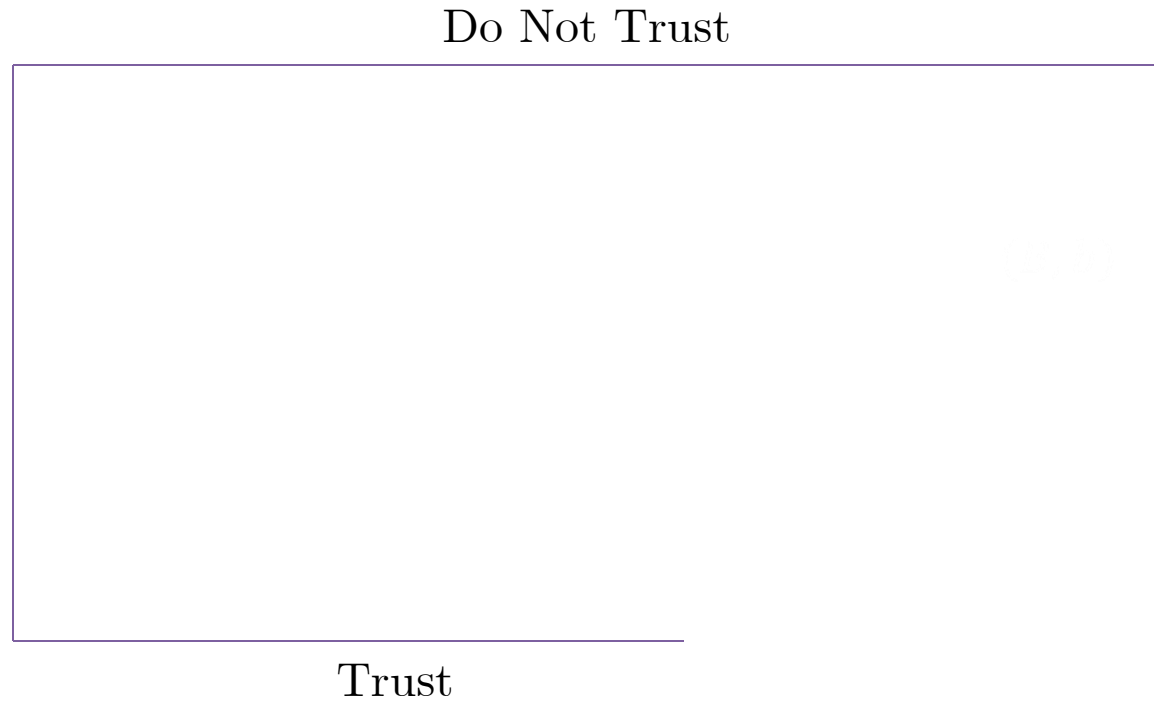
Prospect of more power tomorrow motivates good use of power today

But future power valued *because* it allows empowered to bias decisions

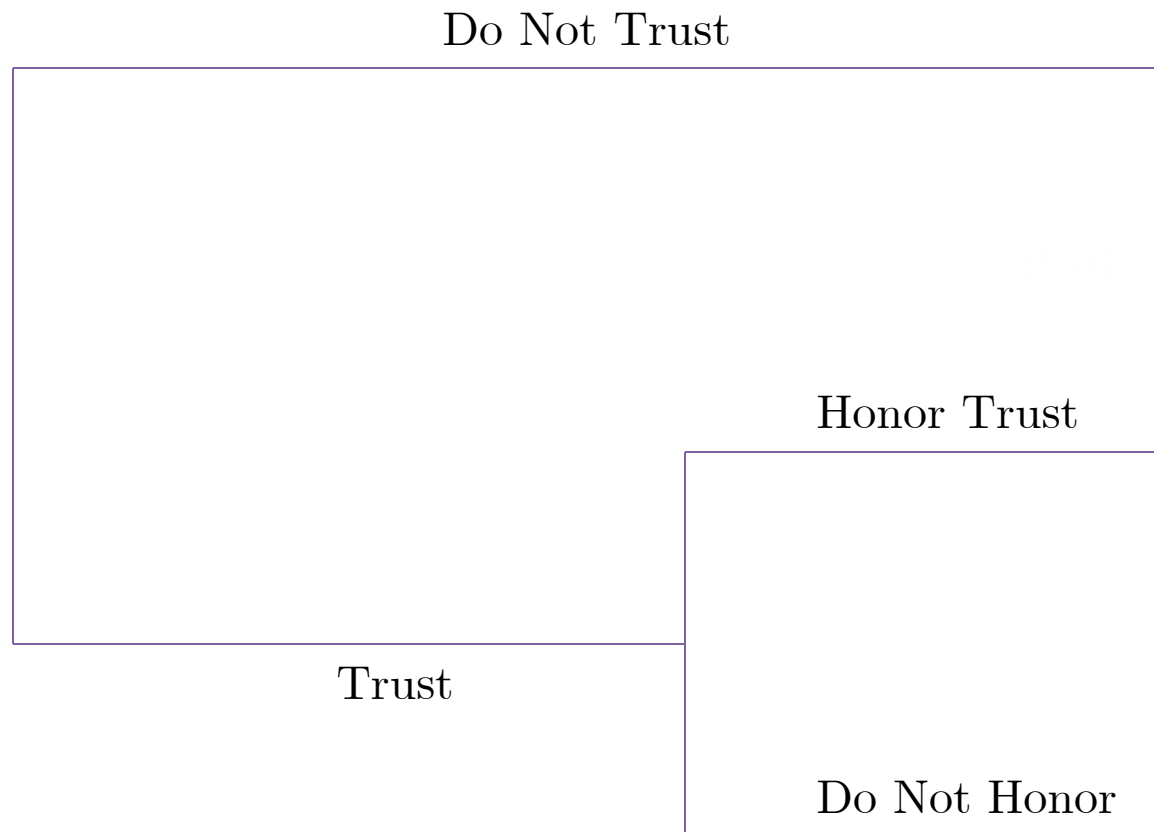
Dynamic trade-off between current and future agency costs



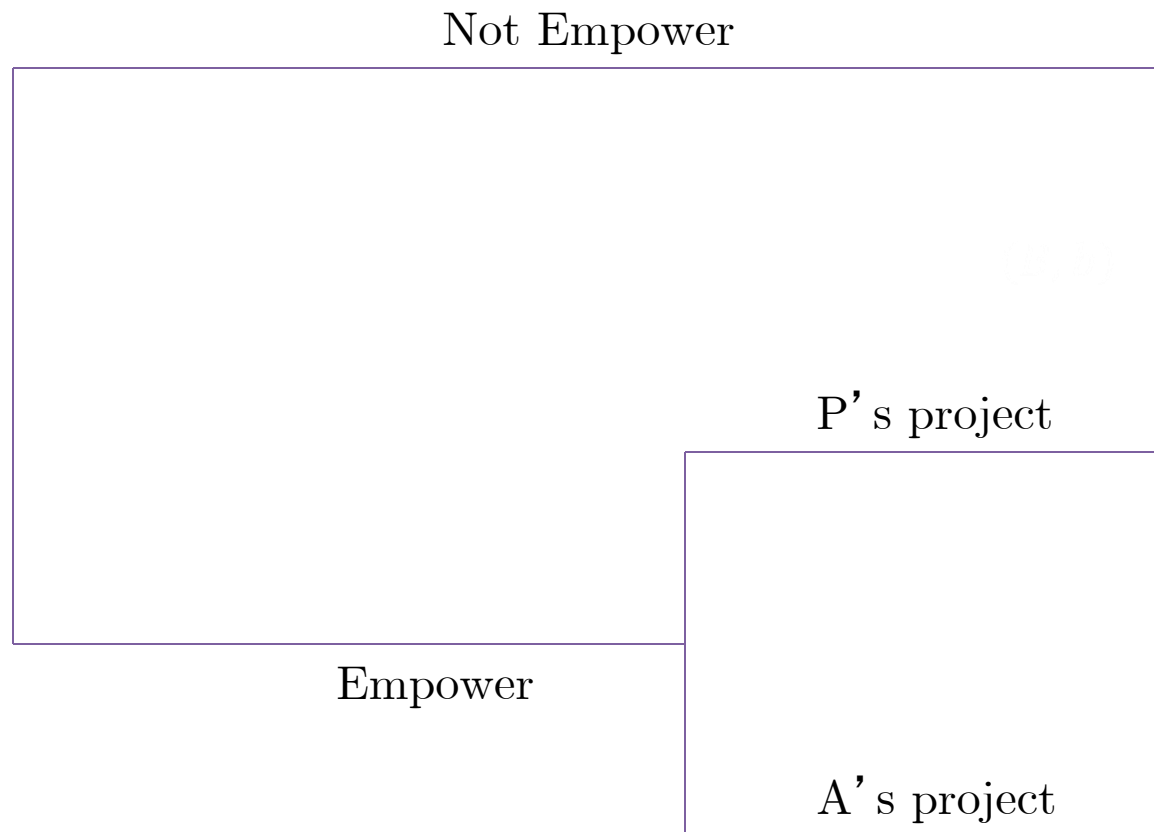
# MODEL SKETCH: REPEATED TRUST GAME



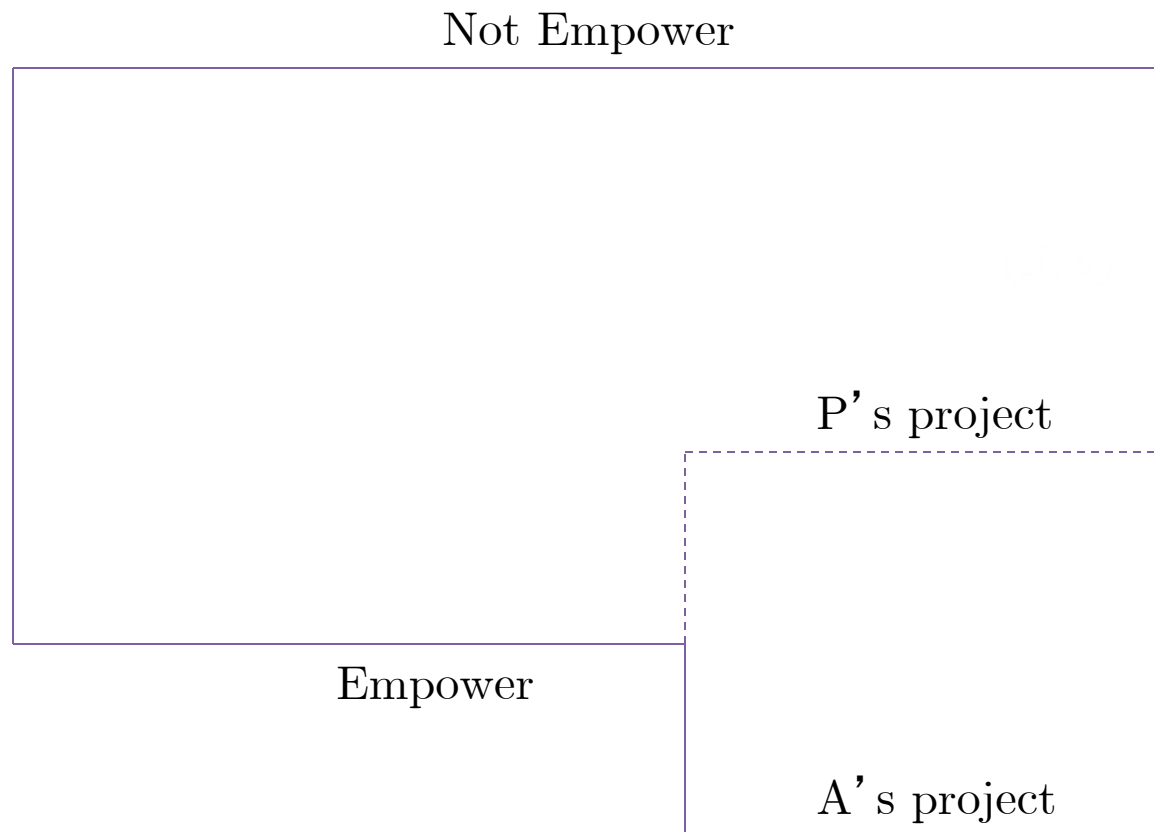
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# WHAT DO WE DO?

Characterize the optimal relational contract: PPE that maximizes principal's expected payoff

Show that entrenched power structures are a natural feature of optimally managed relationships

Examine implications for evolution of firms

# MAIN RESULTS

Firm performance declines over time

Firms stop adapting to information

Different firms decline differently

# AGENDA

- The Model
- The PPE Payoff Set
- The Optimal Relational Contract
- Public Information
- Enrichments of the Model
- Conclusions

# MODEL SKETCH

One principal and one agent

Risk-neutral

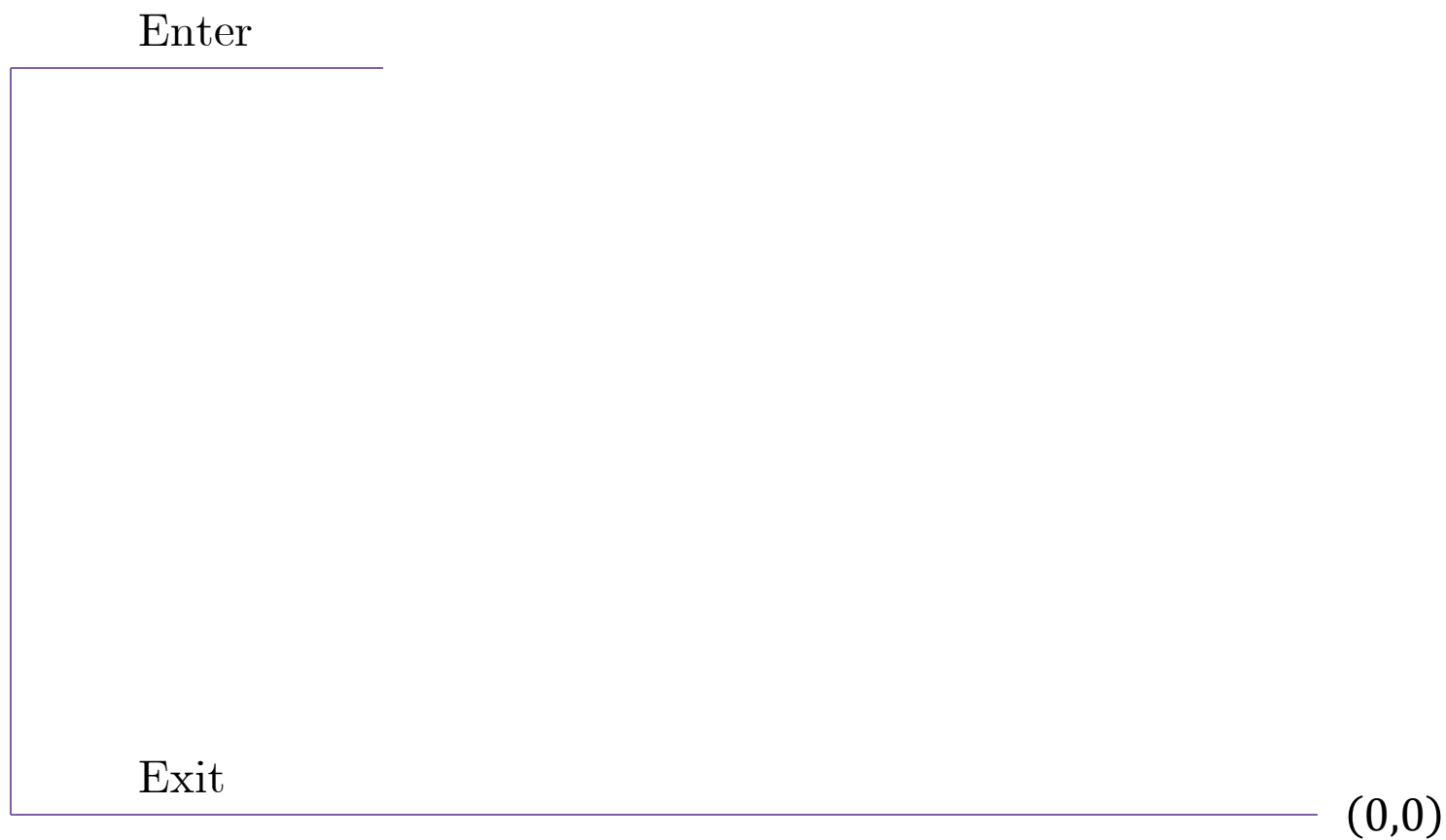
Common discount factor  $\delta$

Repeated trust game

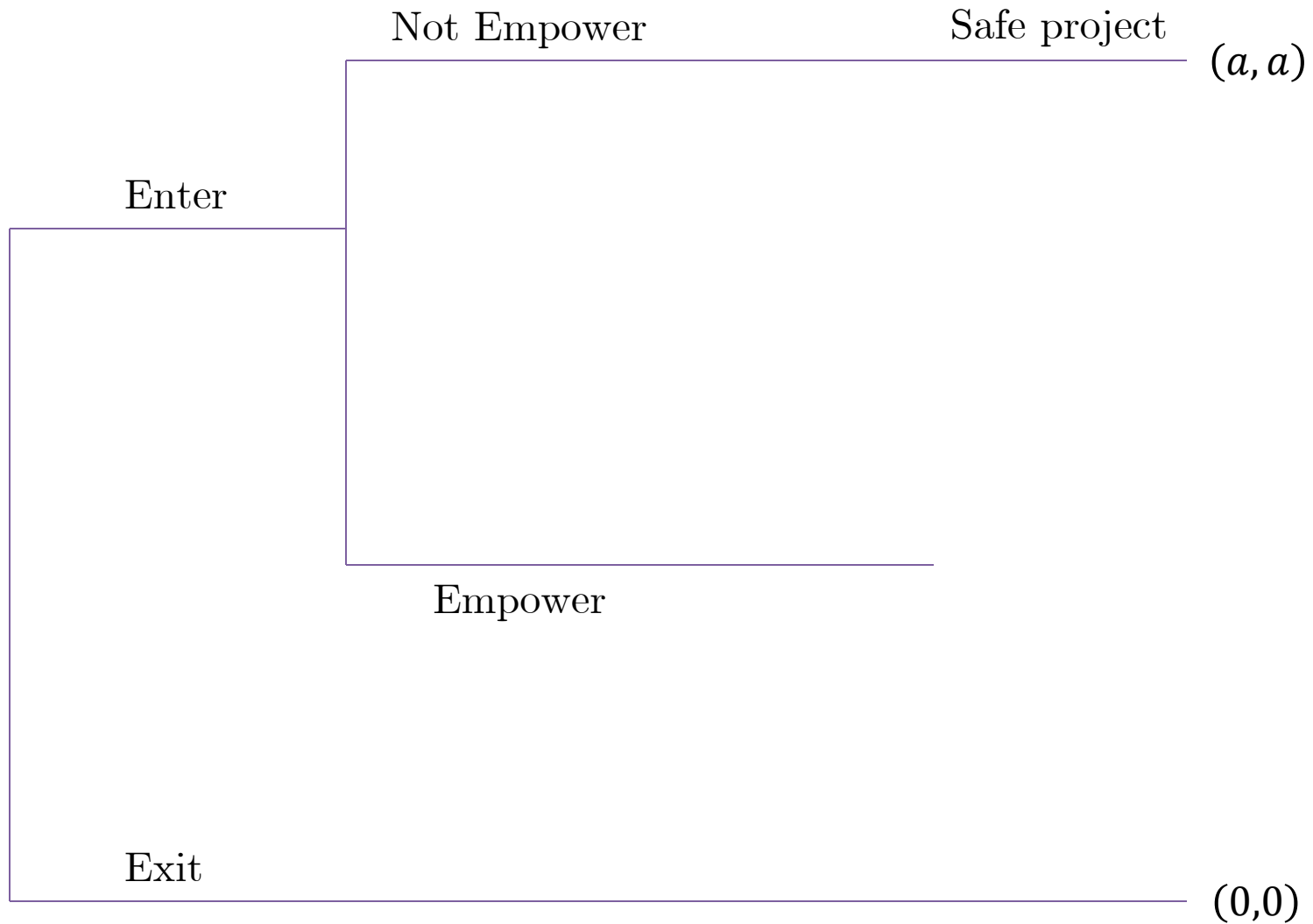
No transfers



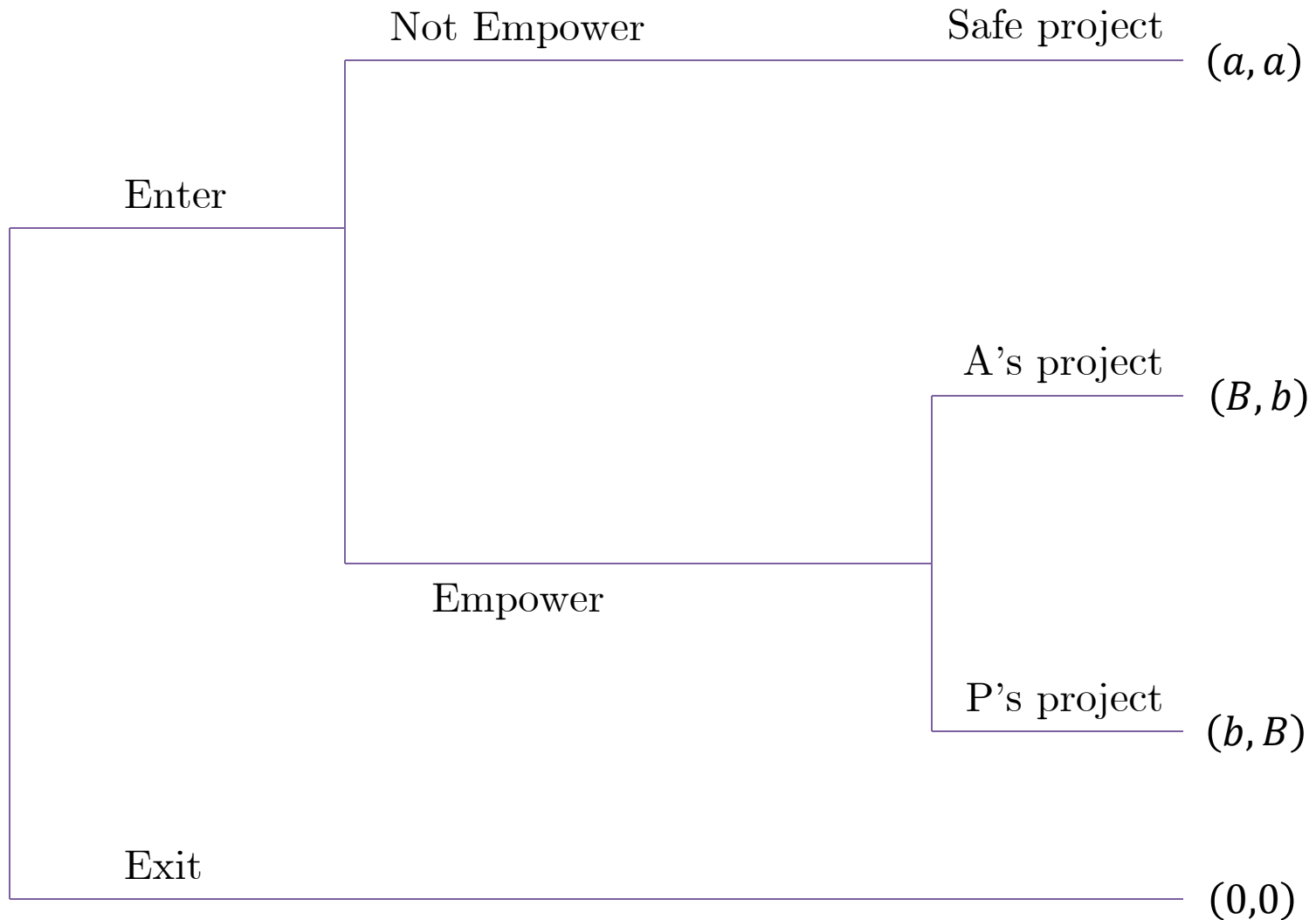
# PRINCIPAL AND AGENT ENTER OR EXIT



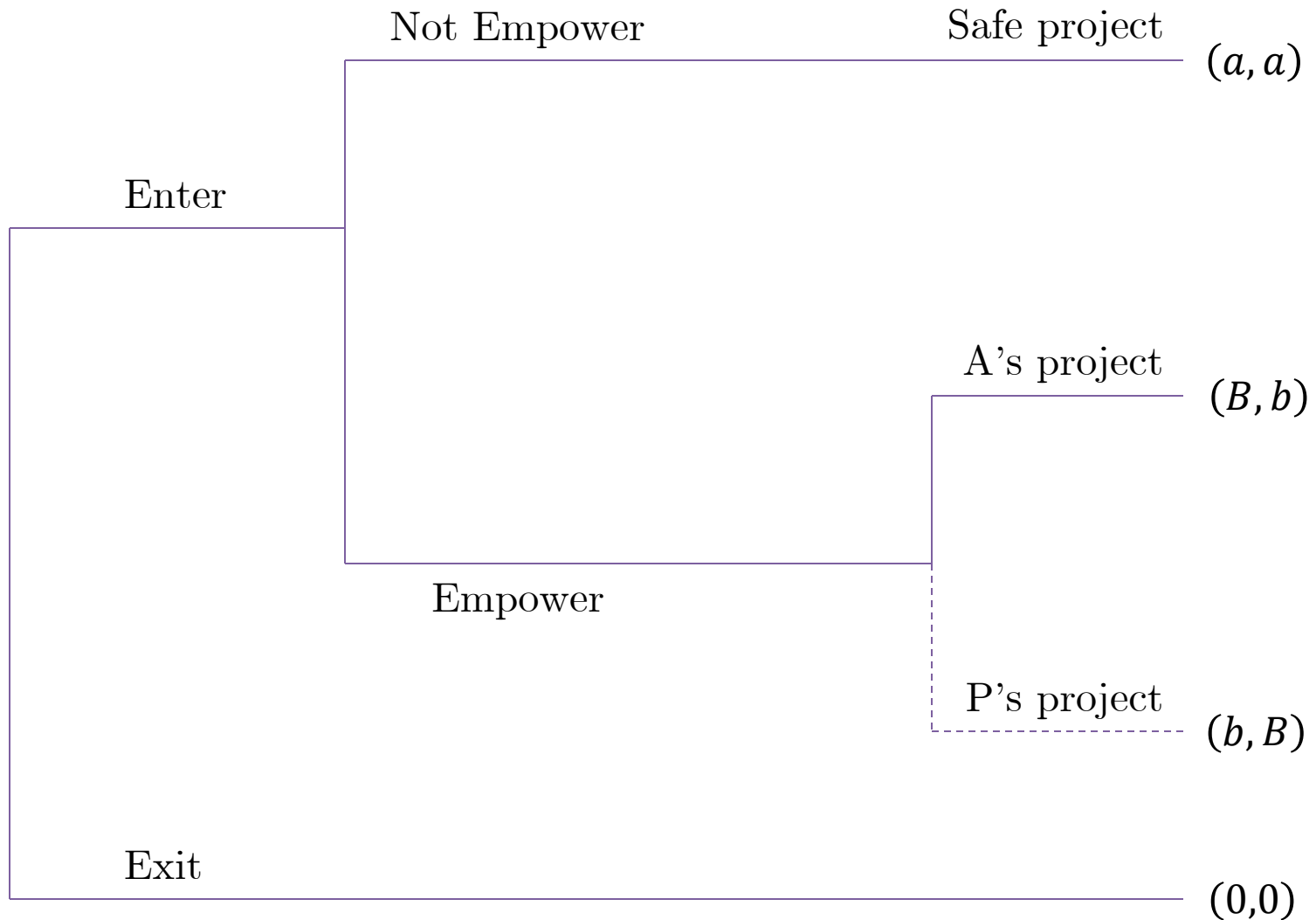
# PRINCIPAL EMPOWERS OR NOT



# AGENT CHOOSES A PROJECT



# PRINCIPAL'S PROJECT MAY BE UNAVAILABLE



# PUBLIC RANDOMIZATION DEVICE

Not Empower

Safe project

$(a, a)$



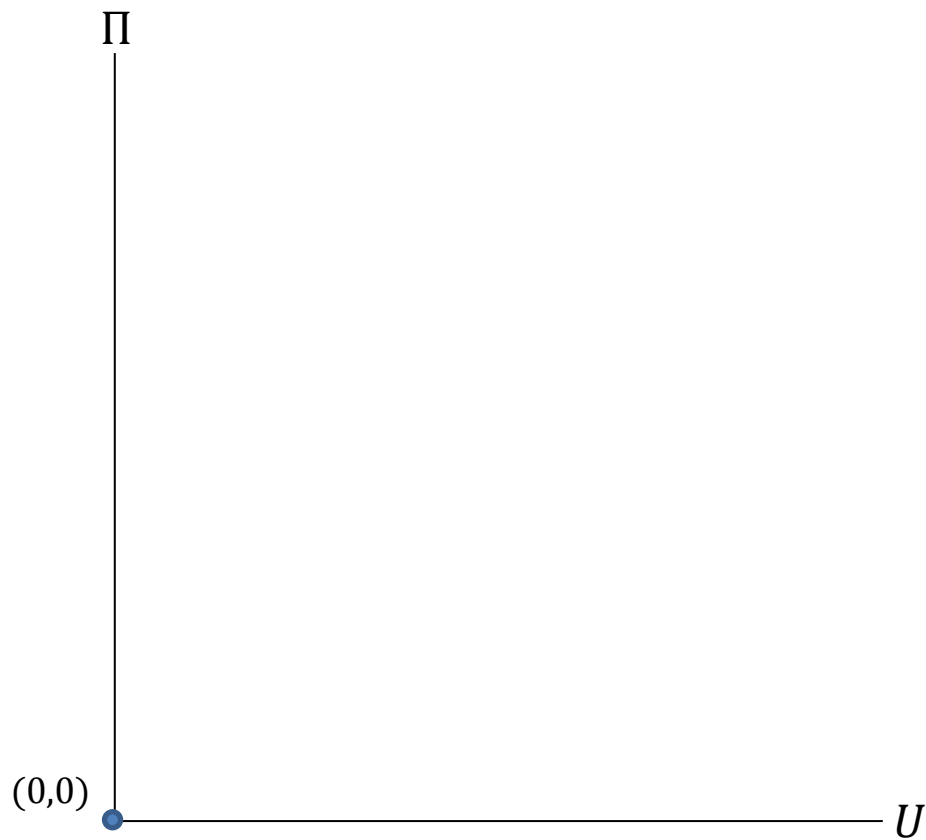
$(B, b)$

$(b, B)$

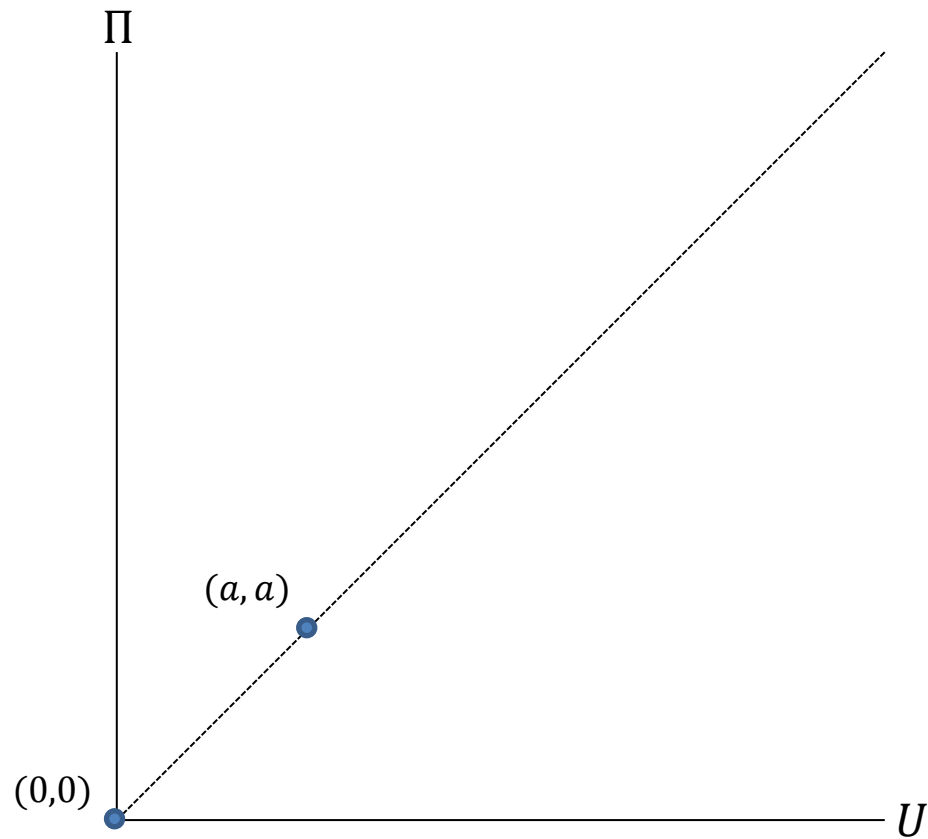
Exit

$(0, 0)$

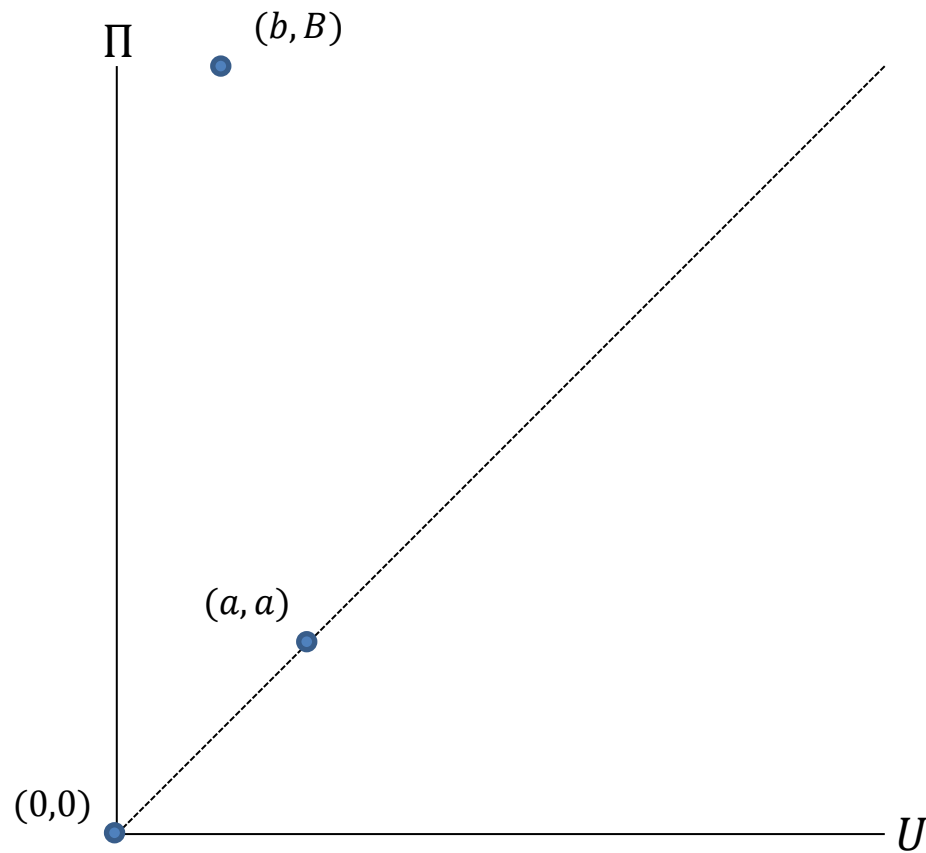
# STAGE-GAME PAYOFFS: EXIT



# STAGE-GAME PAYOFFS: SAFE PROJECT

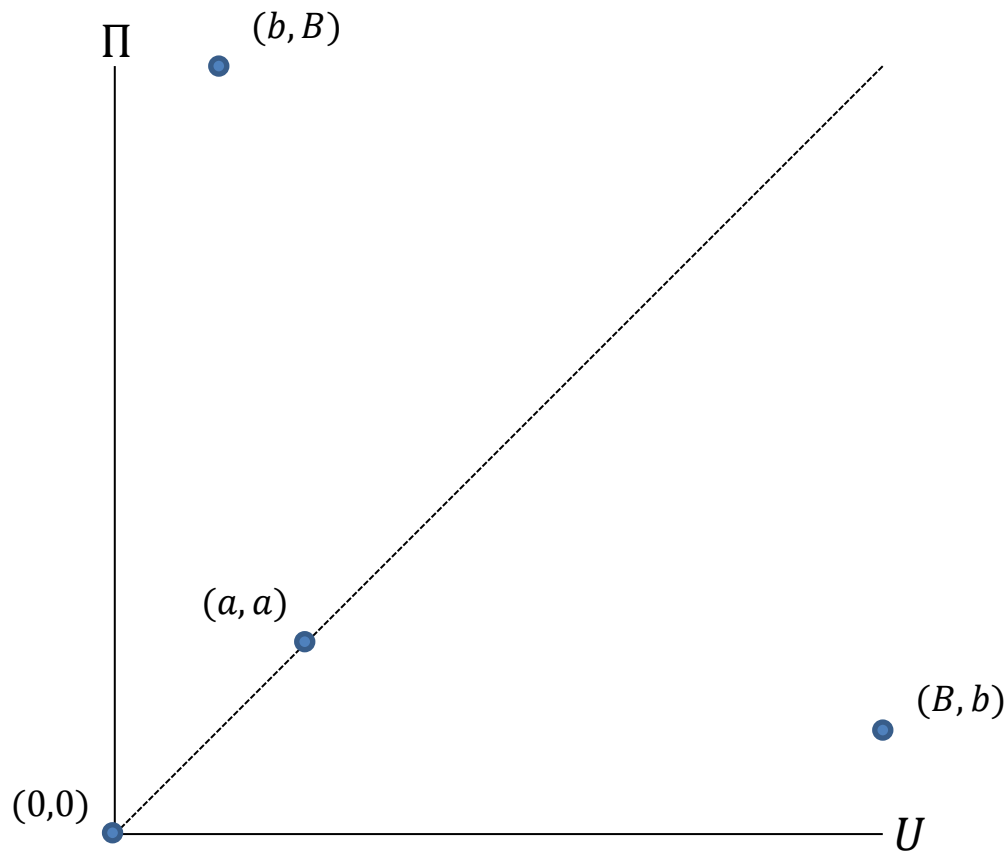


# STAGE-GAME PAYOFFS: PRINCIPAL'S PROJECT

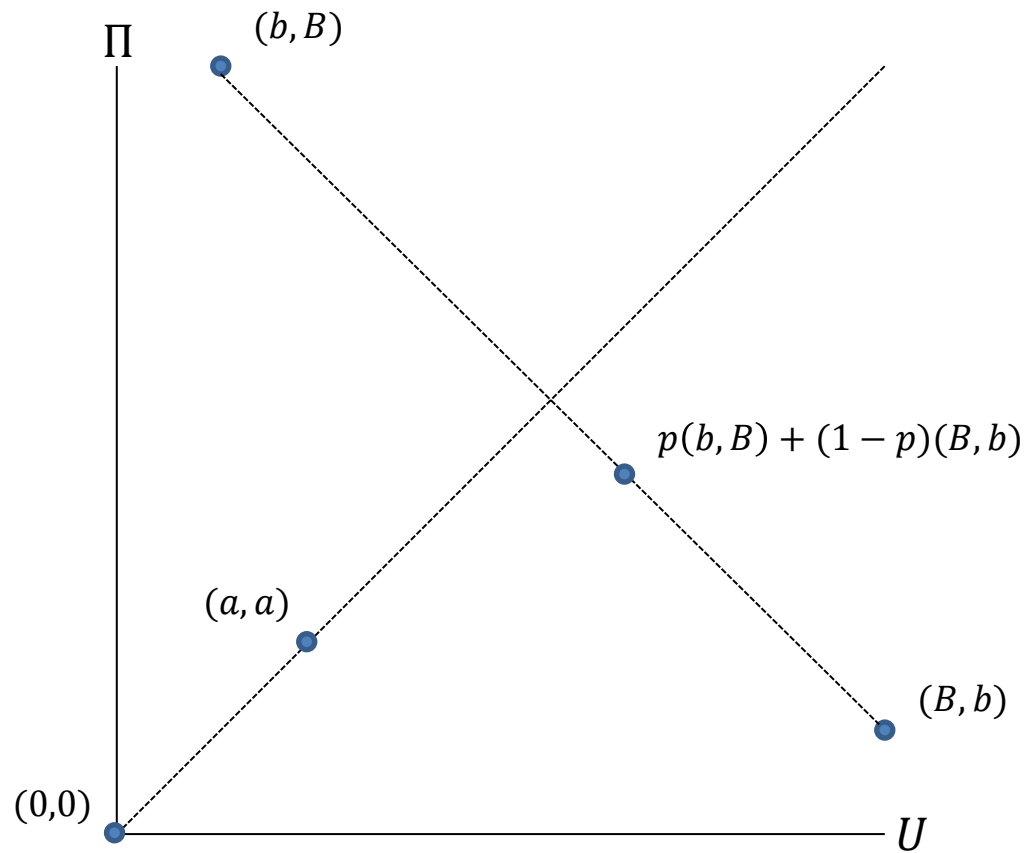




# STAGE-GAME PAYOFFS: AGENT'S PROJECT



# AVERAGE PAYOFF IF BEST AVAILABLE PROJECT



# SOLUTION CONCEPT

Pure-Strategy Perfect Public Equilibrium (PPE)

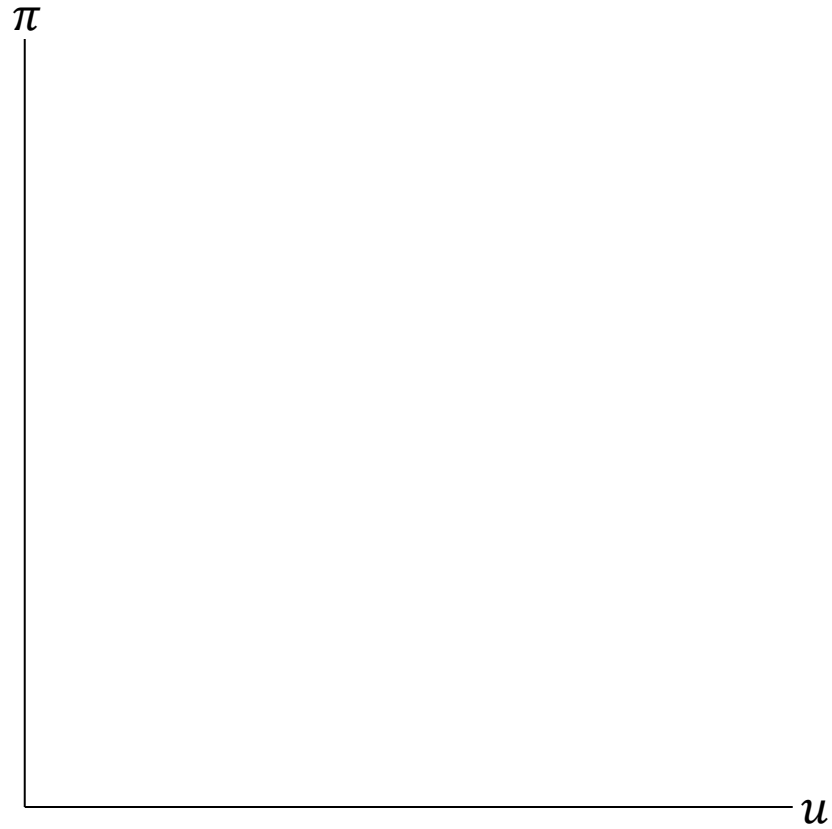
Optimal relational contract: PPE that maximizes  $P$ 's eqbm payoff

Goal: characterize the dynamics of the optimal relational contract

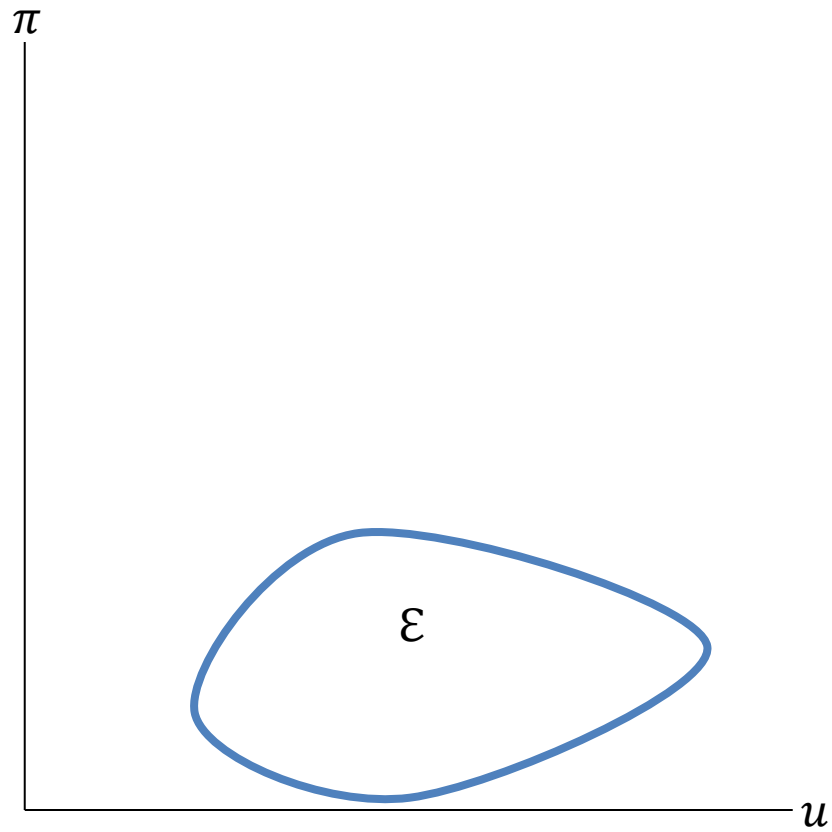
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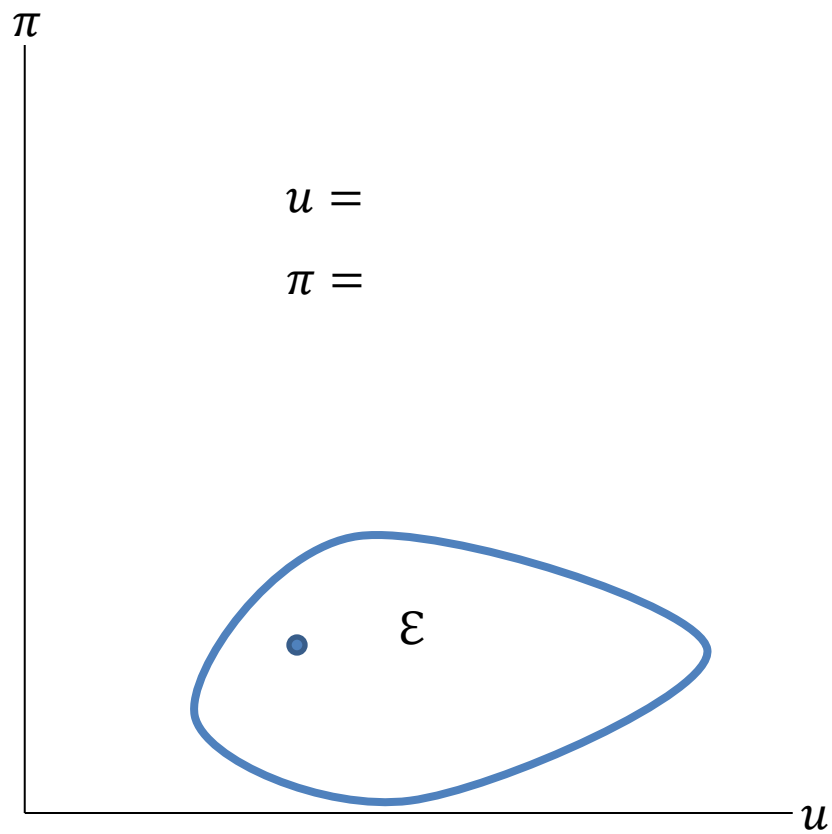
# PPE PAYOFF SET



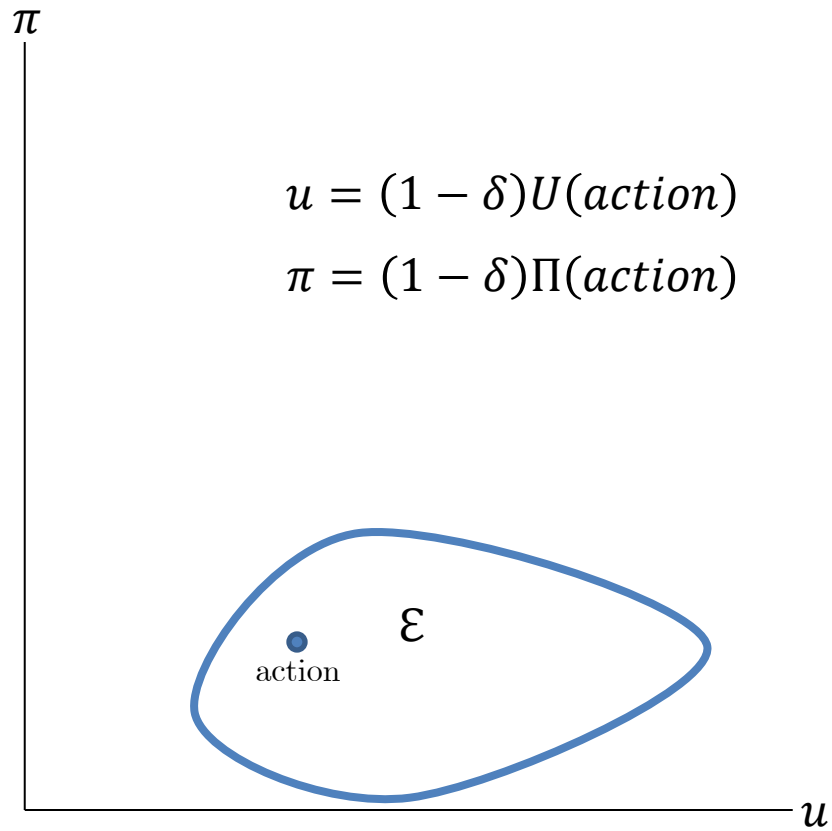
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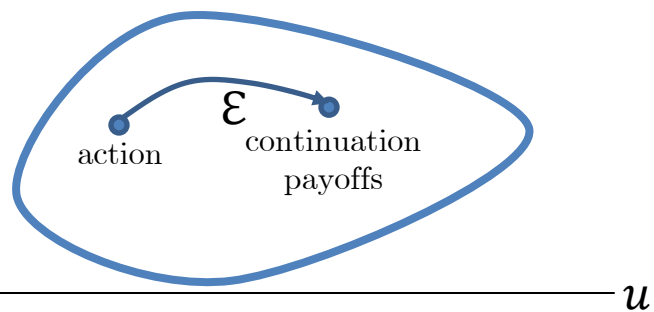


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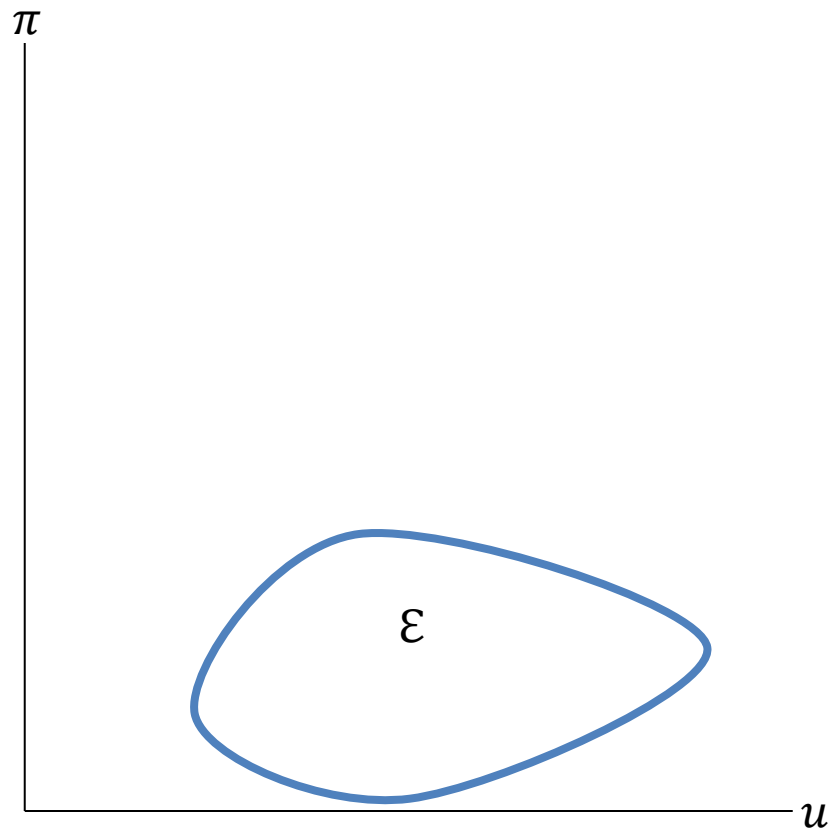
$\pi$

$$u = (1 - \delta)U(\text{action}) + \delta \text{continuation}$$

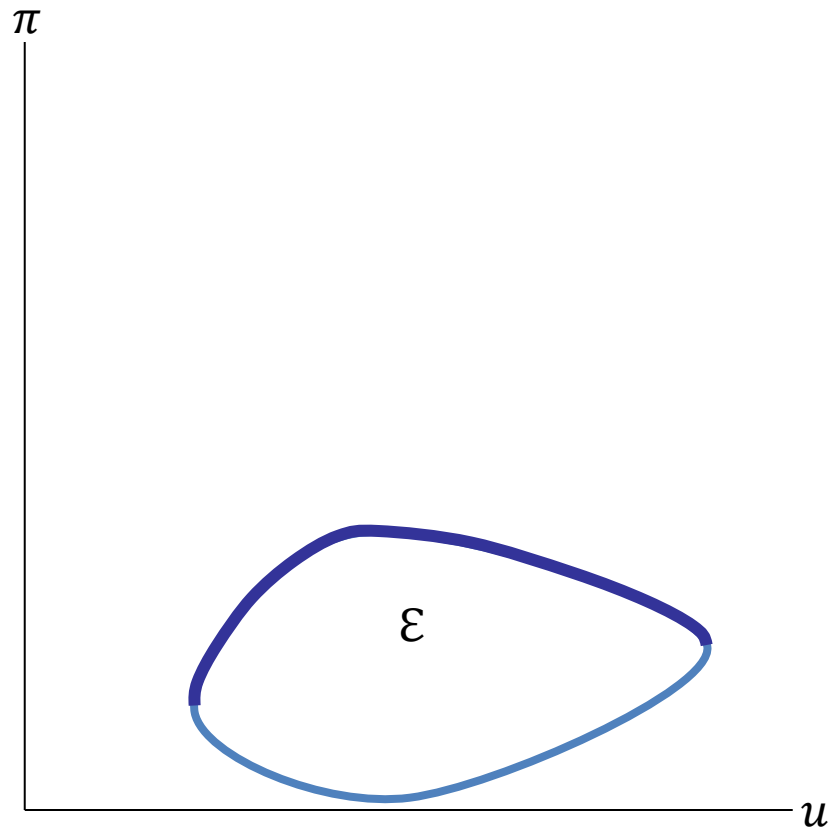
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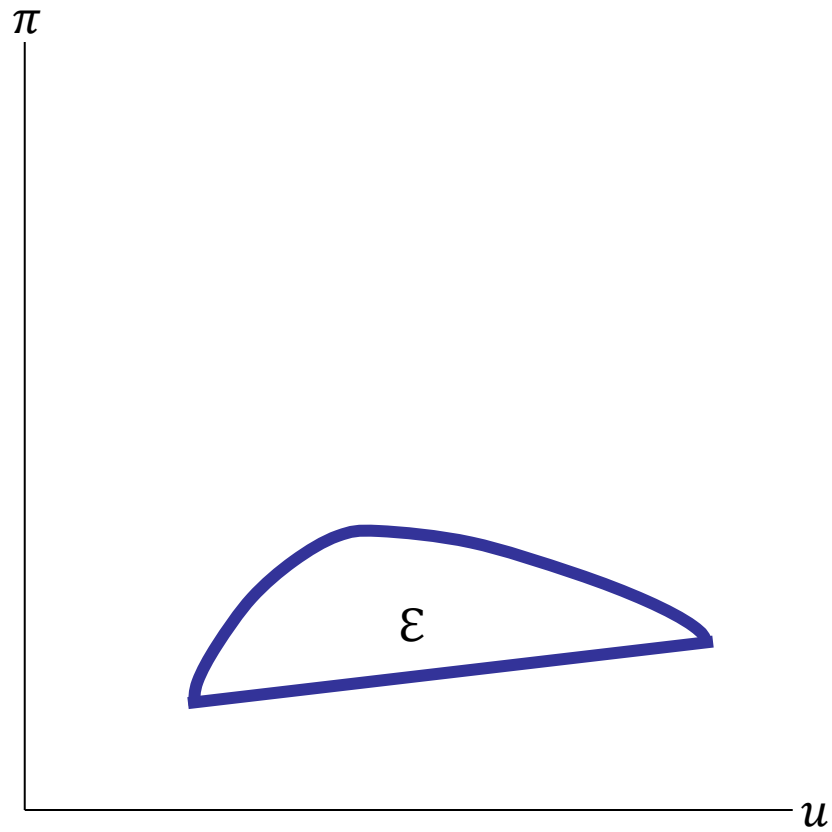
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# FOUR CLASSES OF ACTIONS IN EQUILIBRIUM

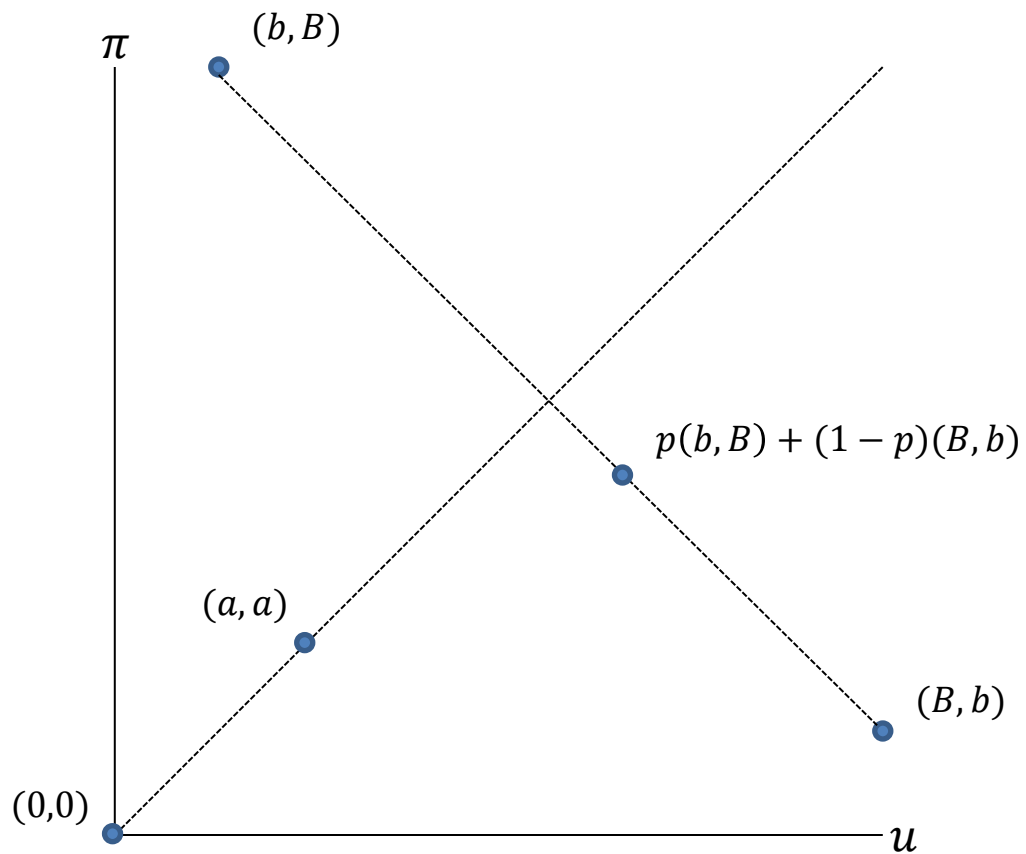
**Centralization:** both enter,  $P$  does not empower

**Cooperative Empowerment:** both enter,  $P$  empowers,  $A$  chooses  $P$ 's project whenever possible

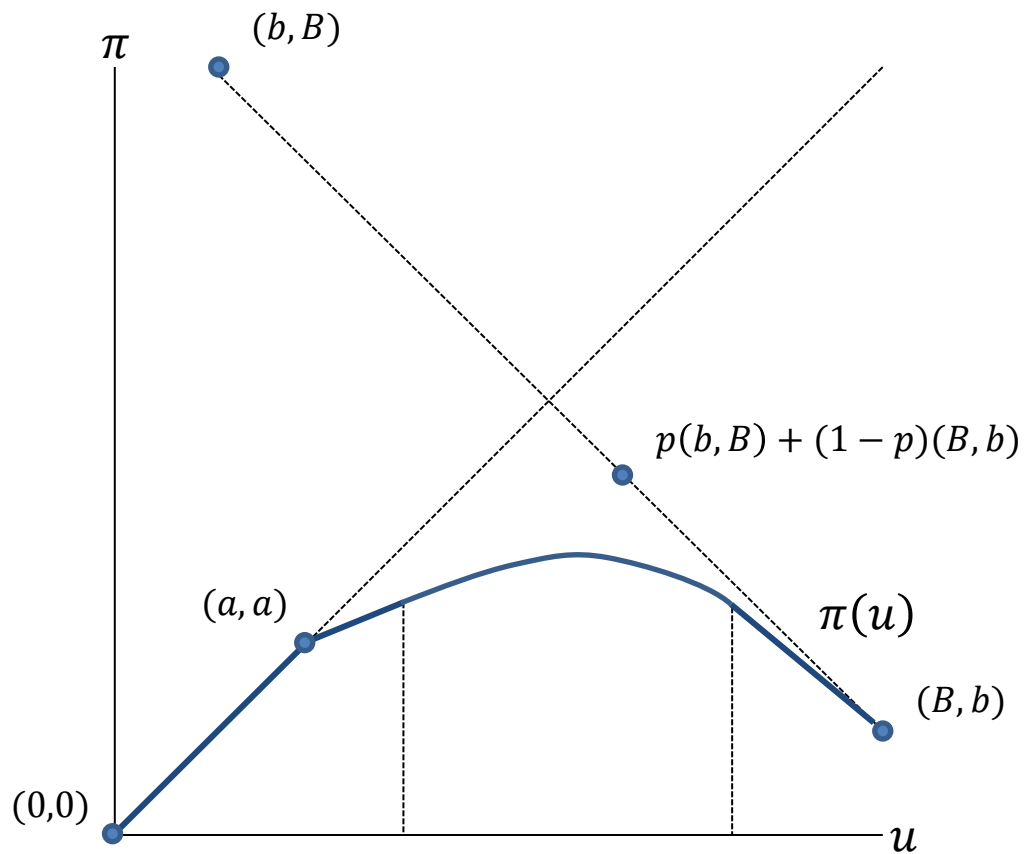
**Uncooperative Empowerment:** both enter,  $P$  empowers,  $A$  always chooses  $A$ 's project

**Exit:** neither enter

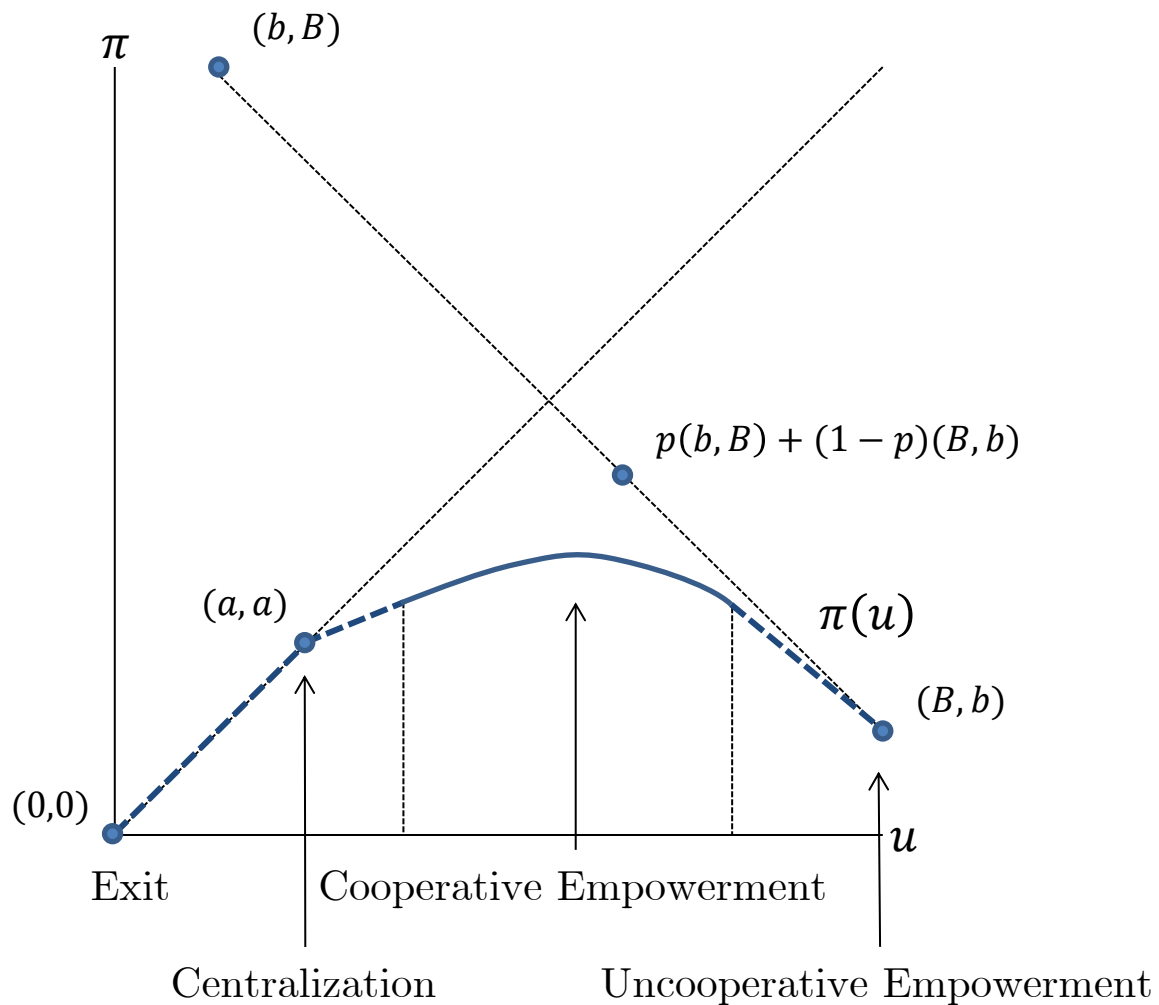
# THE PPE PAYOFF FRONTIER



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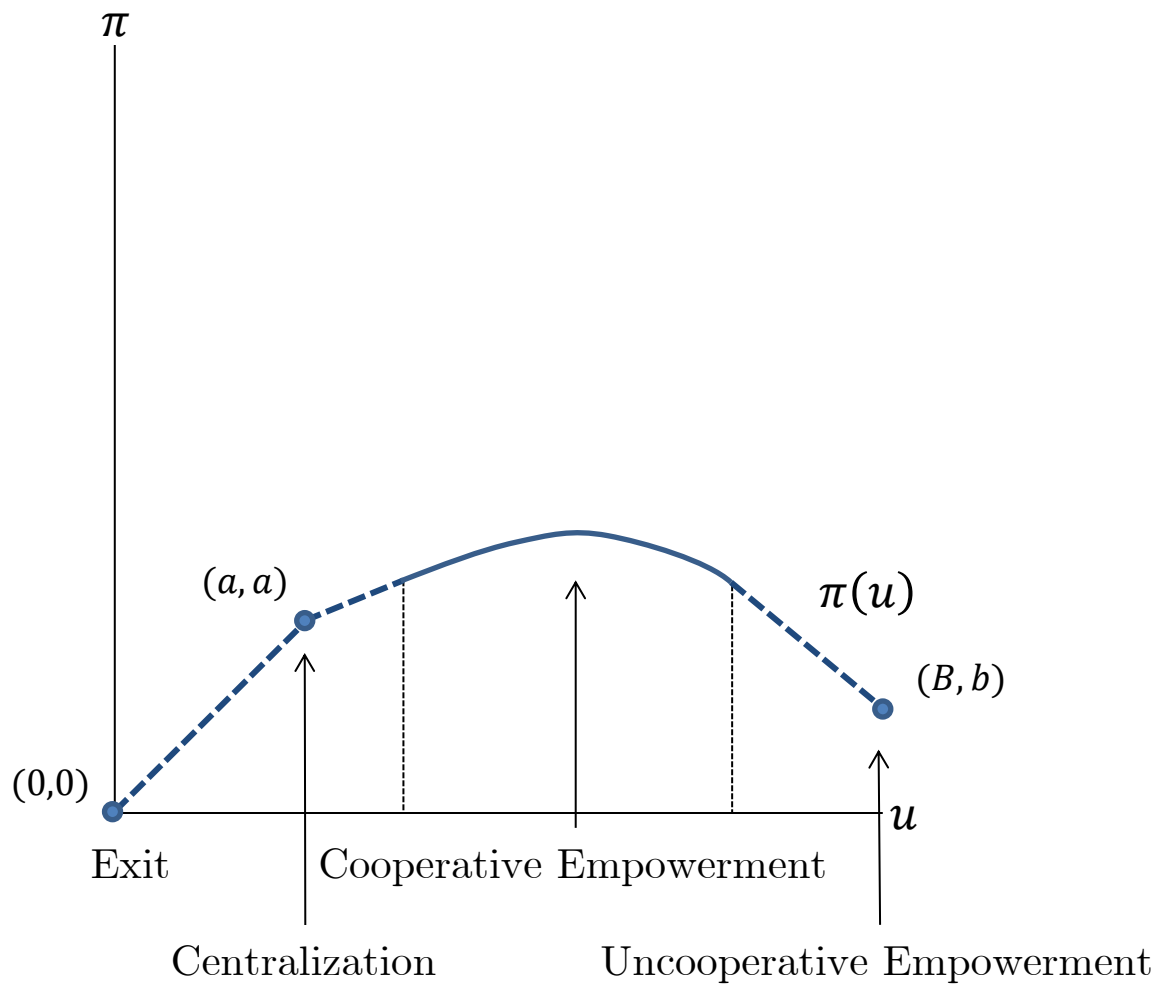


# ACTIONS SUPPORTING THE FRONTIER

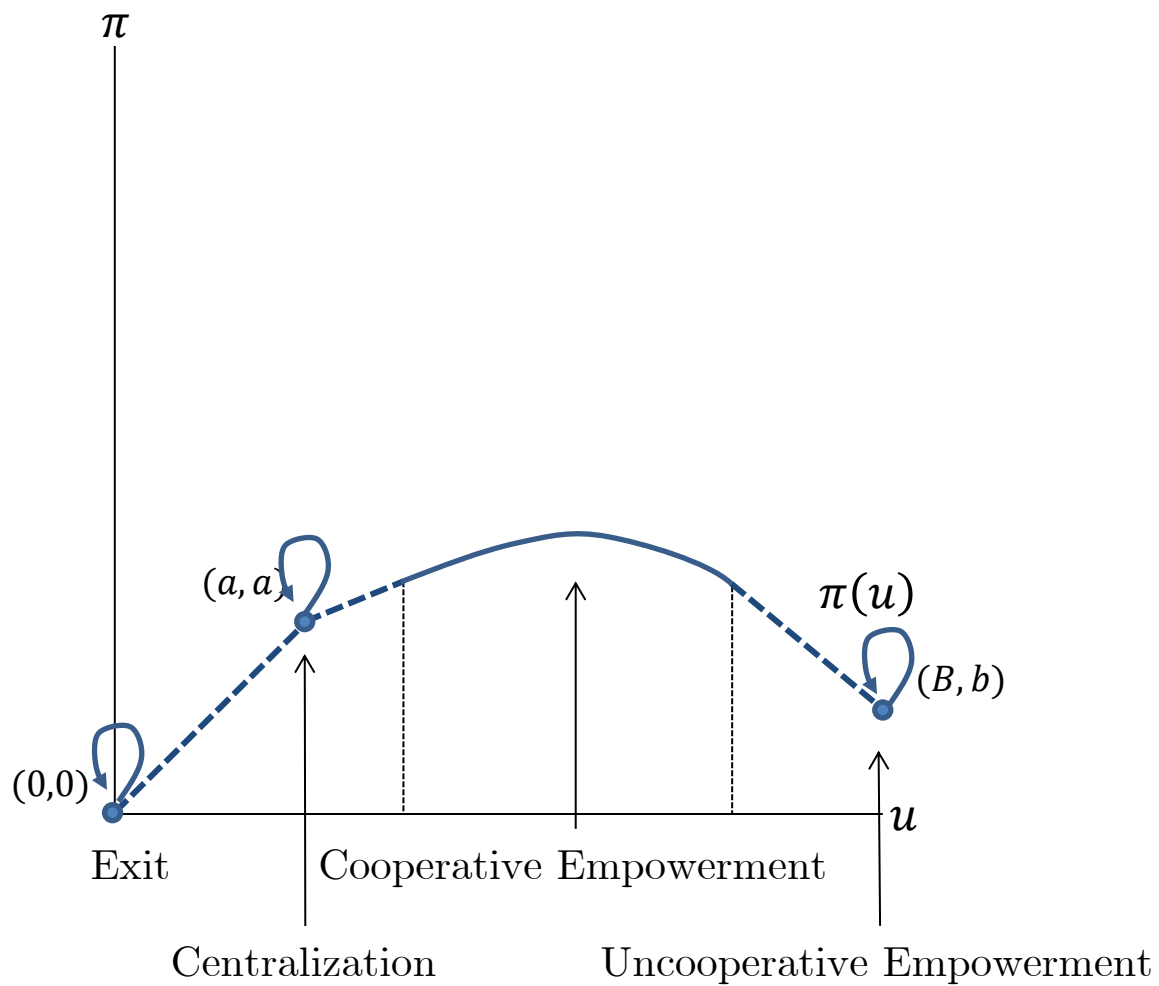




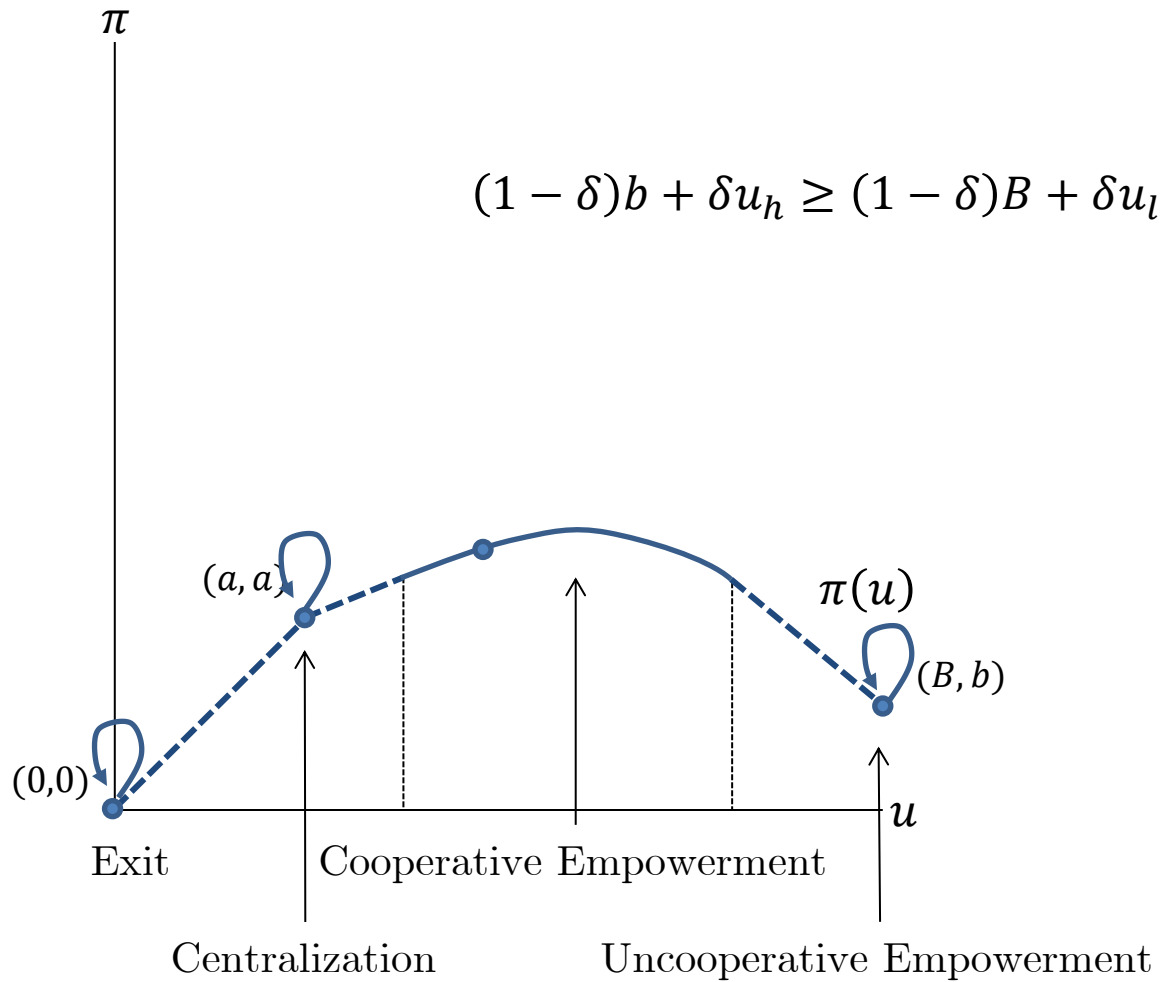
# ASSOCIATED CONTINUATION PAYOFFS



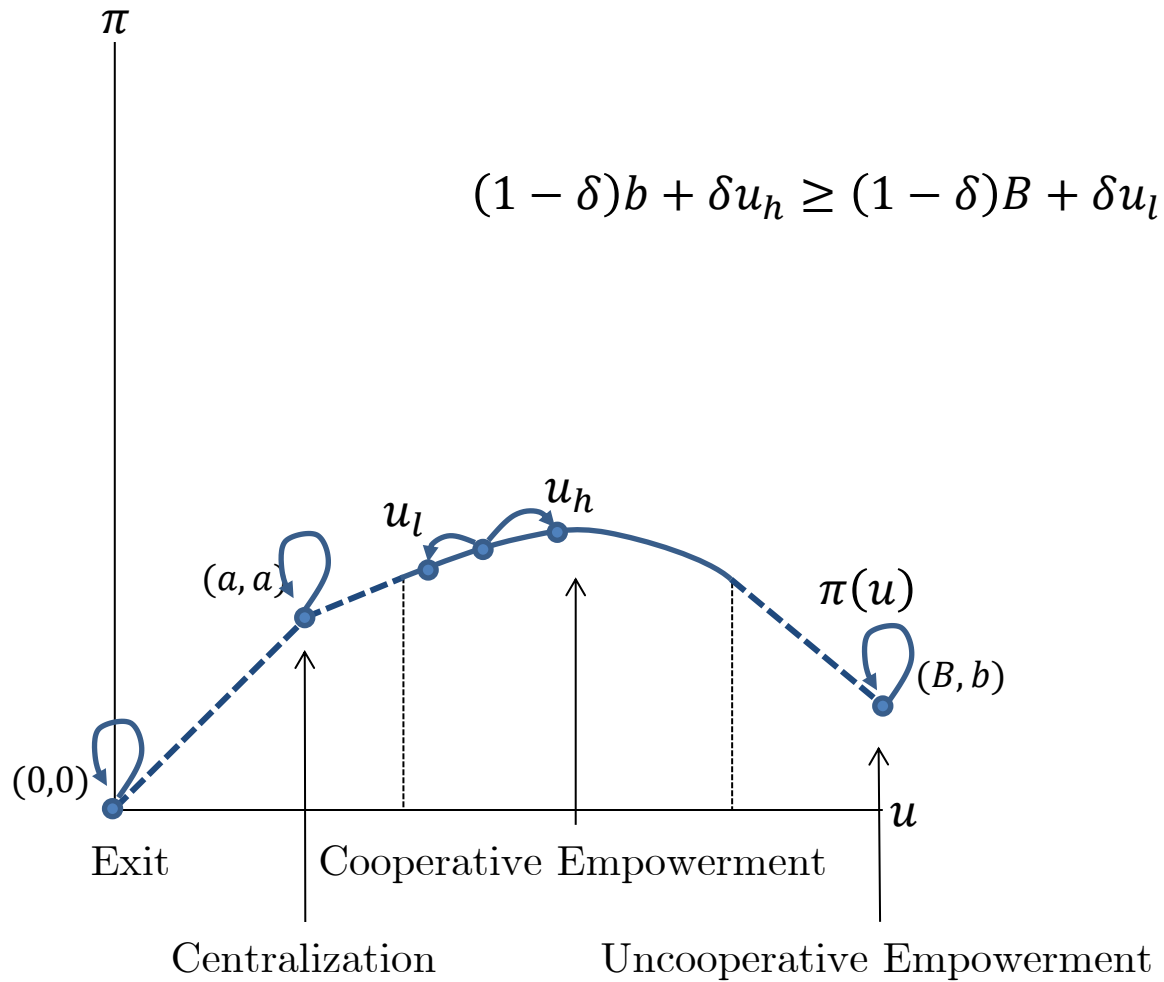
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# INCENTIVE COMPATIBILITY



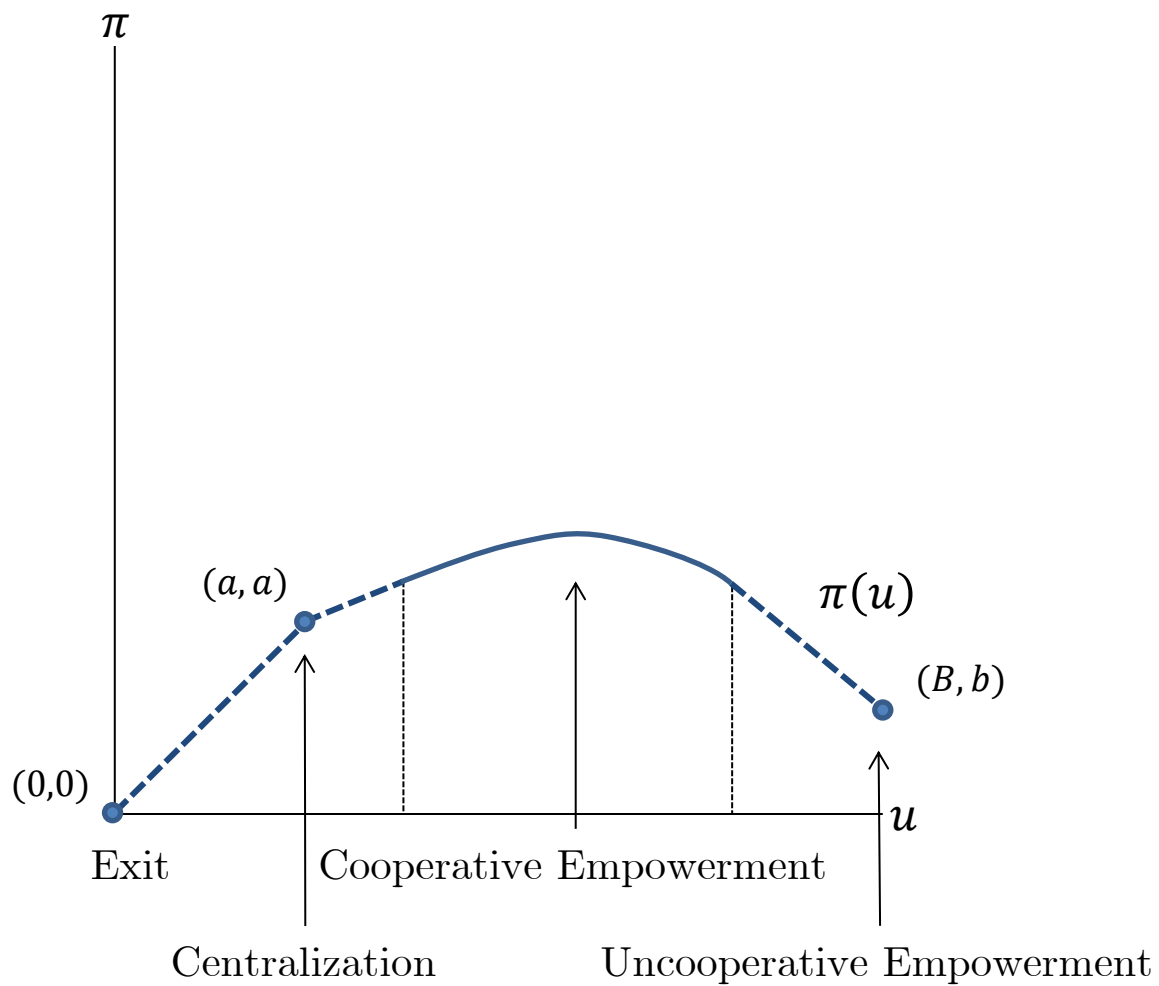
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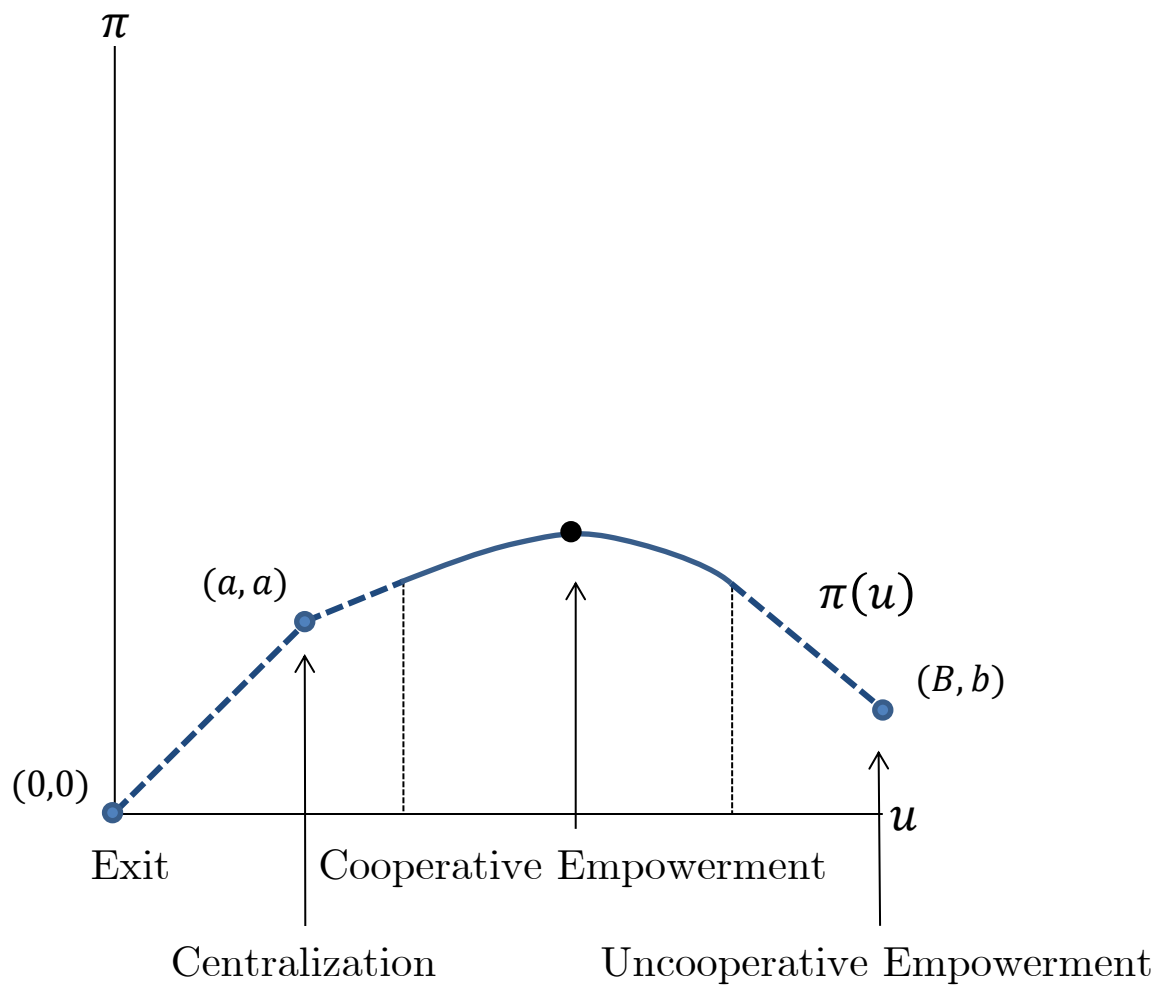
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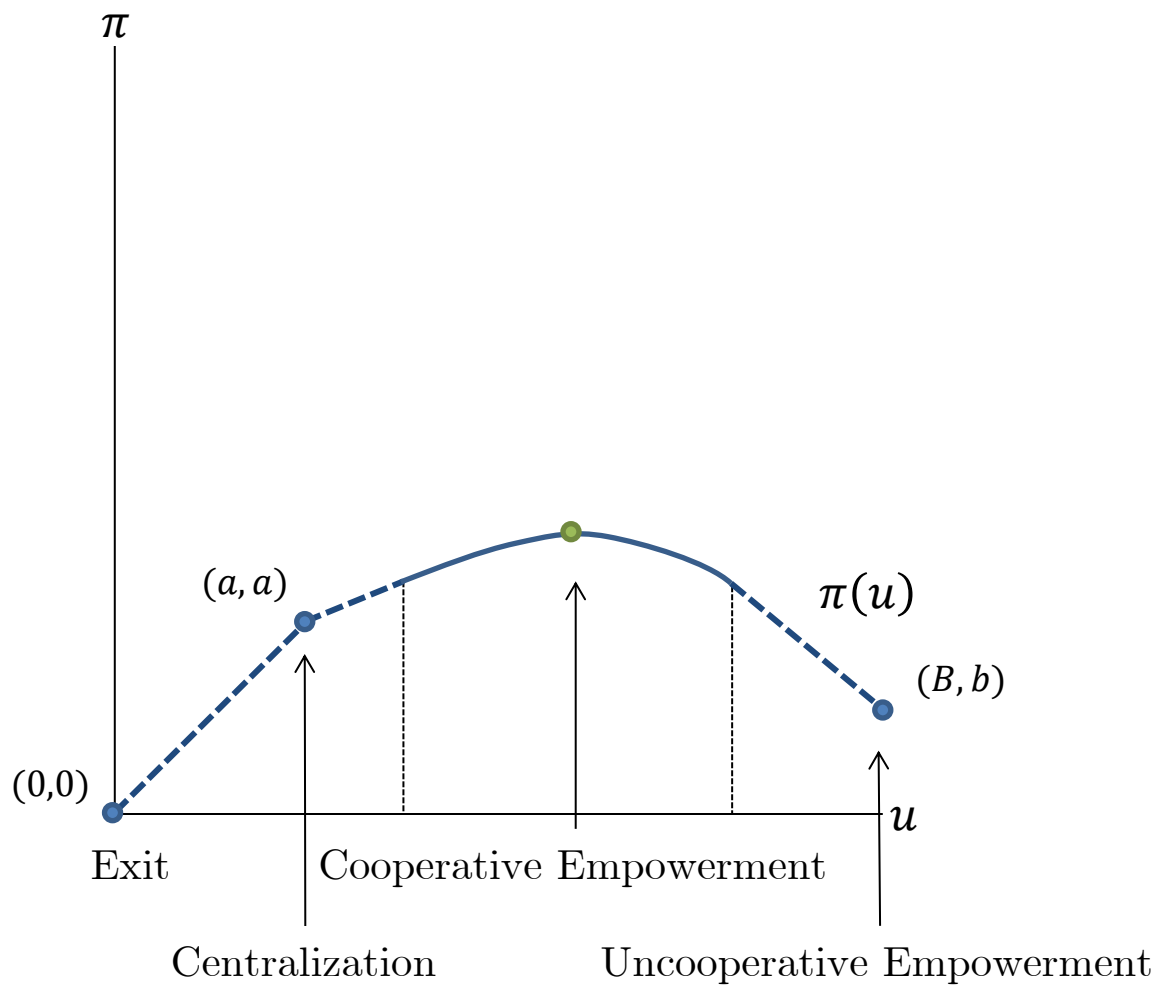
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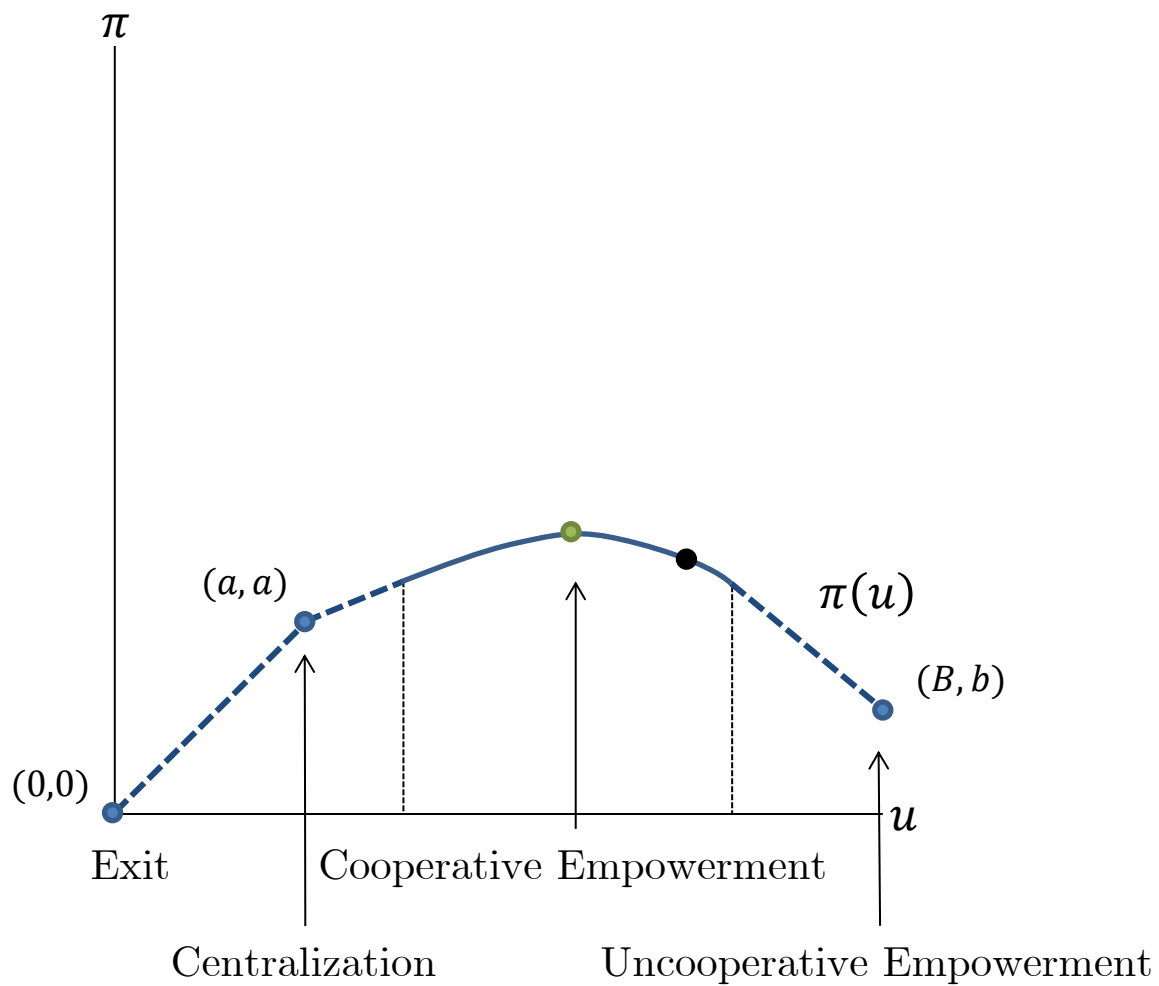


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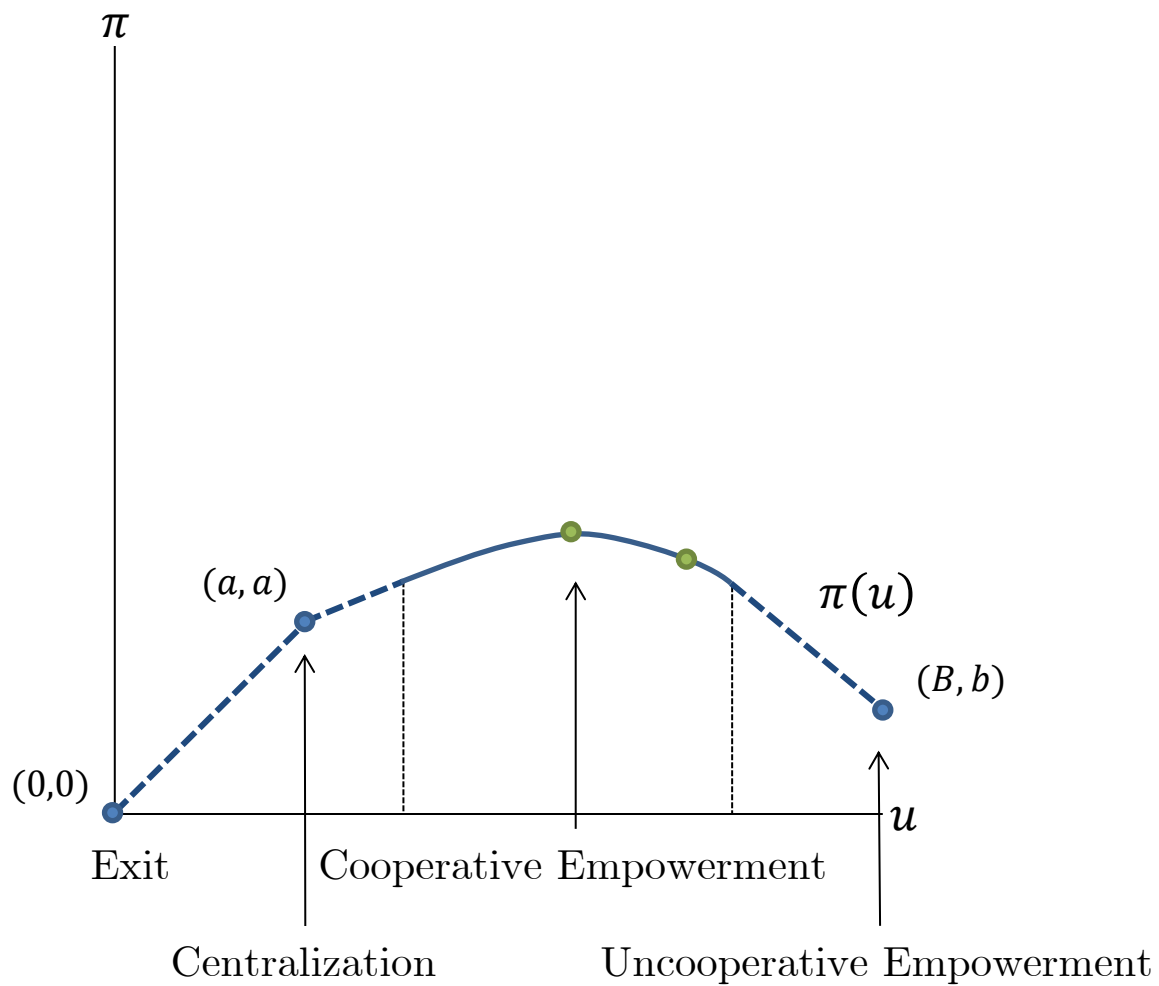




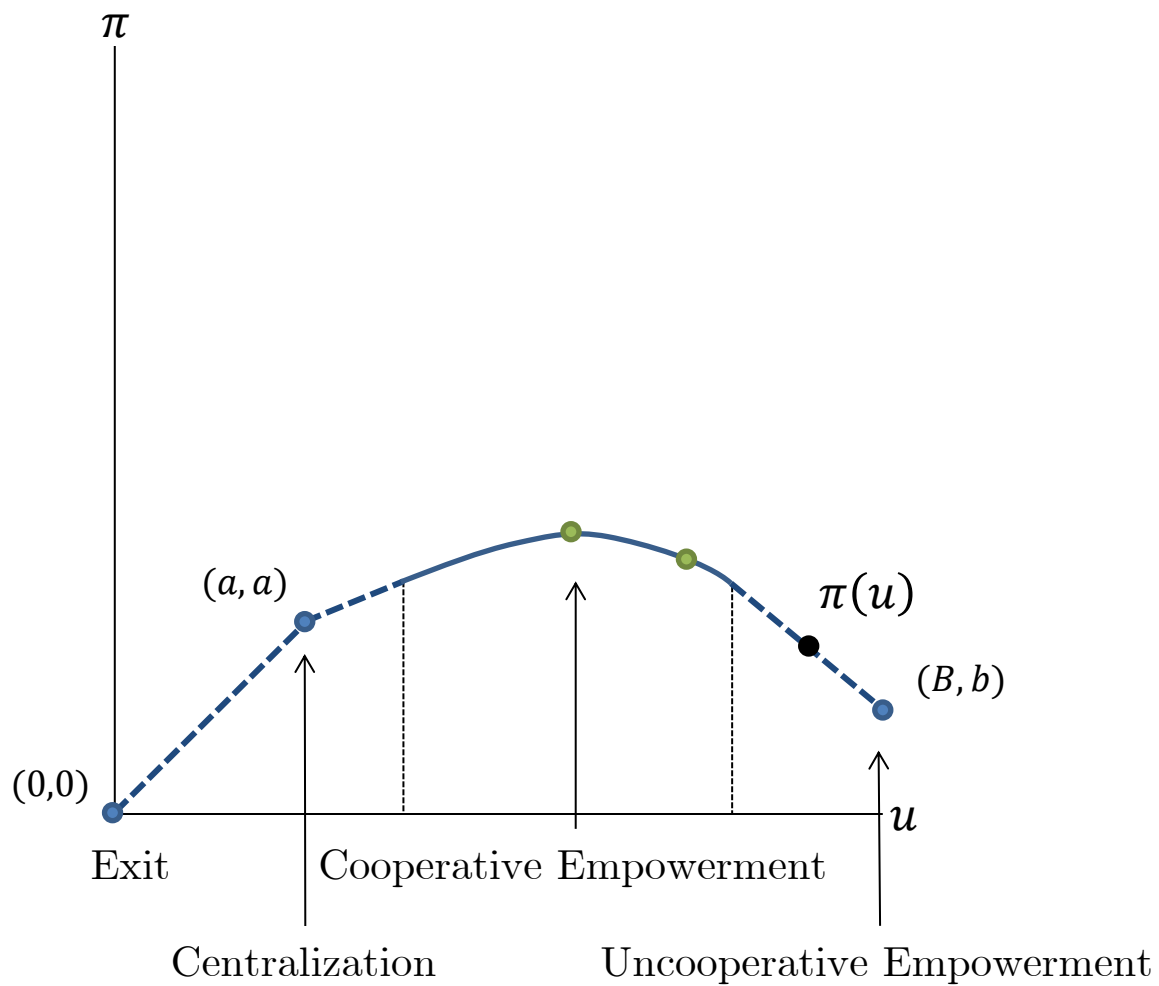
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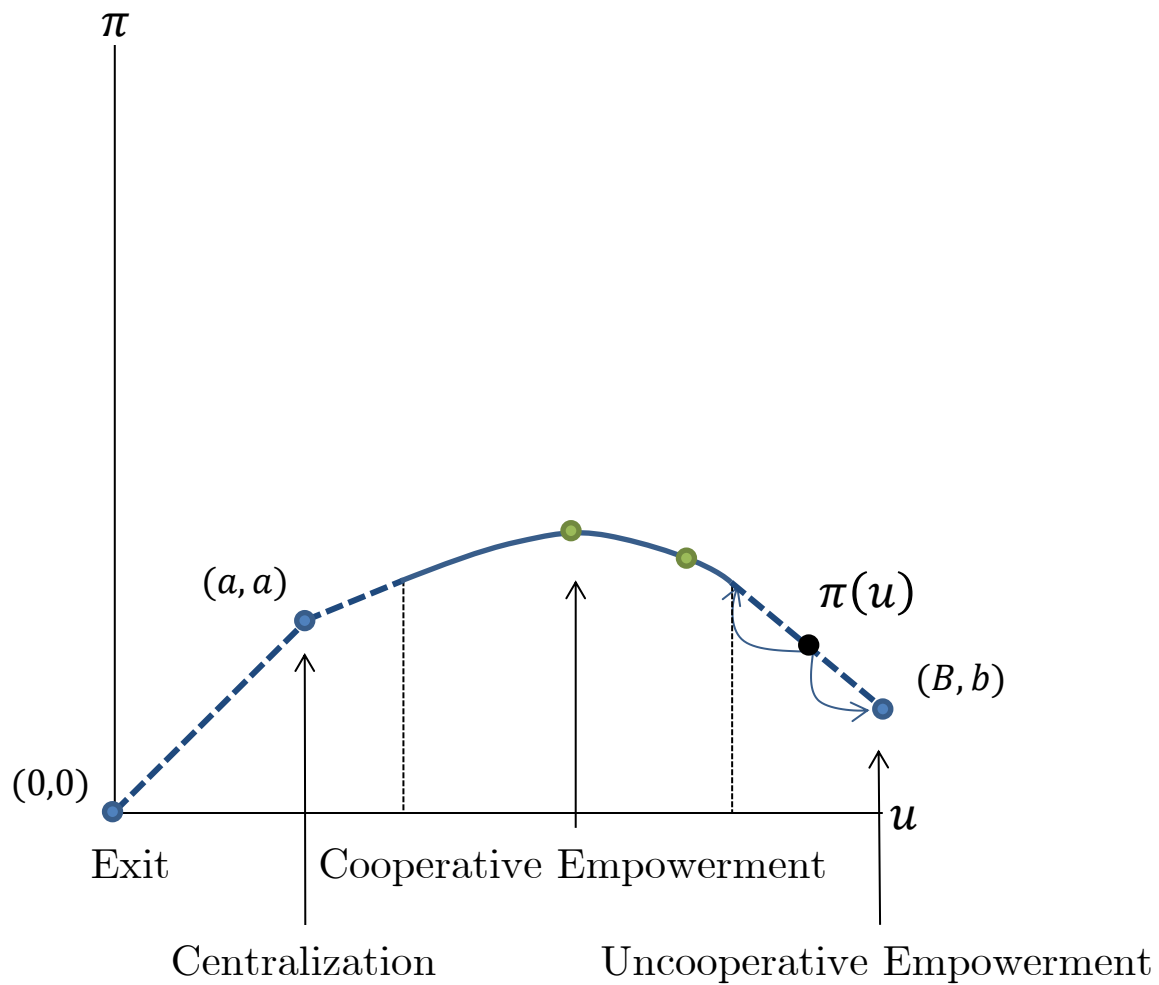
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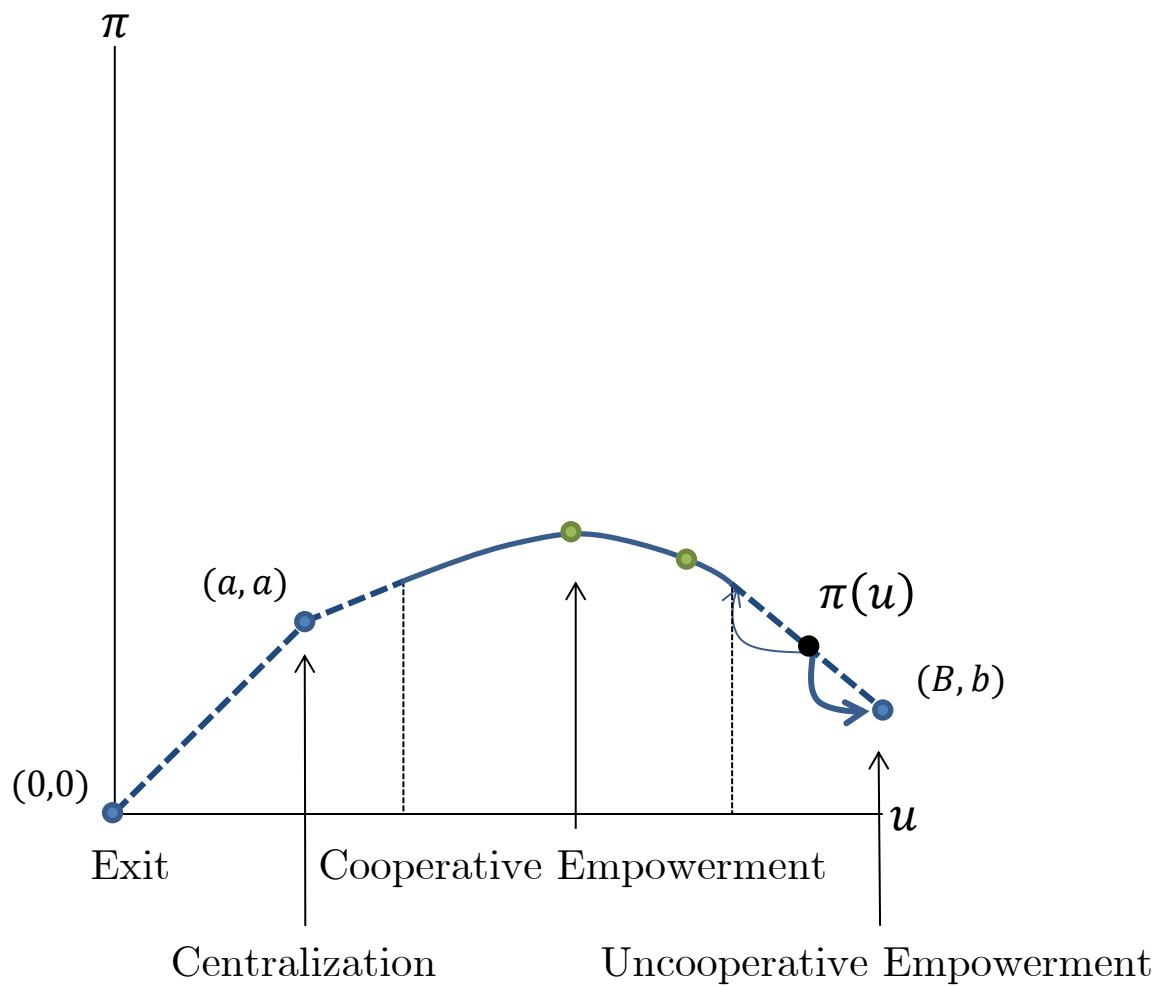
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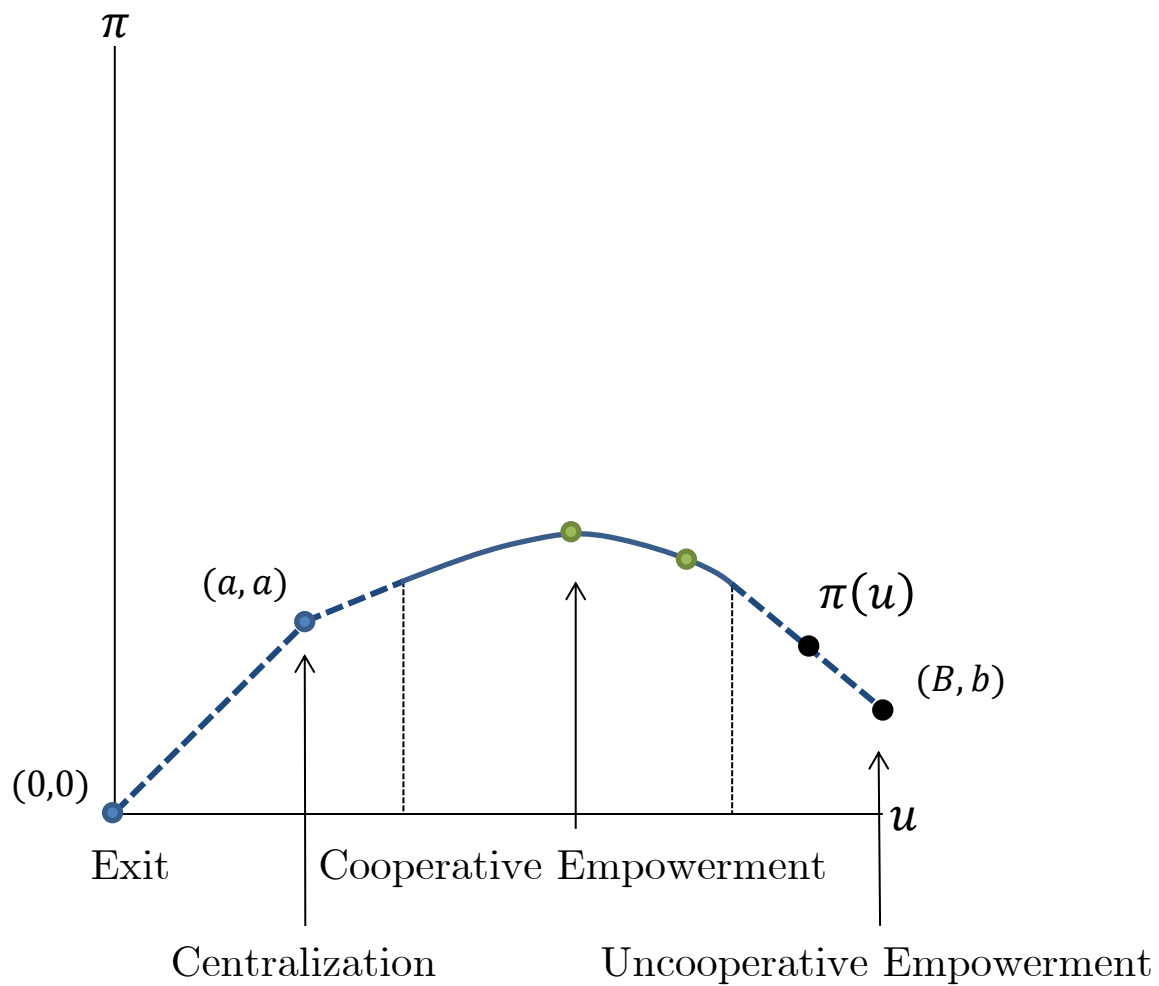
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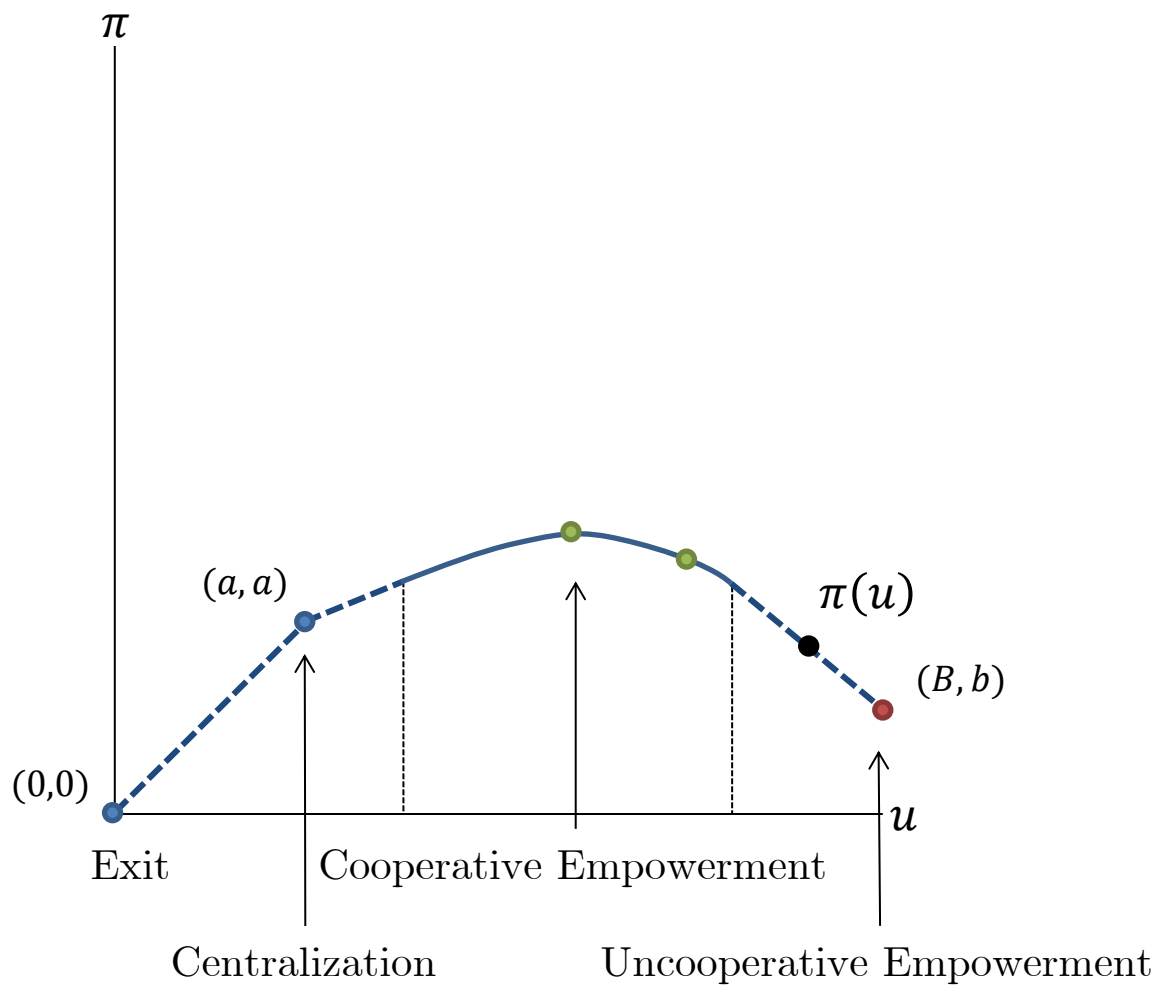
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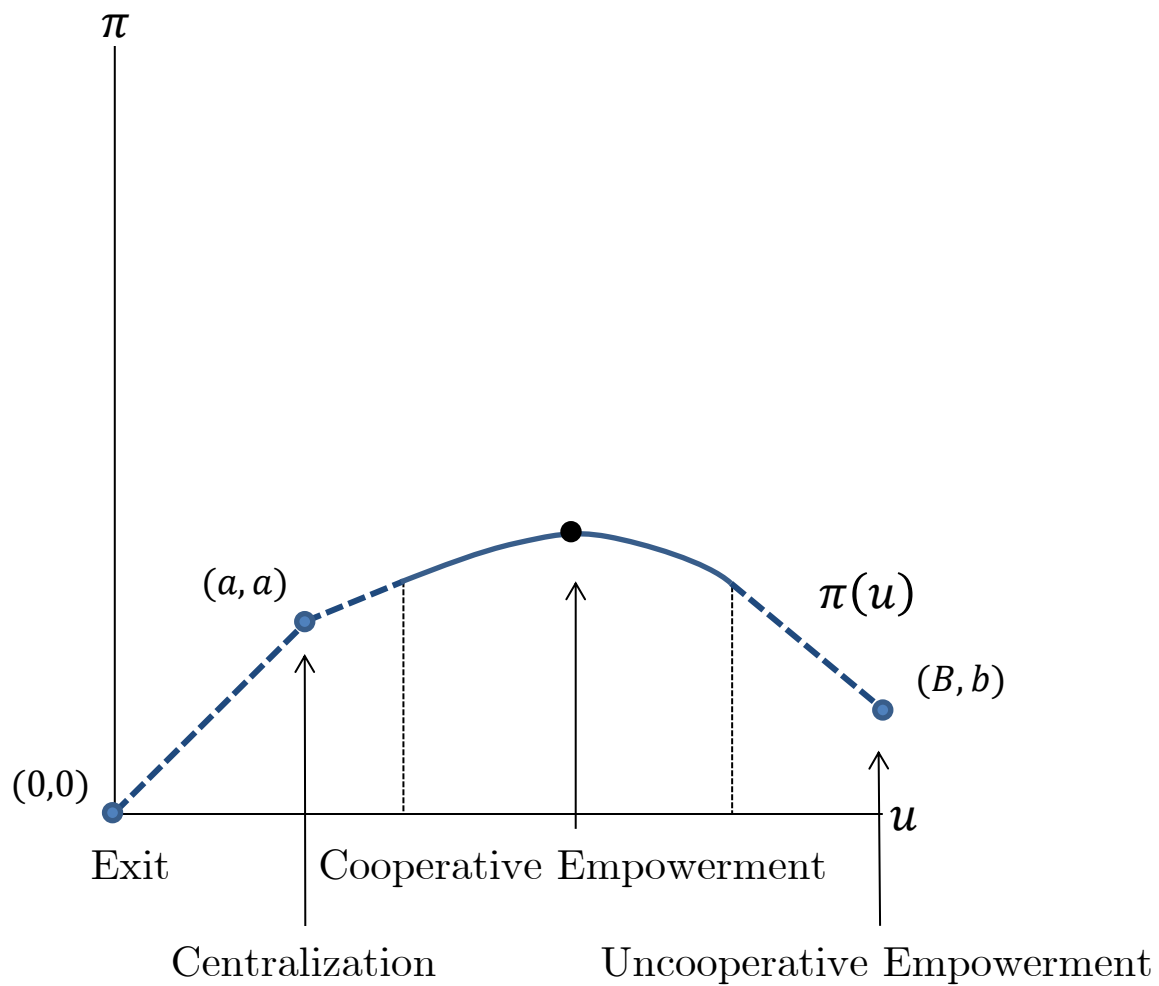
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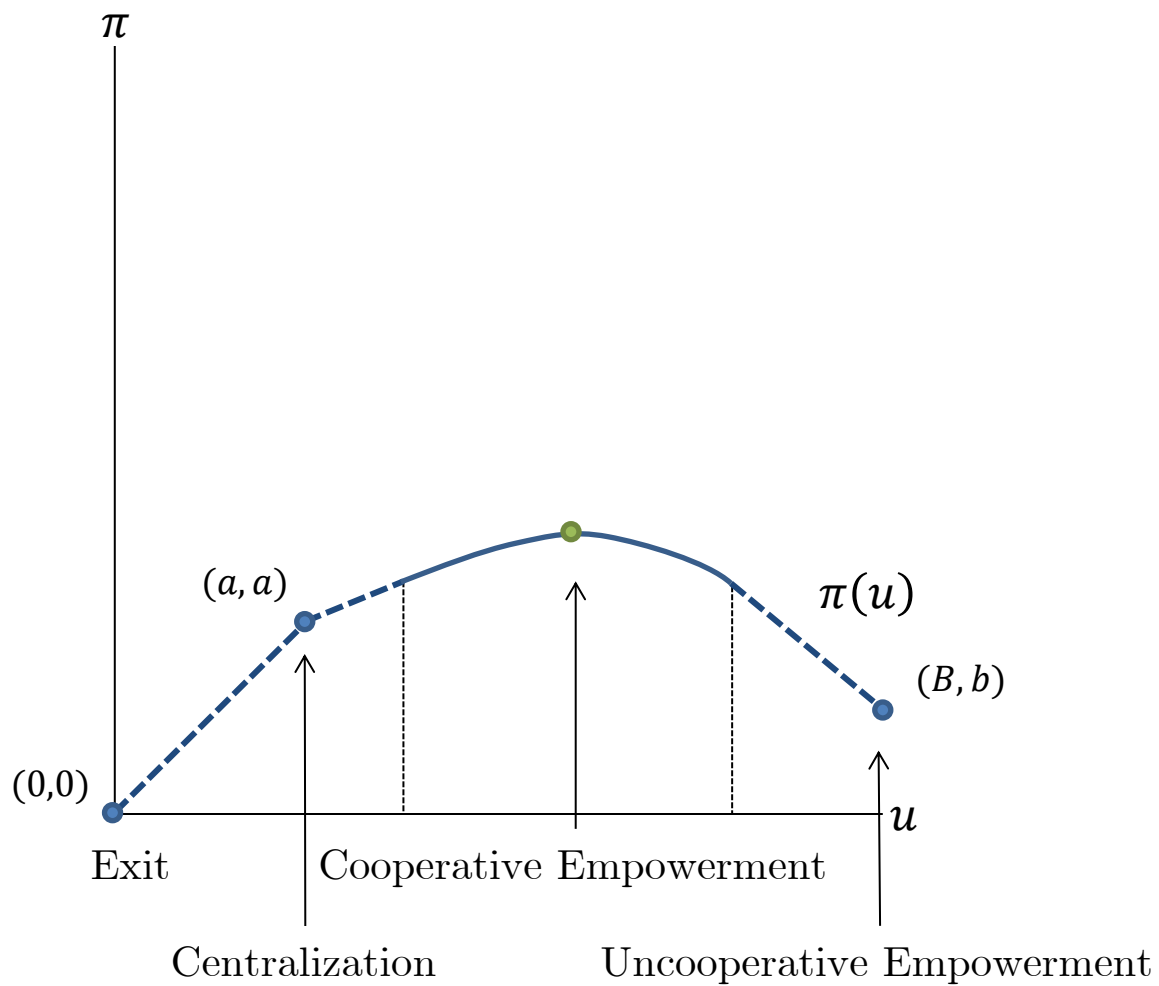


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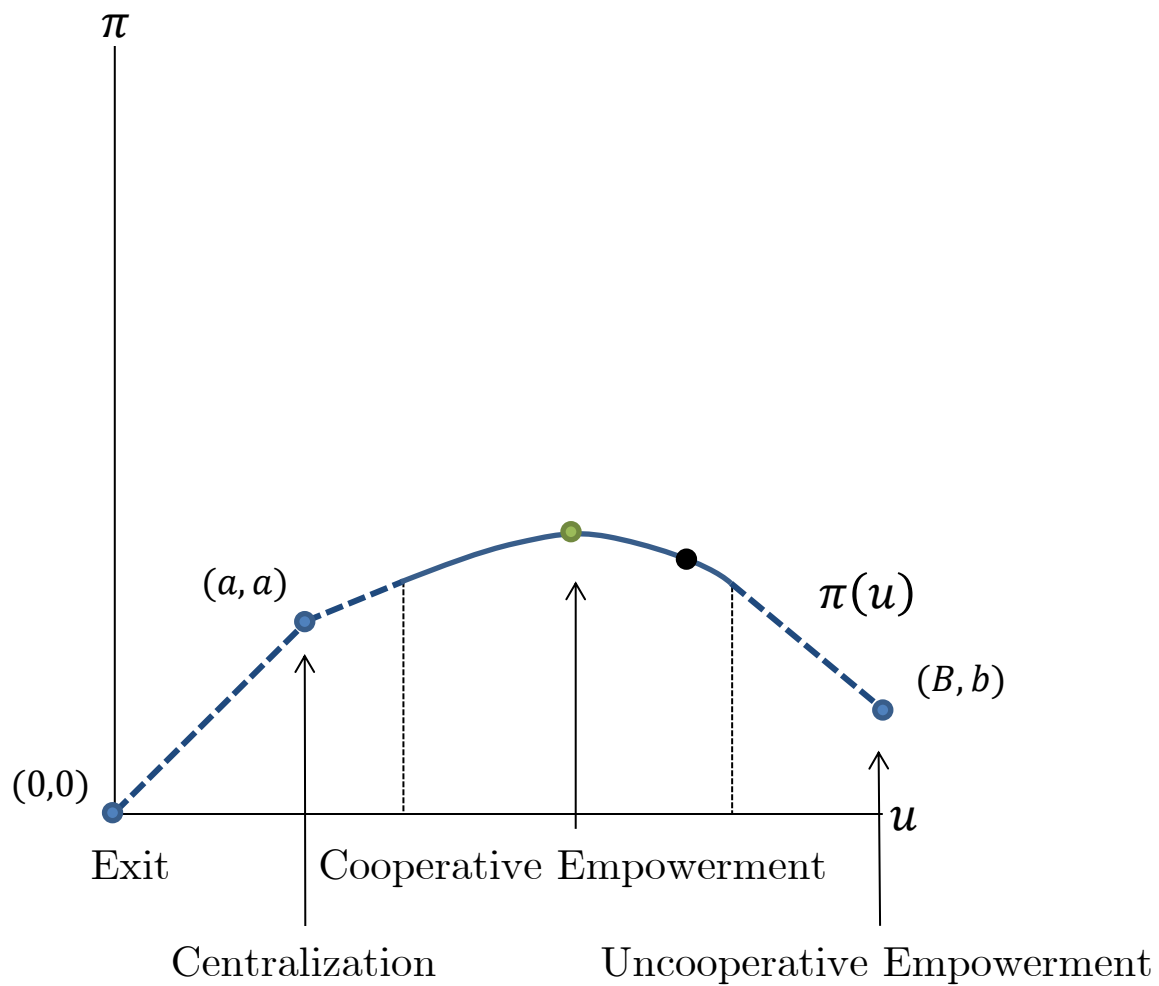




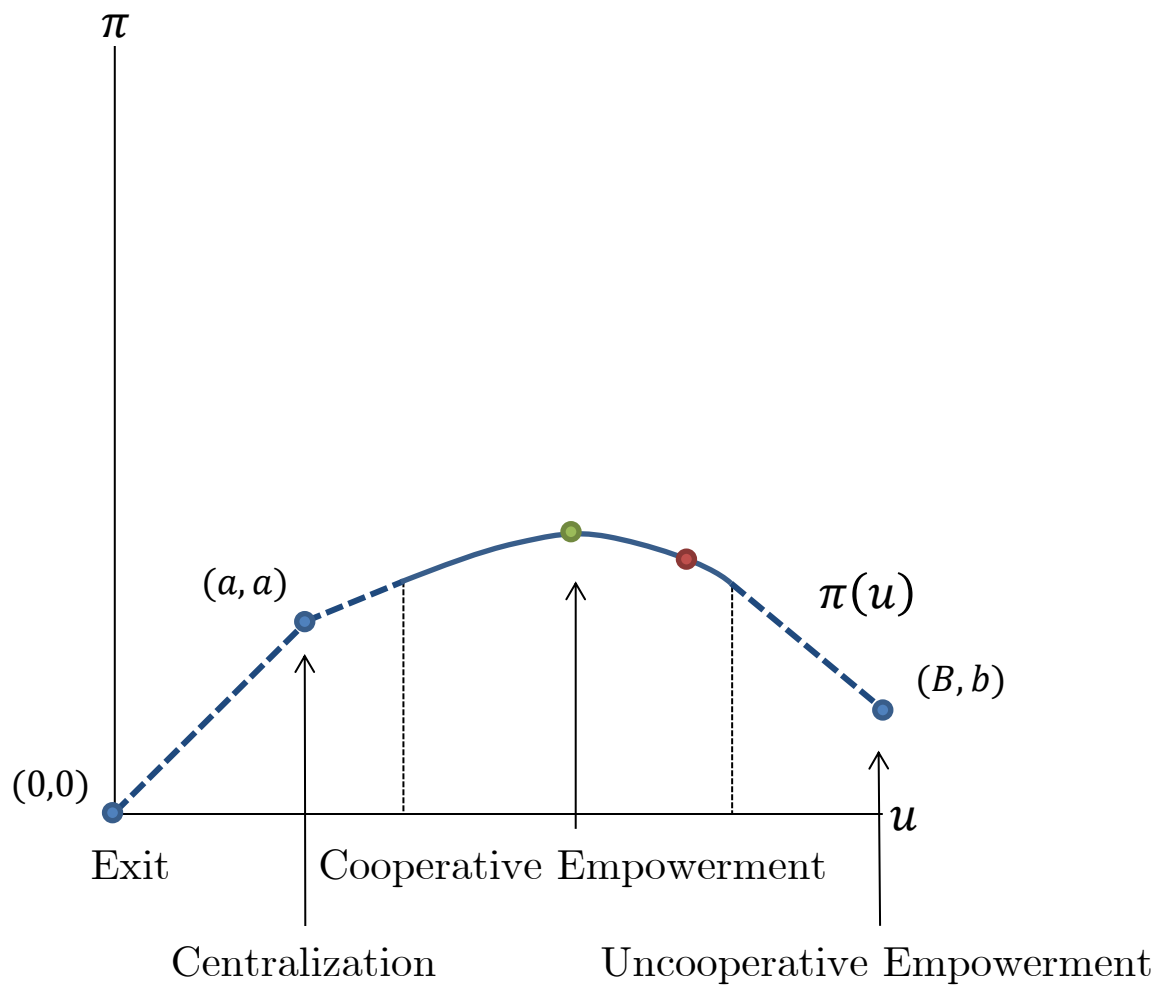
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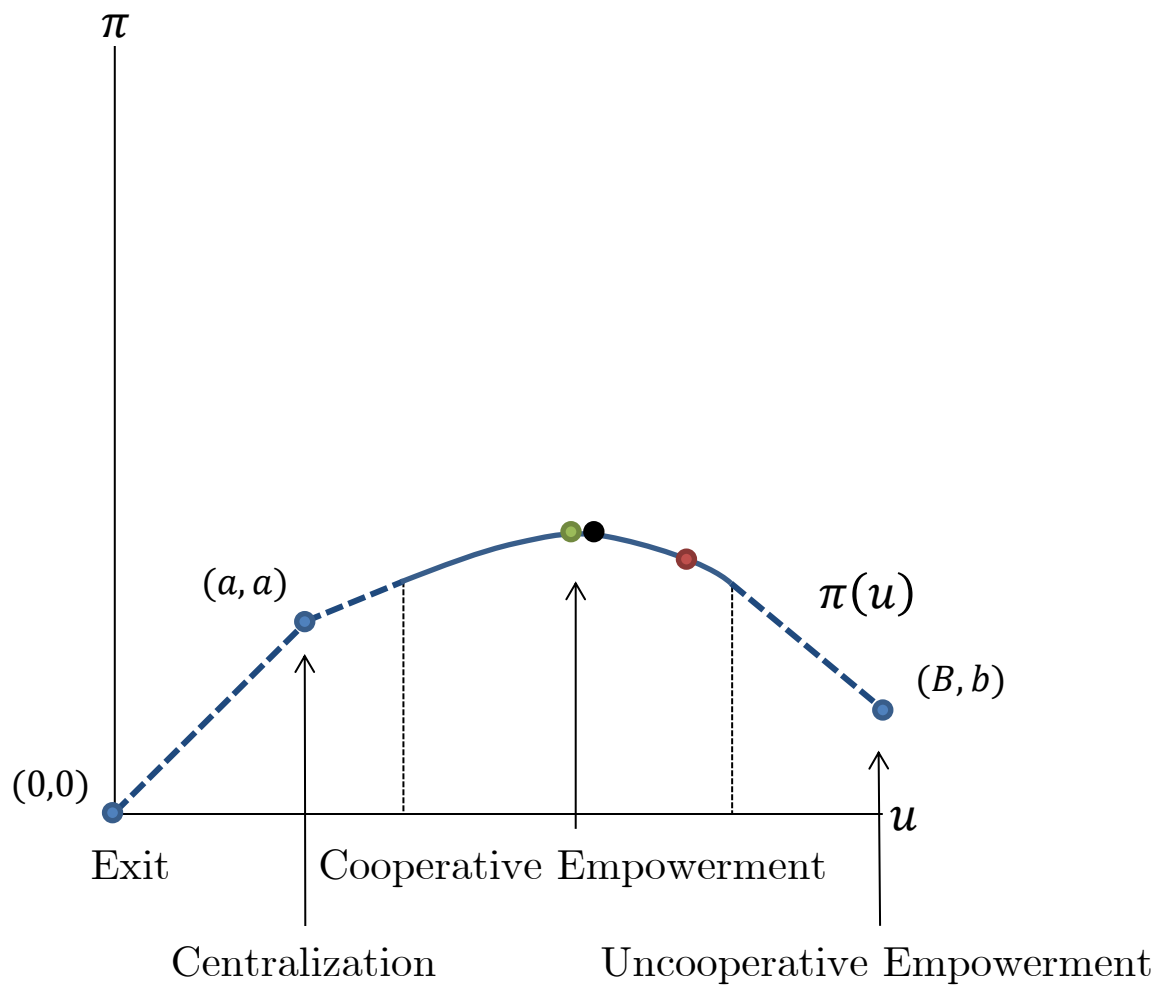
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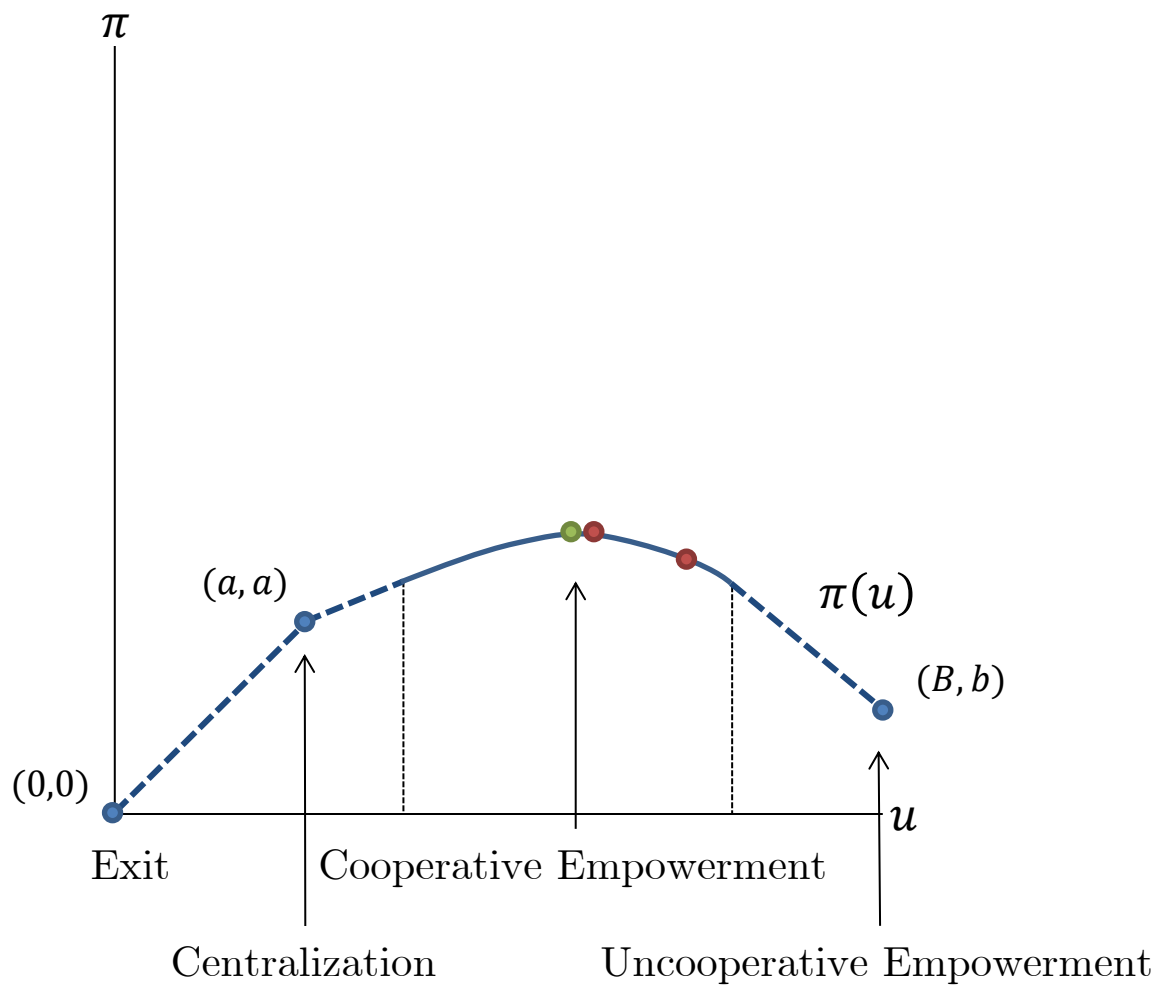
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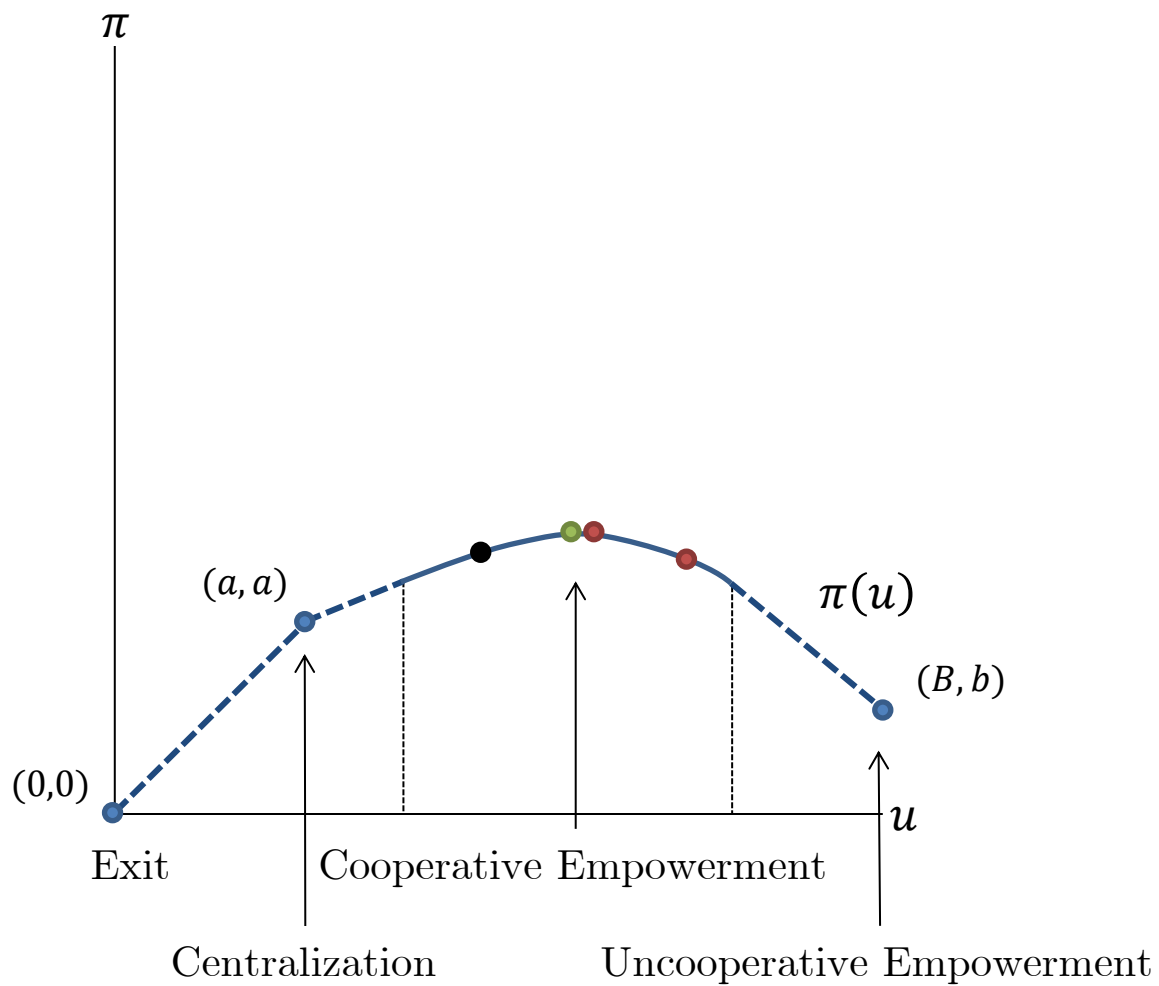
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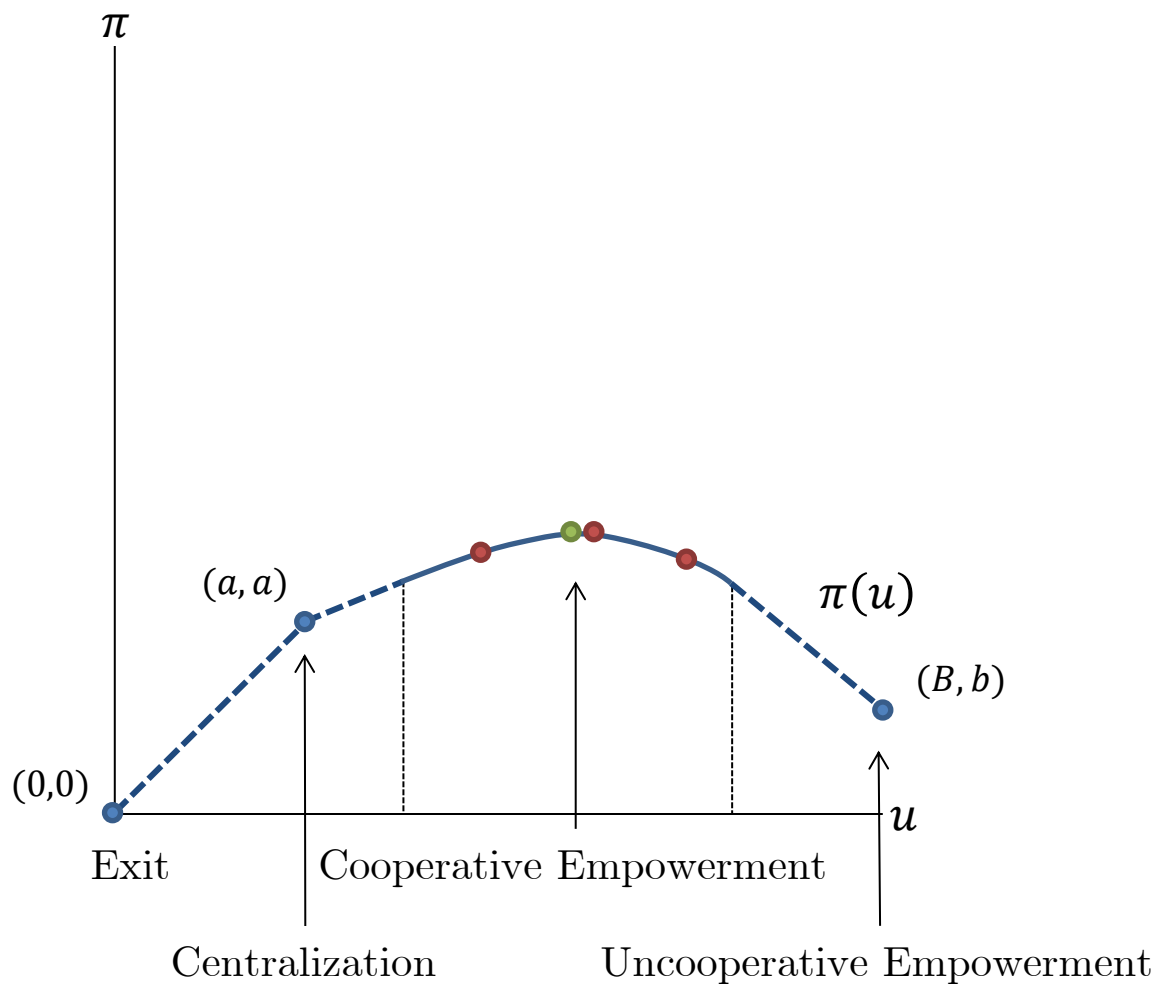
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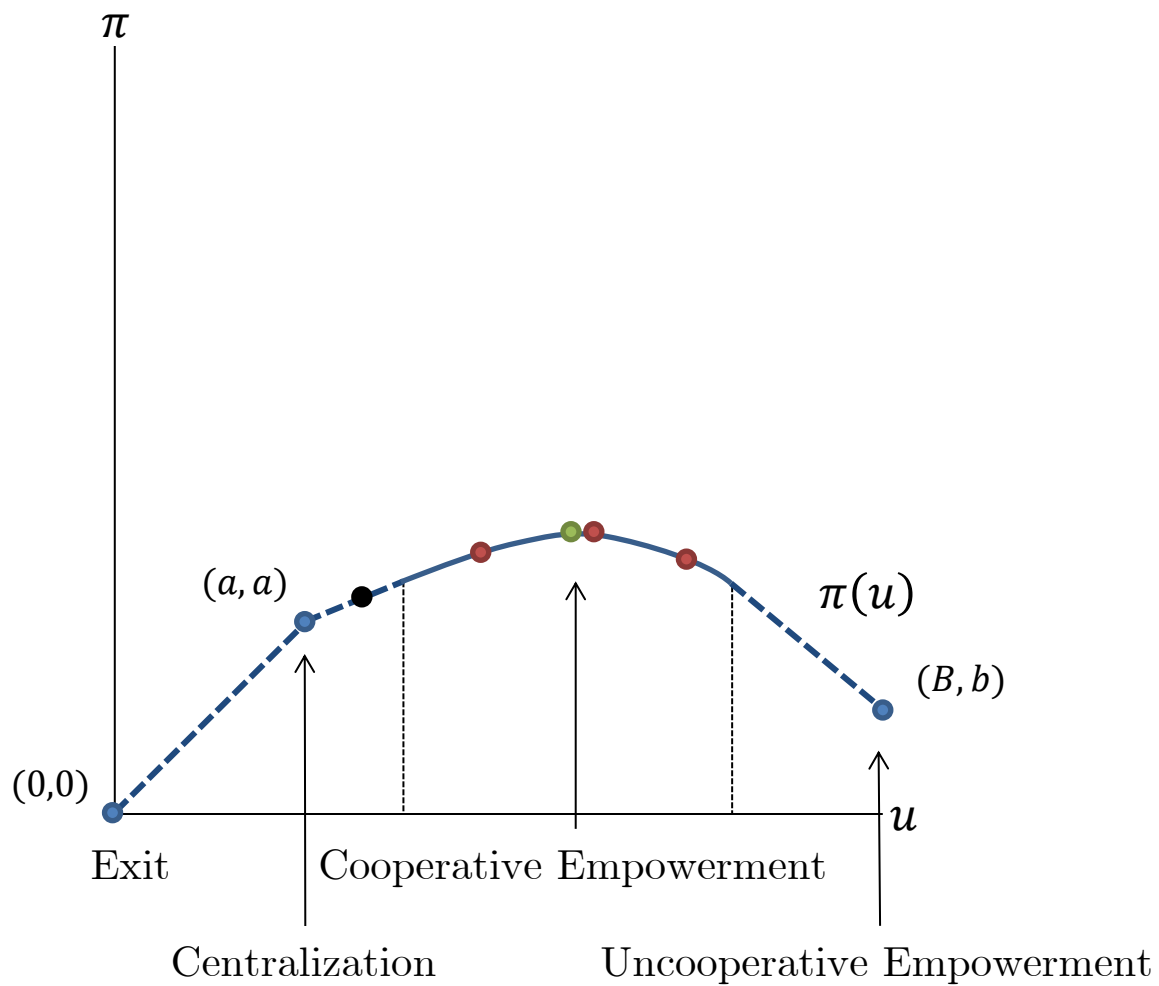
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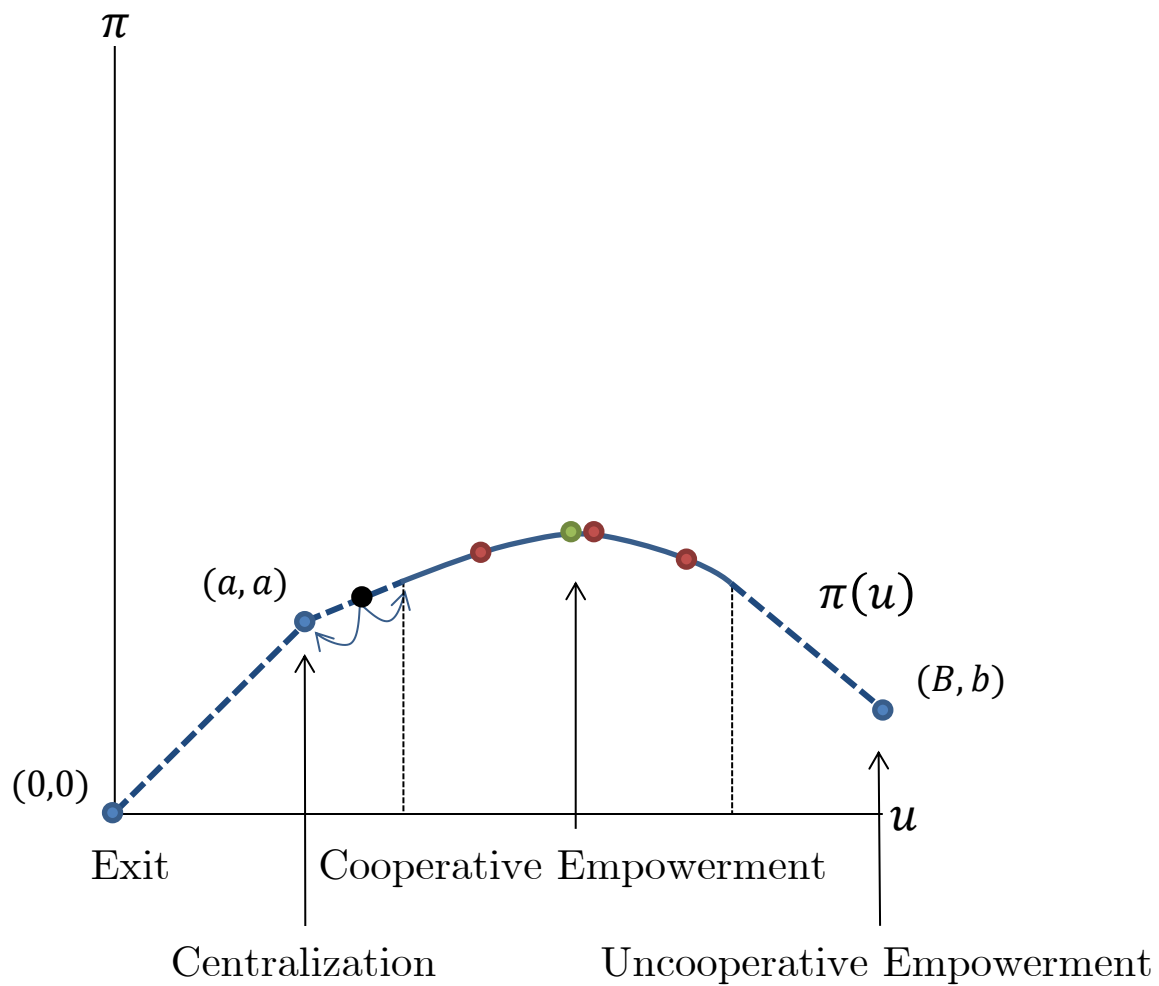


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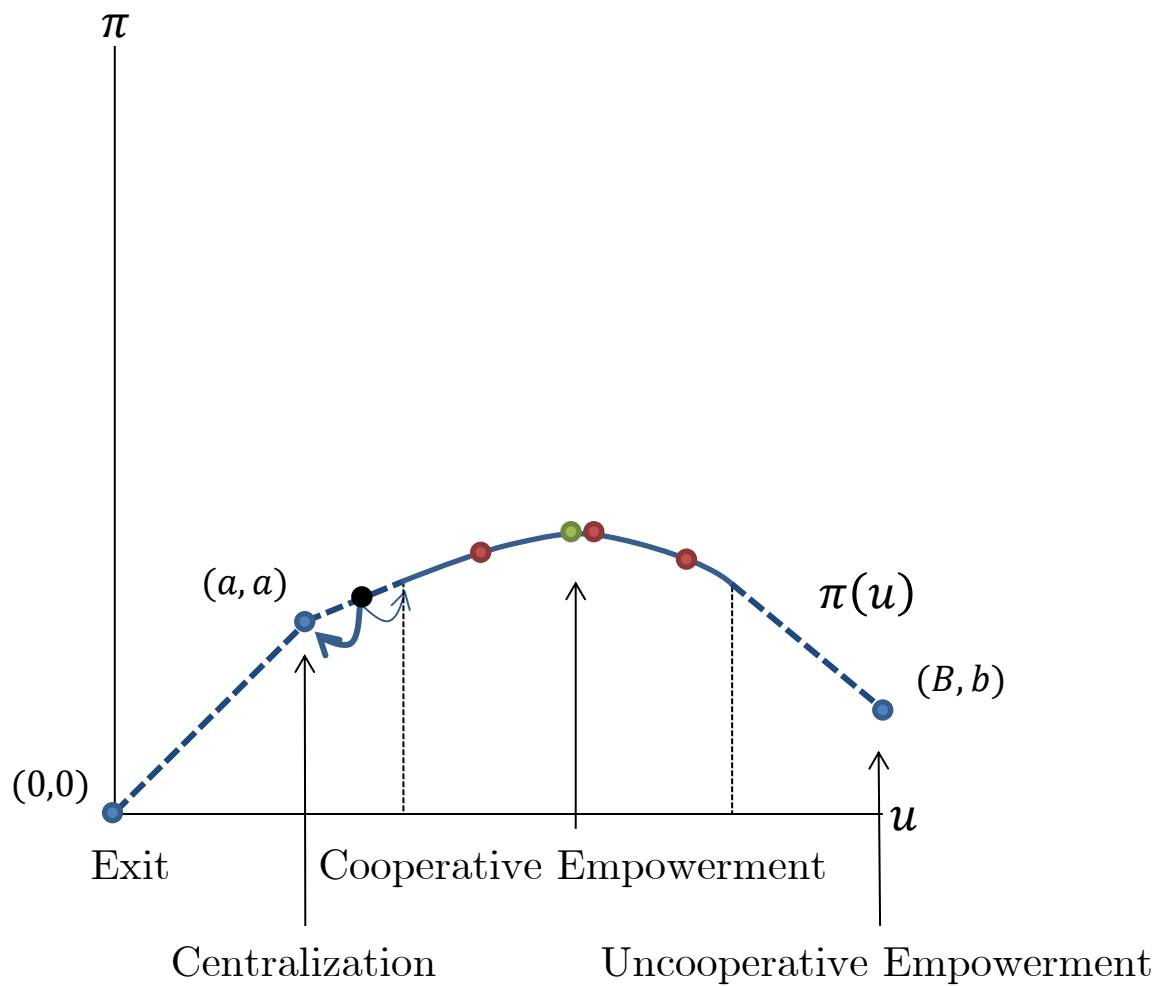




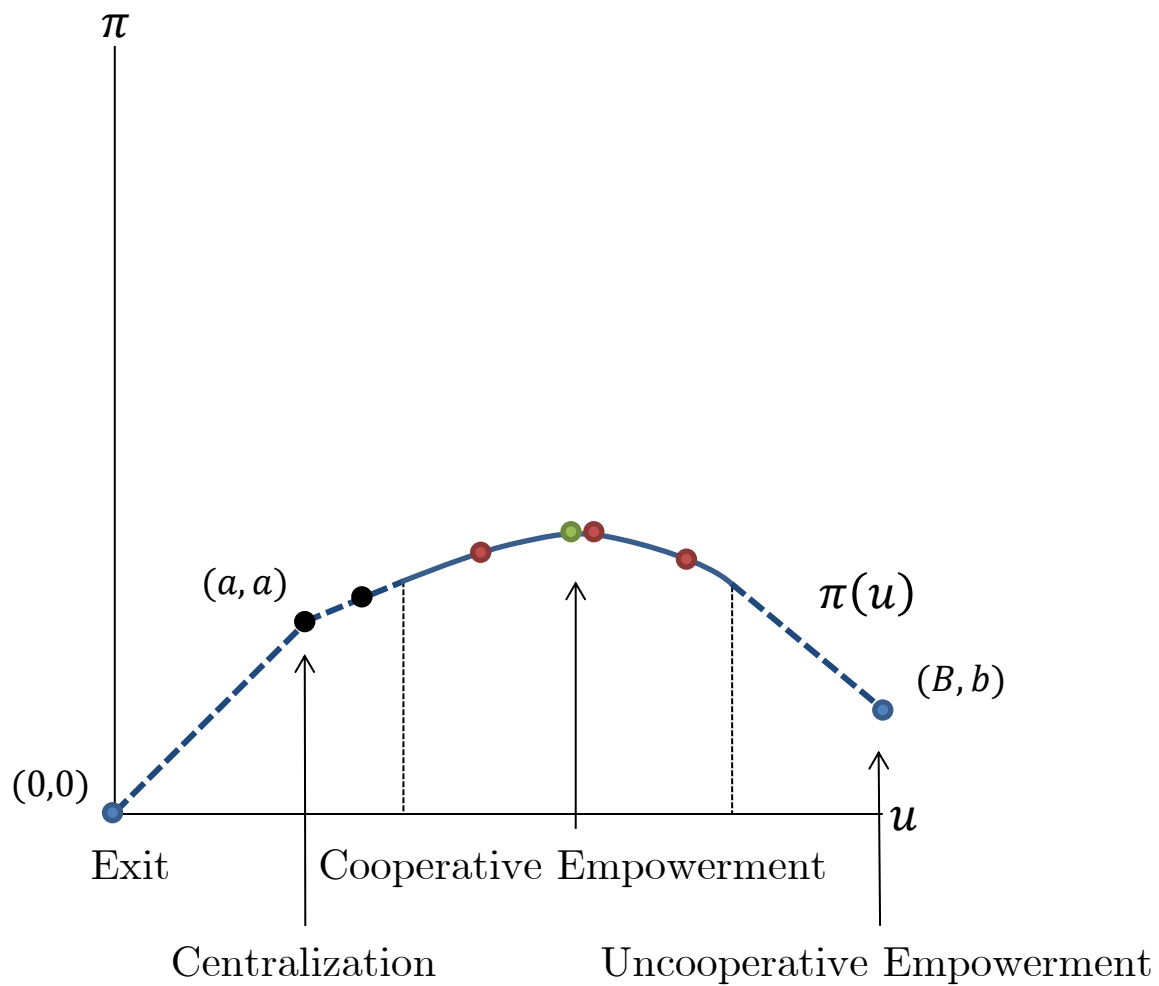
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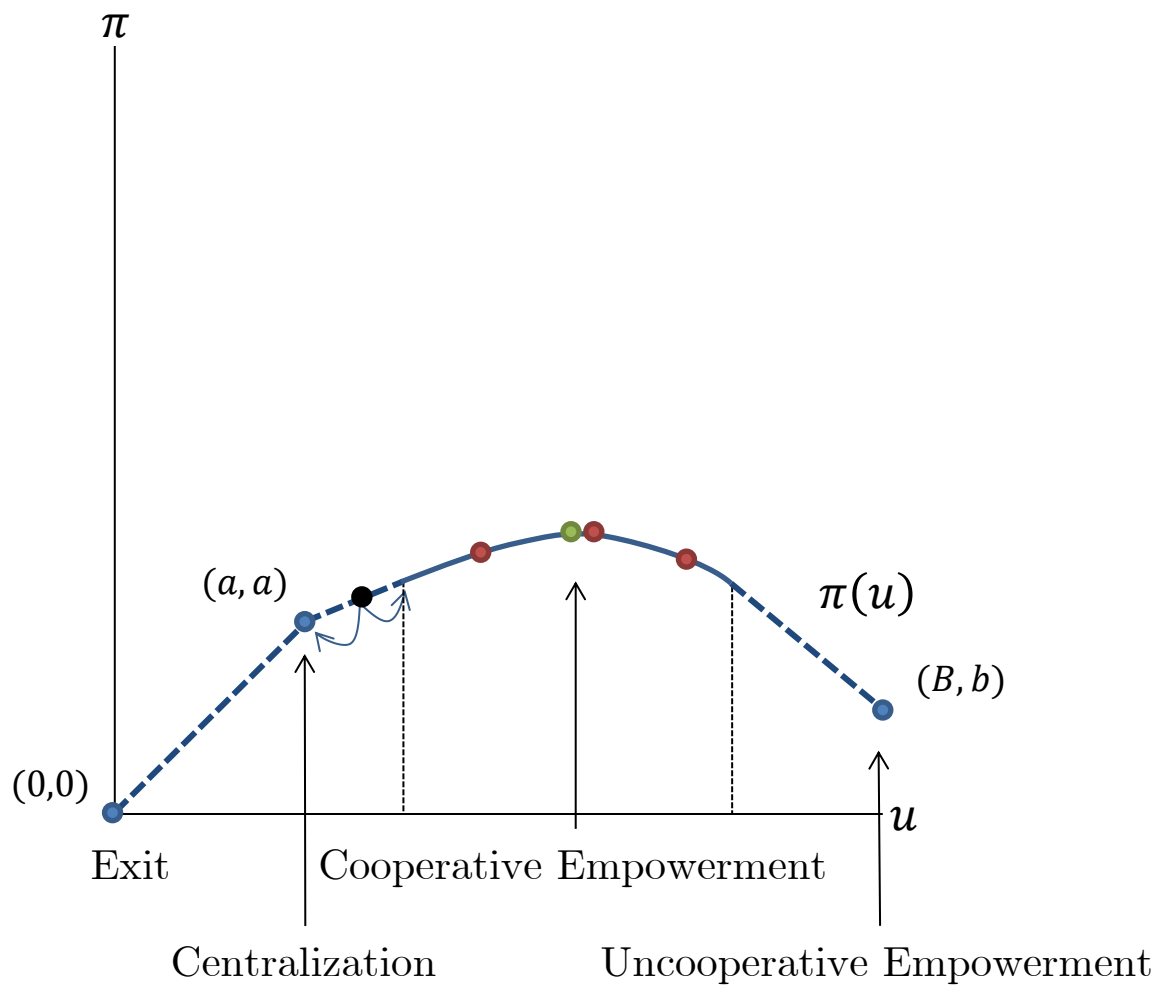
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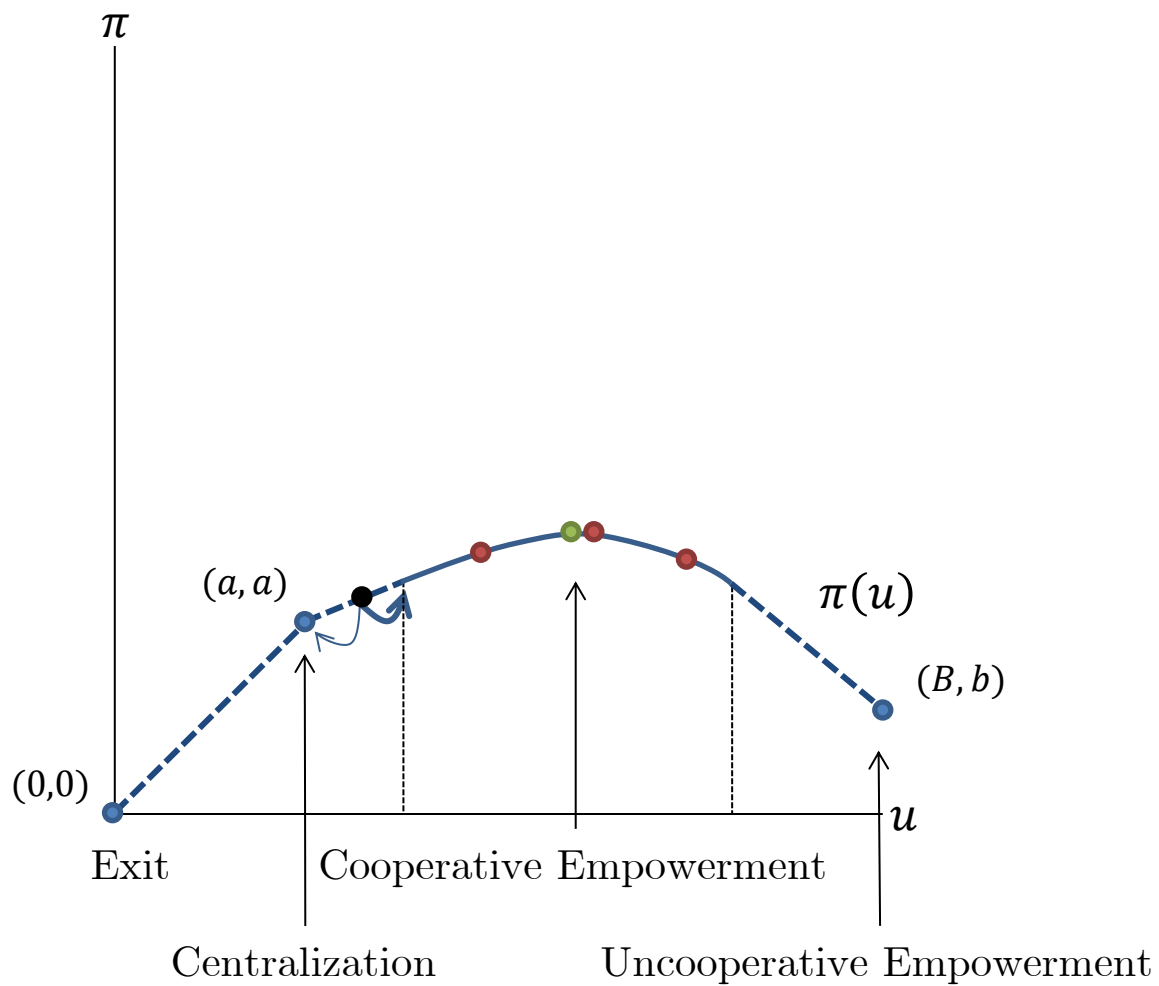
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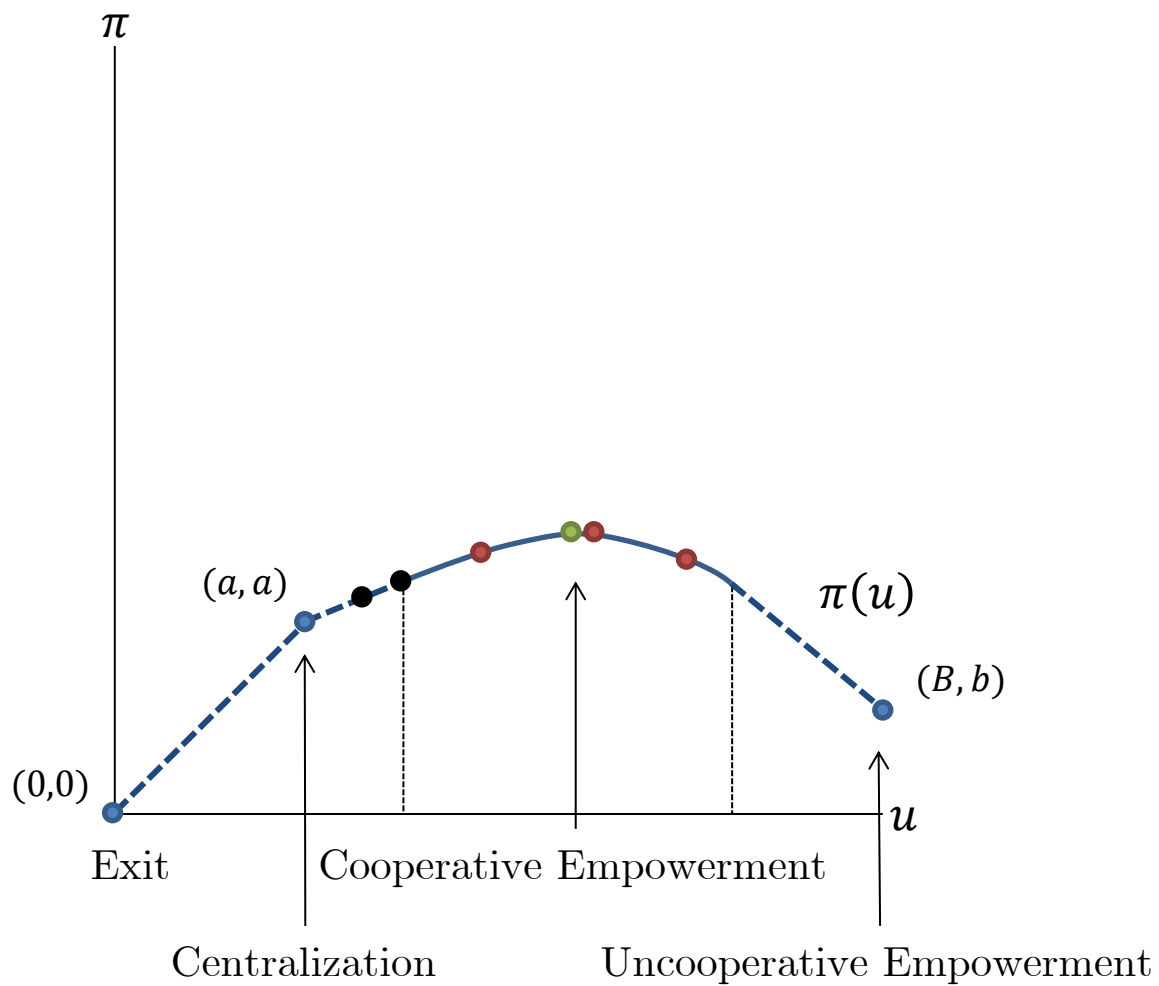
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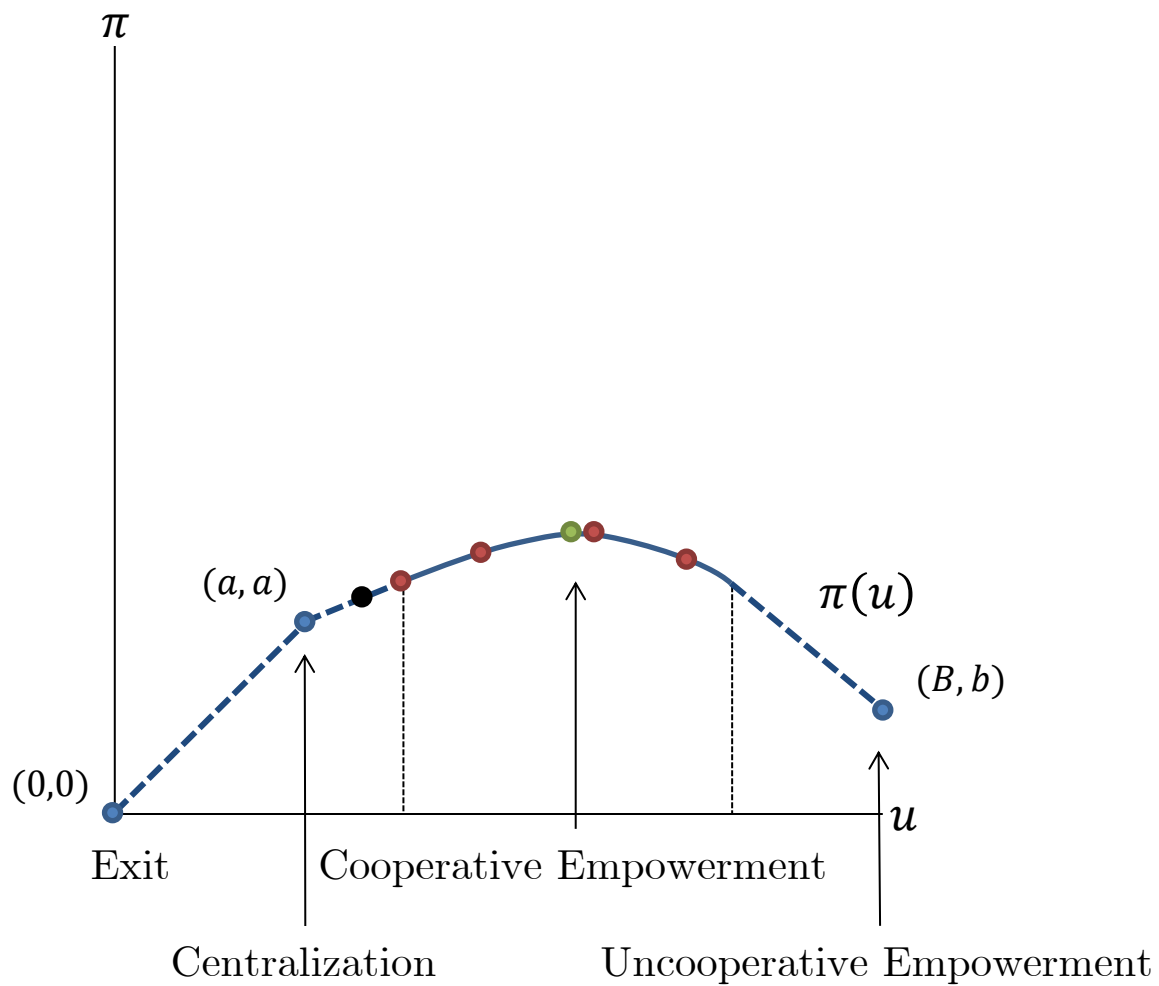
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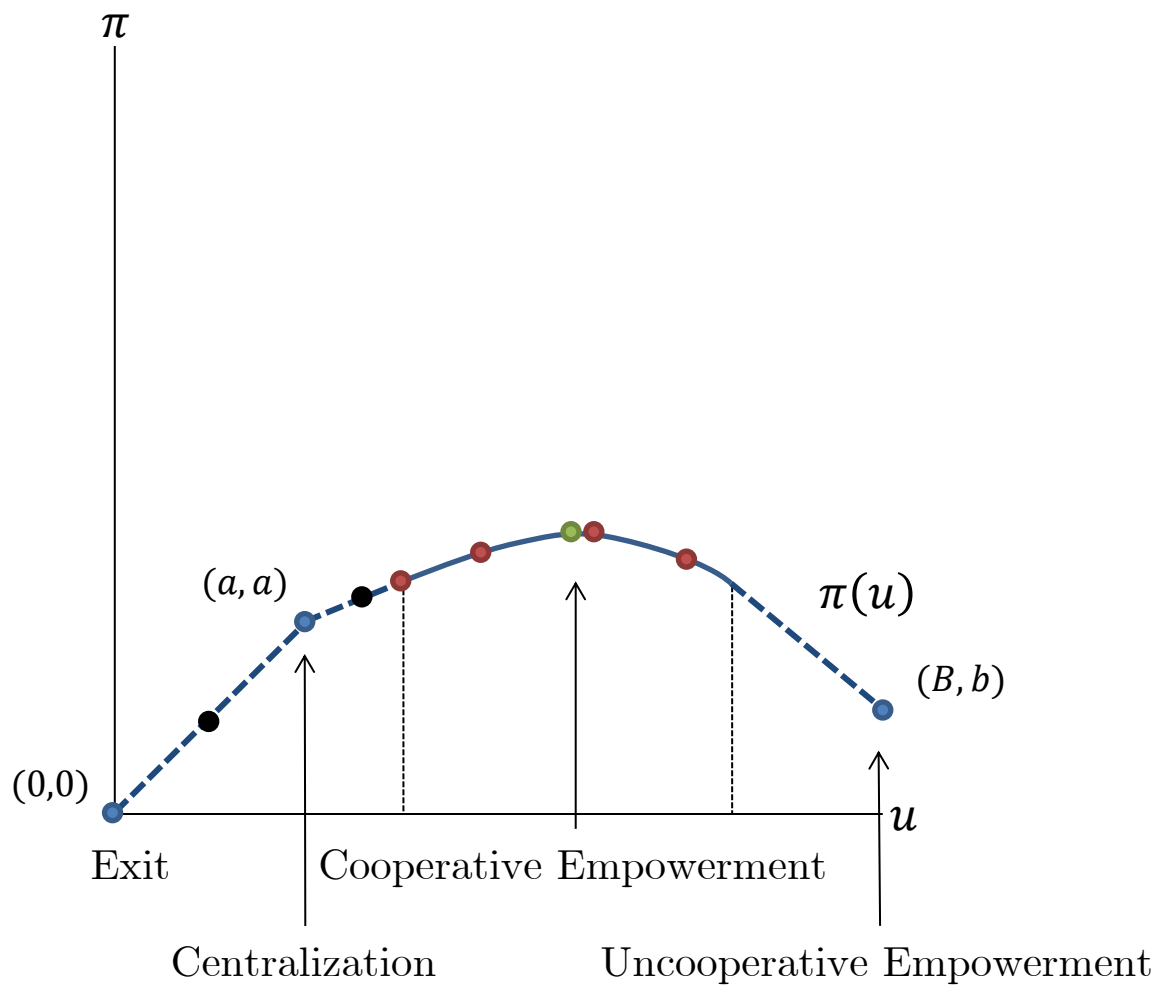
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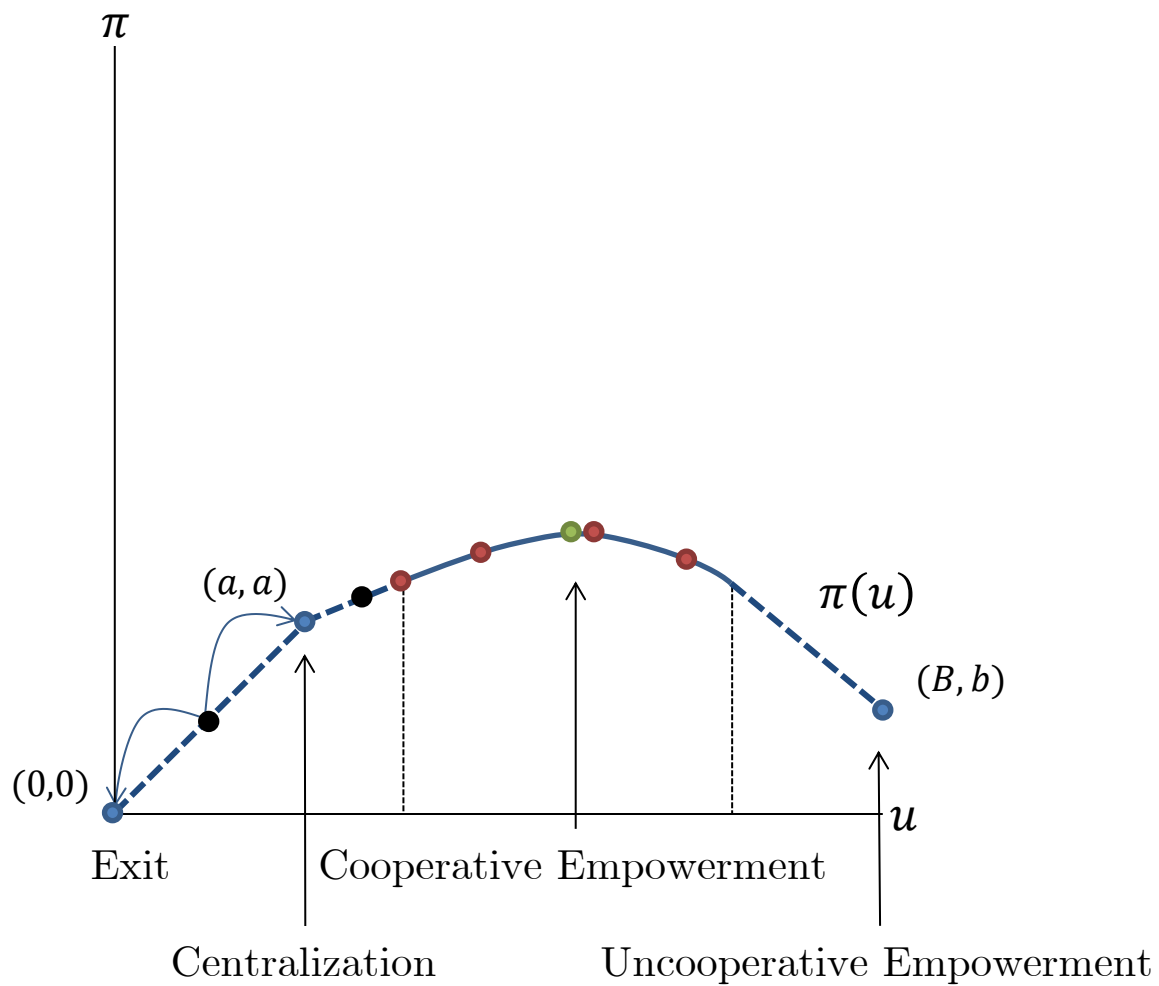


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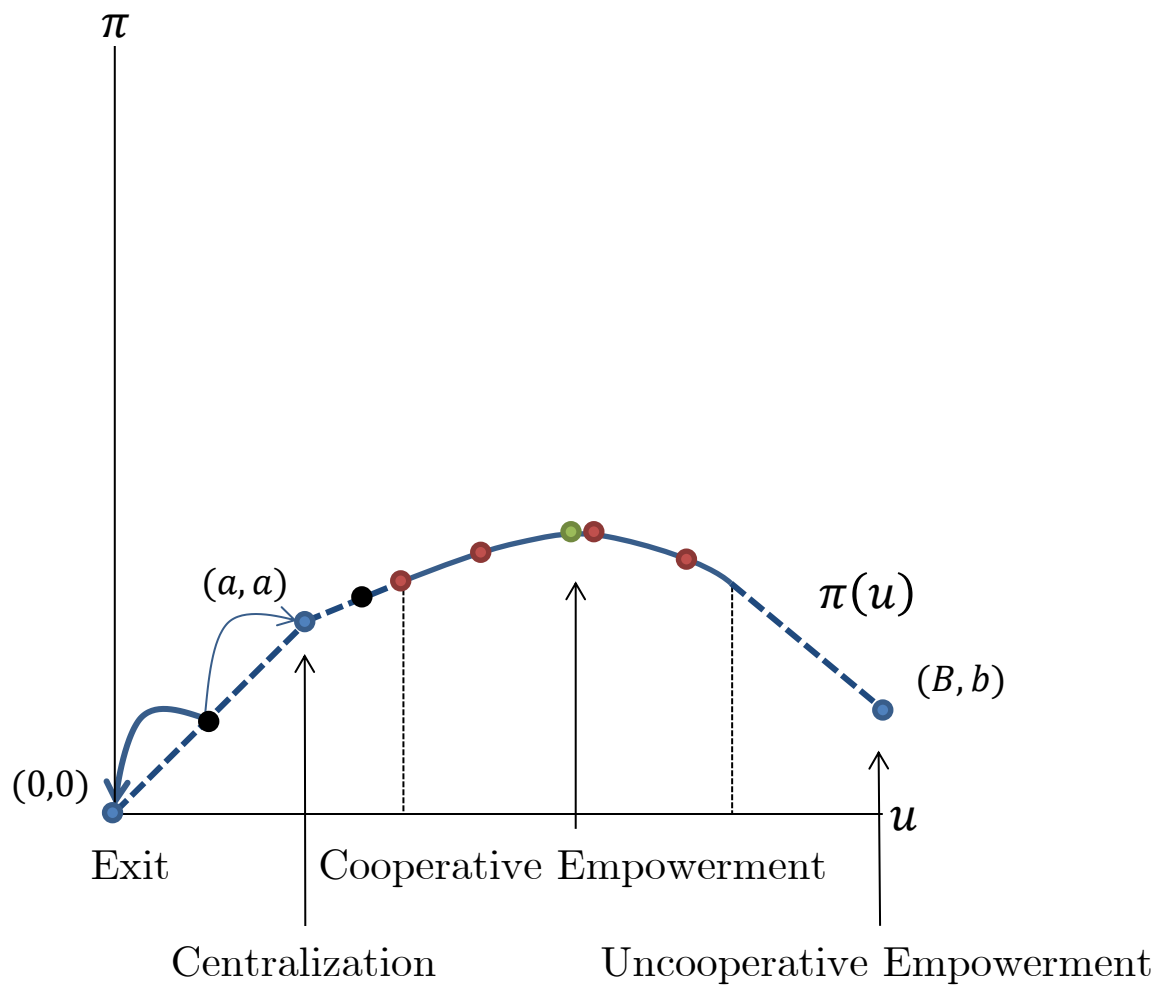




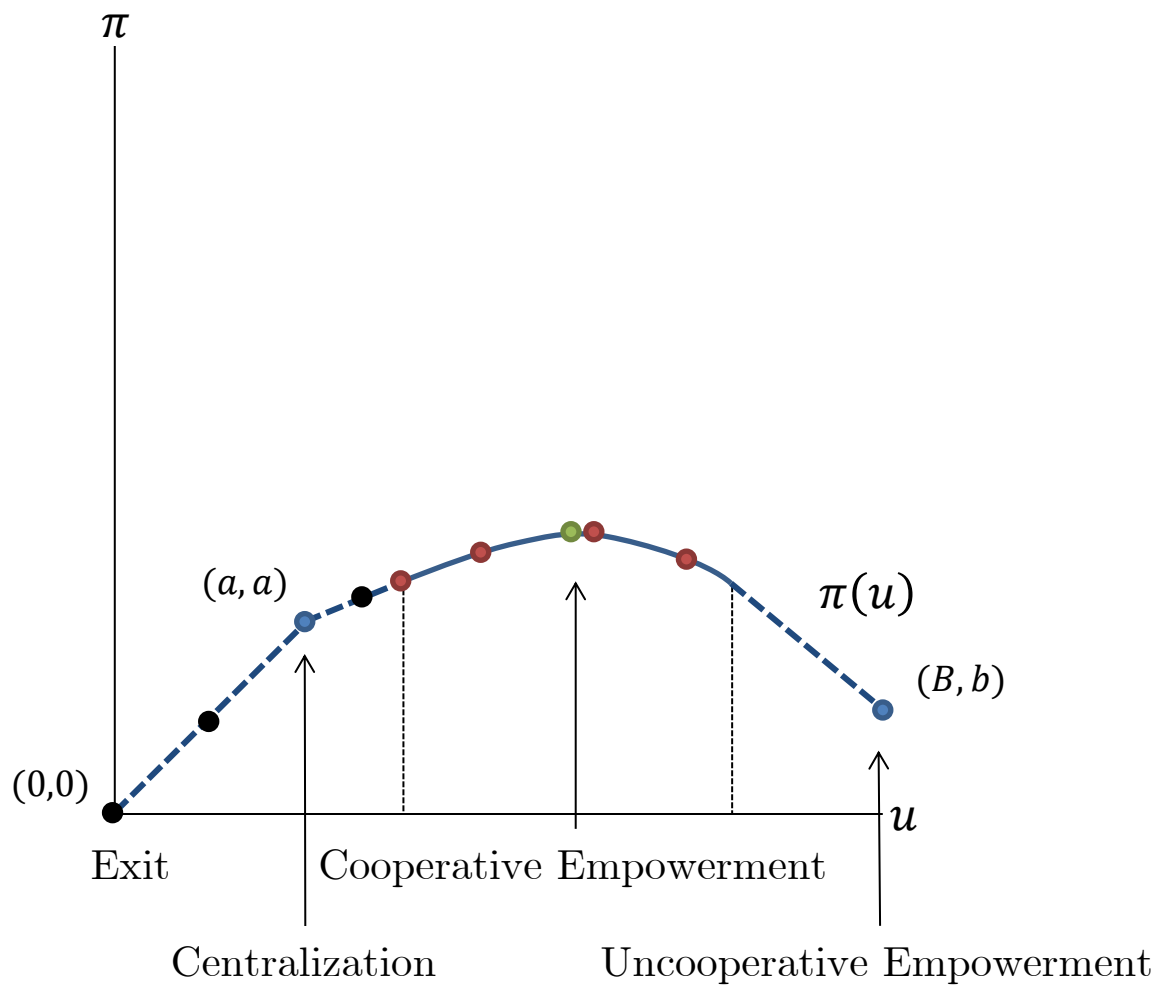
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# MAIN RESULTS

Profits unambiguously fall over time; the relationship gets worse

Firms get worse at adapting to the agent's private information

# INERTIA AND DECLINE

*“It is widely held that **organizations exhibit substantial inertia** in what they do and how they do it (Hannan and Freeman, 1984). In the face of changing external circumstances, **organizations adapt poorly or not at all**” (Kreps 1996, p. 577)*

# INERTIA AND DECLINE

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*“One of the most consistent patterns in business is the **failure of leading companies to stay at the top of their industries when technologies or markets change**” (Bower and Christensen, 1996)*

# PERSISTENT PERFORMANCE DIFFERENCES

*“Organizational policies/procedures tend to be derived from the early history of the organization (Stinchcombe, 1965; Hannan and Freeman, 1977” and to be derived (or at least crystallized out of) specific noteworthy events in the early history of the organization (Schein, 1983)”* (Kreps, 1996, p. 577)

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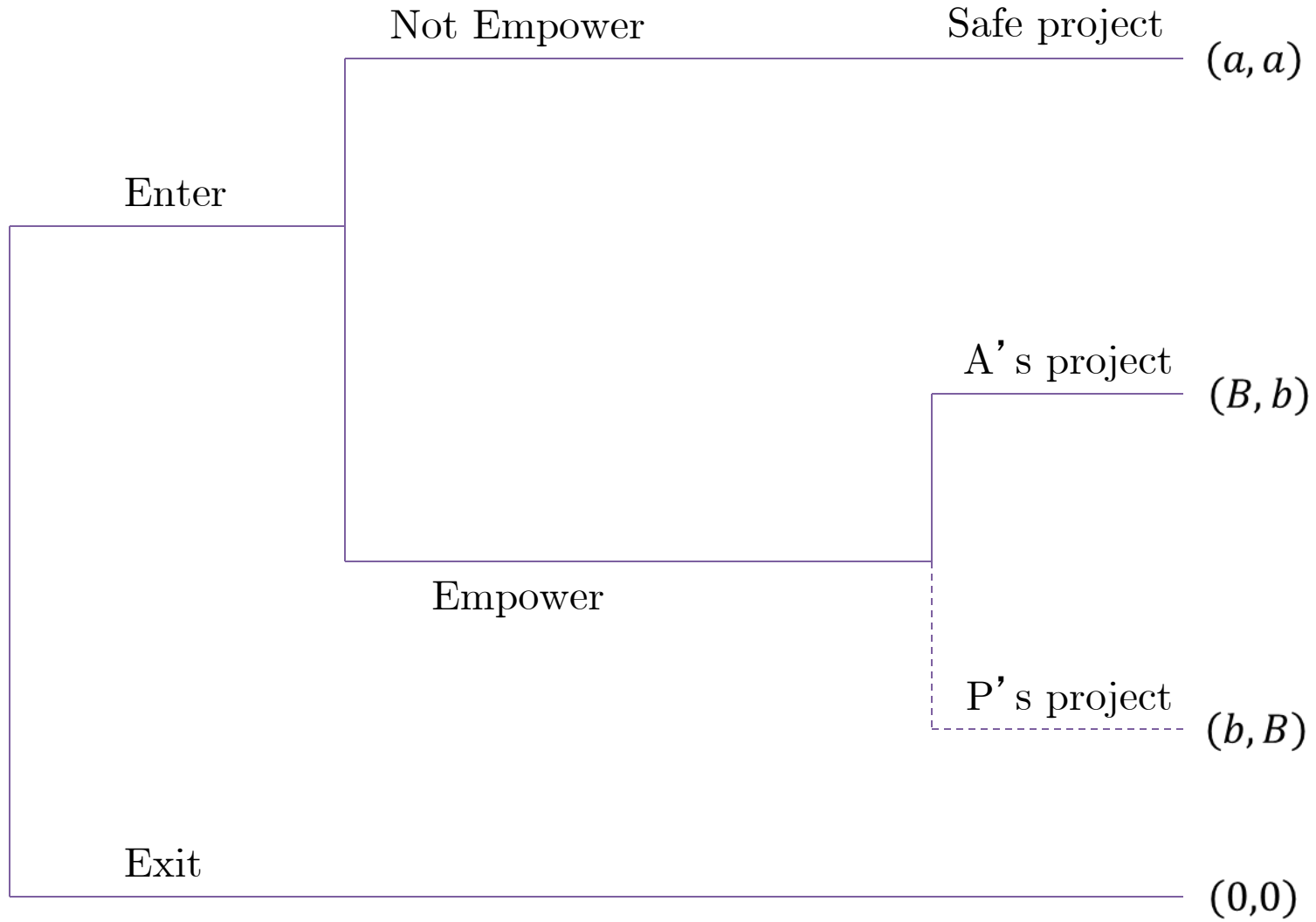


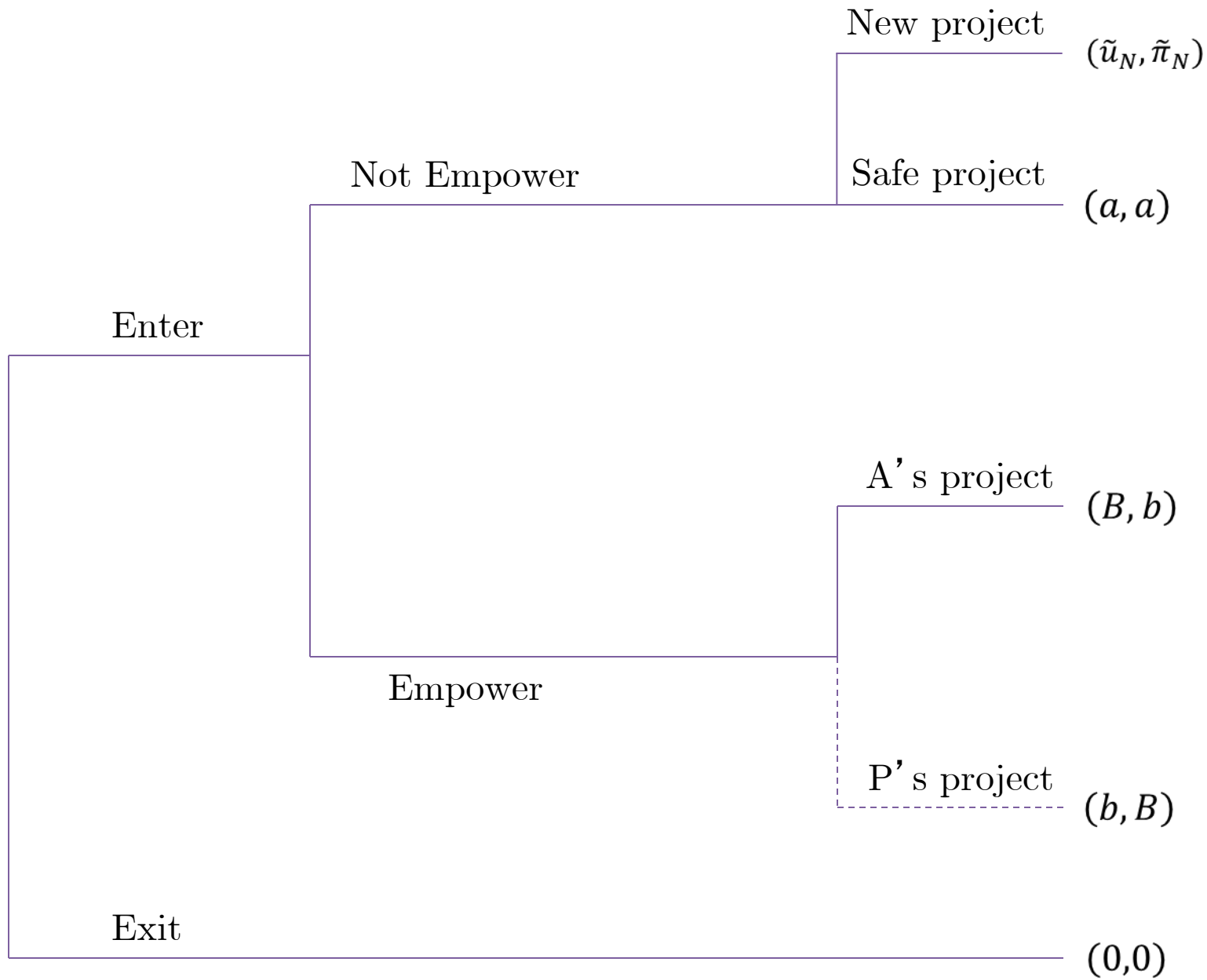
# FAILURE TO ADAPT TO PUBLIC INFORMATION

Sometimes, firms fail to adapt even to public information

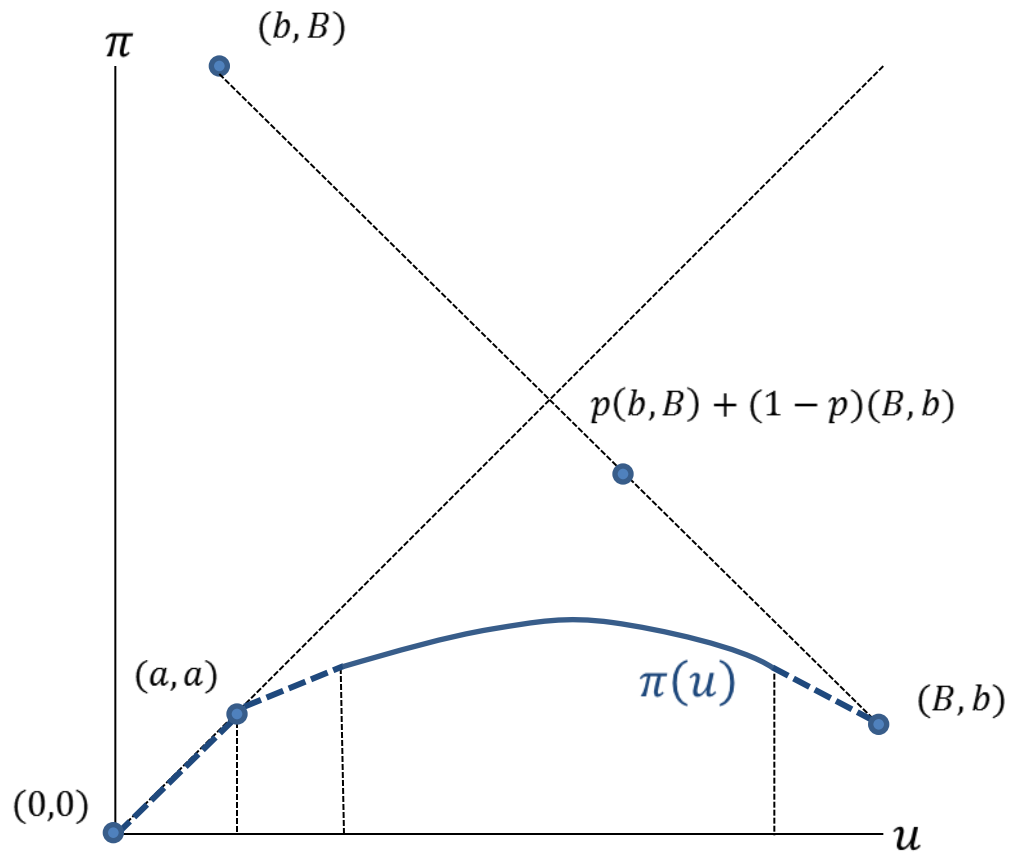
They don't pursue new technologies everyone knows are available (e.g. Kodak and digital photography)

They don't fix what everyone thinks is a mistake (e.g., Sears catalogs)

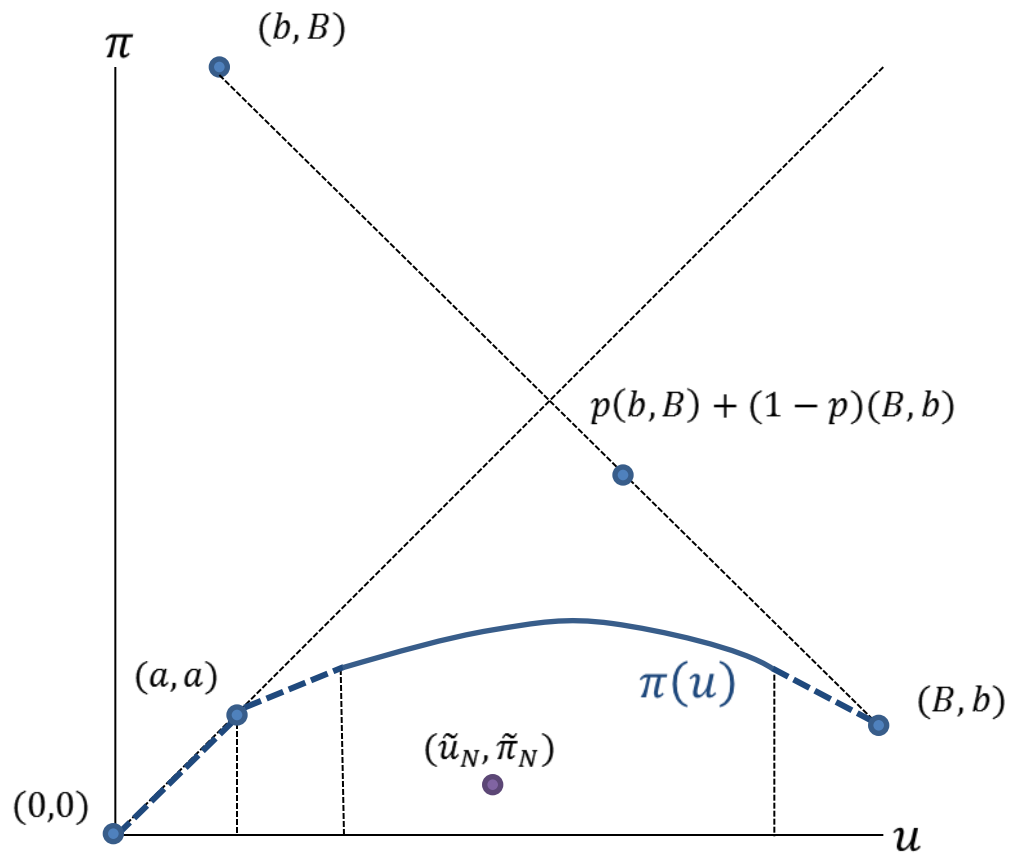




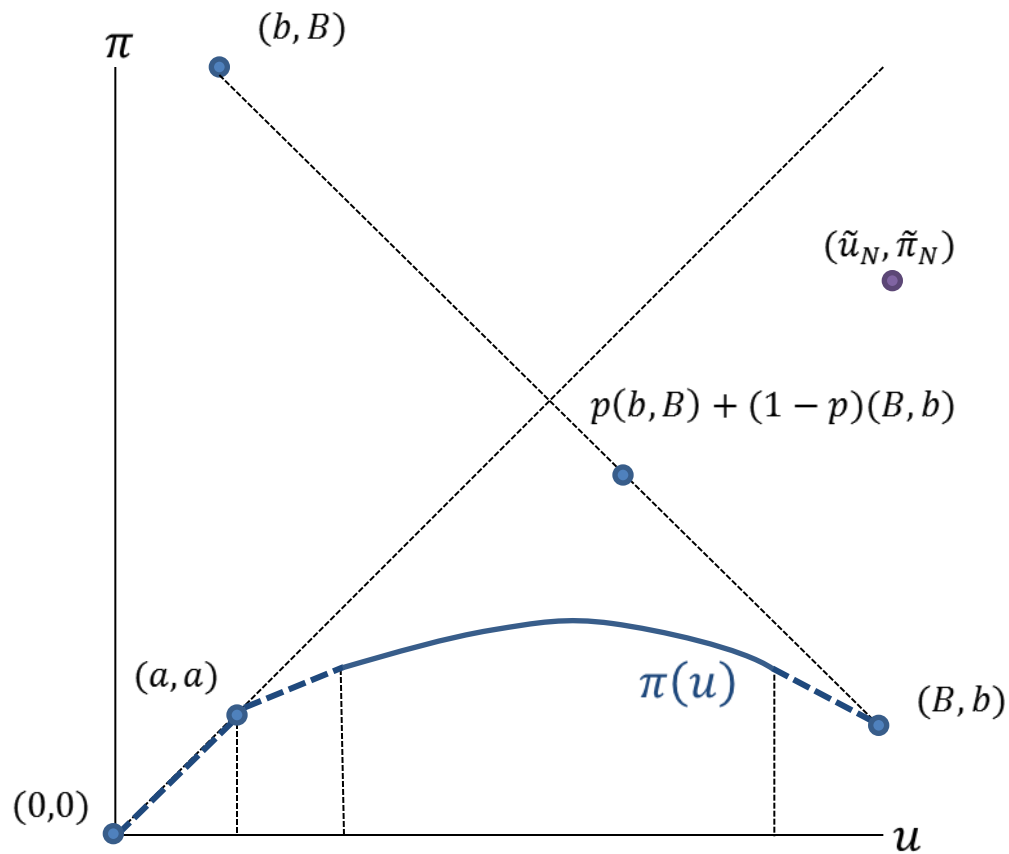
# FRONTIER OF BASELINE MODEL



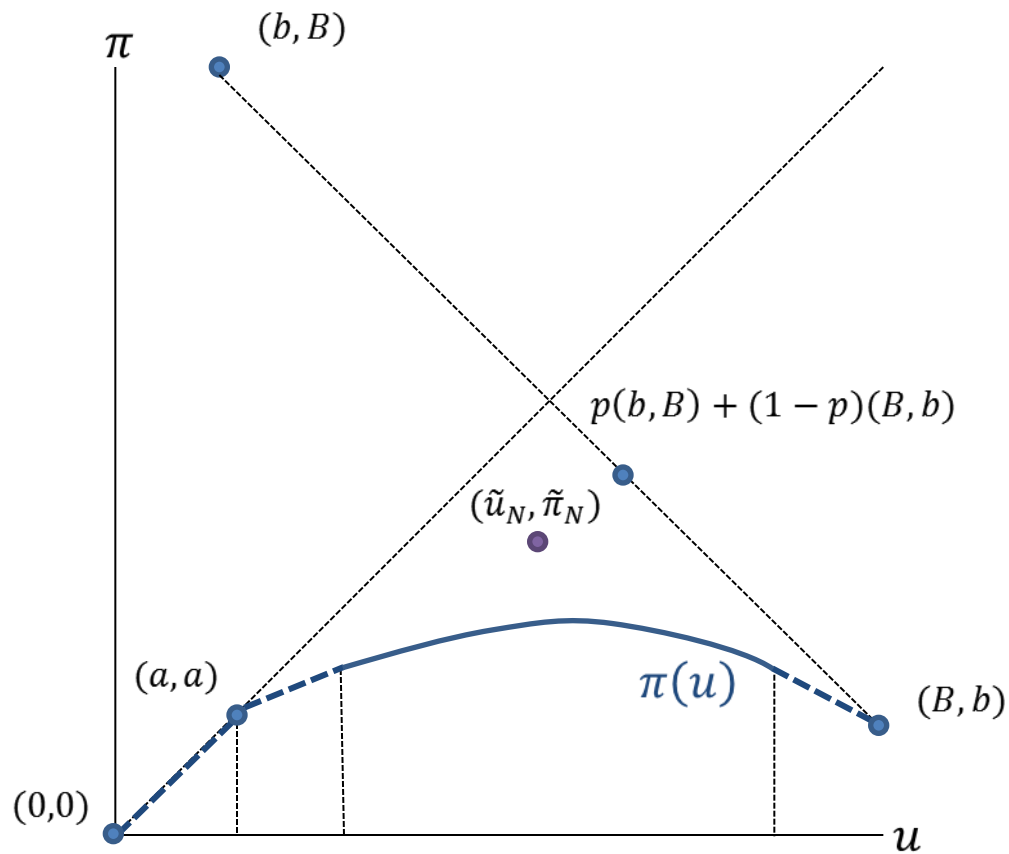
# NEW PROJECT BECOMES AVAILABLE



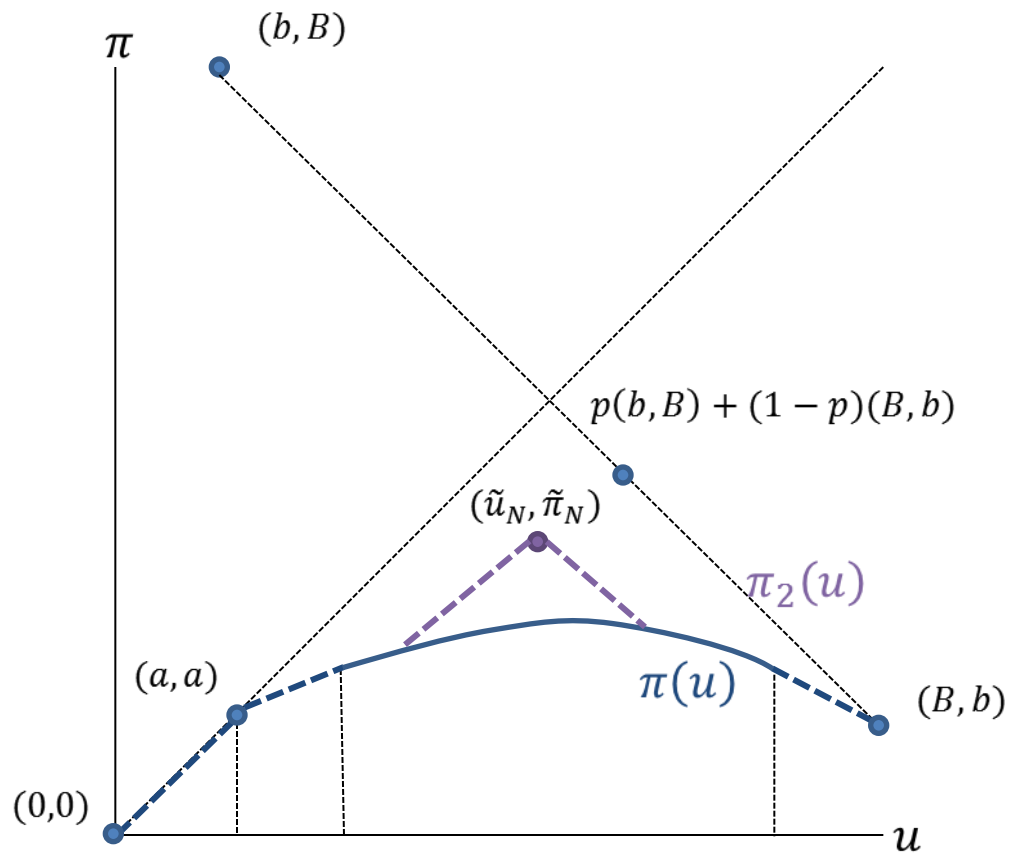
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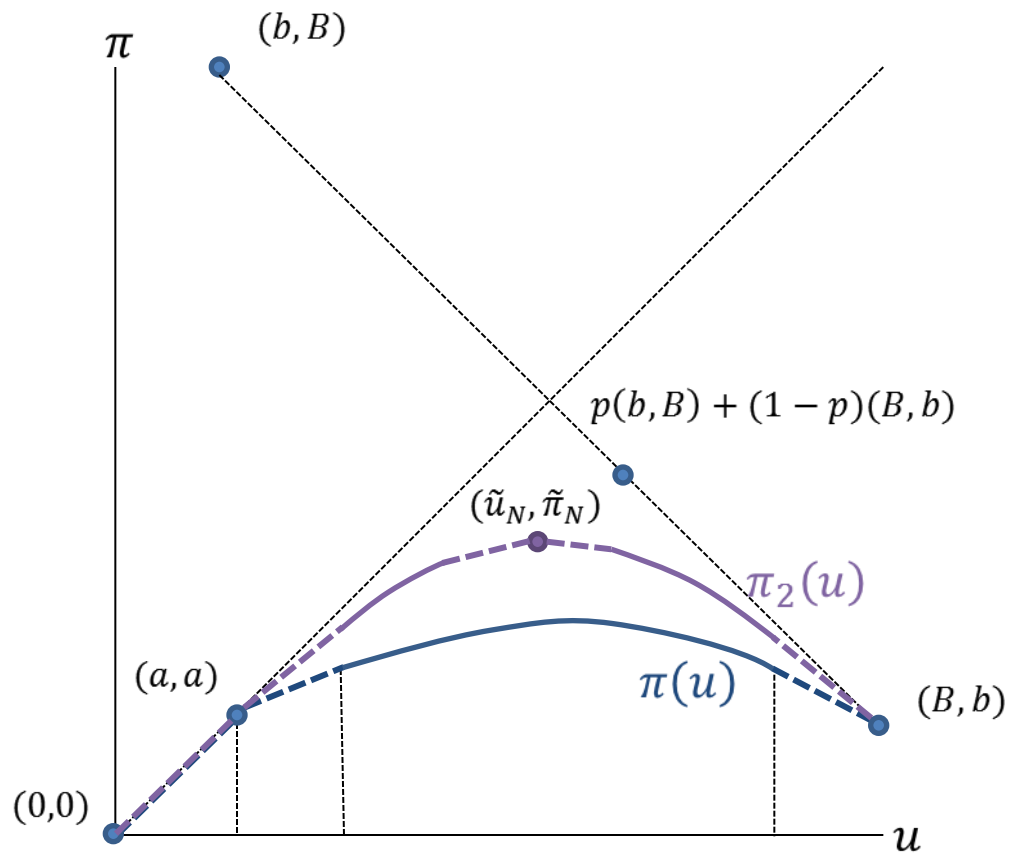


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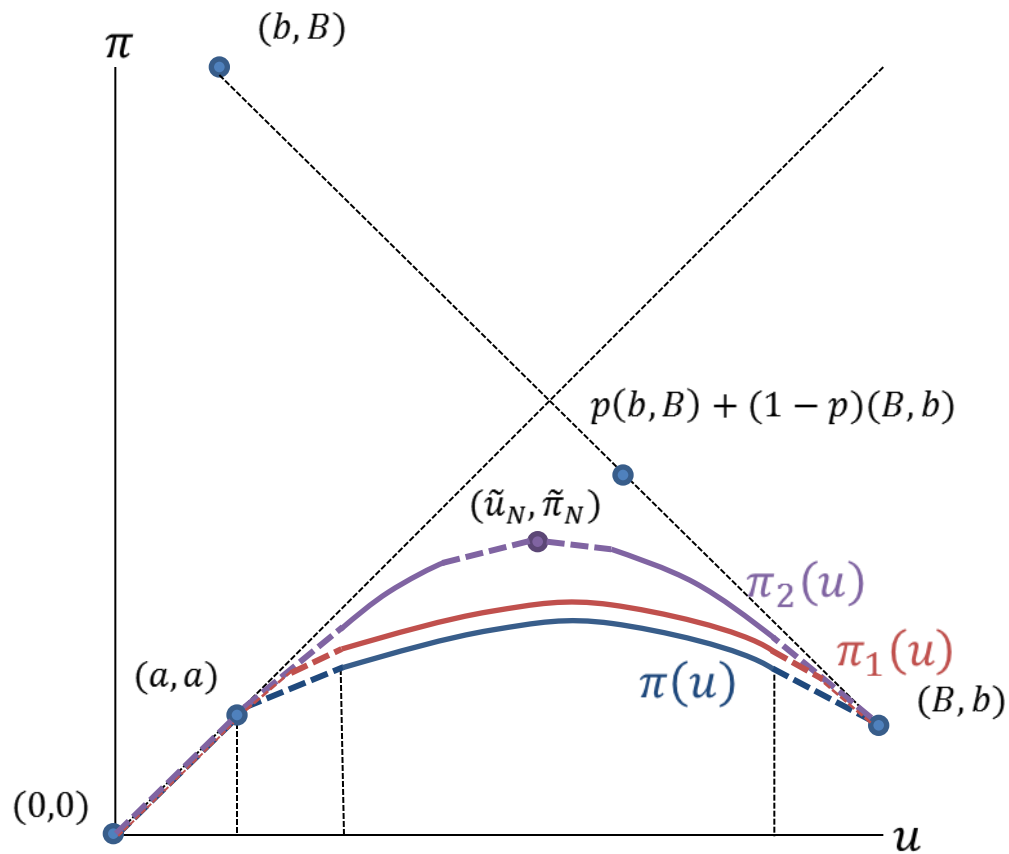




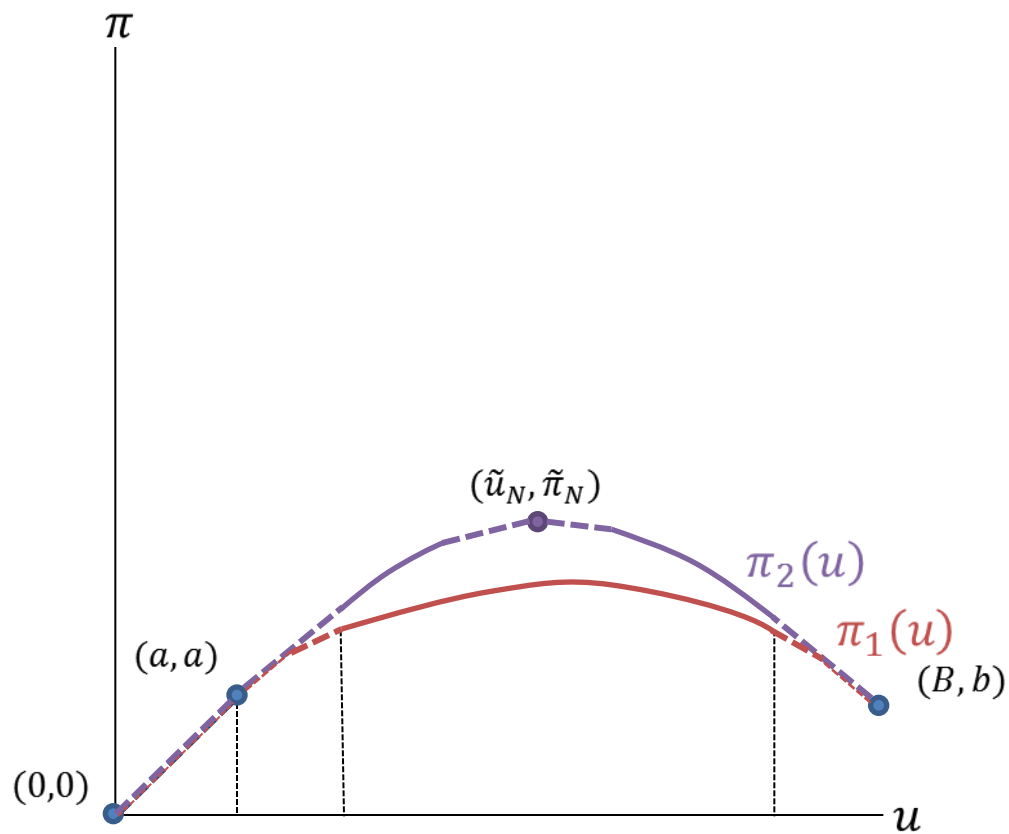
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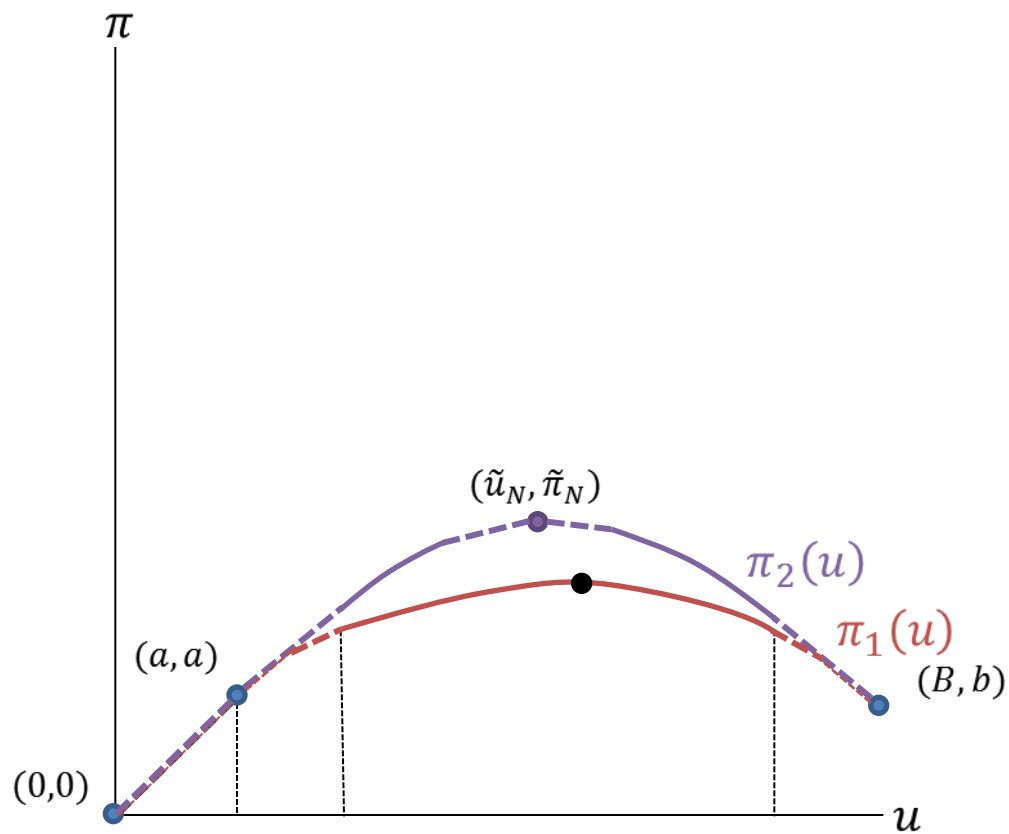
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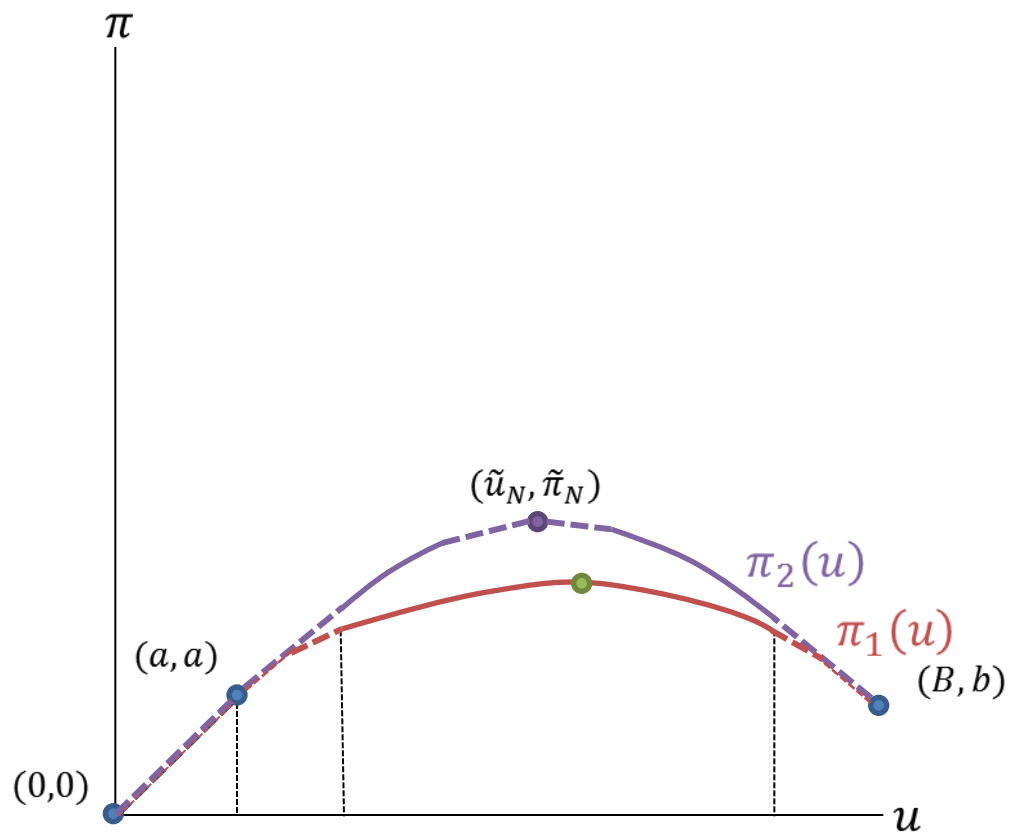
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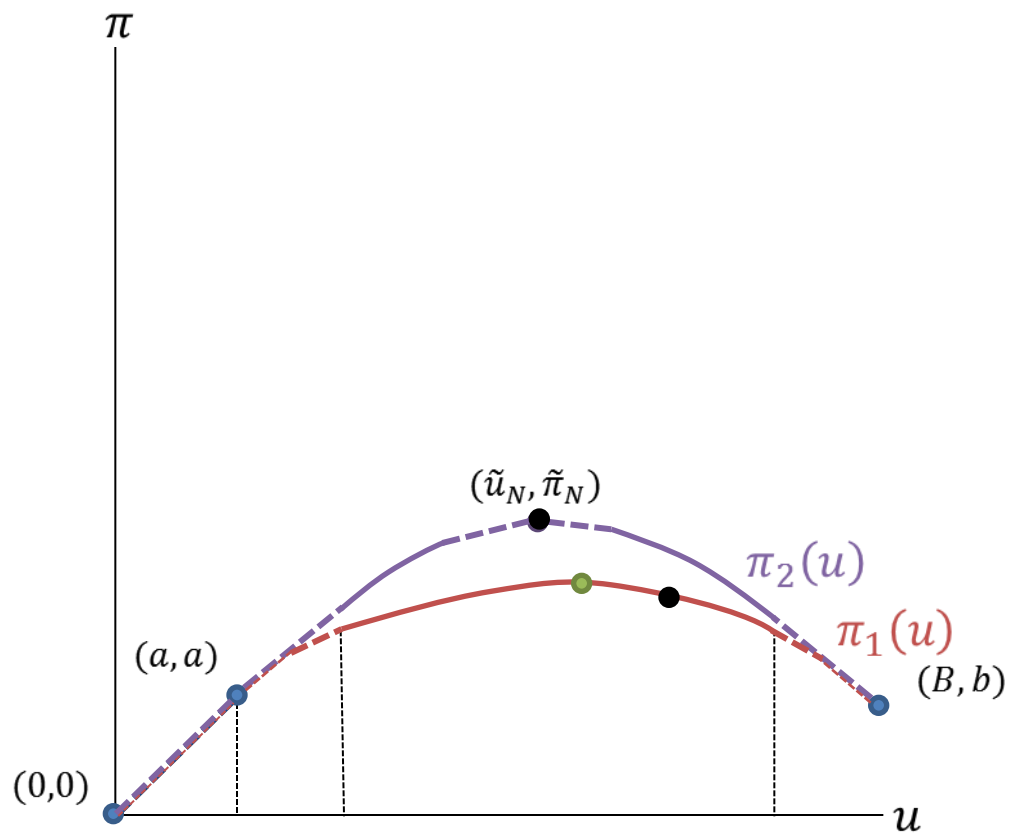
# OPTIMAL RELATIONAL CONTRACT



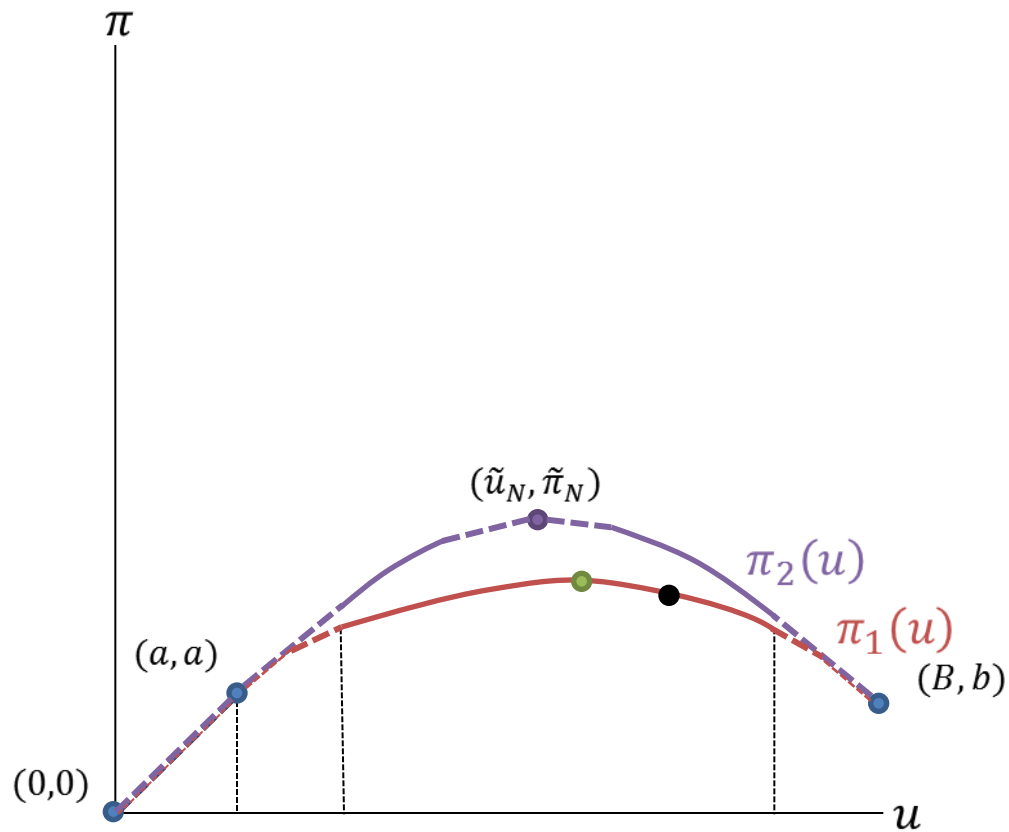
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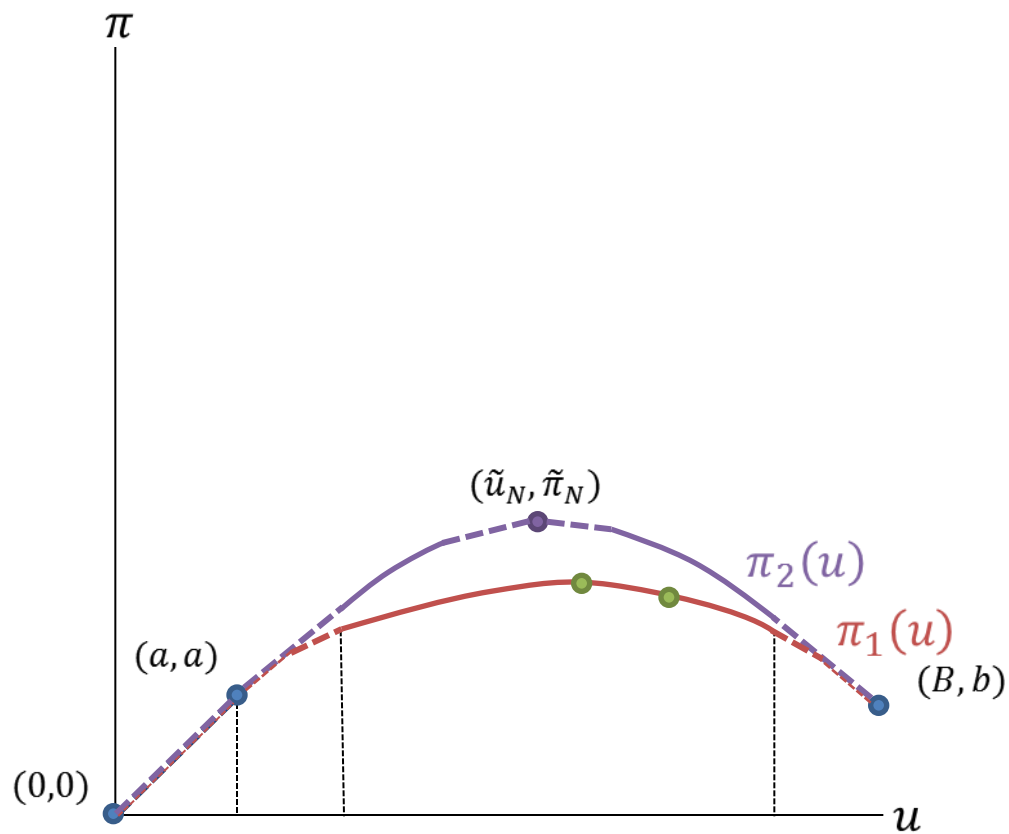
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# OPTIMAL RELATIONAL CONTRACT

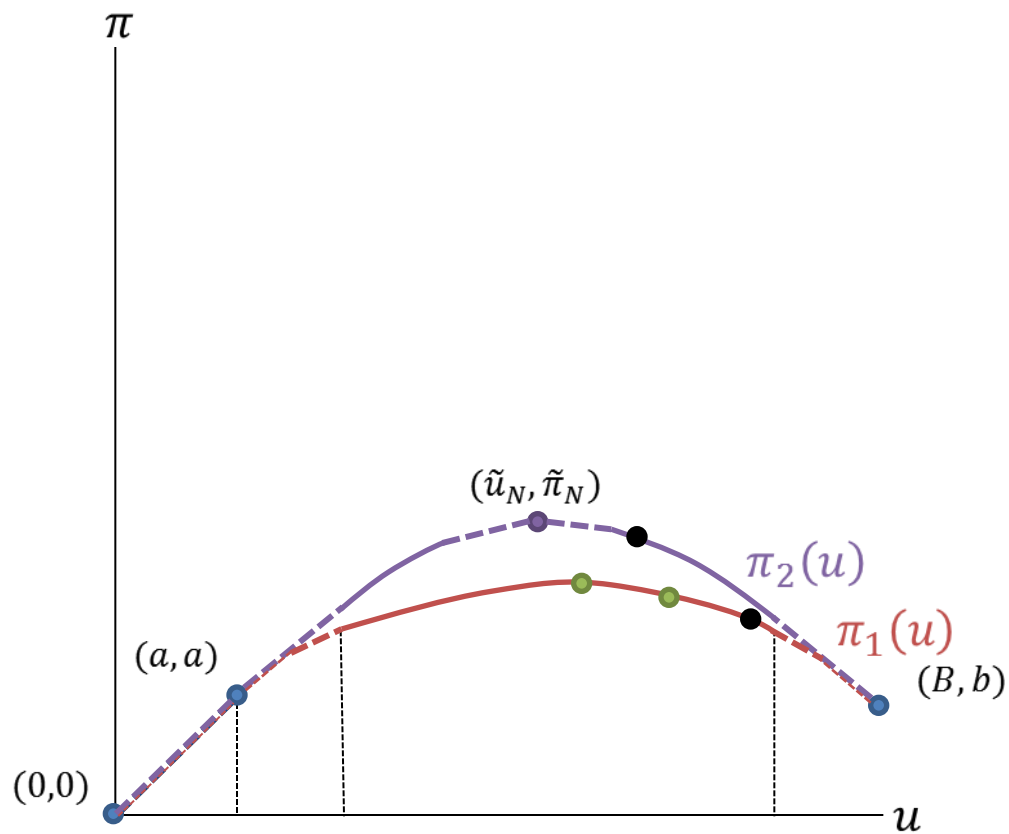


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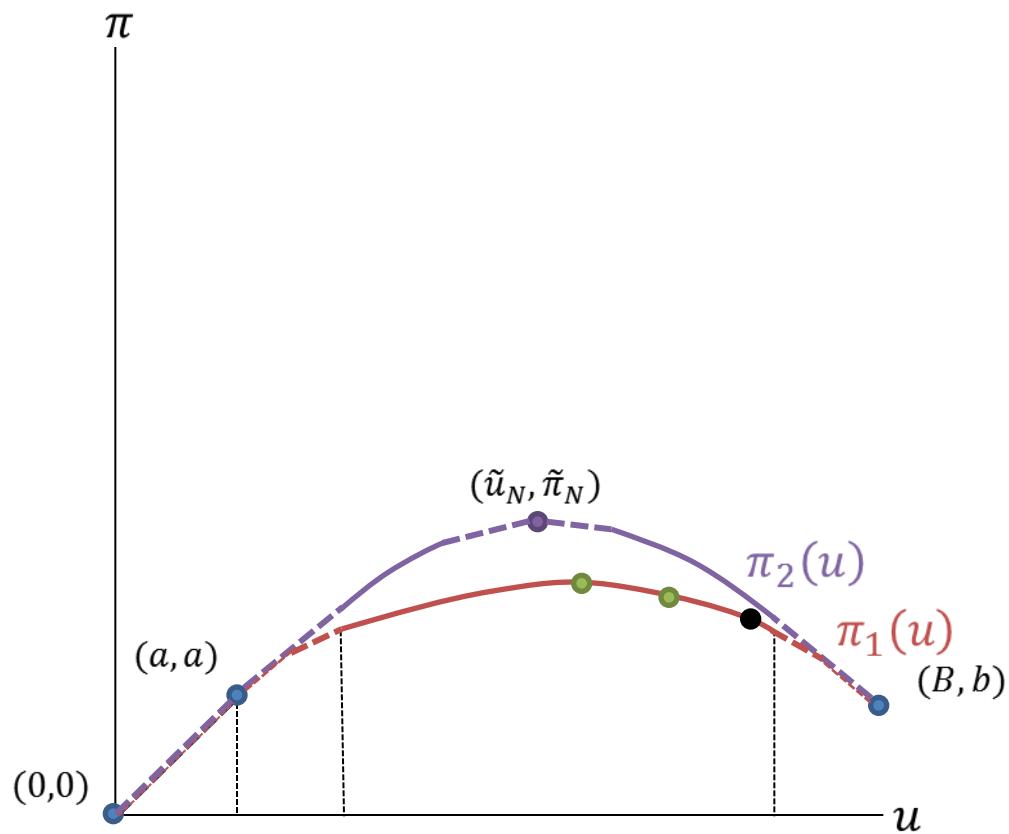




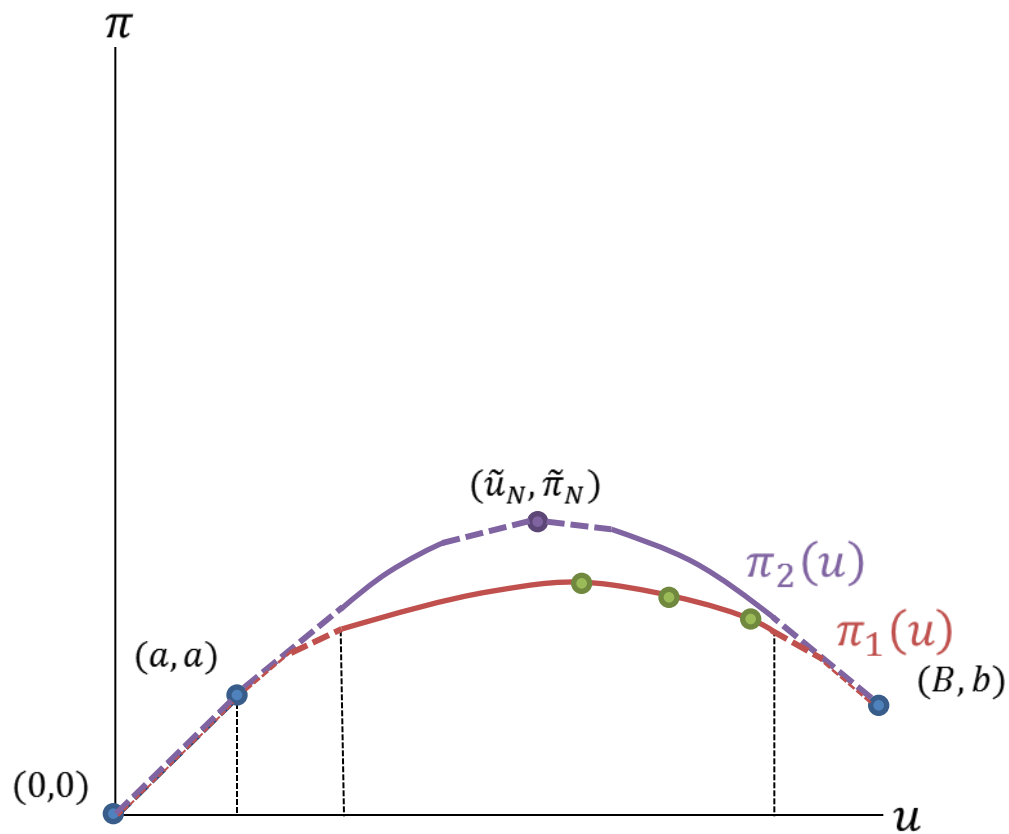
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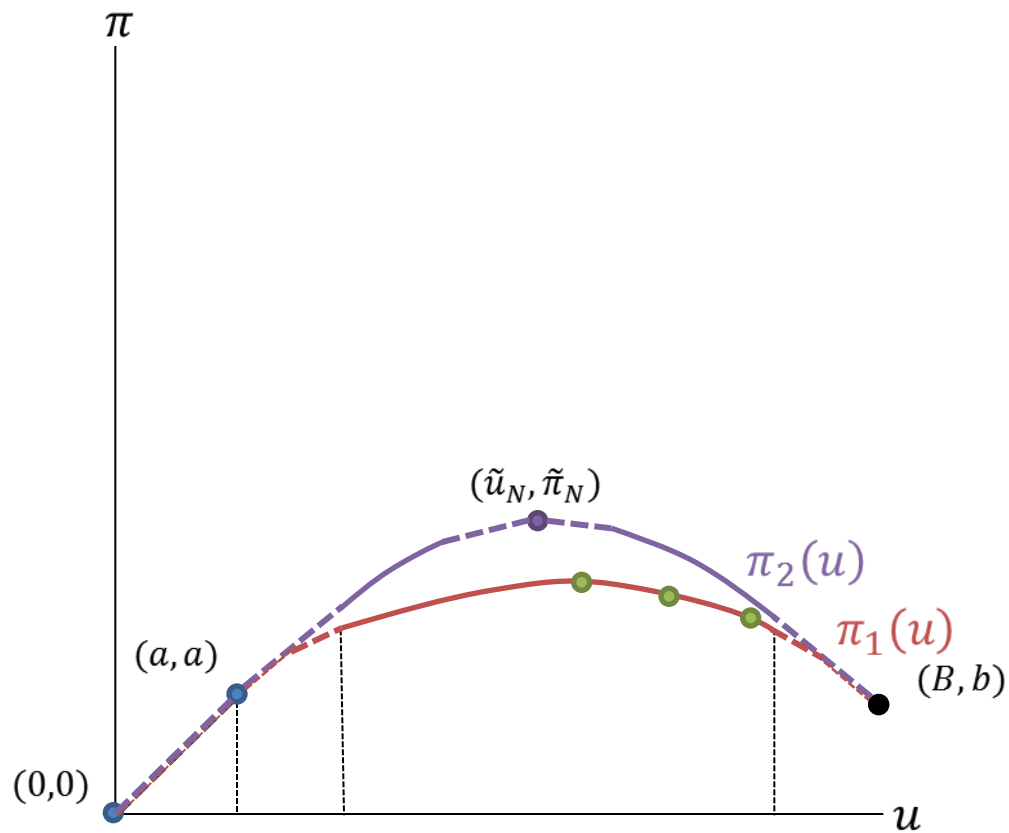
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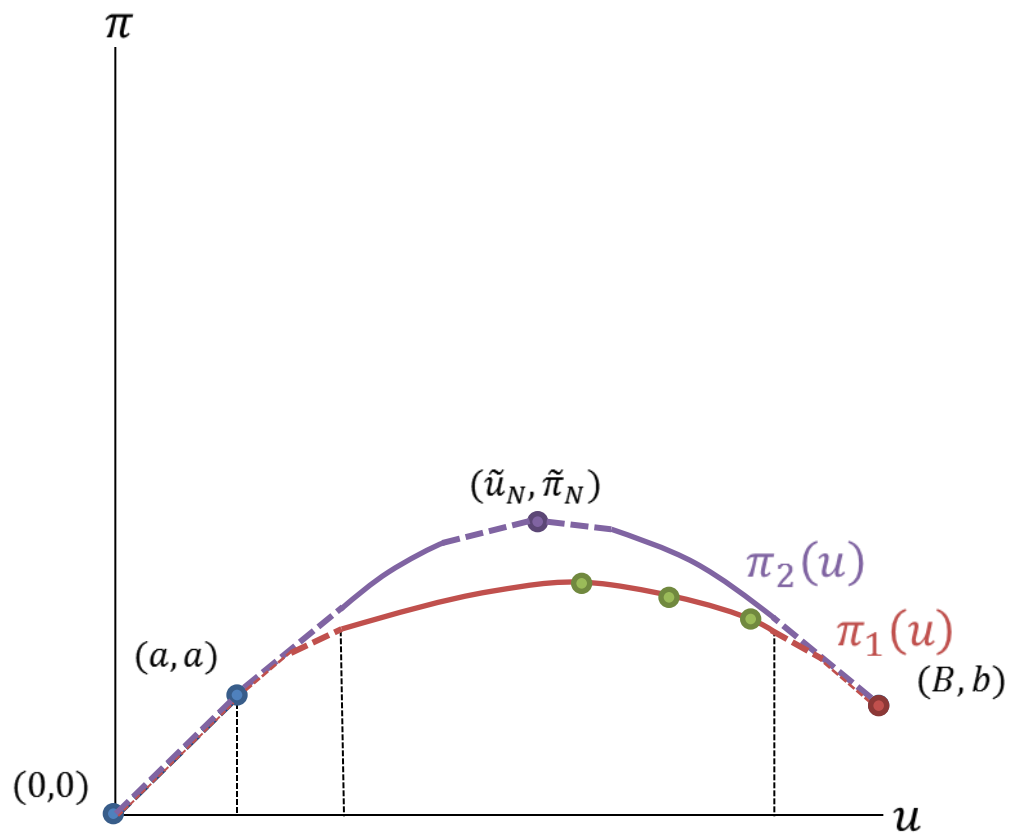
# OPTIMAL RELATIONAL CONTRACT



# OPTIMAL RELATIONAL CONTRACT



# OPTIMAL RELATIONAL CONTRACT



# RESULTS FROM PUBLIC OPPORTUNITY CASE

Promises used to motivate cooperative behavior before the new opportunity is available may spill over and affect whether the new project is adopted when it becomes available

Firms may fail to immediately adapt to public information

Firms may never adapt to public information

The older the firm, the less likely it is to adapt to public information

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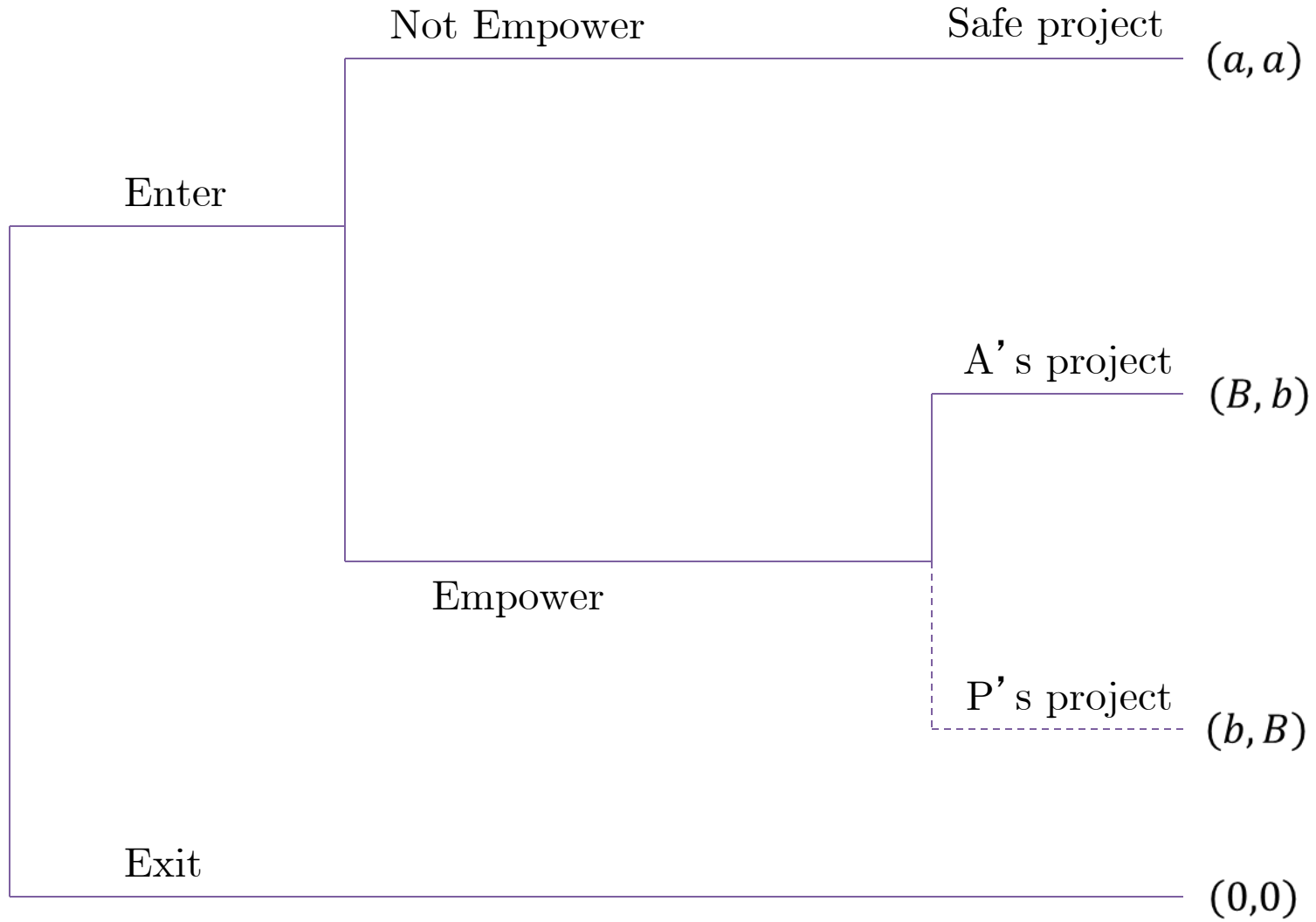


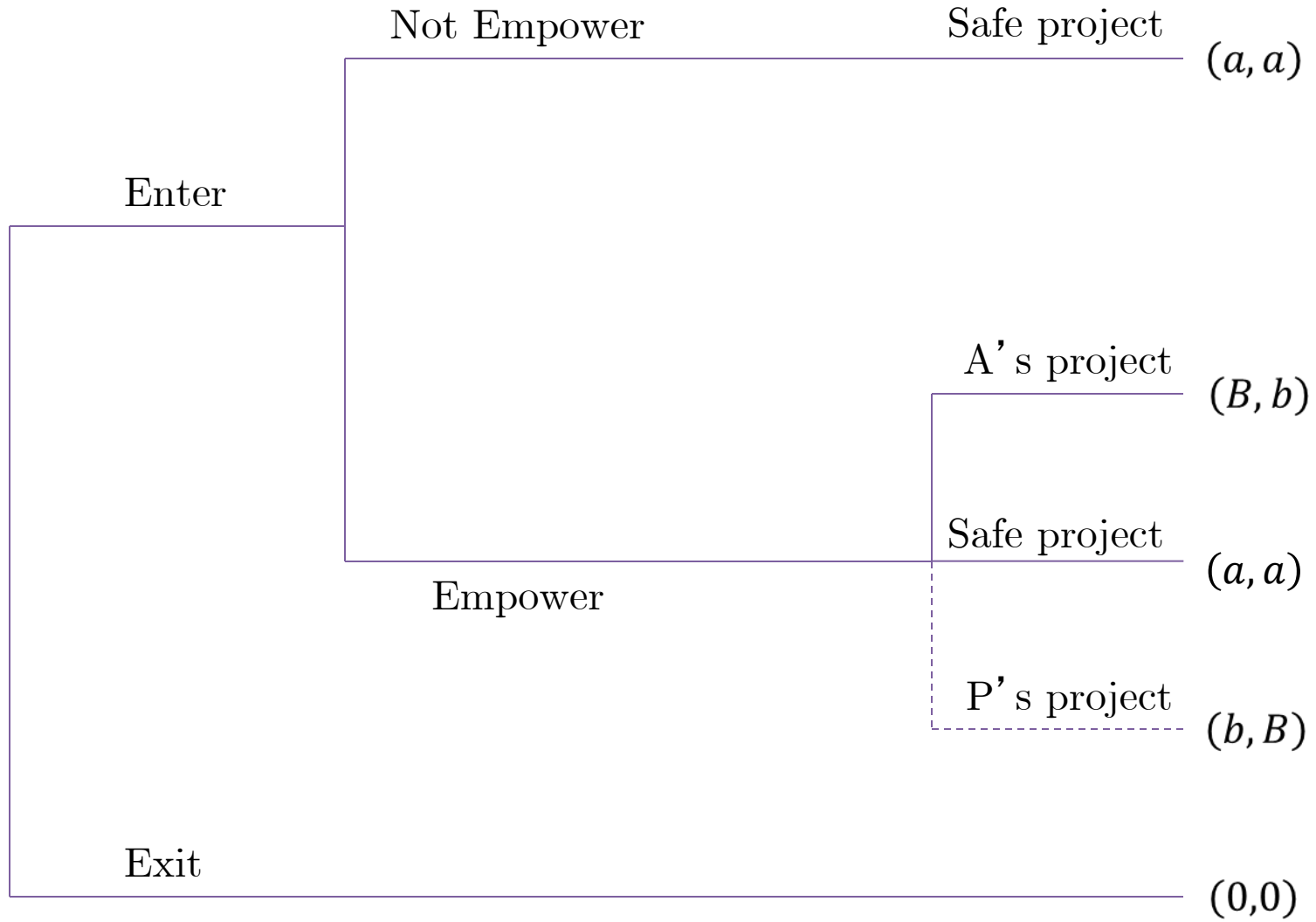
# INTERMEDIATE ALLOCATIONS OF CONTROL

Stark feature of main model: abrupt change in organizational structure

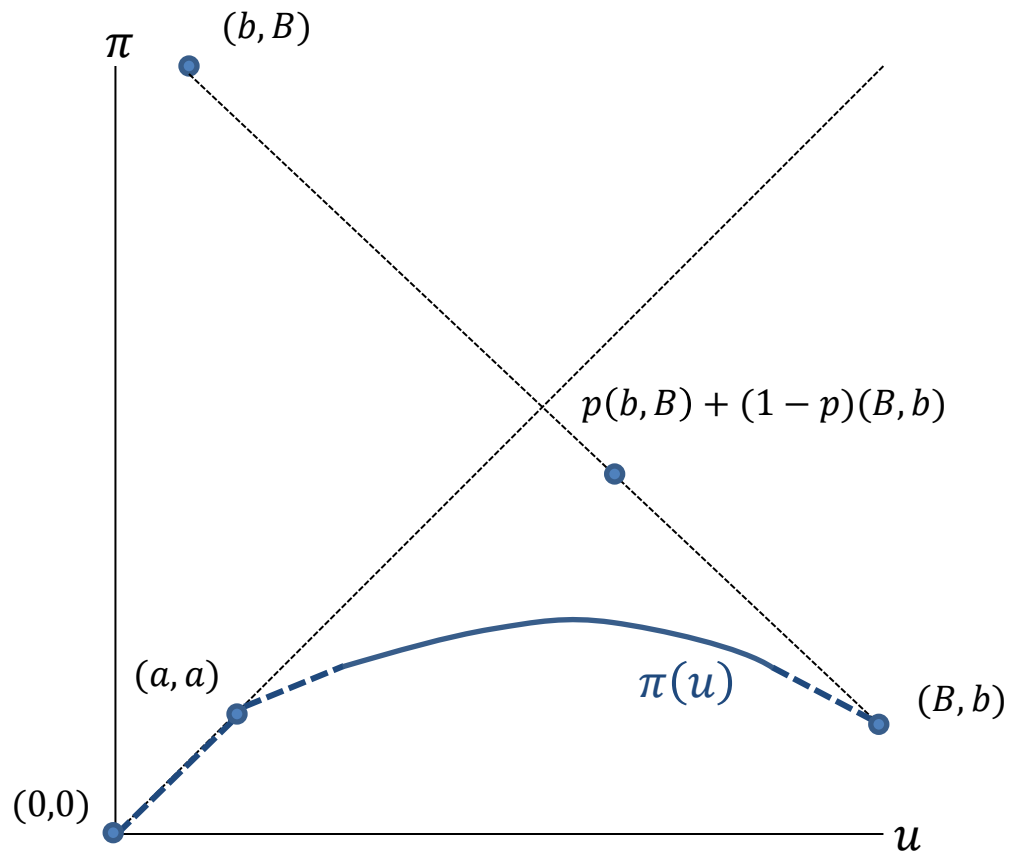
Allow agent to choose among three projects rather than two

**Partial Empowerment** possible: Agent chooses principal's project if available. Otherwise, chooses from constrained set.

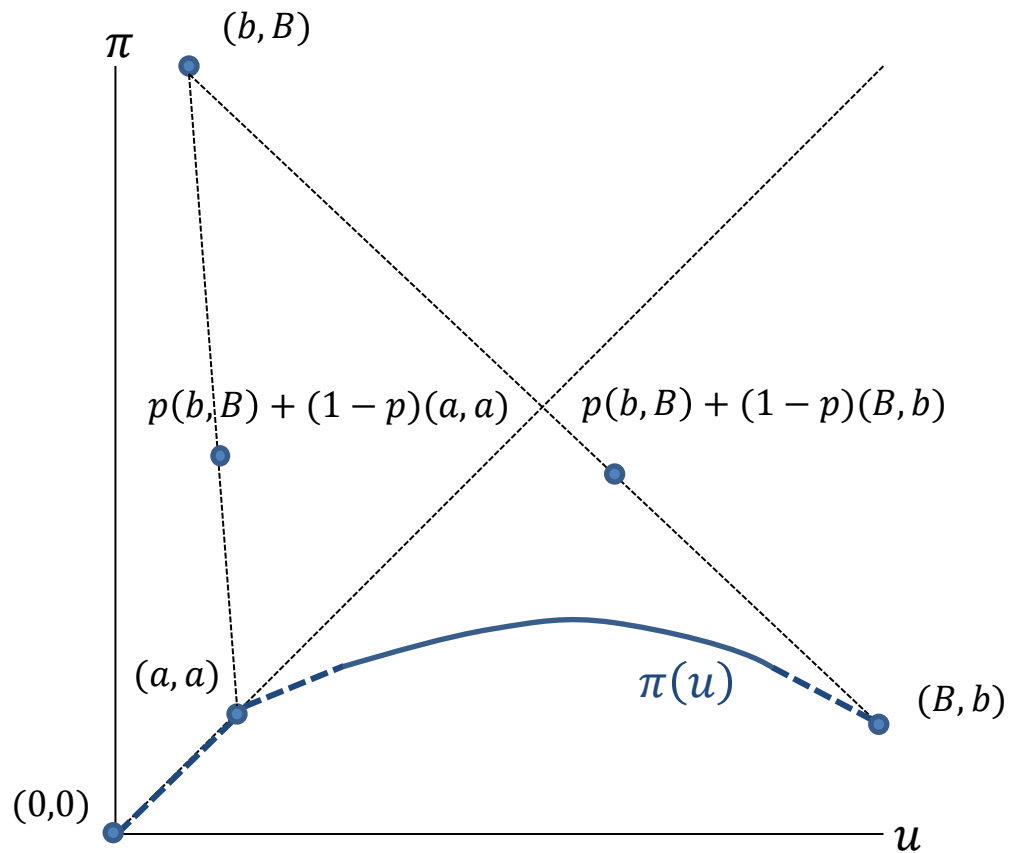




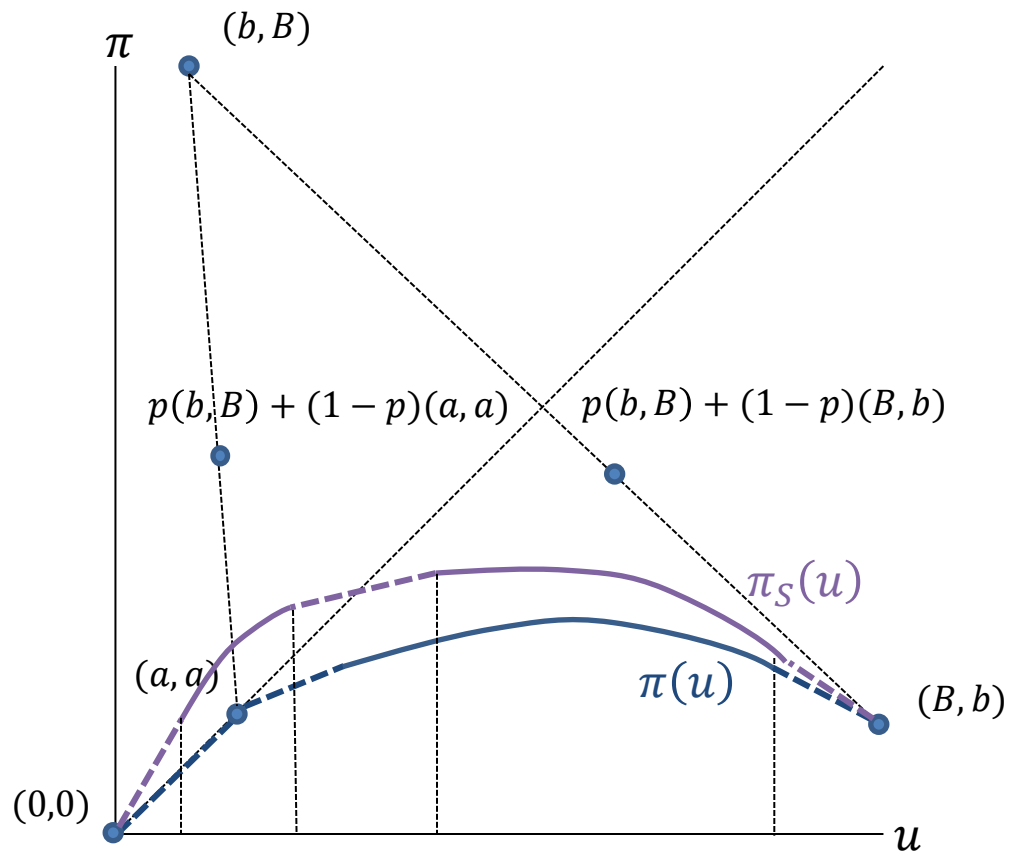
# FRONTIER OF BASELINE MODEL



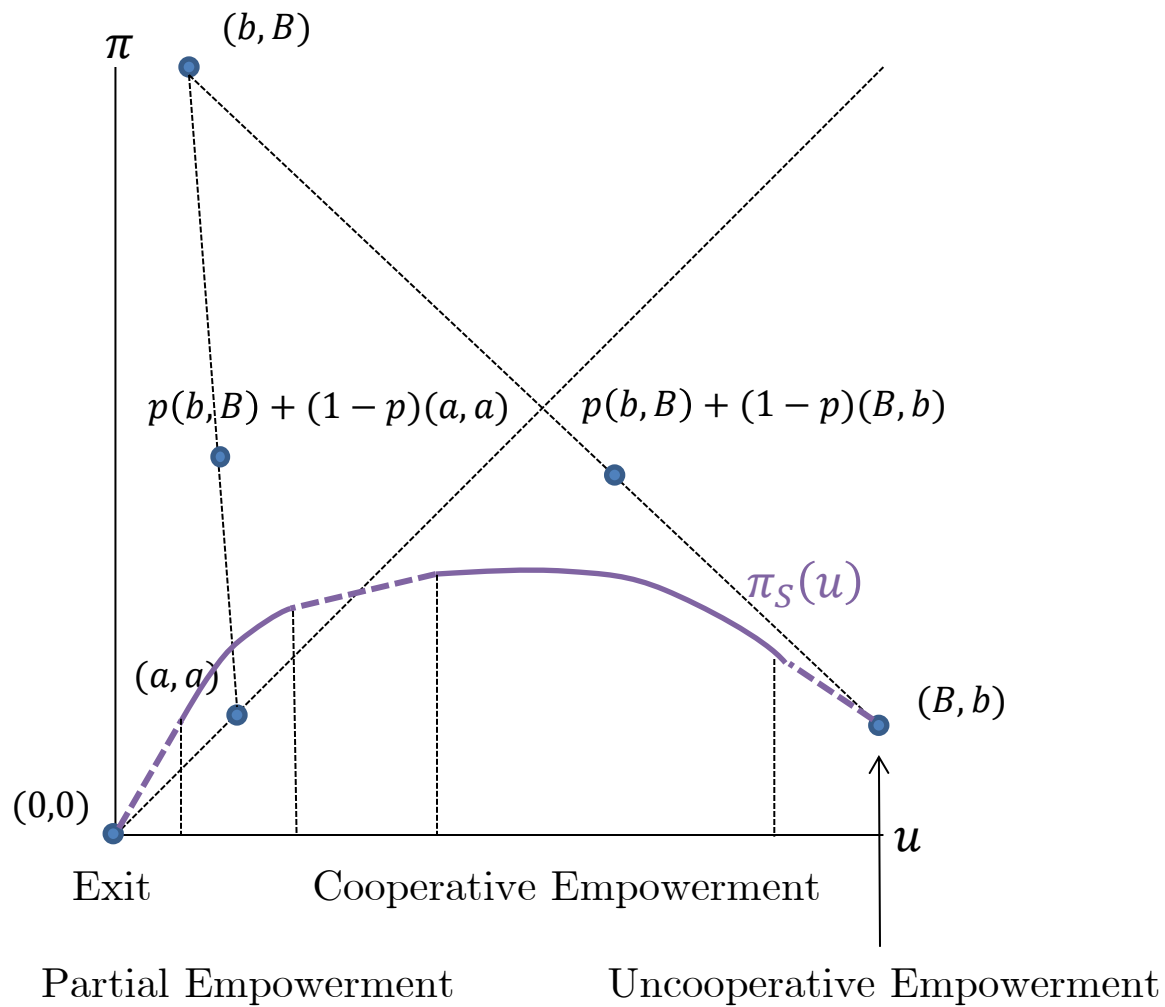
# FRONTIER WITH PARTIAL EMPOWERMENT



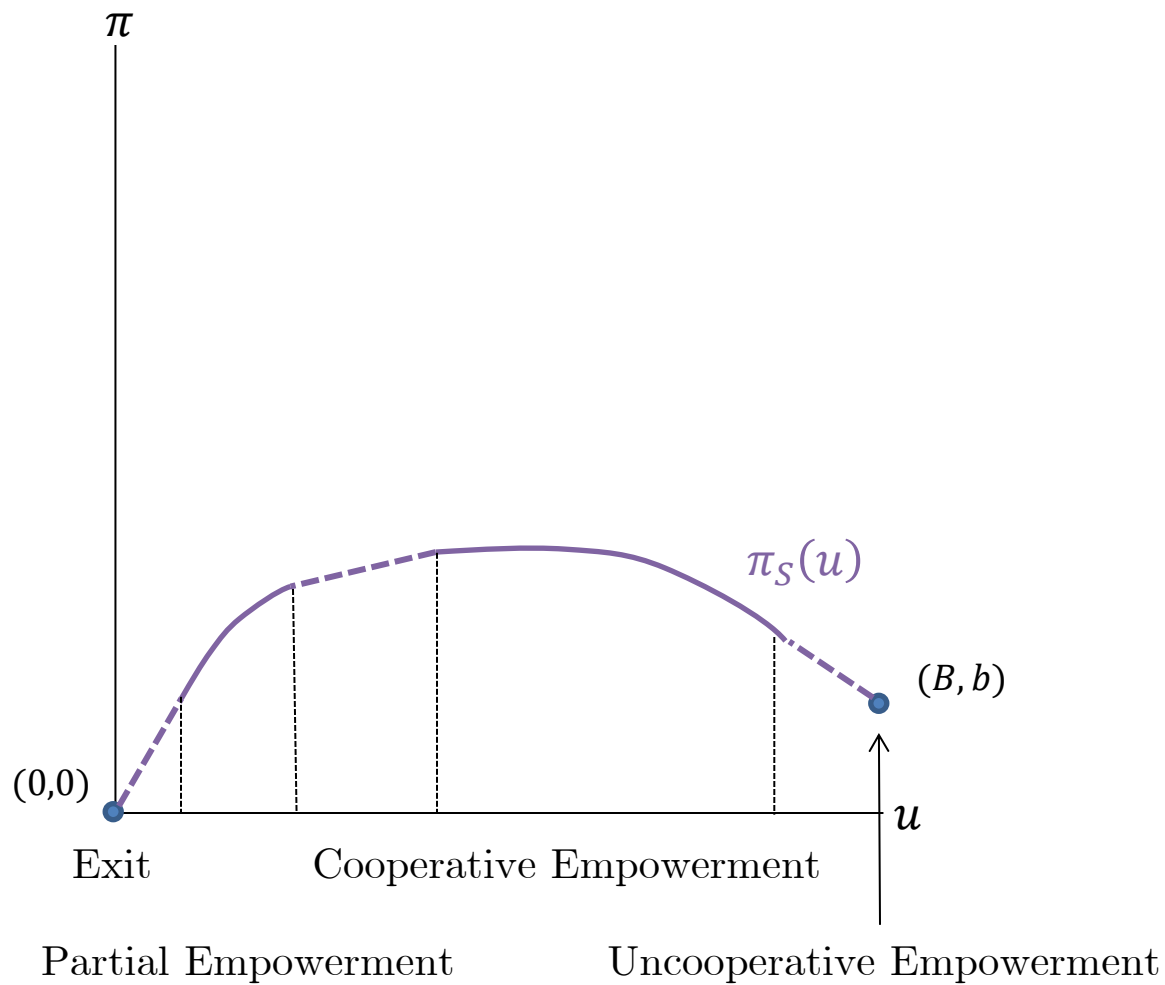
# FRONTIER WITH PARTIAL EMPOWERMENT



# ACTIONS SUPPORTING THE FRONTIER

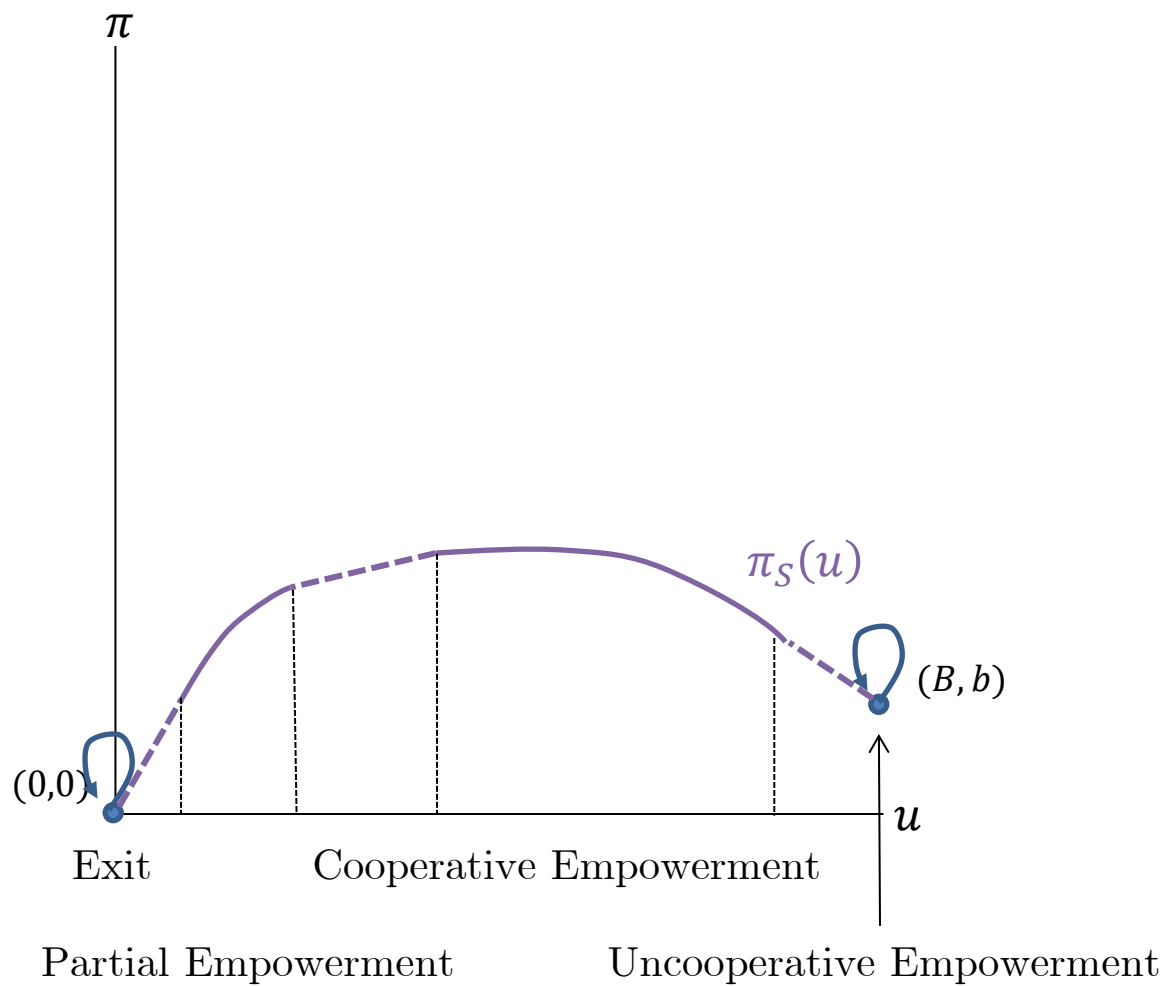


# OPTIMAL RELATIONAL CONTRACT

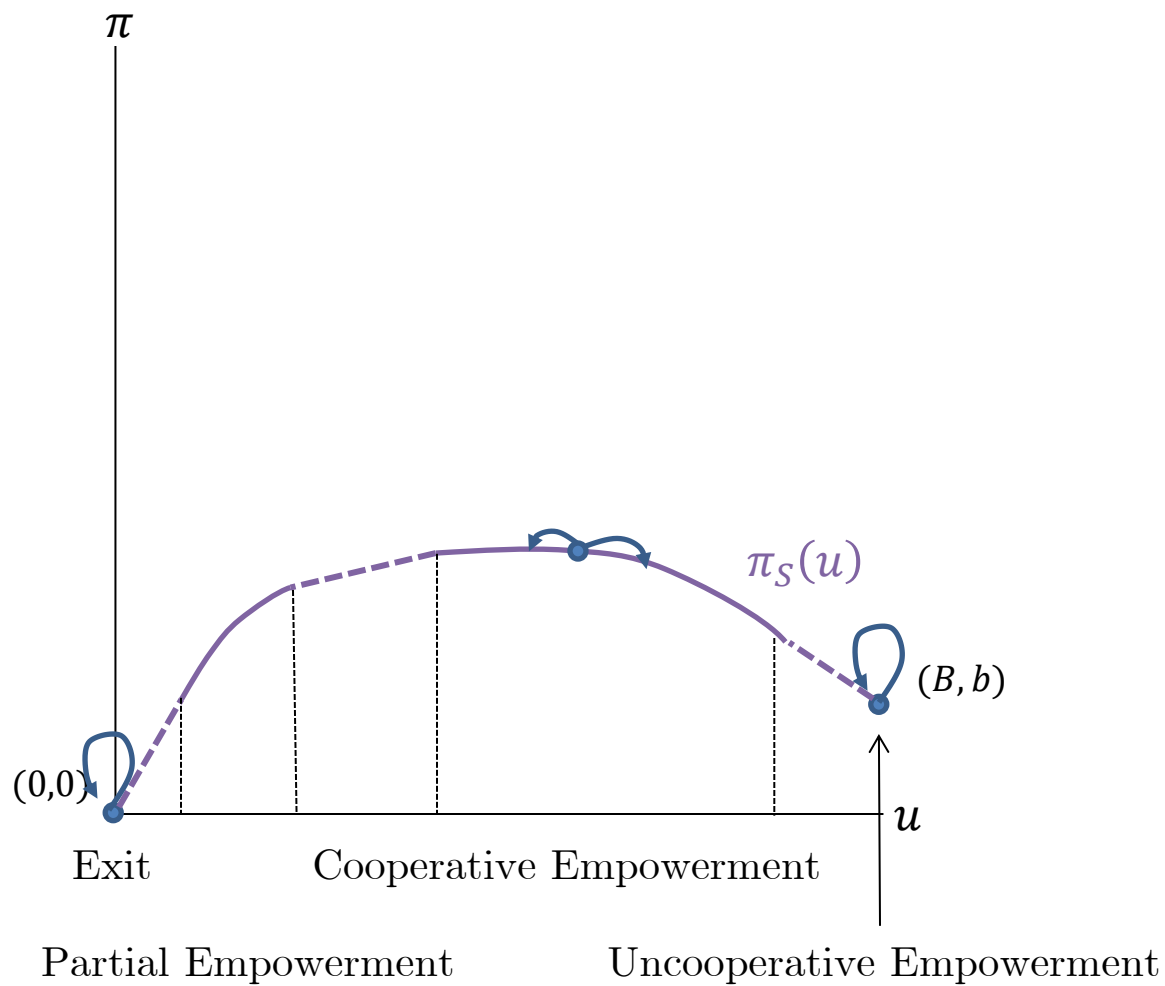




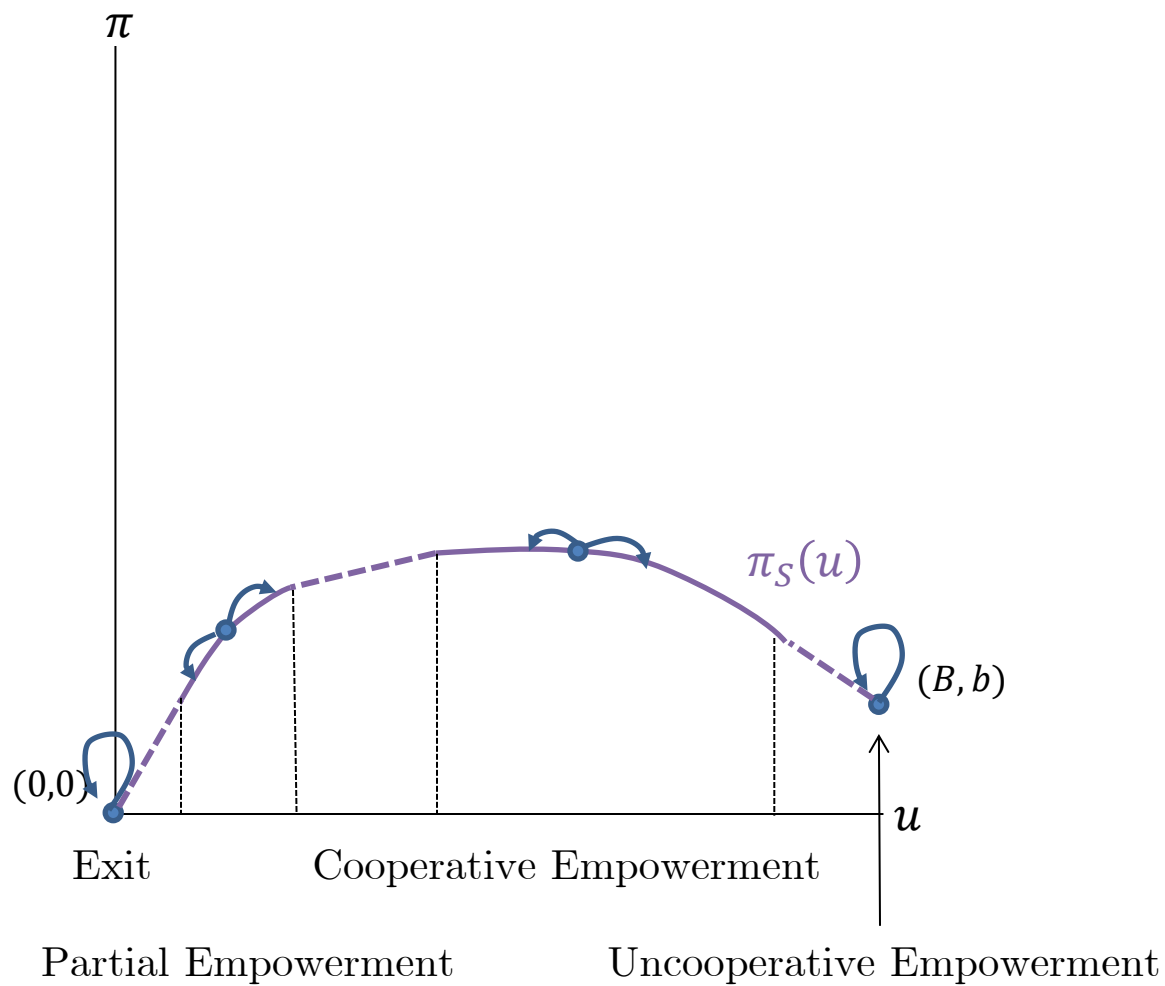
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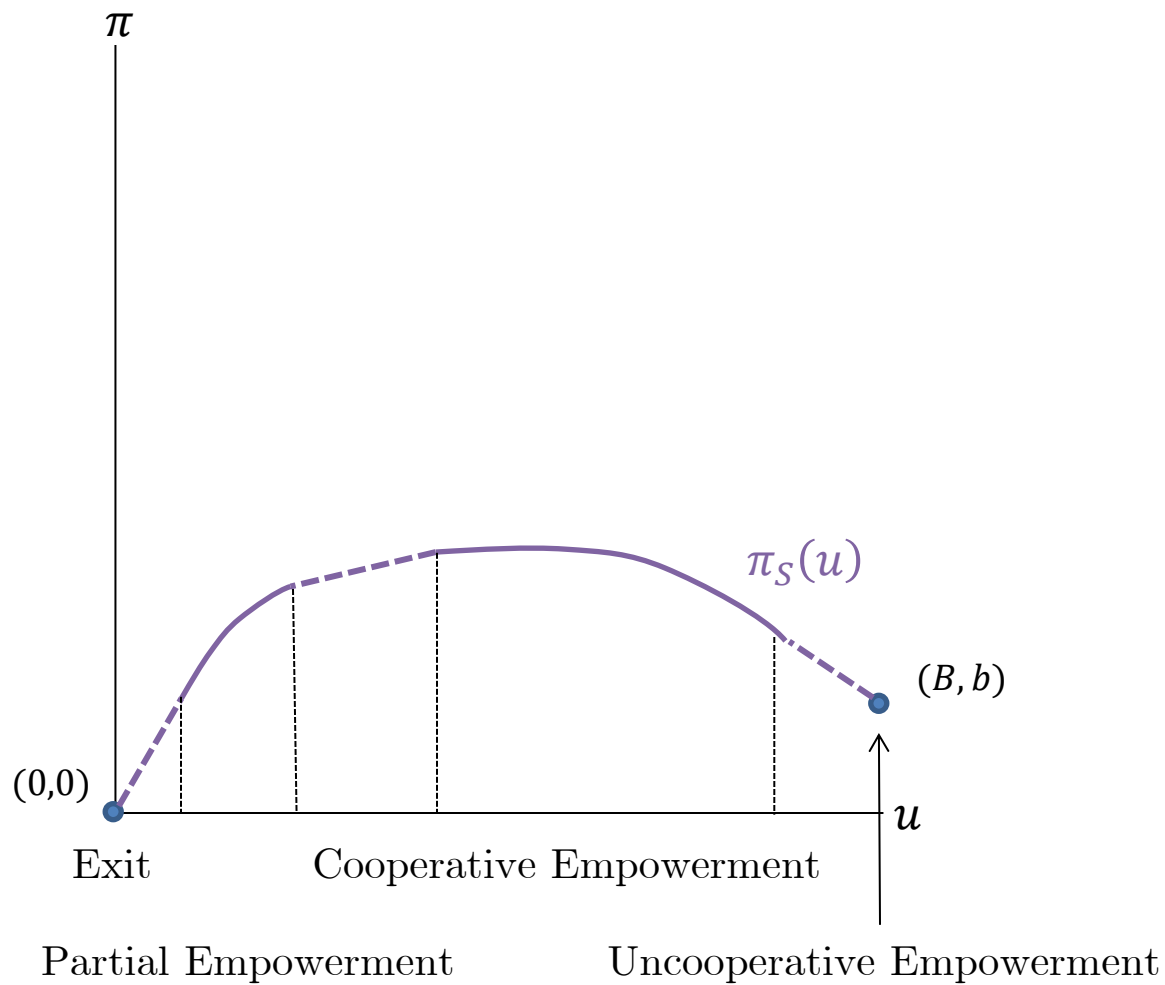
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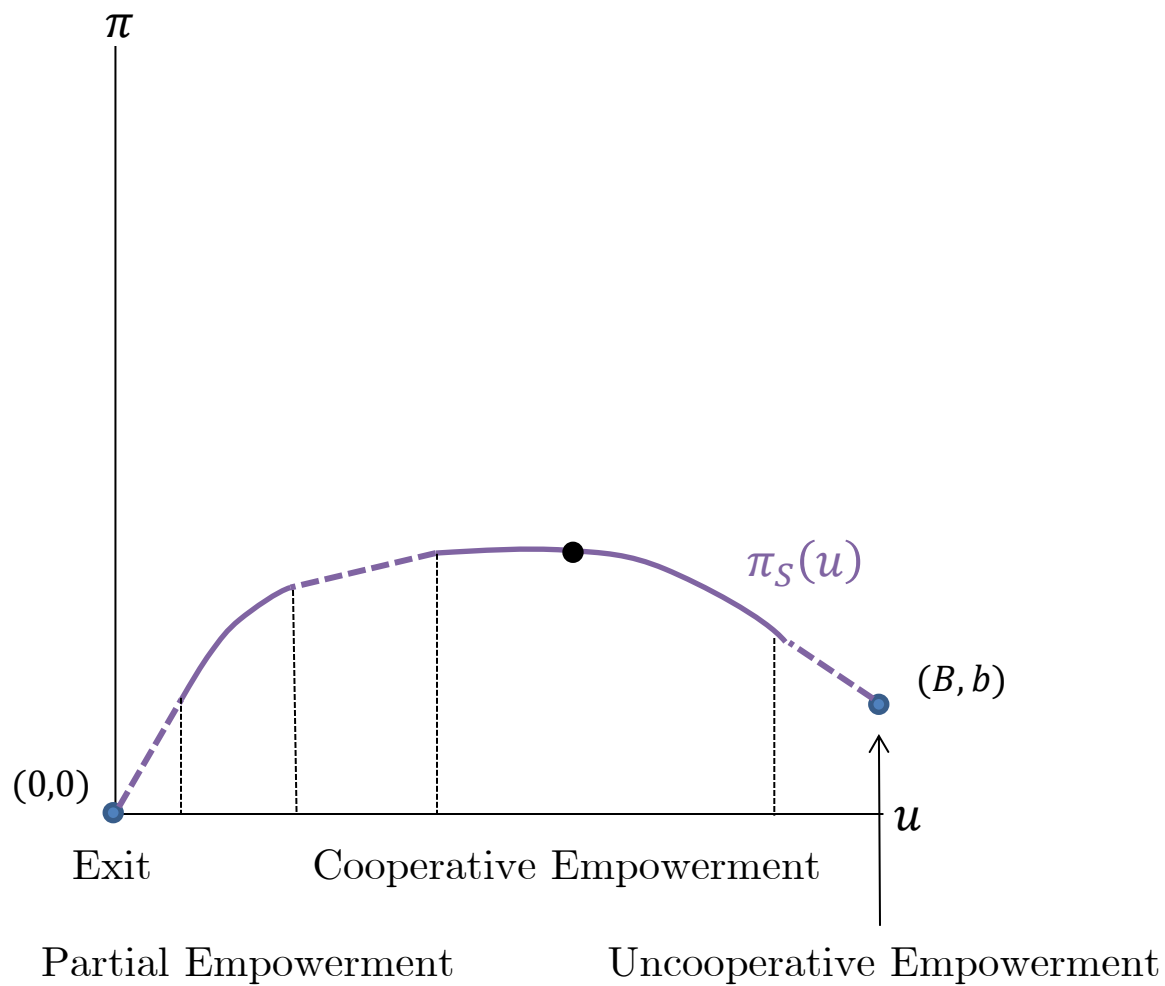
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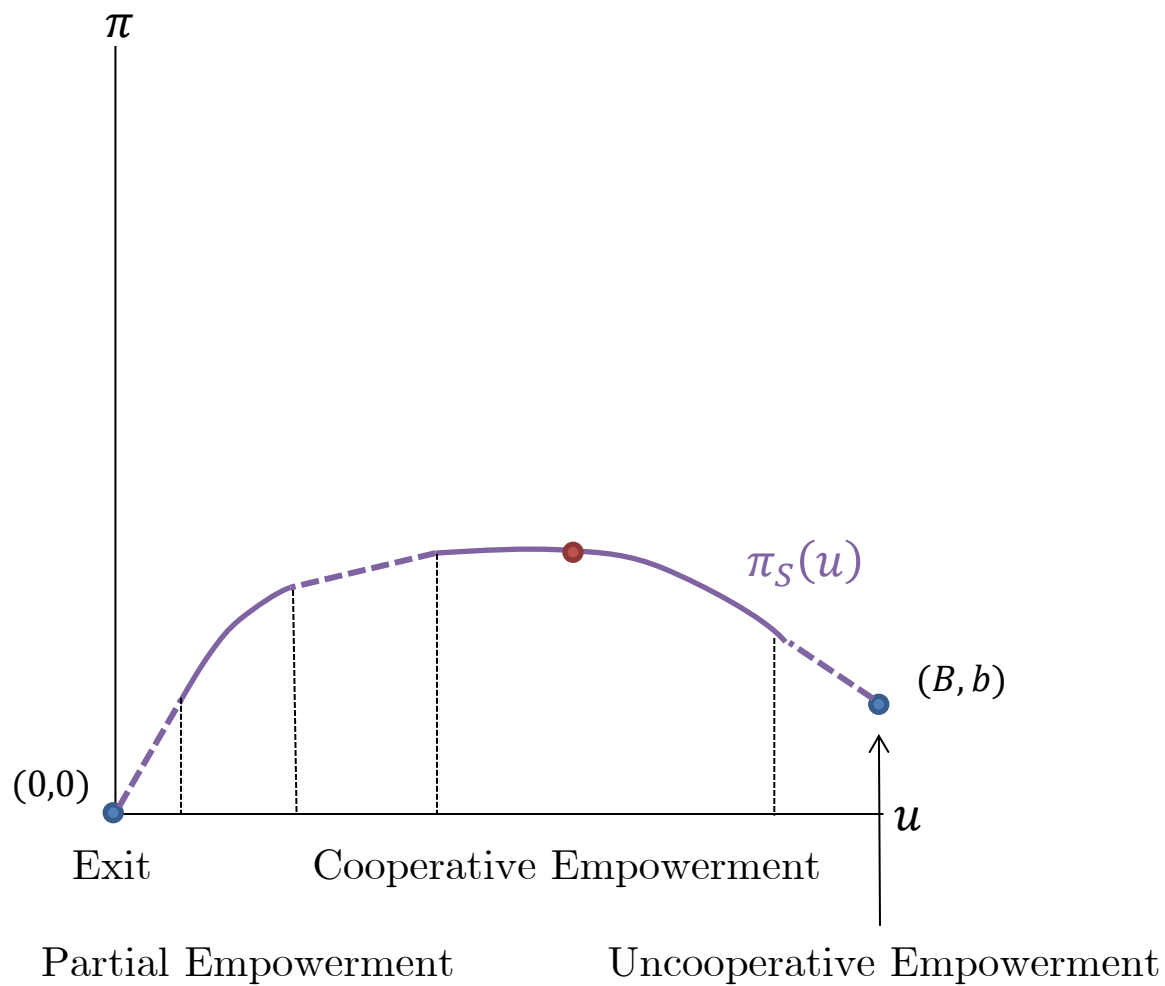
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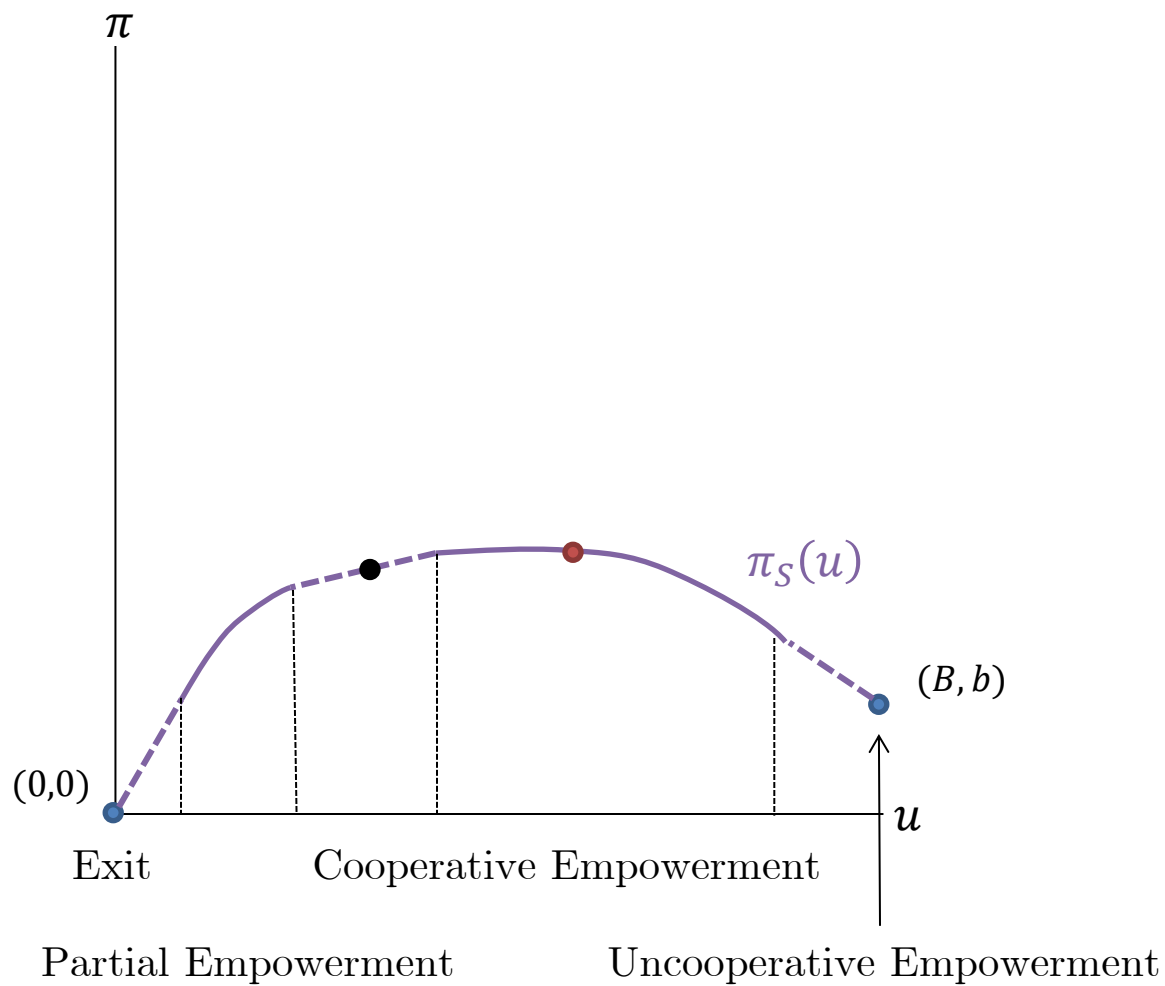
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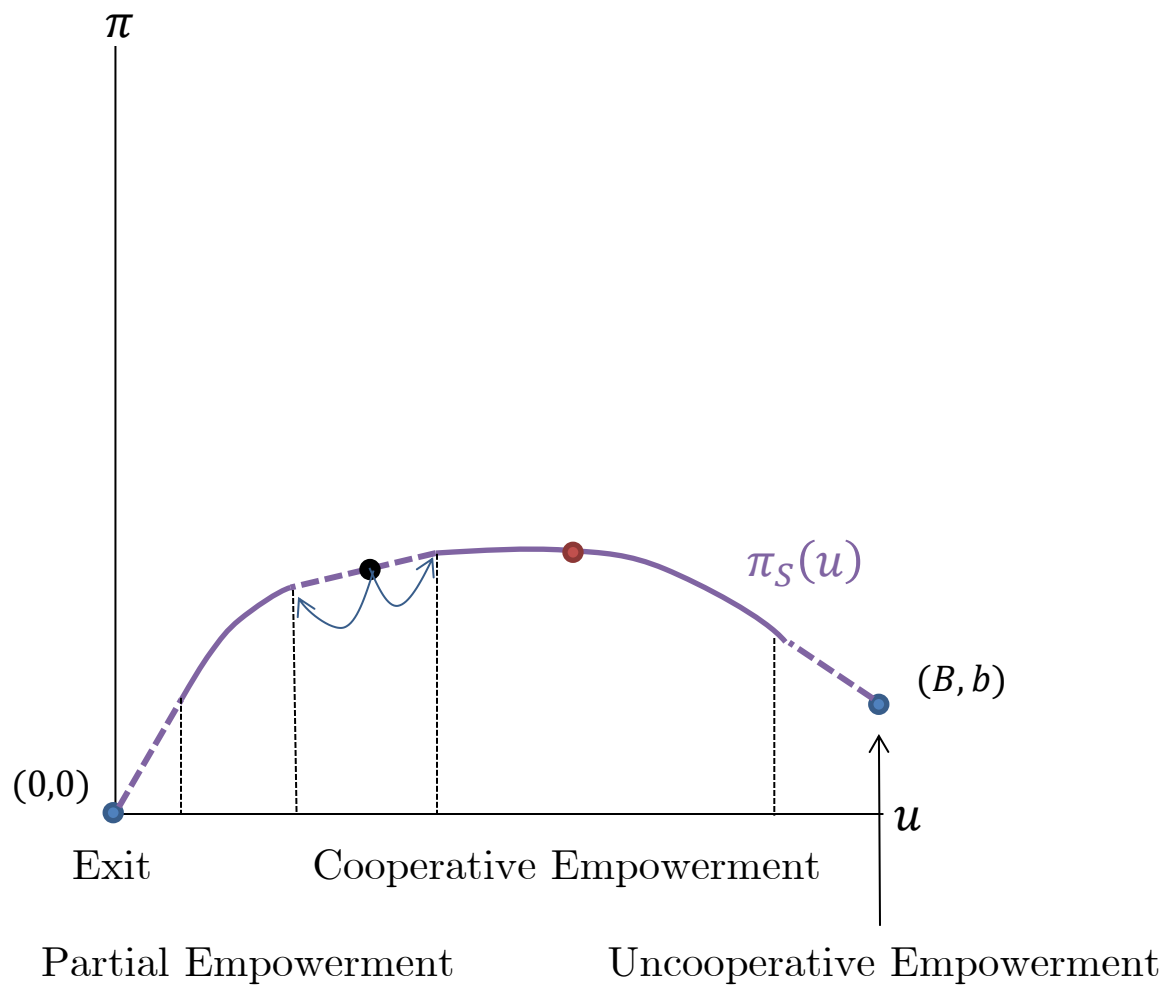
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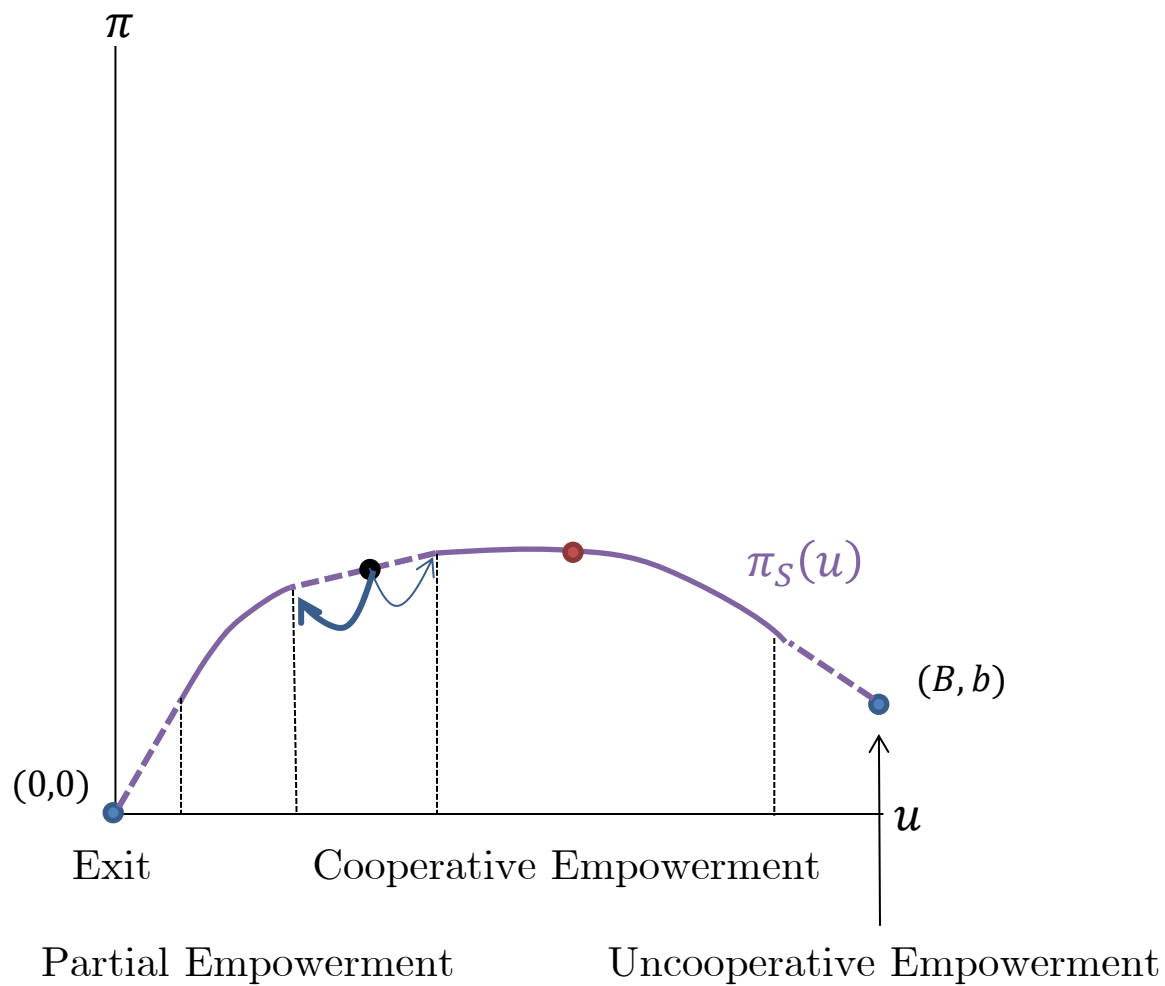


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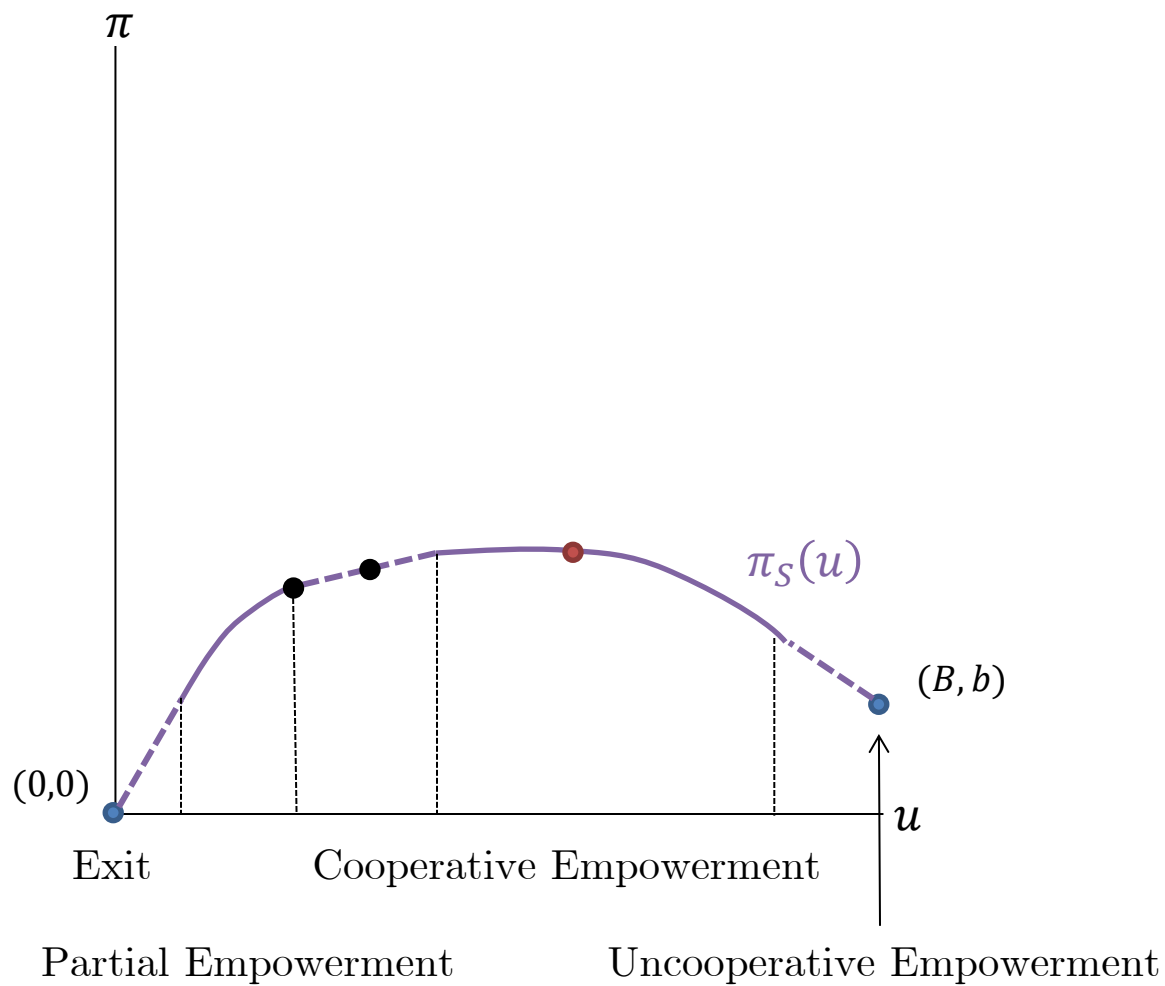




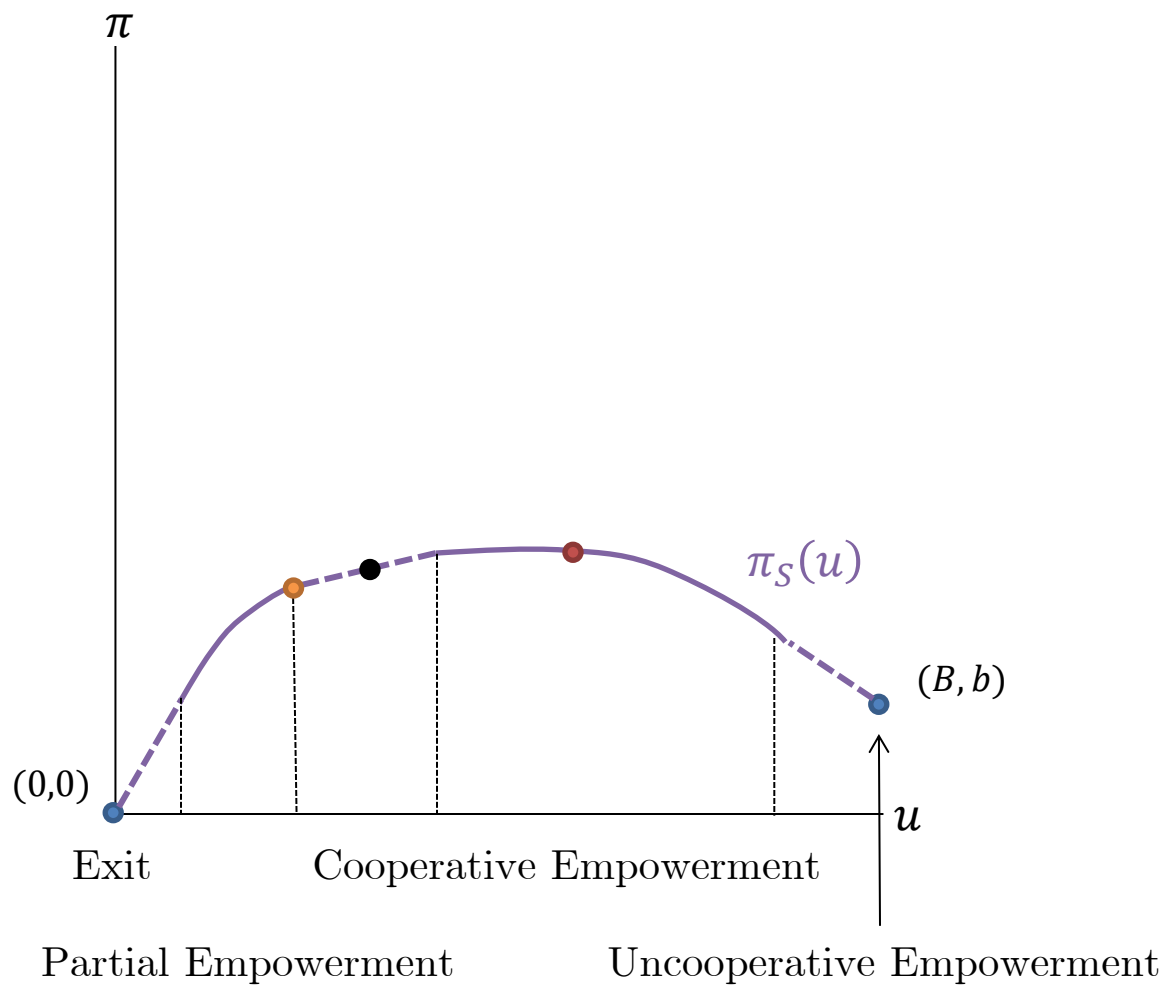
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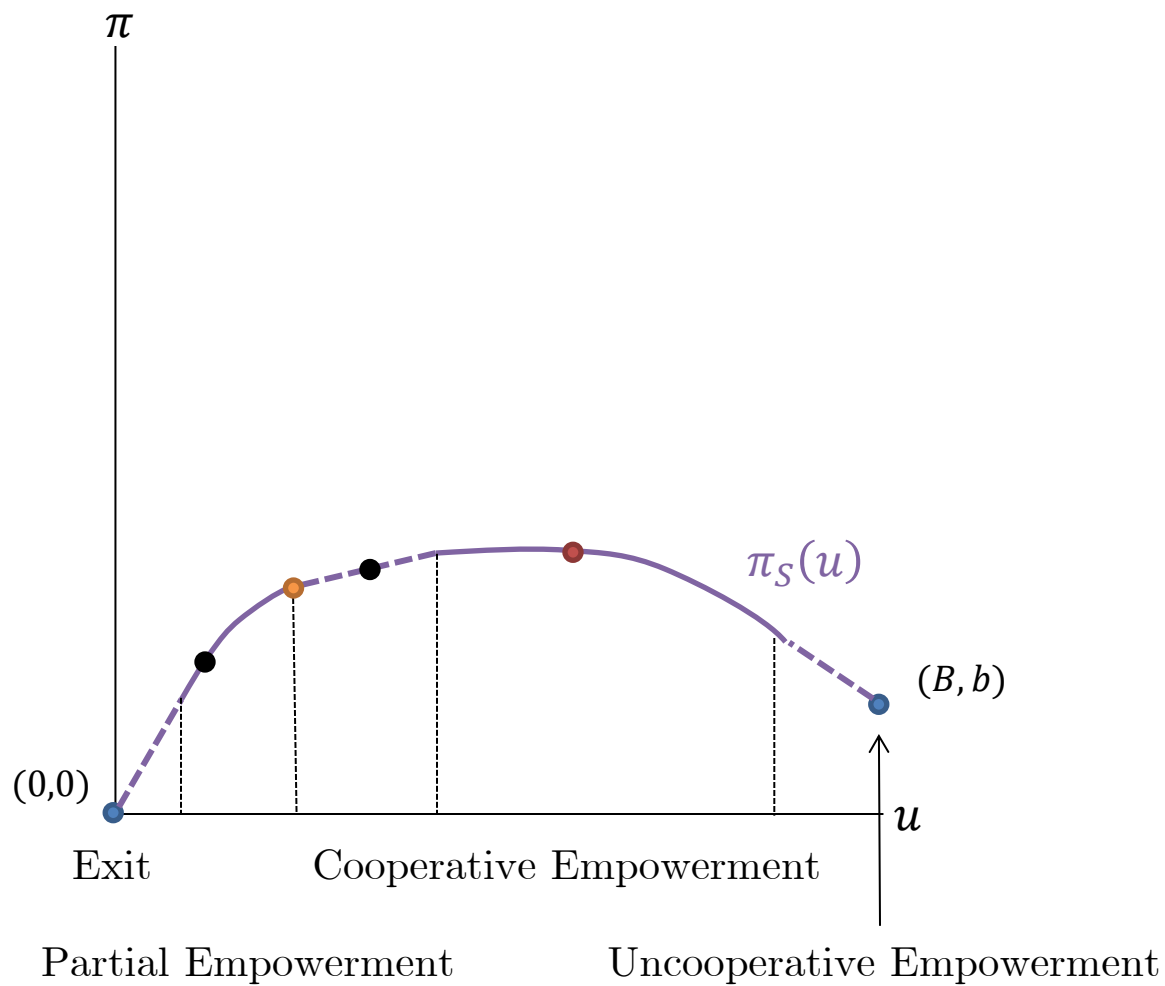
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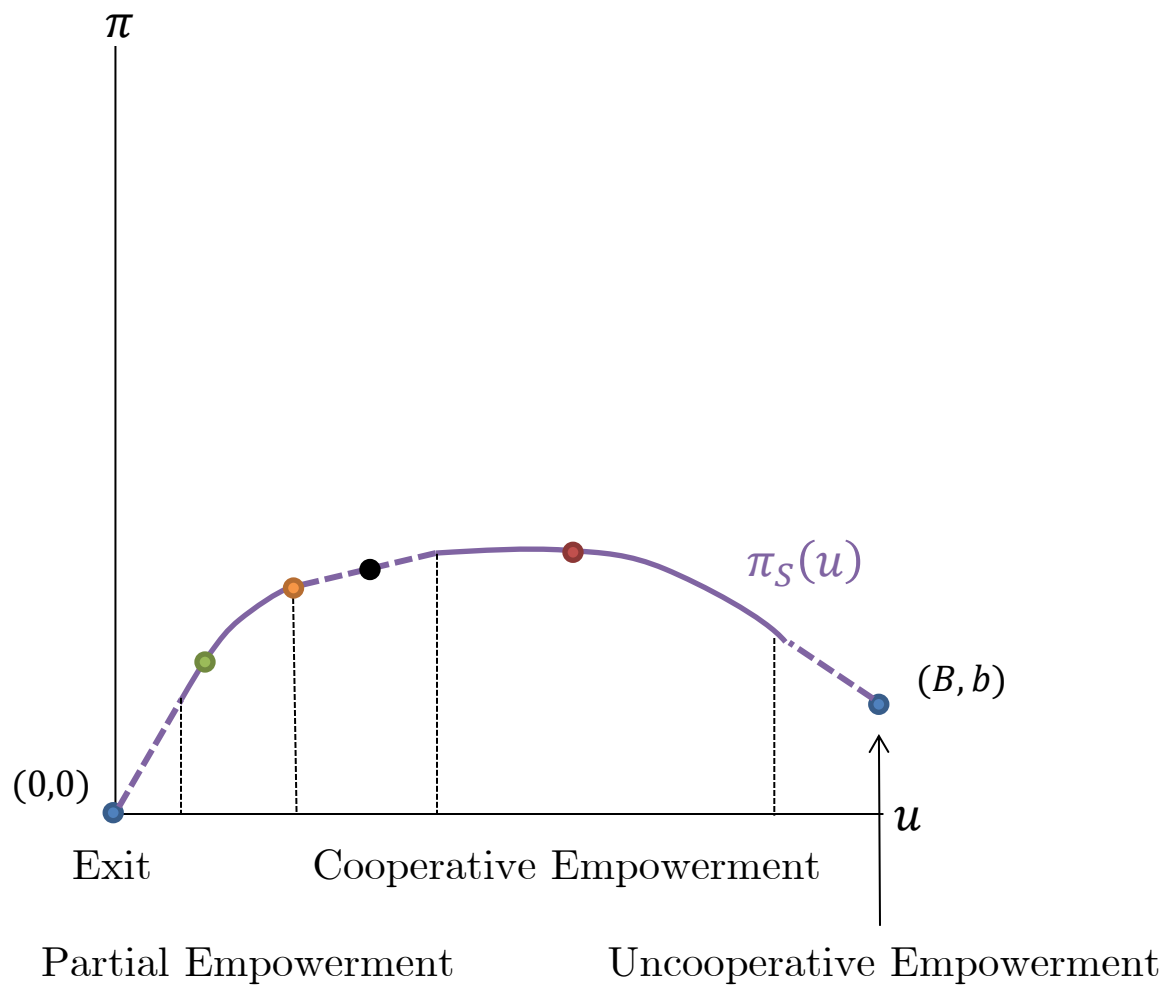
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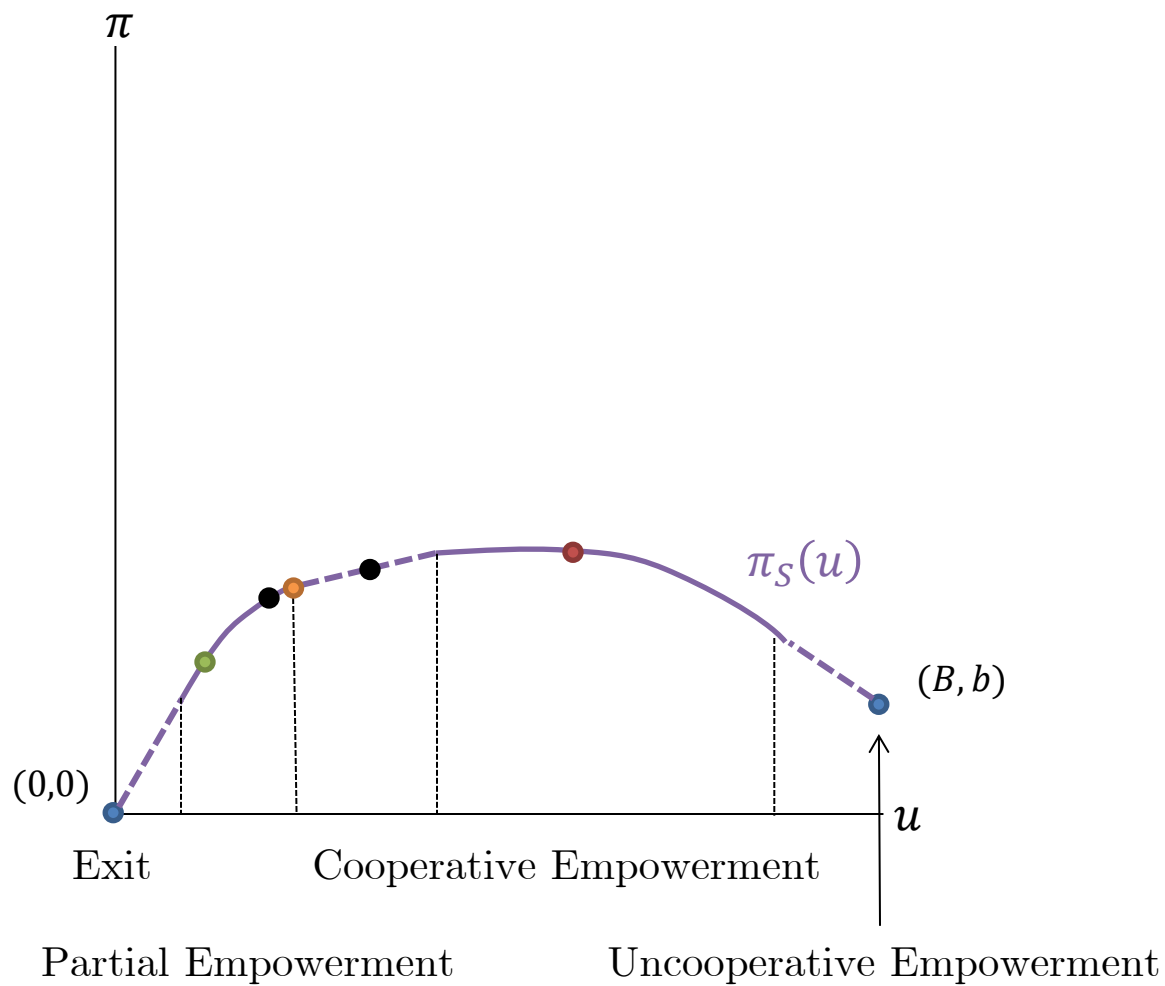
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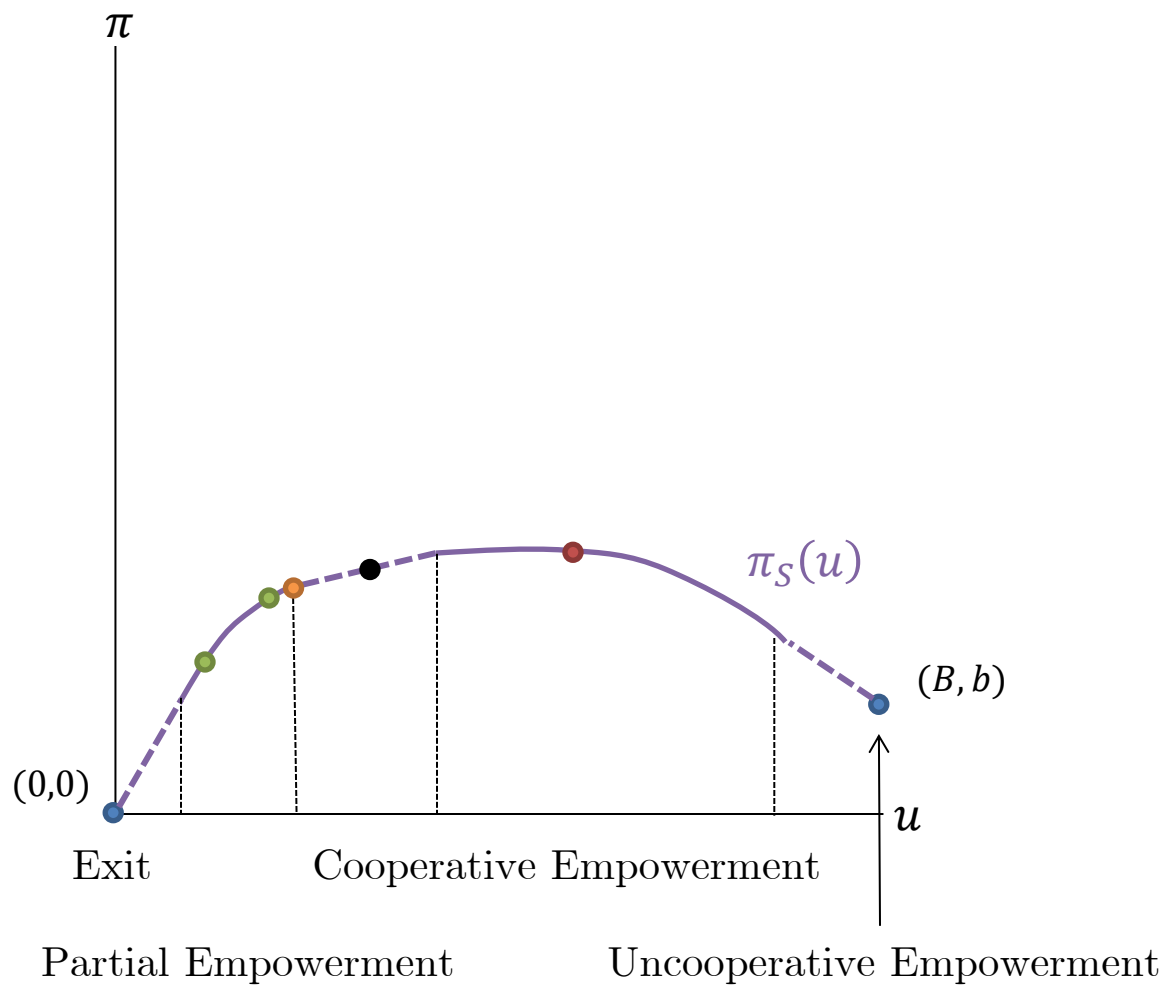
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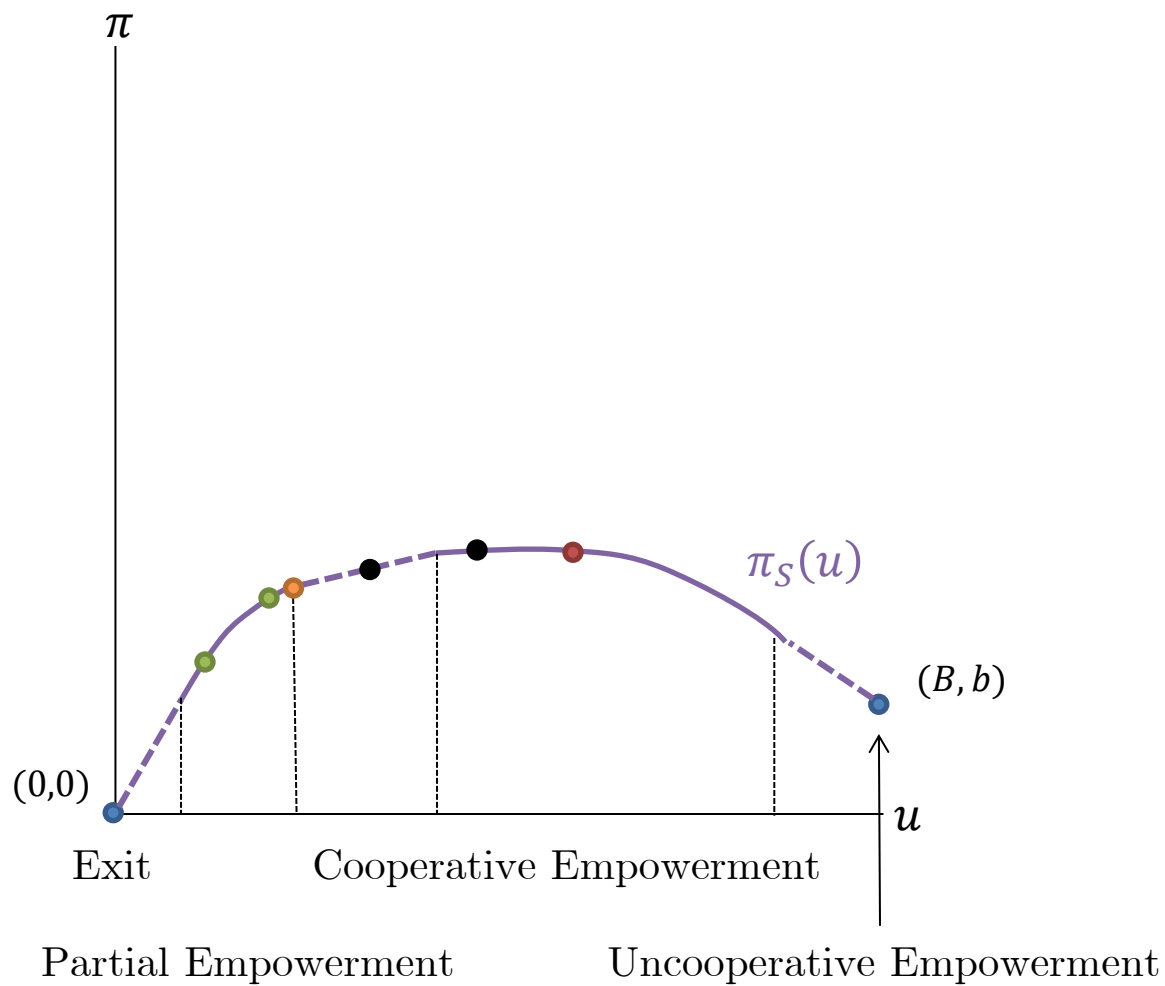
# OPTIMAL RELATIONAL CONTRACT



# OPTIMAL RELATIONAL CONTRACT



# OPTIMAL RELATIONAL CONTRACT





# PARTIAL EMPOWERMENT

Agent can choose the safe project

Start with cooperative empowerment

Punish w/ **partial empowerment** (Agent chooses Principal's project when available; otherwise, he chooses safe project) and then exit

Graduated rewards and sanctions

Permanent disenfranchisement no longer a steady state

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# SUMMARY

Long-run implications of paying with power rather than cash

Motivation today provided by promised future distortions

Explanations for two open issues in organizational economics: (1) failures of established firms to adapt to environment and (2) emergence of persistent performance differences

# GOING FORWARD

*“Side payments, far from being the incidental distribution of a fixed, transferable booty, represent the central process of goal specification. That is, a significant number of these payments are in the form of policy commitments.”* (Cyert and March, 1963, p. 35)

- Role of “policy commitments” in relational contracts
- Principal makes observable **decisions** in each period. Decision plan is a **policy**. A policy is **backward-looking** if each decision does not maximize continuation surplus.
- When are backward-looking policies optimal? (Barron, Powell, 2015)