A Theory of Authority

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 - 1. Agents motivated by sense of duty to follow rules/orders when they are seen as legitimate.
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- The need for legitimacy serves as a constraint.
- This paper: explores the implications of such constraints.

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- Cost to the rm: greater bureaucracy.

Introduction: Related Literature

- Persuasion: Prendergast and Stole (1996); Hermalin (1998);
 Majumdar and Mukand (2004); Van Den Steen (2009).
- Limits to Authority: Shapiro and Stiglitz (1984); Wernerfelt (1997); Marino, Matsusaka, and Zabojnik (2009); Van Den Steen (2010).
- Low-powered versus high-powered incentives: Holmstrom and Milgrom (1991).

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1. High-powered: w(q).

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- Disobedience is only costly when the order is legitimate: $D(q) = \begin{array}{c} \Psi, q \quad L \\ 0, q > L \end{array}$
- Agent has outside option that yields payo of 0.

Authority Maintenance: *q L*.

The Principal's Problem

□ Maximize *p* subject to:

(PC), (IC-authority), (AM)

OR

Solution to Principal's Problem:

1. *L* high:

$$q = a_1^{FB}$$
.
low-powered incentives: $w(h) = w(l)$.

2. L intermediate:

q = L.low-powered incentives: w(h) = w(l).

- 3. *L* low:
 - eschew authority.
 - high-powered incentives: w(h) > w(l).

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- That is, he chooses how much to bolster (b).
- Cost of bolstering: k(b).
- The principal's authority is given by: $L = L_0 + b$.

Solution to Principal's Problem:

- 1. L_0 high:
 - maintain authority/low-powered incentives.
 - no bolstering (b = 0).
- 2. L_0 intermediate:
 - maintain authority/low-powered incentives.
 - bolster (b > 0).
- 3. L₀ low:
 - eschew authority/high-powered incentives.
 - no bolstering (b = 0).

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- 1. Who is the receiver of orders?
 - Suppose agent A is a better worker than agent B but agent B considers the principal's authority more legitimate.
 - One might hire B rather than A (a costly action taken to bolster authority).
 - Examples: dislike of "overquali ed" workers (Bewley); family rms.

2. Who is the giver of orders?

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 - Suppose the principal has more (less) authority over workers than a supervisor.
 - This might lead to under-delegation (over-delegation).
 - Examples: Gouldner's Gympsum Company (under-delegation); Ostrom on detrimental e ects of forest nationalization (over-delegation).

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 - Example: problems associated with merging rms with di erent cultures (see Buono, Bowditch, and Lewis (1985)).



4. An Alternative Explanation for E ciency Wages

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- Suppose paying a higher expected wage increases the principal's legitimacy $(L = L_0 + E(w))$.
- It may be optimal to pay an e ciency wage: that is, set a wage for which (PC) is non-binding.

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- To what extent are persistent performance di erences across rms (PPDs) explained by di erences in authority?
- Relatedly, is variance in rms' management practices due to di erences in managerial skill or authority?
- Is lack of legitimate authority an important reason for underdevelopment (see Basu (2015))?