Workplace Deviance and Recession

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What is the impact of a depressed job market on deviant behavior in the workplace?

- Deviant behavior can include any instance of workplace indiscipline such as shirking, stealing, sabotage etc.
Motivation

Suppose we compare two scenarios. In the first one, everyone anticipates a benign recession (if at all). In the second one, everyone expects a severe recession (if at all).

- Under what scenario would deviant behavior in the workplace (on-the-job crime) be more?
- What is the impact of optimism about the future on deviant behavior?
The relationship between the severity of a recession and deviant behavior depends on two factors:

- Additional probability of being employed in the future of a worker who chooses not to commit a crime.
- The additional utility that a person gets from being a deviant, conditional on being employed in future.

Therefore the incentive to commit crime is non-monotonically related with the severity of an anticipated recession.
We also find that an increase in optimism about the future unambiguously increases deviant behavior.
Model

- Two periods- 1 and 2.
- Two possible states of the economy- H and L.
- Given state $s$ in period 1, the probability of state $s'$ in period 2 is $\gamma_{ss'}$. 

Everyone is employed during a boom while only a fraction of workers are employed during a recession.

\[ e_H = 1 \quad \text{and} \quad e_L < 1 \]

A person derives a private benefit \( B \) from an act of crime.

\[ B \sim [0, \bar{B}] \quad \text{with density function } g(\bullet) \]
Model

- Chance of being caught: $p < 1$.

- Therefore, a bad record implies that the person committed a crime in the past. However, a good record implies that the person is either innocent or was lucky in the past.
Model

- Punishment: A fine \( f \) and the possibility of being fired from the job (that depends on the state of the economy in future).
- Employers’ preference: (i) Experienced worker with a good record, (ii) inexperienced worker, and (iii) experienced worker with a bad record.
Period 2

Does not commit crime

$B^{**} \equiv pf$

Second offence

First offence

$B^* \equiv pf + \tau$

$B$
Plan of the talk

- The rest of the talk considers the case of a boom in the first period.
- The paper considers the case of a boom and a recession in period 1 separately.
Period 1

- Benefit from committing crime in period 1:
  - Private benefit from crime
  - No set up cost of crime in future.
- Cost of committing crime in period 1:
  - Fine (if caught).
  - Lower probability of employment in future.
### Period 1

- $\tilde{B}$: Type of the marginal criminal.

- $\lambda(\tilde{B})$: Proportion of workers employed in period 1 with a bad record (at the beginning of period 2).

\[
\lambda(\tilde{B}) = p\left[1 - G(\tilde{B})\right]
\]
What happens when a boom is followed by a recession?

Regime 3
Good: All employed
No record: Does not exist
Bad: Some employed

Regime 1
Good: Some employed
No record: Does not exist
Bad: None employed

\[ 1 - \lambda(\tilde{B}) \]

\[ e_L \]

\[ \tilde{B} \]
Probability of being employed in period 2 (conditional on a boom in period 1)

- \( q(A_1, s_1) \): Probability of being employed in period 2.

\[
\begin{align*}
q(I, H) & \quad q(C, H) \\
q(I, H) & \quad q(C, H) \\
1 - \gamma_{th} P & \quad 1 - \gamma_{th} P \\
\end{align*}
\]
In period 1, the following condition must hold in equilibrium:

\[ \widetilde{B} = pf + \tau + \theta_H (\widetilde{B}) \]

where \( \theta_H (\widetilde{B}) \) is the dynamic deterrence effect.
Dynamic Deterrence

\[
\theta_H(\tilde{B}) = [q(I,H) - q(C,H)]U_2(A_1 = I) \\
- q(C,H)[U_2(A_1 = C) - U_2(A_1 = I)]
\]

where \(U_2(A_1 = I)\) is the payoff of a person in period 2, given that the person is employed in period 2 and did not commit a crime in period 1.
Impact of a decrease in the severity of a recession

- Suppose labor demand during a recession goes up (that is, $e_L$ goes up).
- Such a change will impact dynamic deterrence by changing

$$
[q(I,H) - q(C,H)]
$$

and

$$
q(C,H).
$$
Case 1: Equilibrium is in Regime 1 (before and after the change)

- In Regime 1, only a fraction of the workers with a good record are employed if there is a recession in period 2.

- An increase in $e_L$ leads to an
  - increase in $[q(I,H) - q(C,H)]$, and an
  - increase in $q(C,H)$ as well.
Case 1: Equilibrium is in Regime 1 (before and after the change)

- The former decreases the incentive to commit crime in period 1, while the latter increases the incentive to commit crime.
- Hence, the net effect on the crime rate is ambiguous.
Case 2: Equilibrium is in Regime 3 (before and after the change)

- In Regime 3, during a recession in period 2, all of the workers with a good record are employed, and a fraction of the workers with a bad record are employed as well.
- An increase in $e_L$ leads to a
  - decrease in $[q(I,H) - q(C,H)]$, and an
  - increase in $q(C,H)$. 
Case 2: Equilibrium is in Regime 3 (before and after the change)

- Both of these increases the incentive to commit a crime in period 1.
- Hence, crime rate increases.
Case 3: Equilibrium shifts from Regime 1 to Regime 3

- An increase in $e_L$ has an ambiguous effect on:
  - $[q(I,H) - q(C,H)]$, but
  - increases $q(C,H)$.
- Hence, the net effect on the crime rate is ambiguous.
Impact of an increase in optimism

- Suppose there is an increase in $\gamma_{HH}$.
- This unambiguously increases the crime rate.
Concluding Remarks

- If the recession becomes less severe, then the crime rate increases unambiguously in only one of three possible cases.
- An increase in optimism increases the crime rate unambiguously.