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**LENIENCY PROGRAMS,
ENFORCEMENT ERRORS AND
EFFECTS FOR COOPERATION AGREEMENTS**

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Background

Leniency programs in Russia:

2007 -> 2009 -> 2012

- In 2008 FAS Russia ran 358 investigations of anticompetitive agreements - twice as much as in 2007
- In 2008 more than 500 companies applied for leniency

Horizontal cooperation agreements

- Article 11 on collusion, part 1 names per se prohibited clauses
- Part 1 Article 13 establishes a rule of reason approach to some agreements, but not those prohibited per se in Article 11
- Since 2012 - Part 1.1 Article 13, rule of reason for cooperation agreements, even if they include clauses named in Part 1 Article 11

MOTIVATION

- In 2008 FAS Russia ran 358 investigations of anticompetitive agreements - twice as much as in 2007
- In 2008 more than 500 companies applied for leniency
- Many cases - not cartels, but concerted practices, vertical and conglomerate agreements (Yusupova, 2013). Perhaps horizontal cooperation agreements?

Problem of type I errors?

- Standards of economic analysis: collusion vs. cooperation
- Asymmetric information between firms and the AA



Type I errors

BENCHMARK MODELS

- Motta, Polo (2003) - include type II errors
- Ghebrihiwet, Motchenkova (2010) - include type I errors, but:
 - “innocent” firms can’t participate in the program;
 - the probabilities of conviction are the same for both “innocent” and “guilty” firms.



No assessment of the impact on cooperation agreements that benefit social welfare

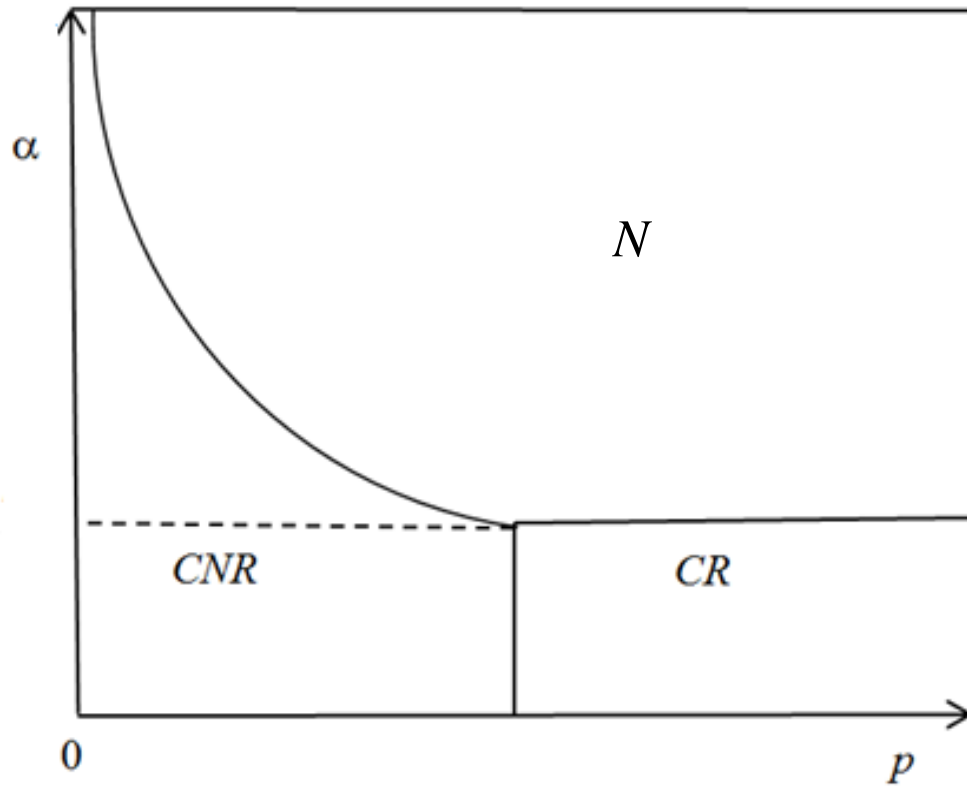
ASSUMPTIONS

1. Symmetric firms
2. $\Pi_M, \Pi_D, \Pi_{COOP}, \Pi_N$
3. Firms confess \rightarrow R or don't \rightarrow F. The investigation lasts 1 or 2 periods.
4. Leniency
 - full leniency for every firm that applies
 - application possible after the investigation starts
5. The AA opens an investigation with probability α_i , which ends in conviction with probability p_i
6. $\alpha_N=0,2\alpha$, $\alpha_D=0,4\alpha$, $\alpha_{COOP}=0,6\alpha$, $\alpha_M=\alpha$
7. $p_N=0,2p$, $p_D=0,4p$, $p_{COOP}=0,6p$, $p_M=p$

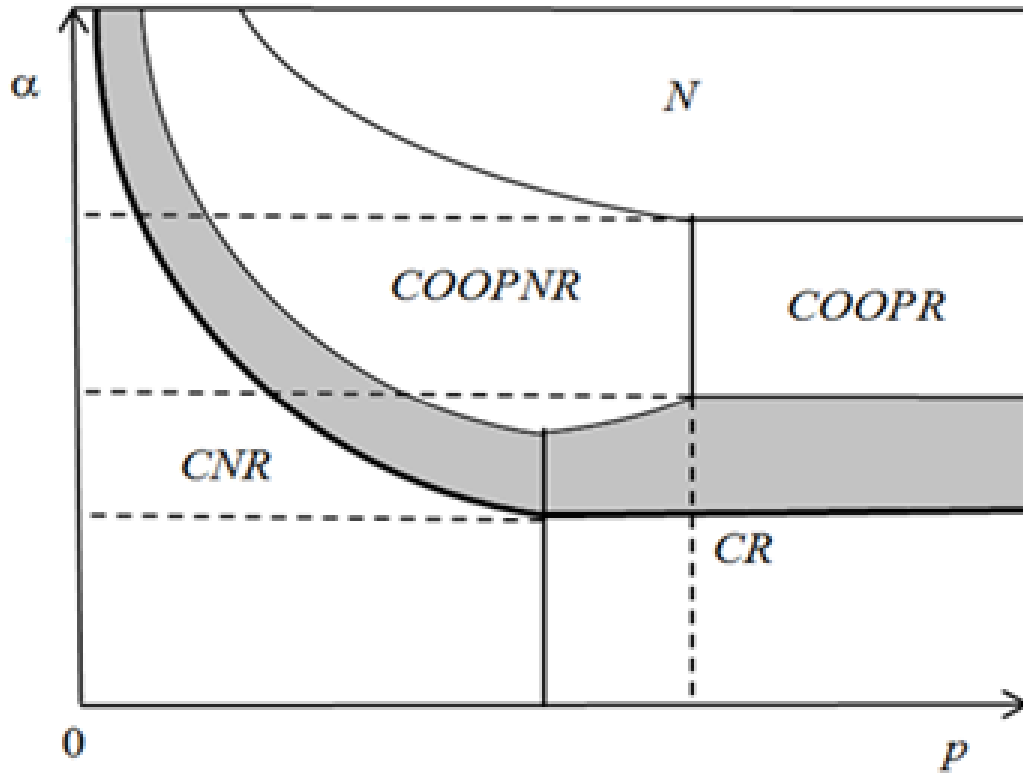
ASSUMPTIONS

- 1) **N** - Not Collude or Cooperate;
- 2) **CNR** - Collude and Not Reveal;
- 3) **CR** - Collude and Reveal;
- 4) **DNR** - Deviate and Not Reveal;
- 5) **DR** - Deviate and Reveal;
- 6) **COOPNR** - Cooperate and Not Reveal;
- 7) **COOPR** - Cooperate and Reveal.

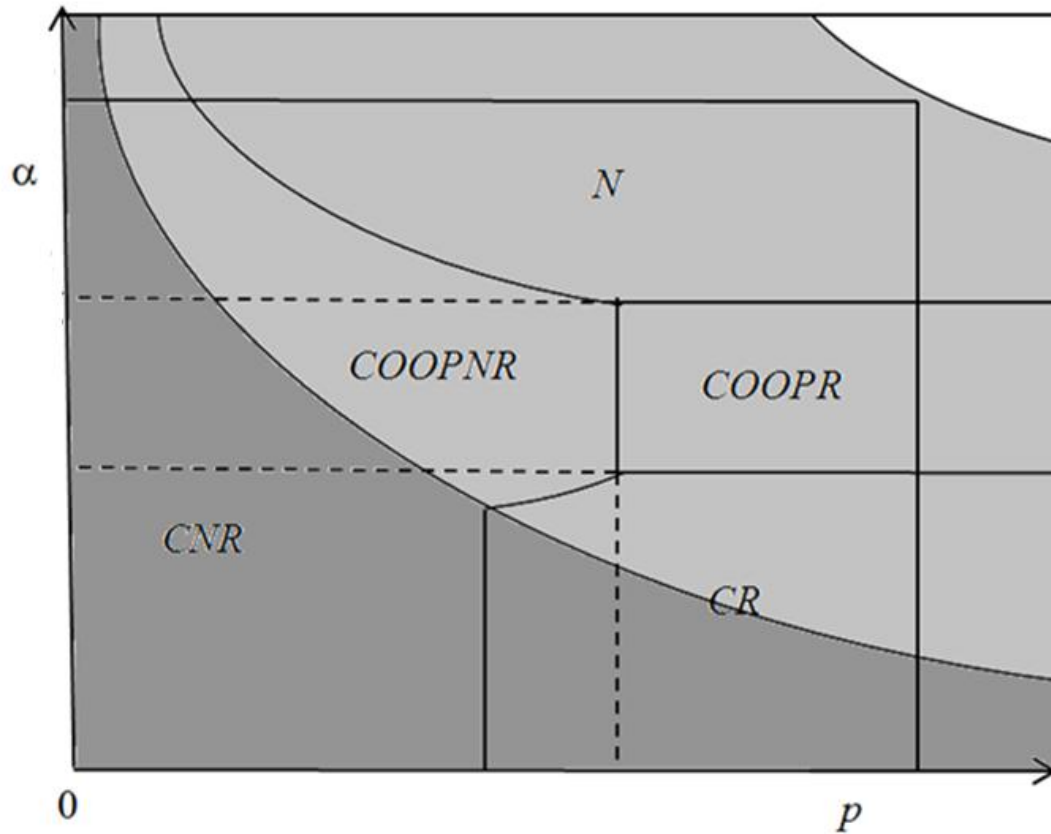
EQUILIBRIUM IN MOTTA, POLO (2003)



EQUILIBRIUM WITH TYPE I ERRORS AND COOPERATION



EFFECTS OF LENIENCY



- Deserved punishment effect
- Disrupted cooperation effect
- Prevented cooperation effect

CONCLUSION

1. Effects of hostility tradition
2. Shavell, Polinsky (1989) - type I errors increase incentive for breaking rules

vs.

Png (1986) - type I errors increase compliance

⇒ both effects are visible

THANK YOU!
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