

# EFFECTIVE CARTEL DETERRENCE IF CORPORATE GOVERNANCE IS IMPERFECT

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# THIS PRESENTATION

- Analysis and comparison of different legal regimes for deterring cartels
  - Pure corporate liability (as in the EU)
  - Pure individual liability (as in common law?)
  - Dual liability systems
    - Fines on both managers and firms (as in NL)
    - Also criminal sanctions for managers (as in UK and in US)
- Should firms be punished, or managers, or both?
  - Both pure systems have drawbacks
  - A dual system is preferable, but which one?

# STRUCTURE OF THE PRESENTATION

- Background
  - Origin of this project (follow-on to an EU case)
  - A little theory and some thoughts
  - Policy discussions: EU, NL, UK
- A model
  - Key assumptions
  - Variants: can the wage be conditioned on detection?
- Analysis of the model
  - The main results
- Policy conclusions

# BACKGROUND OF PROJECT

- 2007: EC fines members of lifts and escalators cartel (Kone, Otis, Schindler and ThyssenKrupp) for €992 million
  - Installation and maintenance of lifts and escalators in B, G, L, NL
  - Between 1995 and 2004, bid rigging, price fixing, market sharing and exchange of confidential information
  - As maintenance is tied to installation, the effects of the cartel may continue for 20 to 50 years
- Fines: K €142m, O €225m, Schindler €144m, T €480m
  - Kone received full immunity from fines under the leniency program in respect of the cartels in Belgium and Luxembourg
  - Otis NL received full immunity for Dutch cartel
  - ThyssenKrupp: repeat offender, fine increased by 50%
- Largest ever fines imposed by EC for cartel violations (2007)

# THE PROJECT FOR SCHINDLER

- Can such large fines be distortive?
  - If so, in what ways?
  - If so, are there alternatives?
- Even though the fines are very large, they do not succeed to deter all cartels
  - Are there alternatives?
  - In particular, with less distortions?
- This discussion has taken place more generally in EU, MS's (UK and NL) and (partly) academia

# BACKGROUND: BECKER & POLICY

- To deter illegal behavior (assuming risk neutrality), expected penalty should be larger than the benefit:
  - $B_f \leq \lambda_f P_f$  or  $B_m \leq \lambda_m P_m$
- As increasing  $\lambda$  is costly, while a fine is a transfer
  - Recommendation: monetary penalty as large as possible
- With fine on firm only:  $P_f \approx 100\%$  of *Turnover*
- Conclusion: current EU system is inadequate and an effective FoFO-system will be distortive
- Hence, put a penalty also on the manager
  - Strongest punishment: imprisonment
  - But if criminal sanctions, then lower  $\lambda_m$

# BACKGROUND: BECKER & AGENCY

- Becker's model does not deal with P-A structure
- If there is such structure, then?
  - Without imperfections, it does not matter (just one of the constraints should be satisfied)
  - If only A is punished, then incarceration might be needed
    - Good as P cannot indemnify that easily
    - Bad as incarceration is costly (and higher burden of proof)
  - So it may be better to punish P
    - Then P has incentive to induce law abiding behavior on A
    - If P can do that, and if A can be punished severely: fine
- But what if P cannot do that?
  - Our paper (as well as some others)

# POLICY BACKGROUND: NL

- 2007: Reform of the Dutch Competition Law
  - Should there be penalties on managers?
  - If so, what form should these take?
- Discussions in parliament
  - At the start: strongly in favor of criminal sanctions
  - Lawyers (and lobby?) warn against criminalization
    - Cartels and Dutch culture; Dutch legal culture
  - In current law: administrative fines only (max €450K)
- ACM practice since 2007: a few cases
  - Lack of attention for marginal deterrence (Wegener)
  - Is F allowed to pay the fine of M? (LHV)



# POLICY BACKGROUND: NL (2)

- Managers, those that ordered the violation and those that actually carried it out, can be given a fine of up to €450K
- Legal criteria for proof still unclear
  - Mix of competition law, commercial law, and criminal law
- Slavenburg II criteria:
- “Van feitelijk leiding geven aan verboden gedragingen kan onder omstandigheden sprake zijn indien de desbetreffende functionaris –hoewel daartoe bevoegd en redelijkerwijs gehouden- maatregelen ter voorkoming van deze gedragingen achterwege laat en bewust de aanmerkelijke kans aanvaardt dat de verboden gedragingen zich zullen voortdoen.”
- In any case:  $\lambda_m \leq \lambda_f$
- Effectiveness remains to be seen

# POLICY BACKGROUND: UK

- Enterprise Act of 2002 introduced personal penalties for hard core cartel offences:
  - Individual fines (as in NL)
  - Director disqualification orders (between 2 and 15 yrs.)
  - Imprisonment (up to 5 years)
- A House of Lords judgment in 2008 raised issues about the standard of proof
- As far as I know, up to now, there have not yet been criminal convictions in UK under this Act

# CONCLUSION FROM INTRO

- Competition Law Practice raises several issues
  - Now: under-deterrence under corporate liability only
  - Increased corporate fines likely to be distorting
    - Bankruptcies -> worse market structures
    - Other distortions?
  - Criminal sanctions are not as effective as thought
- Dual system could lead to improvement
  - But how to design?
- Back to first principles
  - Why not liability for manager only?

# THE MODEL

- Three actors: S, P and A
  - S determines the law (liability mechanism)
  - P proposes a wage contract for A
- A has a choice between 4 actions (see table)
  - Action C is illegal, may be punished
  - $\pi_H > \pi_L$  ;  $E\pi - c > \pi_L$  ; can  $w_H \neq w_D$ ?

ACTION	OUTCOME	A	P	S
Q	-	$u$	0	4 <sup>th</sup>
N	L	$w_L$	$\pi_L - w_L$	2 <sup>nd</sup>
R	L or H	$Ew - c$	$E\pi - Ew$	1 <sup>st</sup>
C	H or HD	$Ew - c - \lambda l_A$	$\pi_H - Ew - \lambda l_P$	3 <sup>rd</sup>

# THE MODEL'S ASSUMPTIONS

- S can punish only detection of illegal action
  - No subsidies for favorable outcomes
  - C detected with probability  $\lambda$ , hence,  $\lambda_A = \lambda_P$
- P offers a wage contract
  - Action of the agent is not observed directly
  - $w = (w_L, w_H, w_D)$ , possible restriction  $w_H = w_D$
  - We need to have  $Ew(-c) \geq u$  and  $w_S \geq 0$
- There is a limit on how much A can be punished
  - $l_A \leq L$ , whereas  $l_P$  is unrestricted
- Hence, limited liability and imperfect governance

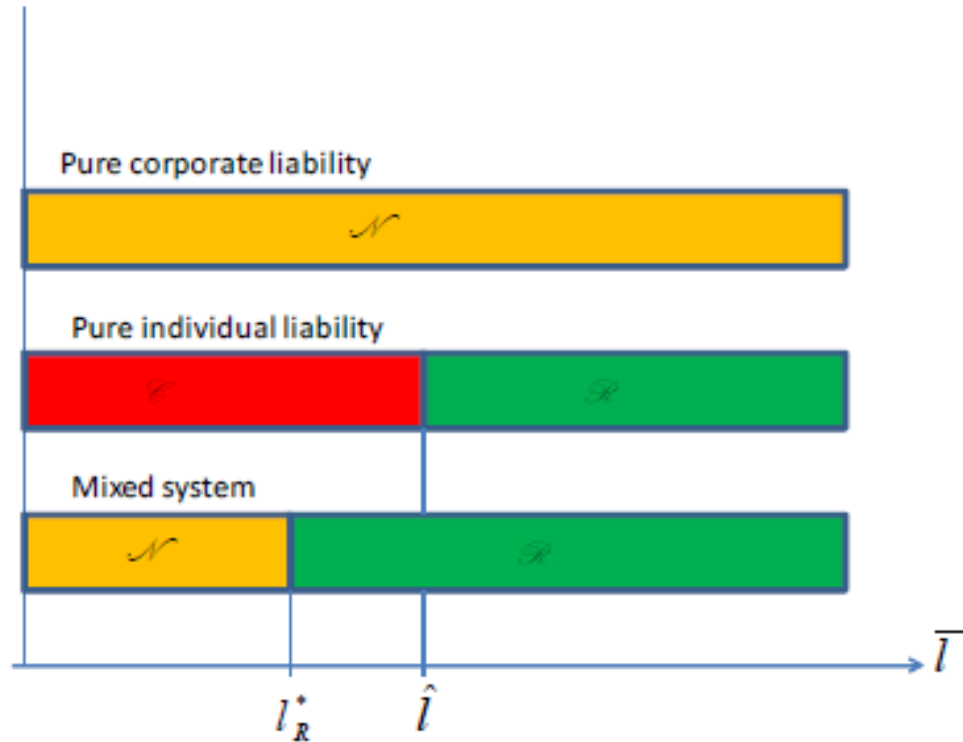
# BENCHMARK: NO ENFORCEMENT

- If there is no enforcement
  - $\lambda l_A = \lambda l_P = 0$
- Then the outcome is C
  - Trivial

# RESULTS: $W_H = W_D$

- Corporate liability only
  - The outcome is N: productive inefficiency (2<sup>nd</sup> best)
- Individual liability only
  - If  $l_A < L_{NI}$ , then outcome is C
  - If  $l_A > L_{NI}$ , then outcome is R
- Dual system
  - If  $l_A < L_N$ , then outcome is N
  - If  $l_A > L_N$ , then outcome is R
  - Where  $L_N < L_{NI}$
- Conclusion
  - The dual system improves on both, but not effective for small  $l_A$

# PICTURE: $W_H = W_D$





# RESULTS: $W = (W_L, W_H, W_D)$

- Corporate liability only
  - The outcome is R if  $u + p\Delta\pi > (1 - e(p, \lambda))c$
  - N otherwise
- Individual liability only
  - If  $l_A < L_{DI}$ , then outcome is C
  - If  $l_A > L_{DI}$ , then outcome is R
  - Where  $L_{DI} = (1 - p)\Delta\pi/\lambda$
- Dual system
  - If  $l_A < L_D$ , then outcome is N
  - If  $l_A > L_D$ , then outcome is R
  - Where  $L_D = (1 - e(p, \lambda))c - u - p\Delta\pi$
- Compared to the previous case ( $w_H = w_D$ ), we have:
  - $L_{DI} > L_{NI}$  (individual only: full contracting shrinks the range for R)
  - $L_D < L_N$  (dual system: full contracting enlarges the range for R)

# THE MAIN RESULTS

- 1. Current EU System (pure corporate liability)
  - With limited contracting, this system may yield productive inefficiency, and, hence, also allocative inefficiency
- With full contracting:
  - 2. If  $\lambda$  is large enough, 1<sup>st</sup> best can be reached under pure corporate liability, and more easily so if  $u$  is large
  - 3. If  $\lambda L$  is large enough, 1<sup>st</sup> best can be reached under pure individual liability
- Moving from limited to full contracting:
  - 4. Reduces the range of 1<sup>st</sup> best in the case of pure individual liability
  - 5. Enlarges the range of 1<sup>st</sup> best in case of a dual liability system; the larger  $u$  the larger that range

# POLICY CONCLUSIONS

- 1. The EU-system may have undesirable properties
  - Induces higher production costs
  - Hence, may lead to higher prices
- 2. A dual system functions better
  - We should allow full contracting
  - Are the worries of ACM in case of LHV justified?
    - Indemnification clauses are good
    - The firm insuring the manager is bad
- 3. It is easier to deter cartels if the job market for managers is good
- “Detection and conviction” probability is crucial
  - $0 \ll \lambda_m \leq \lambda_f$

# A THOUGHT ON ACM AND NL

- In NL, both F and M may be fined if there is a violation of the antitrust law
- Should both instruments be used in all cases?
  - Becker: Yes, why not?
  - Marginal deterrence considerations: No
    - Let the punishment fit the crime (Stigler, Law)
- ACM has followed Becker
  - Punishment of M in many cases
  - Not only for hard-core cartels, also for borderline cases
- Is this really effective?
  - “Bewust aanmerkelijke kans aanvaarden”

# THANK YOU!

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