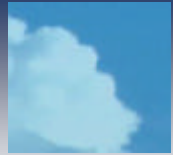


1st German Aviation
Research Seminar

**Predatory Pricing in
the Airline Industry –
Contemporary Strategic Theory,
Evidence and Policy**

Kai Hüsichelrath

**WHU Graduate School of Management
Vallendar, Germany**

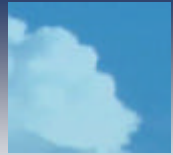


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The Next 25 Minutes ...

- Introduction
- Simple Framework
- Discussion
- Conclusion

Introduction → Simple Framework → Discussion → Conclusion

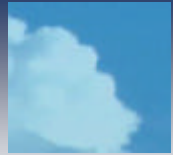


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Definitions

- Predatory behavior can be defined as the foregoing of maximum current profits in order to eliminate competitors *or* deter *or* delay entry, so that greater profits can be earned in the long run (*Dodgson (1990)*)
- An action is predatory if (*Cabral (1997)*)
 - a different action would increase the likelihood that rivals remain viable and
 - the different action would be more profitable under the counterfactual hypotheses that the rival's viability were unaffected
- Predatory Pricing (as one form of predatory behavior) in the airline industry is assumed, when an incumbent responds to market entry by greatly expanding capacity and low-fare seats (*Meyer (2000)*)

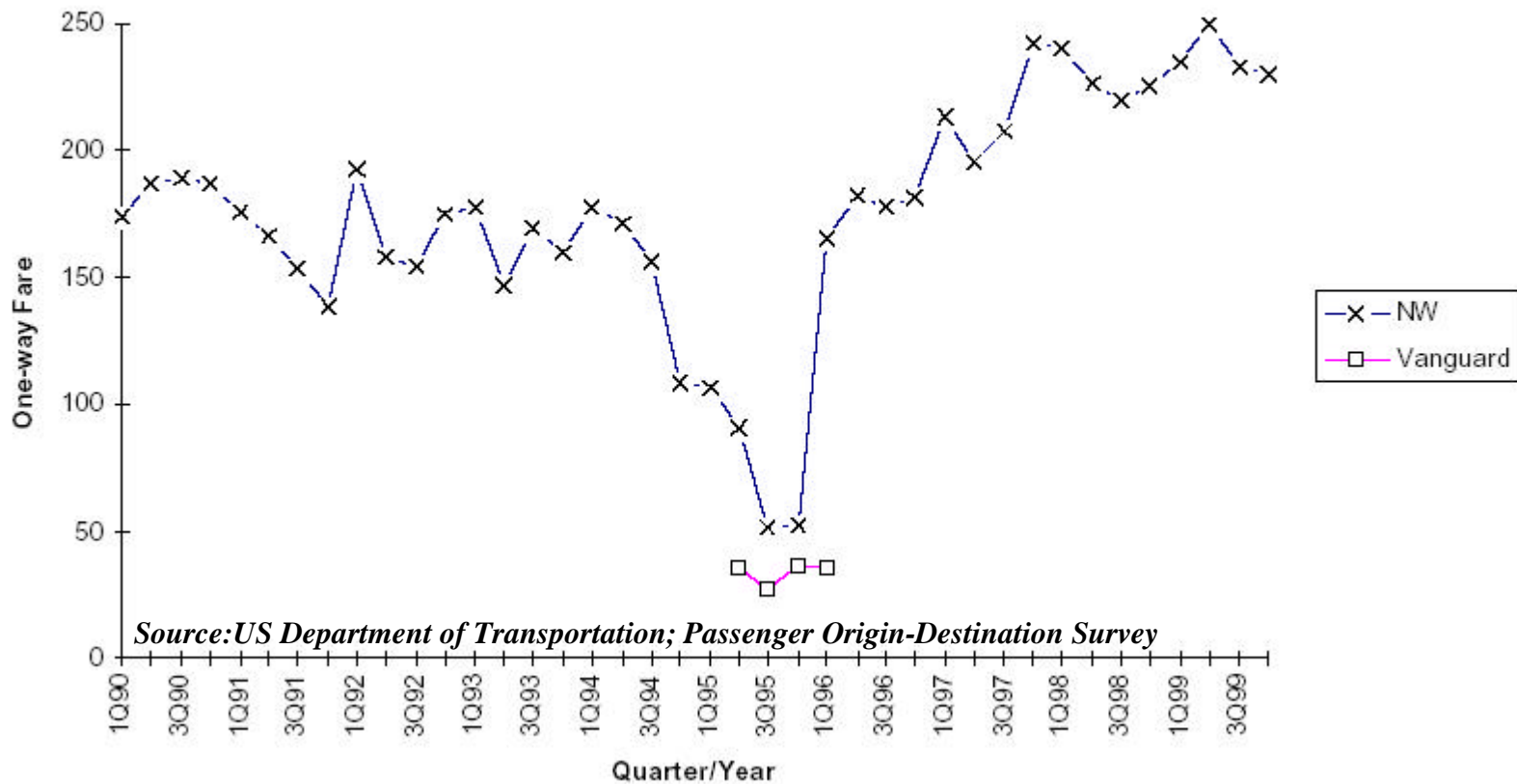
Introduction → Simple Framework → Discussion → Conclusion



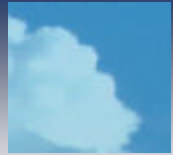
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An Example

Minneapolis-Des Moines Average Fare



Introduction → Simple Framework → Discussion → Conclusion

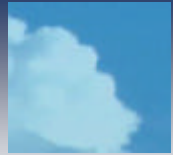


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Towards a Simple Framework

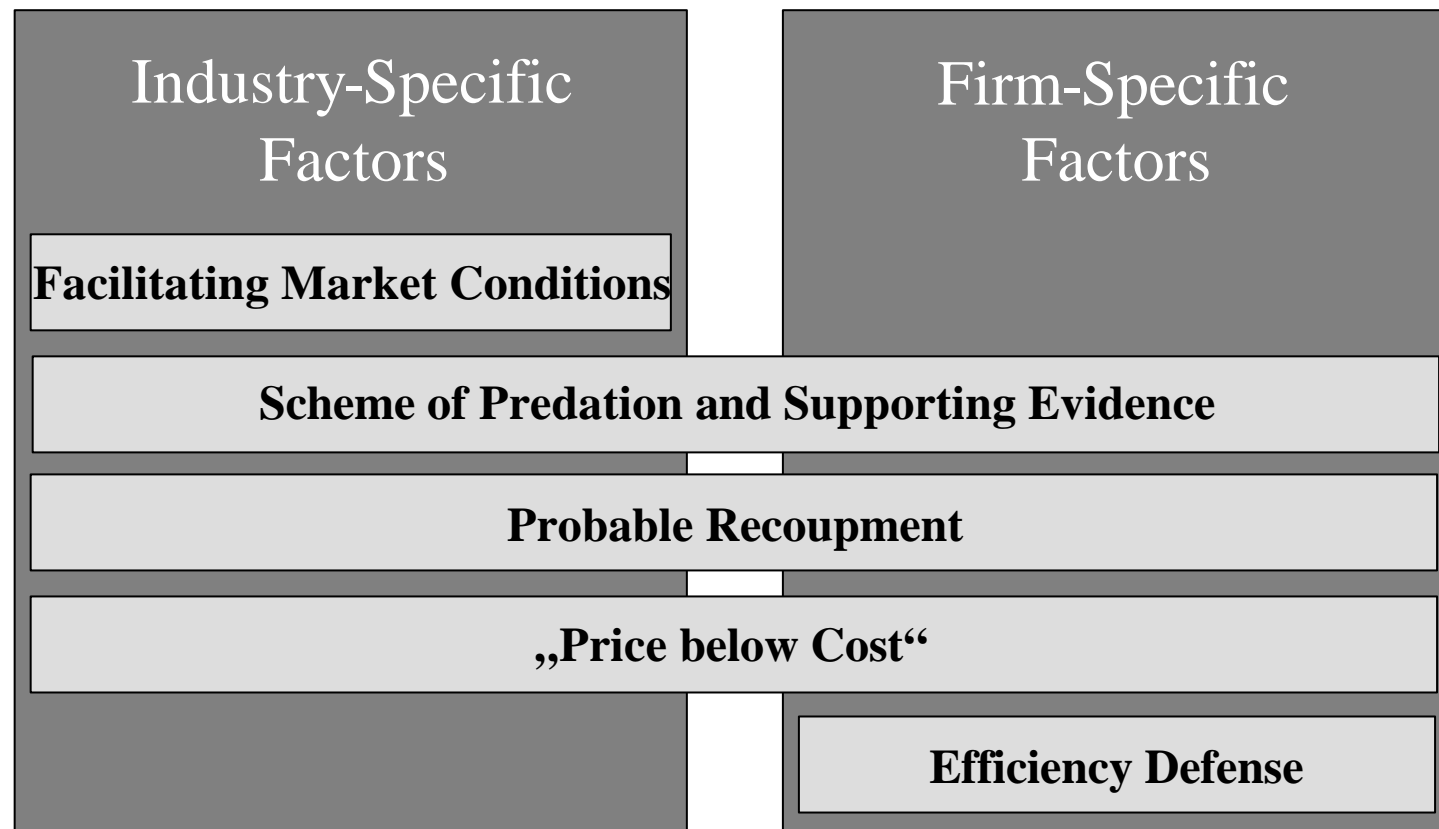
- History and economic (game) theory show that predatory pricing can be an instrument of abuse
- On the other side, price reductions are the hallmark of competition
- The scientific challenge is therefore twofold:
 - identify circumstances in which predatory pricing strategies are feasible, rational and welfare reducing
 - provide workable rules for setting policies
- ➔ A reasonable framework must integrate the problems of „feasibility and rationality“ and „detection“

Introduction ➔ Simple Framework ➔ Discussion ➔ Conclusion

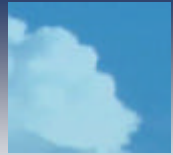


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Simple Framework



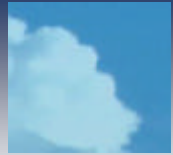
Introduction → Simple Framework → Discussion → Conclusion



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Facilitating Market Conditions ...

- High market share
(→ *relevant geographic and product market*)
- Medium to high entry and reentry barriers
(→ *e.g. sunk costs, excess capacity, reputation effects*)
- Low level of product differentiation
(→ *price elasticities, substitutes*)
- Multimarket contact
(→ *permanence of competition, rivalry in other markets [networks!]*)
- Short run pricing power
(→ *ability to raise prices*)
- Industry development and financial situation
- Informational asymmetries

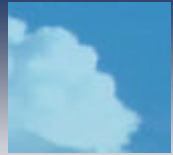


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... Scheme of Predation and Evidence ...

- The modern literature has developed new theories of how predatory pricing may be achieved consistent with rational behavior:
 - „The long purse“
 - having a long purse may provide a credible threat of post-entry predation and thus could deter entry
 - Reputation theory
 - phases of predation may create a reputation that will dissuade other entrants in other markets
 - Signaling theory
 - in contrast to reputation theory, the incumbent's motive is to induce exit rather than to deter entry
- These theories are the basis in order to show that predatory pricing is plausible ex ante and probable ex post (→ empirical evidence)

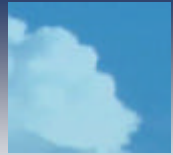
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... Probable Recoupment ...

- A plausible predatory scheme and supporting evidence are important conditions for the proof of predatory pricing
- An additional condition must check, if the predatory scheme has its planned
 - exclusionary effect on rivals and
 - injures consumers either now or in the foreseeable future
- This means that e.g. the exclusion of rivals is the intended *instrument* of the predatory scheme and the future raising of prices is its anticipated *effect*

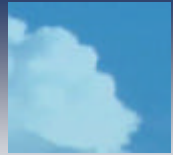


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... „Price below Cost“ ...

- The aim is proof of „price below cost“
- The basis for discussion is the (modified) Areeda-Turner-Rule used by many courts:
 - Price above ‚average total cost‘ (ATC) is conclusively lawful
 - Price below ‚average variable cost‘ (AVC) is presumptively unlawful
- Several shortcomings of this concept lead to the development of better cost concepts:
 - Substitution of ‚average avoidable cost‘ for AVC
 - Substitution of ‚long run average incremental cost‘ for ATC

Introduction → Simple Framework → Discussion → Conclusion

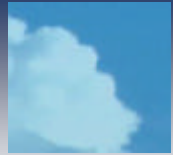


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... Efficiency Defense

- The aim is to eliminate cases where below cost pricing is efficiency-enhancing rather than predatory
 - Minimize losses stemming from unexpected market developments
 - Promotional Pricing
 - Learning-by-doing
 - Network externalities

- Proof of an efficiencies defense:
 - Plausible efficiencies gain
 - No less restrictive alternative
 - Efficiency-enhancing recoupment

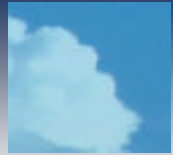


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Discussion

- The proposed framework includes the complex dynamic nature of predatory pricing described by modern game theory
- But the framework has a few shortcomings:
 - Limitation problem: The framework neglects other forms of predatory behavior
 - Clarity problem: The framework couldn't differentiate clearly between predatory pricing and other business strategies e.g. battles for market leadership, punishment phase in a cartel/collusion
 - Information problem: The framework needs a lot of confidential firm data which might be unavailable
 - Time Lag problem: A decision based on the framework might take too long to prevent market exit

Introduction → Simple Framework → Discussion → Conclusion



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Conclusion

- Predatory pricing can be a successful and fully rational business strategy
- Simple (static) price-cost-test doesn't take the strategic component of predatory pricing into account
- A reasonable framework has to cope with „feasibility and rationality“ and „detection“
- Framework solutions are far from being perfect
- Besides the prosecution of predatory pricing, governments should undertake complementary positive actions to promote airline entry and competition

Introduction → Simple Framework → Discussion → **Conclusion**

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Thank you for your attention!

Contact:

Kai Hüschelrath

WHU Graduate School of Management

Chair of Industrial Organization

Burgplatz 2, 56179 Vallendar, Germany

Tel: ++49-(0)261-6509-272

Fax: ++49-(0)261-6509-279

web: www.whu.edu/mikro

email: hueschel@whu.edu