The « *Oligopoly Problem* »: Beyond Merger Law?

NICOLAS PETIT, UNIVERSITY OF LIEGE (ULG)

ACLE SEMINAR, 14 MARCH 2011

NICOLAS.PETIT@ULG.AC.BE
HTTP://CHILLINGCOMPETITION.COM

Objectives

- Circumscribe the scope of the so-called « *oligopoly problem* »
- Review remedies applied in modern competition law against tacit collusion
- Discuss whether the current approach (i) delivers; and (ii) could be improved?

Outline

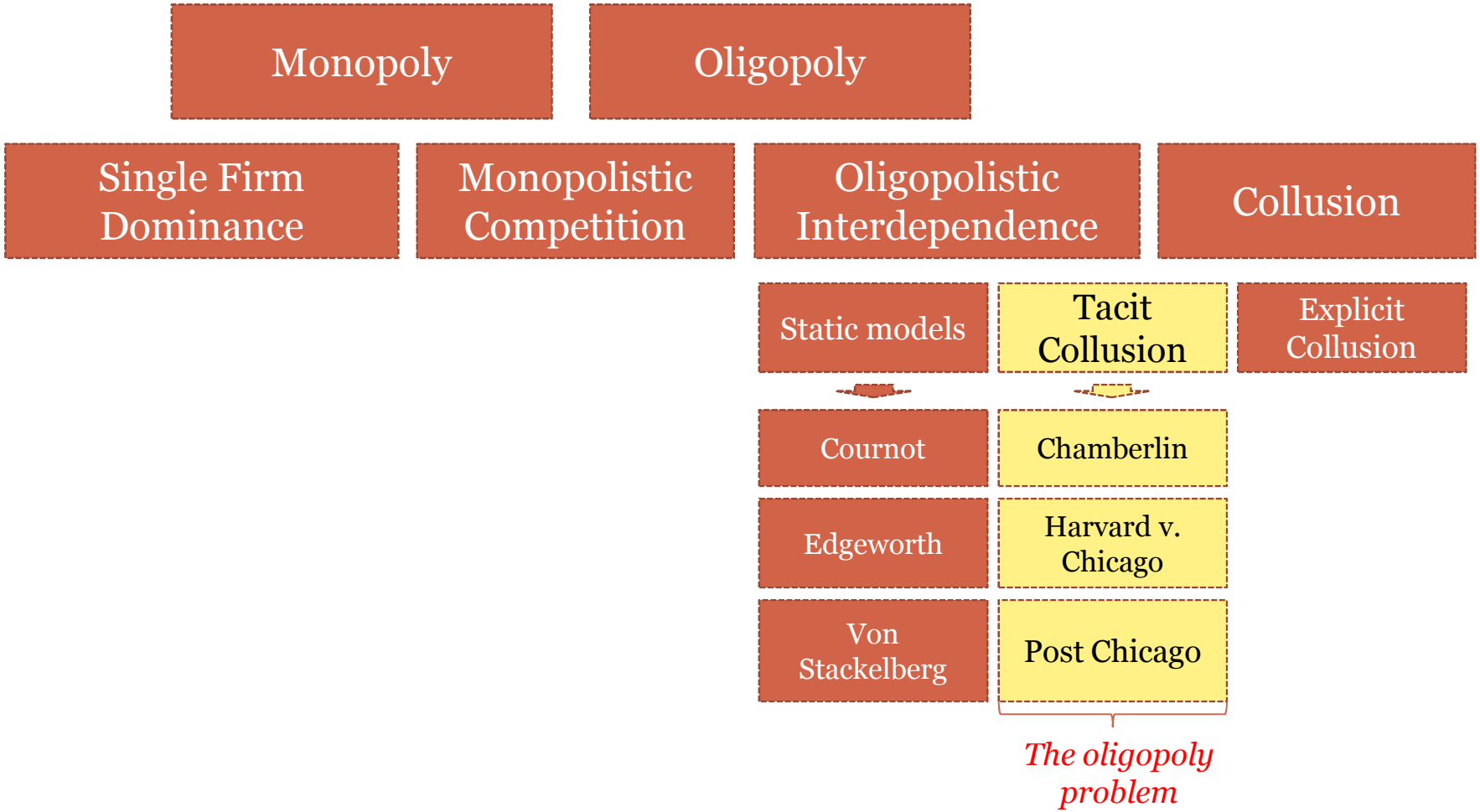
1. The « *Oligopoly Problem* »
2. Prevailing Approach in Modern EU Competition Law
3. Beyond Merger Law?
4. Ex post enforcement as the way forward?
5. Conclusions

1. The « *Oligopoly Problem* »

Introduction

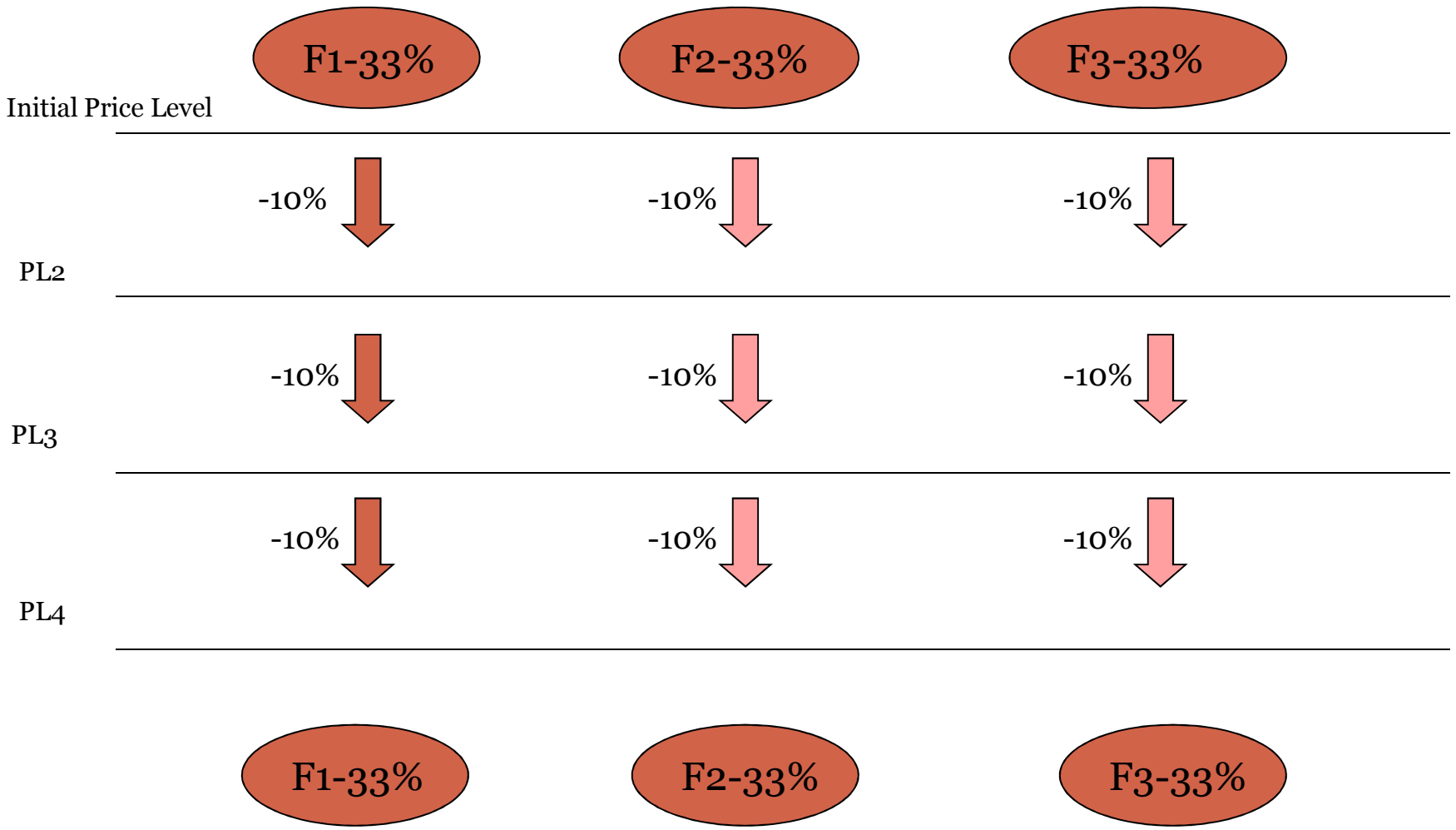
- Rise of giant oligopolies over the XXth century
- Early interest from economists
- Identification of a specific market failure
- Distinct from supra-competitive outcomes in classic oligopolistic interdependence models (Cournot, Edgeworth, Von Stackelberg)

Epistemological Overview



Overview of the Literature

- Chamberlin, « Value where sellers are few » (1929) *Quarterly Journal of Economics*, 63
  - In certain oligopolies, price cuts are useless
  - Oligopolists mimic each other's conduct
    - Prices remain abnormaly stable
    - Prices increase in parallel
  - Outcome similar to collusion / process different (no agreement)
  - « *Tacit collusion* », « *conscious parallelism* », « *parallel conduct* »



After four interactions on the market, the price drops by 30% and the oligopolists' MS remain stable: price competition is a loss-making strategy

Overview of the Literature

- Harvard => Structural issue
  - Bain, *Industrial Organization*, John Wiley & Sons, New York, 1968
  - Kaysen & Turner, Rahl, etc.
  - Structural presumptions of unreasonable market power
  - Neal Report (1967) and Industrial Reorganisation Act (1972)
- Chicago => Behavioral issue
  - Stigler, « Theory of Oligopoly », (1964), 72 *Journal of Political Economy*, 44
  - Structure is not sufficient to presume market failure
  - Tacit collusion is unstable, with constant incentives to deviate
  - Strict conditions must be met for oligopolists to coordinate=> monitoring mechanism

Overview of the Literature

- Post Chicago school and game theory
  - Formally explains how oligopolists can tacitly collude
    - In a one shot game, competition is the Nash equilibrium. Oligopolists will compete, even though cooperation would bring more profits
    - In a repeated game, cooperation (absent communication) is the Nash equilibrium. Oligopolists will cooperate tacitly, because with repeated games, they can (i) indirectly communicate; (ii) profits from deviation decrease/profits from coordination increase (discount factor issue)
  - Identifies 4 conditions for tacit collusion to happen
    - **C1** – Mutual understanding of the « *terms of collusion* » (focal point, signalling strategies, etc.)
    - **C2** – Punishment mechanism (credible, timely and deterrent)
    - **C3** – Monitoring mechanism
    - **C4** – Obstacles to entry
  - Conditions are influenced by market features (market structure, transparency, elasticity of demand, etc.)
  - Tacit collusion may occur in relation to prices, output, but also investments, product launch, etc.)

Overview of the Literature

- Since the 1970s, economists have devoted countless studies to the influence of specific market features on tacit collusion
  - Endogeneous market features
    - Market structure, firms' symmetry (costs, capacities, etc.), demand fluctuations, demand elasticity, price transparency, transactional features, innovation rate, etc.
  - Exogeneous market features
    - Contractual clauses (english clauses, MFN clauses, etc.), cross shareholdings, signalling strategies, joint ventures, basing point pricing, price regulation systems, etc.

Overview of the Literature

- Studies draw distinctions between:
  - « + factors »: those that foster tacit collusion
    - Market concentration fosters C1, C2 and C3
    - English clauses foster C1
  - « – factors »: those that undermine tacit collusion
    - Innovation undermines C1, C2 and C3
    - Product differentiation undermines C3
  - « mixed factors »: those that simultaneously foster/and undermine tacit collusion
    - Multimarket contacts foster C1, but have an ambiguous effect on C3

Overview of the Literature

- Recent studies
  - Behavioral economics => game theory is overly strict. Tacit collusion may be more frequent than predicted, and may in particular arise absent one of the four conditions (reputational effects, classwide spirit, etc.)
  - Other studies => tacit collusion is rare. Little empirical evidence + ambiguous results of controlled experiments (Stenborg 2004)

Bottom line(s)

- Tacit collusion is a serious market failure, which exhibits inefficiencies similar to cartels
  - Remedial intervention is warranted
- Tacit collusion is unfrequent
  - Intrusive, systematic remedies (reporting, notifications, etc.) should be avoided
- Tacit collusion is caused by a range of factors (not only market structure)
  - Remedies must be flexible, and target the various sources of tacit collusion (incl. facilitating practices)
- Tacit collusion is difficult to predict
  - *Ex ante* remedies are unsuitable
- Tacit collusion is rational conduct (or more precisely, oligopolists do not intend to inflict harm, they have no other choice)
  - Punitive remedies (sanctions, etc.) are not appropriate

2. Current Approach in Modern Competition Law

2.1. Statutory Oligopoly Gap

- Modern competition statutes (US *Sherman Act*, TFEU, etc.) say nothing of oligopolies, let alone tacit collusion => Oligopoly gap?
- Query whether open-ended provisions of the TFEU may be interpreted to cover tacit collusion => Closing the gap?
- Focus on the EU, yet similar solutions in the US and in the Member States

Oligopoly as a Defense under Anti-Conspiracy Provisions (Article 101 TFEU)

- Early, the EU courts have defused the applicability of anti-conspiracy provisions to tacit collusion (Article 101 TFEU)
  - *Sugar* case: « *article 101 TFEU does not deprive economic operators of the right to adapt themselves intelligently to the existing and anticipated conduct of their competitors* »
  - *Dyestuffs* and *Woodpulp* cases: Observed parallel conduct is only unlawful if caused by concerted practice. Other causes, such as oligopolistic dynamics, exclude the applicability of Article 101 TFEU => oligopoly defense
- Rationale
  - Unfair to punish firms for purely rational conduct
  - Unworkable to request firms to behave irrationally to comply with the law

Collective Dominance (Article 102 TFEU) All but Tacit Collusion (1)

- Article 102 TFEU talks of the abusive conduct of « *one or more undertakings* ».
- In *Italian Flat Glass*, the GC acknowledges that Article 102 TFEU covers a dominant position held by several independent undertakings, which are bound by « *economic links* ».
- In subsequent case-law, the concept of abuse of collective dominance is applied to situations alien to tacit collusion
  - Liner conferences in the maritime sector (*CMB*, *TACA*, etc.)
  - Aggregation of local individual dominant positions (*Almelo*)
  - Vertical dominance held by a mother and subsidiary (*Irish Sugar*)

Collective Dominance (Article 102 TFEU) All but Tacit Collusion (2)

- In *Laurent Piau v. Commission*, the General Court states that collective dominance under Article 102 TFEU covers oligopolistic tacit collusion. Yet the case exhibits none of the features of tacit collusion
- Guidance Communication on the Commission's Enforcement Priorities in applying Article 102 TFEU to Abusive Exclusionary Conduct (2009)
  - Silent on abuse of collective dominance (>< Discussion Paper)
  - Implicit Commission acknowledgement that it will not use Article 102 TFEU to combat tacit collusion

  => Legal basis exists, but was never applied
- Rationale
  - Punitive provision which shall not be applied to purely rationale conduct
  - If collective dominance means tacit collusion, unclear what the abuse is
  - Most of the exclusionary abuses sanctioned when they come from single dominant firm (rebates, predatory pricing, etc.) are actually akin to pro-competitive cheating in a collusive oligopoly

2.2. Merger Regulation Monopoly over Tacit Collusion

- Adoption of the Merger Regulation in 1989 (EUMR)
- EU-wide mergers subject to Commission *ex ante* scrutiny
- Commission can block mergers creating or strenghtening dominant positions
- Proactive decisional practice and case-law, which routinely scrutinizes mergers conducive to tight oligopolies through concept of « *collective dominance* »
- Rationale
  - Absent a satisfactory *ex post* remedy, *ex ante* remedy preventing the apparition of tacit collusion is appropriate => « *Always better to put care before cure* » (G. Drauz)
  - Tacit collusion is caused by deficiencies in market structure. A structural response is warranted
- Progressive refinement of wording (coordinated effects) and analysis (from « *checklist* » approach to *Airtours*+horizontal guidelines)

The Commission's Track Record

- EUMR enjoys a *de facto* jurisdictional monopoly over collective dominance issues
- Between 1990 and 2006, risks of collective dominance has been scrutinized in 127 decisions
- Systematic review of risks of coordinated effects in horizontal mergers on tight oligopolies (5-4; 4-3; 3-2 mergers) + non horizontal mergers
- Out of 21 prohibition decisions, the Commission has forbidden, directly or indirectly, 4 mergers on grounds of tacit collusion (*Gencor/Lonrho, Airtours/First Choice, Alcan/Pechiney* and *SCA/Metsä Tissue)*

Remedies

Up until June 2009, the Commission has applied remedies in order to resolve coordinated effects concerns in 34 decisions

Case	Decision Date	Type of Procedure	Anticipated Market Structure	Type(s) of Remedy
Nestlé/Perrier	22/07/1992	Phase II	Duopoly	Type I and III
Kali + Salz/MDK/Treuhand	14/12/1993	Phase II	Duopoly	Type II
ABB/Daimler-Benz	18/12/1995	Phase II	Duopoly	Type I
Allianz/AGF	08/05/1998	Phase I	Duopoly	Type II
Danish Crown/Vestjyske Slagterier	08/03/1999	Phase II	Duopoly	Type I, II and III
Axa/GRE	08/04/1999	Phase I	Duopoly	Type II
Rohm and Haas/Morton	18/04/1999	Phase I	Duopoly	Type II
Vodafone/Airtouch	21/05/1999	Phase I	Duopoly	Type II
Exxon/Mobil	29/09/1999	Phase II	4-3 (and more)	Type II
New Holland/Case	28/10/1999	Phase I	Duopoly	Type I
AKZO Nobel/Hoechst Roussel	22/11/1999	Phase I	4-3	Type I
Air Liquide/BOC	18/01/2000	Phase II	Duopoly	Type I
Alcan/Alusuisse	14/03/2000	Phase II	Duopoly	Type I
VEBA/VIAG	13/06/2000	Phase II	Duopoly	Type II
REXAM(PLM)/American National Can	19/07/2000	Phase I	Duopoly	Type I
France Télécom/Orange	11/08/2000	Phase I	Duopoly	Type II
Grupo Villar Mir/EnBW/ Hidroeléctrica del cantabrico	26/09/2001	Phase II	Duopoly	Type I
Norbanken/Postgirot	08/11/2001	Phase I	Duopoly	Type II
Shell/DEA	20/12/2001	Phase II	Duopoly	Type I and II
BP/E.ON	20/12/2001	Phase II	Duopoly	Type I and II
EnBW/EDP/Cajastur/ Hidrocantabrico	19/03/2002	Phase I	Duopoly	Type I
Solvay/Montedison-Ausimont	09/04/2002	Phase I	Duopoly	Type I
Bayer/Aventis Crop Science	17/04/2002	Phase II	Duopoly	Type I
Wallenius Lines AB/ Wilhelmsen ASA/Hyundai Merchant Marine	22/11/2002	Phase I	3	Type II
Air Liquide/Messer Targets	16/04/2004	Phase I	Duopoly	Type I
AREVA/Urenco/ETC	06/10/2004	Phase II	Duopoly	Type II
AP Moller-Maersk AS/P&O Nedlloyd (PONL)	29/07/2005	Phase I	[…]	Type II
Amer/Salomon	12/10/2005	Phase I	Duopoly	Type II
TUI/CP Ship	12/10/2005	Phase I	[...]	Type II
Linde/BOC	06/06/2006	Phase I	Duopoly	Type I and II
Antalis/MAP	24/10/2007	Phase I	Duopoly	Type I
Lesaffre/GBI UK	11/07/2008	Phase I	Duopoly	Type I
ABF/GBI Business	23/09/2008	Phase II	Duopoly	Type I
RWE/Essent	23/06/2009	Phase I	Duopoly	Type I

Conclusion on Current Approach

- Full *ex ante* enforcement system under merger control rules
- No *ex post* enforcement of statutory behavioural provisions
  - Article 101 TFEU is inapplicable
  - Article 102 TFEU is applicable, but (i) scope unclear; and (ii) Commission unwilling to use it
- Application of the EUMR to tacit collusion is subject to very little criticism. Practitioners support this approach (Temple Lang, 2000; Hawk and Motta, 2008)
  - Firms know when they will be subject to EUMR proceedings, whereas risk of Article 102 TFEU proceedings is unpredictable
  - Moral hazard? Systematic testing under the EUMR is lucrative?

3. Beyond Merger Law?

3.1. Intrinsic Flaws of the EUMR (1)

i. Preventive scope of the EUMR is limited
   - Mature oligopolies
   - Internal growth
   - Candid view that ultimate preventive instrument => many other uncovered practices may turn an oligopoly from competitive to tacitly collusive (minority shareholdings, english clauses, etc.)

Important risk of type II errors

ii. Predictive power of tacit collusion theory is low
   - Stigler => *"with oligopoly, virtually everything is possible"*
   - Shapiro (1996), Scheffman and Coleman (2003), Slade (2004)
   - Many "*mixed factors*" => issues of arbitrariness

Important risk of type I and II errors

iii. Systematic scrutiny of coordinated effects under the EUMR is costly, as compared to the allegedly limited occurrence of tacit collusion

3.1. Intrinsic Flaws of the EUMR (2)

iv. Procedural framework is ill-suited

- Big cases, which involve a quasi-sectoral inquiry, incompatible with (i) time limits under EUMR; (ii) bilateral nature of EUMR proceedings (notifying parties and Commission)
- Even if the Commission requests feedback of competitors, risks that they will support pro-collusive mergers => adverse selection

Important risk of type II errors

v. Devising adequate corrective measures is complex

- Type I remedies (remedies creating or restoring 'competitive forces' external to the 'core' oligopoly)
  - Cooperation effect
  - Symmetry effect
- Type II remedies (remedies severing links amongst oligopolists)
  - Enforcement issues (goodwill of third parties, etc.)
- Type III remedies (remedies removing facilitating practices)
  - Scope issues (parties can only eliminate their own facilitating practices, and can do nothing about market wide facilitating practices => english clauses, etc.)

3.2. Side-effects of Anticartel Policies

- Drastic toughening of anticartel policies in the world
  - Firms incentivized to resort to looser communication techniques which fall short of Article 101 TFEU
    - Unilateral signaling through press/radio announcements;
    - *Atlantic Sugar* – Prices posted in lobby of one firm that rivals could view
    - "*Hub and spoke*" communication through intermediaries
- Clear success of leniency programmes in the world
  - Firms, in particular risk averse ones, incentivized to report loose forms of collusion (*e.g.* unilateral signaling)?

3.3. Risks emanating from the Open-Textured Concept of Abuse of Collective Dominance

- Open-ended content of abuse of collective dominance: tacit collusion >< parallel behaviour >< oligopolistic interdependence >< non intensive competitive behaviour? (Mezzanote, 2010; Hawk and Motta, 2008)
  - Legal uncertainty for firms and their counsels
  - Misuse of powers => loosely defined concept may be used to regulate all types of oligopolies, including non collusive ones => *e.g.* retail banking markets
- Unclear conditions for the proof of collective dominance under Article 102 TFEU => Emergence of structuralist national case-law on abuse of collective dominance, which often equates oligopolistic market structure with holding of a collectively dominant market share (regardless of C1, C2, C3, and C4)

4. *Ex Post* Enforcement as the Way Forward?

4.1 Doctrinal debate (1)

- Theory of optimal enforcement: most enforcement systems rely on a fluctuating balance of *ex ante/ex post* intervention (Shavell)
- Given the costs and errors arising from full *ex ante* enforcement against tacit collusion, there is scope for an *ex post* enforcement mechanism
  - Regulatory mechanism (UK-like MIRs)? => but very intrusive
  - Sector-specific instrument (telcos, energy, etc.)? => but limited scope
  - Deconcentration legislations? => but important politicization and overly structural approach fraught with inefficiencies

4.1. Doctrinal debate (2)

- Given the costs and feasibility issues of devising a *sui generis* remedy against tacit collusion, should/can the existing *ex post* competition rules be used as a complementary mechanism?
  - Petit (2007)
    - Explore use of Article 101 to control facilitating practices that create links amongst oligopolists
    - Explore how to use Article 102 TFEU on tacitly collusive oligopolies through the concept of "*abuse of collective dominance*".
  - Mezzanote (2009)
    - Article 101 TFEU only encompasses a limited number of facilitating practices (?)
    - Article 102 TFEU shall not be used to regulate tacit collusion:
      - The *Don Quixote* argument (there's no such thing as tacit collusion, hence there's no such thing as a gap => technique involves drawing distinctions with unconscious parallelism, parallel behavior and tacit collusion)
      - The *Leviathan* argument (applying article 102 TFEU would involve heavy-handed, disproportionate interventions on markets)

4.2 Facilitating Practices

- Article 101 TFEU covers many practices which are *prima facie* efficient, but which create problematic bonds amongst oligopolists:
  - Informational links (exchange of industry data)
  - Industrial and commercial links (JVs)
  - Financial links (cross shareholdings, interlocking directorates)
  - Vertical links (common agency systems, MFN clauses)
  - Intellectual links (transfer of technology agreements)
- Whilst many are covered, scarce decisional practice (only Guidelines), hence little awareness/guidance
- Old-fashioned substantive standards, based on checklist analysis, which would deserve to be refined pursuant to C1, C2, C3 and C4
  - Example of information exchange agreements in recent Guidelines on horizontal cooperation agreements ("checklist approach" rather than systematic C1, C2, C3, C4 approach)

4.3 A Proposed Theory of « *Abuse of Collective Dominance* »

- Devise an *ex post* remedy which:
  - Alleviates the concerns – or some of them – raised by the EUMR's monopoly over tacit collusion
  - Clarifies the concept of abuse of collective dominance and limits risks of erratic application beyond tacit collusion
  - Fits with the standard case-law under Article 102 TFEU

First component – Collective dominance

- Under Article 102 TFEU, there is collective dominance where firms present themselves on the market as a "*collective entity*" (*CMB v. Commission*)
- This means that Article 102 TFEU refers to an observable situation of tacit collusion (*Laurent Piau v. Commission; Atlantic Container Lines v. Commission*), as opposed to a market where tacit collusion has not yet, but may occur (Petit, 2007; Massey and McDowell, 2010)
- Interpretation which presents several merits
  - Holding a collective dominant position is not unlawful. Only the *abuse* of a collective dominant position is unlawful. Hence, observed tacit collusion is not incriminated in itself. Firms are thus not blamed for purely rational conduct. Need for more.
  - Pure *ex post* analysis which limits *ex ante* speculation errors => tests of performance can be undertaken
  - Less constraining procedural framework (no deadline)

Second component – Abuse

- Case-law only says that abuse can be individual or collective
- Abuse can be any conduct with anticompetitive object/effects
- Overview of the literature
  - Excessive prices?
    - Whish
    - Supra-competitive pricing is the essence of tacit collusion. Need more than this to find an abuse.
    - Little remedial interest: the problem with tacit collusion does not lie in the price *level*, but in the fact that oligopolists' prices are *uniform*
  - Legalistic approach?
    - Stroux
    - Same as abuses of single firm dominance, in particular, exclusionary ones (rebates, discounts, price discrimination, etc.)
    - Perverse effects => In the context of tacit collusion, conduct which is often pro-competitive. Prohibiting an individual oligopolist to engage into such practices risks chilling his incentives to cheat
  - "Facilitating practices"?
    - Korah, Monti, former Canadian competition law
    - Interesting, but if collective dominance is lawful, practices which create collective dominance ought to be deemed lawful

Second component – Abuse

- Alternative proposal
  - Dynamic approach: abuse should catch conduct which artificially protects the tacitly collusive situation from natural dislocation
  - Over time, situations of tacit collusion are likely to be undermined by two sets of external pressures:
    - Entry of a new player
    - External shock (natural disaster, change in tax rates, rise of new technological standard, etc.) => firms must adjust commercial conduct to new circumstances, but cannot communicate
  - To remove risks of dislocation of tacit collusion, oligopolists may, individually or collectively, adopt
    - Protective behaviour, which seeks to *deter*, *punish* or *tame* new entrant (*e.g.* acquisition of minority shareholding in new entrant)
    - Adaptative behaviour, which seeks to adjust the tacitly collusive equilibrium to the new circumstances (*e.g.* unilateral signaling on petrol surcharge following 9/11; French mobile communications market following increase of VAT rate; launching of complaints against Qualcomm with W-CDMA standardization ?)

Assessment

Pros

- Tacit collusion is not in itself unlawful
- *Ex post* proof is more robust
- Intervention is less systematic under Article 102 TFEU
- Ability to correct some type II errors under EUMR
- Congruent with traditional Article 102 TFEU case-law
- Intelligible theory of harm, which stakeholders (firms, NCAs, courts) can understand
- Twinning of Article 102 TFEU and EUMR, as in other disciplines
- Predictability => intervention contingent on threat of effective entry/external shock

Cons

- *Ex post* proof may be demanding (Mezzanote, 2010)
- Identification problem => Competition also brings about parallel conduct (Mezzanote, 2010). Risk of inferential errors can however be limited by proof that parallel conduct is caused by C1; C2; C3; and C4

5. Conclusions

- Challenges for future research
  - Search for market instances supporting a finding of abuse of collective dominance
  - Scrutinize evolution of markets where Commission considered collective dominance issues under EUMR
  - Clarify the theoritical interplay between *ex ante* and *ex post* enforcement
- Challenge for future case-law
  - Develop modern case-law in relation to facilitating practices under Article 101 TFEU
  - Need a test case to assess whether proposed Article 102 TFEU approach is workable