The Impact of Cartels on National Economy and Competitiveness

A Lithuanian Case Study
### 3 Cartel Markets

- **3.1 Cartel During Different Business Cycle Stages** 69
  - **3.1.1 Cartel During the Boom Phase of Business Cycle** 71
  - **3.1.2 Cartel During the Decline Phase of Business Cycle** 72
  - **3.1.3 Cartel During the Depression Phase of Business Cycle** 73
  - **3.1.4 Cartel During the Recovery Phase of Business Cycle** 75

- **3.2 Characteristic Features of Industries with Increased Cartelisation Risks and Identification Thereof in Lithuania** 78
  - **3.2.1 Key Indications of Cartel Markets** 79
  - **3.2.2 Cartel Markets in Lithuania: Identification and Features** 83
  - **3.2.3 Economic Methods in Cartel Detection** 91

### References 93

### 4 Legal Regulation of Cartels

- **4.1 Reasons and Objectives of Cartels Regulation** 97
- **4.2 Regulation of Cartels in the EU and in Lithuania** 101
- **4.3 Detection of Cartels: Authorities and Measures in the EU and in Lithuania: System of Fines** 106
  - **4.3.1 EU Network of Competition Authorities** 106
  - **4.3.2 EU Commission** 108
  - **4.3.3 Lithuanian Competition Council** 108
  - **4.3.4 Cartel Fining System** 110
- **4.4 Measures to Prevent Cartels: Peculiarities and Problems of Their Application in the EU and in Lithuania** 115
  - **4.4.1 Leniency Programmes** 115
  - **4.4.2 Private Actions for Damages Caused by Cartels** 119
  - **4.4.3 Problems Concerning Imposition of Individual Liability for Cartel Activity** 122
  - **4.4.4 Restrictions on Participation in Public Procurement Procedures** 123
  - **4.4.5 Rewards to Natural Persons for the Provision of Information About a Cartel** 124
  - **4.4.6 Competition Law Compliance Programme** 125
- **4.5 Main Problems of Implementing Competition Policy in Respect of Cartels in Lithuania and Solutions to them** 126

### References 131

### 5 Analysis of the Impact of Cartels on National Economy and Competitiveness

- **5.1 Cartel and Market Inefficiency (Deadweight Loss)** 135
- **5.2 Cartel Adverse Impact on Economy and Competitiveness** 138
  - **5.2.1 Cartel Adverse Impact at National Level** 138
  - **5.2.2 Cartel Adverse Impact at International Level** 143
- **5.3 Cartel Positive Impact on Economy and Competitiveness** 148

### References 152
6 Critical Analysis of Economic Efficiency of Fines Imposed on Cartels ........................................... 155
  6.1 Cartels and Antitrust Policy ........................................ 156
  6.2 Theoretical Concept of Optimal Fines ............................. 158
  6.3 Deterrent Effect of Fines ........................................... 161
  6.4 Empirical Research on the Economic Efficiency of Fines ....... 165
References ................................................................. 168

7 Methodological Principles of Assessing Cartel Harm (Effects) .... 173
  7.1 Assessment of Harm in Social-Economic System: Role and Principles ........................................... 174
  7.2 Parties Affected by Cartels ........................................ 177
  7.3 Quantitative Assessment of Cartel Effects ........................ 180
  7.4 Phases of Effects Estimation ....................................... 188
  7.5 Methods for Estimating Harm Caused by Cartels ................. 191
    7.5.1 Overcharge Calculation ....................................... 193
    7.5.2 Calculation of the Pass-On of Overcharges ................. 198
    7.5.3 Evaluation of Lost Profit (Losses) ......................... 199
    7.5.4 Methodology for Cartel Effects Assessment Applied by Competition Supervisory Authorities .......... 200
  7.6 Practical Difficulties in Harm Assessment ......................... 203
  7.7 Aspects of Increasing Harm Estimation Accuracy ................. 208
References ................................................................. 212

8 Assessment of Cartel Impact on the National Economy: Integrated Model ........................................... 217
Reference ................................................................. 229

9 Empirical Application of a Model for an Integrated Assessment of Cartel Impact on the National Economy in the Case of Lithuania ......................................................... 231
  9.1 Integrated Assessment of the Paper Cartel’s Impact on the National Economy ................................ 232
    9.1.1 Description of Paper Cartel Products ......................... 233
    9.1.2 Paper Cartel Market Description ............................. 233
    9.1.3 Paper Cartel Performance Analysis .......................... 233
    9.1.4 Identification of Parties Affected by the Paper Cartel ... 234
    9.1.5 Objects Affected by the Paper Cartel ....................... 235
    9.1.6 Modelling of a Counterfactual Scenario for the Paper Cartel .............................................. 235
    9.1.7 Evaluation of the Paper Cartel’s Economic Impact ......... 238
    9.1.8 Robustness and Sensitivity Analysis of Paper Cartel Assessment Results .................................. 246
    9.1.9 Interpretation of Paper Cartel Assessment Results: Assessment of the Economic Efficiency of Fines .... 249
9.2 Integrated Assessment of the Orthopaedic Cartel's Impact on the National Economy
9.2.1 Orthopaedic Cartel Product Description
9.2.2 Orthopaedic Cartel Market Description
9.2.3 Orthopaedic Cartel Performance Analysis
9.2.4 Identification of Parties Affected by the Orthopaedic Cartel
9.2.5 Objects Affected by the Orthopaedic Cartel
9.2.6 Modelling of a Counterfactual Scenario for the Orthopaedic Cartel
9.2.7 Assessment of the Orthopaedic Cartel's Economic Impact
9.2.8 Robustness and Sensitivity Analysis of Orthopaedic Cartel Assessment Results
9.2.9 Interpretation of Orthopaedic Cartel Assessment Results: Estimation of the Economic Efficiency of Fines

9.3 Integrated Assessment of the Milk Cartel's Impact on the National Economy
9.3.1 Milk Cartel Product Description
9.3.2 Milk Cartel Market Description
9.3.3 Milk Cartel Performance Analysis
9.3.4 Identification of Parties Affected by the Milk Cartel
9.3.5 Objects Affected by the Milk Cartel
9.3.6 Modelling of a Counterfactual Scenario for the Milk Cartel
9.3.7 Assessment of the Milk Cartel's Economic Impact
9.3.8 Robustness and Sensitivity Analysis of Milk Cartel Assessment Results
9.3.9 Interpretation of Milk Cartel Assessment Results: Evaluation of the Economic Efficiency of Fines

9.4 Generalisation and the Main Problems of Empirical Cartel Impact Assessment
References

10 Recommendations to Minimise an Adverse Impact of Cartels on the National Economy
Conclusions
Annexes
Annex 3. Consumer Price Index in Lithuania