

# The Use of Quantitative Methods in Competition Analysis

**Hanoi, Vietnam  
20-22 April 2009**

## Seminar Overview

This 3-day program is intended to introduce front-line competition agency staff to data collection and analysis. The methods used to analyse data -- quantitative methods -- are a valuable tool for the modern competition agency. Data can, for example, help define a market, measure the possible harm from a merger, analyse the competitiveness of a market, and provide evidence of cartel behaviour.

The program will combine theory with actual case examples. Each topic will include case studies or exercises to illustrate the concepts. Although presentations may include some jargon, algebra and theory, the primary focus will be on the practicalities of data collection and analysis.

The main goal of the program is to familiarize participants with basic quantitative tools. These tools can improve decisions within the competition authority, enable analysis of data presented by outside parties to the authority, and allow better use of consultants or experts. However, the program will also emphasize the limitations of such quantitative methods, especially in the absence of advanced training.

## Seminar Agenda

### Monday, April 20 -- Supply and Demand, and Market Definition

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| 9.00-9.15   | <b>Welcome and Introduction</b> -- Arnie Celnicker, Consultant, OECD   |
| 9.15-10.00  | <b>Overview of Using Quantitative Methods in Competition Analysis</b> -- Arnie Celnicker, Consultant, OECD                 |
| 10.00-10.15 | <b>Briefing on Excel</b> -- Sara Ross, UK CC   |
| 10.15-10.30 | <i>Break</i>   |
| 10.30-11.45 | <b>Supply, Demand and Profit Maximization</b> -- Sara Ross, UK CC  |
| 11.45-13.15 | <i>Lunch</i>   |
| 13.15-14.30 | <b>Elasticities</b> -- Sara Ross, UK CC  |
| 14.30-15.00 | <b>Introduction to Market Definition Analysis</b> -- Arnie Celnicker, Consultant, OECD                                     |
| 15.00-15.15 | <i>Break</i>   |
| 15.15-16.30 | <b>Critical Loss, Margins and Diversion Ratios</b> -- Matthew Weinberg, U.S. FTC   |
| 16.30-17.00 | <b>Market Definition – Case studies</b> -- Matthew Weinberg, U.S. FTC; Sara Ross, UK CC; Arnie Celnicker, Consultant, OECD |

**Tuesday, April 21 -- Data, Statistics, and Market Studies**

- 9.00-10.00      **Market Definition – Case studies (continued)**
- 10.00-10.15      *Break*
- 10.15-11.30      **Obtaining and Organizing Data --** Matthew Weinberg, U.S. FTC
- 11.30-12.00      **Basic Statistical Concepts (Correlation, Causation, Variance, etc.) --** Bui Duong Hai,  
National Economics University of Vietnam
- 12.00-13.30      *Lunch*
- 13.30-15.00      **Basic Statistical Concepts and Excel Exercises (continued)**
- 15.00-15.15      *Break*
- 15.15-16.30      **Market Studies and Surveys --** Sara Ross, UK CC
- 16.30-17.00      **Market Studies and Surveys – Case Studies --** Sara Ross, UK CC

**Wednesday, April 22 -- VCAD Investigations, Cartels, and Linear Regressions**

- 9.00-10.15      **VCAD Investigations --** Cao Xuan Hien, VCAD
- 10.15-10.30      *Break*
- 10.30-12.00      **Economic Evidence in Cartel Cases --** Arnie Celnicker, Consultant, OECD
- 12.00-13.30      *Lunch*
- 13.30-15.00      **Introduction to Basic Linear Regression Theory --** Matthew Weinberg, U.S. FTC
- 15.00-15.15      *Break*
- 15.15-16.15      **Basic Linear Regression – Case studies --** Matthew Weinberg, U.S. FTC
- 16.15-17.00      *Closing Remarks and Evaluations*