

**INDUSTRIAL ORGANIZATION II (EC 2901)**

**University of Toronto. Department of Economics. Spring 2013  
Instructor: Victor Aguirregabiria**

**FINAL EXAM: April 11, 2013. From 9:00-12:00 (3 hours)**

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**INSTRUCTIONS:** The exam consists of two sets of questions on two papers. Please, try to answer all the questions. Try to allocate your time, and the space of your answers, proportionally to the value of the question (180 points in total  $\Leftrightarrow$  180 minutes). This is a closed book exam. No study aids are allowed.

**TOTAL MARKS = 180**

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**PROBLEM 1 (90 points).** Answer the following questions on the article "*The Costs of Environmental Regulation in a Concentrated Industry*," by Stephen Ryan (*Econometrica*, 2012).

**Question 1.1 (15 points).** Describe the empirical question(s) of the paper and the key features of the empirical strategy that Ryan uses to answer these question. In your opinion, why firm competition and market structure matter to answer these questions?

**Question 1.2 (15 points).** Describe the components and features of the structural model that the author proposes and estimates. Please, provide a formal answer including the equations and assumptions that describe the different components of the model. What are the main characteristics of the industry that are incorporated into the model? Are important features of the industry missing or ignored? In your opinion, what features of the model are particularly important to answer the empirical questions in the paper?

**Question 1.3 (15 points).** Describe the different parts in the estimation of the model and in the evaluation of the policy effects. Please, provide a formal answer with the equations that describe the estimated equations, assumptions, and methods. What are the most important econometric problems / challenges that this estimation should deal with?

**Question 1.4 (15 points).** Provide a critical assessment of the paper. In your opinion, what are the main contributions and limitations of the paper? Try to provide suggestions to improve those limitations.

**PROBLEM 2 (90 points).** Answer the same questions but on the article "*Dynamic Product Positioning in Differentiated Product Industries: The Effect of Fees for Musical Performance Rights on the Commercial Radio Industry*," by Andrew Sweeting (*Econometrica*, forthcoming 2013). For the sake of completeness, I include the same questions here.

**Question 2.1 (15 points).** Describe the empirical question(s) of the paper and the key features of the empirical strategy that Sweeting uses to answer these question. In your opinion, why firm competition and market structure matter to answer these questions?

**Question 2.2 (15 points).** Describe the components and features of the structural model that the author proposes and estimates. Please, provide a formal answer including the equations and assumptions that describe the different components of the model. What are the main characteristics of the industry that are incorporated into the model? Are important features of the industry missing or ignored? In your opinion, what features of the model are particularly important to answer the empirical questions in the paper?

**Question 2.3 (15 points).** Describe the different parts in the estimation of the model and in the evaluation of the policy effects. Please, provide a formal answer with the equations that describe the estimated equations, assumptions, and methods. What are the most important econometric problems / challenges that this estimation should deal with?

**Question 2.4 (15 points).** Provide a critical assessment of the paper. In your opinion, what are the main contributions and limitations of the paper? Try to provide suggestions to improve those limitations.