

# CIFREM SEMINARS

***Inequality and civil war:  
measurement problems and new evidence***  
***Speaker: Daniele Bortolotti – CIFREM PhD student***

***Measuring Regulatory Stringency in the Chemical Industry***  
***Speaker: Mariana Doria – CIFREM PhD student***

***Abstract:***

One of the main challenges of studying the impact of environment, health, and safety regulation on firms is finding an appropriate measure of regulatory stringency. This research develops a quantitative measure of regulatory stringency in order to examine the relationship between regulation and innovation in the chemical industry. European Council Directive 76/769/EEC, which restricted or prohibited the use and marketing of chemical substances in the EU from 1976 to 2003, was chosen to be evaluated due to its importance for the production chain of the chemical industry. The technological applications of all chemical substances listed in the Council Directive were investigated. Out of a total of 986 restrictions, 705 were determined to have no impact, while the remaining 281 impacted one or more technological areas related to products and processes of the chemical industry. The results show that the most regulated technological areas were agrochemicals (A01N), macromolecules (C08), and paints and dyes (C09); these three areas accounted for 70% of the total impact. These findings are consistent with previous studies, supporting the proposed methodology. The main advantage of the new measure is that it creates opportunities for analyzing the impact of regulation on innovation.

***Thursday, December 11 2008***  
**at 3.30pm - DISA seminar room**  
**Faculty of Economics**  
**Via Inama, 5 - Trento**