

## **Operations Management Seminar**

### **Projects and Team Dynamics**

**George Georgiadis**

**UCLA Anderson School of Management**

**Monday, February 11, 2013**

**9:15 – 10:45 am**

**GSB 6.420**

### **Abstract**

This paper studies the dynamic collaboration of a team on a project that progresses gradually over time and generates a payoff upon completion. The main result is that members of a larger team work harder than members of a smaller team if and only if the project is sufficiently far from completion. In contrast, as the project gets close to completion, the aggregate effort of a larger team can become less than that of a smaller team due to aggravated free-riding. This result provides a rationale for the formation of project teams even without mutual monitoring, peer pressure, synergies, or non-pecuniary benefits from teamwork. In addition, this result has three implications in the organization of partnerships and when a manager recruits agents into a team to undertake a project on her behalf. First, given a fixed budget, larger teams are preferable if the project is large. Second, the manager can benefit from dynamically decreasing the team size as the project approaches completion. Third, smaller teams and asymmetric compensation are preferable if the project is small.

### **Speaker's biosketch:**

George Georgiadis is currently a doctoral student in the Decisions, Operations and Technology Management area at the UCLA Anderson School of Management. He joined UCLA in 2008, and he earned master's degrees in Electrical Engineering and in Economics, both in 2010. He is expected to complete the Ph.D requirements by May 2013.

His research spans the areas of the operations-economics interface and supply chain management. In the first strand, he studies dynamic free-rider and contracting problems. Building upon the analysis developed in this strand, he also uses laboratory experiments to test the theoretical predictions of his work. The second strand deals with supply chain problems in which a decision maker needs to coordinate the entire supply chain to minimize total expected costs under uncertain demand. His research is forthcoming at *Production and Operations Management*, and under revision for the *Review of Economic Studies* and the *RAND Journal of Economics*. The techniques he uses are drawn from game theory, dynamic programming (in particular continuous-time methods), and integer programming.

At UCLA, George has served as a teaching assistant for the core Operations Management and Statistics courses, as well as for the Supply Chain Management and High Technology Management elective courses.

**Full paper is available for download at**

<http://www.mcombs.utexas.edu/Departments/IROM/Speakers-and-Seminars.aspx>