Osaka University

Institute of Social and Economic Research

Models of Entrepreneurship and Industry Evolution

Summer 2018 Seminar Series Syllabus

[version April 4, 2018]

Seminar Meets: Thursdays, July 5, 12, 19, 26, 2018

Time: 13:00-15:00

Room: Room 315 @ ISER Building B

Instructor: Serguey Braguinsky, Professor (cross-appointment) Osaka University, ISER; Associate Professor, Robert H. Smith School of Business and the Department of Economics, University of Maryland; Research Associate, NBER

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The aim of this seminar series is to introduce the students to some models that have been used in the theory of entrepreneurship and industry evolution.

All students who want to attend should come to class prepared. This means reading the required papers in advance and being familiar with the models. During the class, we will go through the details of model construction and derivations and discuss its applicability to various empirically relevant issues.

Seminar I (July 5): Lucas model of the "span of control"

Here we will study the neoclassical general equilibrium approach to entrepreneurship, starting from the seminal paper by Lucas (1978), who offers a static model with one-dimensional ability space and occupational choice. Jovanovic (1994) simplifies and at the same time extends the Lucas model to firm formation with two-dimensional managerial and labor skills.

Required readings:

Lucas, Robert E. Jr. (1978) "On the Size Distribution of Business Firms." *Bell Journal of Economics*, 9 (2), 508-523.

Jovanovic, Boyan (1994). "Firm Formation with Heterogeneous Management and Labor Skills." *Small Business Economics*, 6 (3), 185-191.

Seminar 2 (July 12): Extensions and applications of "span of control" models

Calvo and Wellisz (1980) extend the Lucas (1978) framework to a dynamic setting where new opportunities emerge as a result of exogenous technological progress. Papers by Murphy, Shleifer and Vishny (1991), Takii (2003), Eeckhout and Jovanovic (2011) apply the Lucas framework to various issues, from rent-seeking to global division of labor, to predictive ability, and illustrate the power of the methodology and the diversity of its applications.

Required readings:

Calvo, Guillermo A. and Wellisz, Stanislaw (1980). "Technology, Entrepreneurs, and Firm Size." *Quarterly Journal of Economics*, Dec., 663-677.

Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny (1991). "The Allocation of Talent: Implications for Growth." *Quarterly Journal of Economics,* 106(2), 503-30.

Eeckhout Jan, and Boyan Jovanovic (2011). "Occupational Choice and Development." *Journal of Economic Theory*, 147, 657-683.

Takii, Katsuya (2003). "Prediction Ability." *Review of Economic Dynamics*, 6, 80-98.

Seminar 3 (July 19): Models of entrepreneurship and business transfers

The model due to Holmes and Schmitz (1990) offers a theory that differentiates entrepreneurs as creators of new businesses from managers of established firms. They also study the interaction between these two classes of agents. Jovanovic and Braguinsky (2004) present a simple model of value creation in mergers and acquisitions.

Required readings:

Holmes, Thomas J. and James A. Schmitz, Jr. (1990). "A Theory of Entrepreneurship and its Application to the Study of Business Transfers." *Journal of Political Economy*, 98(2), 265-94.

Jovanovic, Boyan and Serguey Braguinsky (2004). "Bidder Discounts and Target Premia in Takeovers." *American Economic Review*, 94(1), 46-56.

Seminar 4 (July 26): Models of industry evolution

Two classic models are in papers by Klepper (1996) and Jovanovic and MacDonald (1994). The models also rely on ability heterogeneity, but rather than focusing on a snap-shot static picture, they emphasize, each in its own way, the interaction between innovators who create new products and imitators who jump in later. Closely related is the empirical literature on industry (product) life-cycle (Gort and Klepper, 1982; Agarwal and Gort, 2002).

Required readings:

Klepper, Steven (1996). "Entry, Exit, Growth, and Innovation Over the Product Life Cycle." *American Economic Review*, 86 (3), 562-83.

Jovanovic, Boyan and MacDonald, Glenn M. (1994) "The Life Cycle of a Competitive Industry." *Journal of Political Economy*, 102(2), 322-347.

Extra readings:

Gort, Michael and Steven Klepper (1982). "Time Paths in the Diffusion of Product Innovations." *Economic Journal*, 92, 630-653.

Agarwal, Rajshree and Michael Gort (2002). "Firm and Product Life Cycles and Firm Survival." *American Economic Review*, 92(2), 184-90.