Lecture / Seminar (Master level)

Industrial Dynamics

Fachbereich Wirtschaftswissenschaften

Economic Policy Research Group

Professor Dr. Guido Bünstorf / Dipl.-Ök. Ann-Kathrin Blankenberg

Winter Term 2013/14

Time and location
Monday, 12.15-16.00 (first class on October 21, 2013)

Nora-Platiel-Strasse 6; Room 0207

Overview
In recent years, the development of markets and industries has attracted substantial scholarly attention. A rich theoretical and empirical literature on industrial dynamics and industry life cycles has been developed to complement the models of game-theoretic industrial organization. This literature has yielded important new insights into the conditions and dynamics of entry, exit, market structure and innovation activities in competitive industries. Evolutionary approaches to industrial dynamics have highlighted the relevance of firm heterogeneity. At the same time, the research on industrial dynamics is closely related to the current work on entrepreneurship and also to strategic management research.

Credits and requirements
Requirements (6 ECTS Credits):

- Seminar paper (about 15 pages; in German or English) plus oral presentation (about 20 minutes; in English)
- Ungraded test (pass/fail; 45 minutes; in German or English) after the lecture part of the course
- Active participation in the seminar discussion

Note:

- Attendance is mandatory for the seminar part of the course (second half of semester)
- The seminar paper has to be handed in one week prior to the oral presentation.

Registration and choice of topics by E-Mail to ak.blankenberg@uni-kassel.de
Part A: Firm Population and Market Competition

1. Firm size distributions, entry and turbulence in markets
   1.1 Empirical findings
   1.2 Theoretical explanations
   1.3 Entry, exit and turbulence in the firm population
   1.4 The distribution of firm sizes and firm ages
   1.5 Implications


2. Replicator dynamics, selection and competition
   2.1 Theoretical foundations
   2.2 Empirical evidence
   2.3 Implications: Can theory account for the stylized facts?

3. Competing technologies, path dependence and critical mass phenomena
   3.1 Basic concepts
   3.2 A model of path dependence
   3.3 Frequency-dependent adoption of inferior technologies: Is lock-in a relevant problem?
   3.4 Standards and strategic interaction in the competition of technologies
   3.5 Historical example: the „Battle of the Systems“
   3.6 Present-day example: electric mobility

   History: Thomas Edison and „The Battle of The Systems‘ Reconsidered.“ Industrial and Corporate
   Change, 1(1): 129-180.)
Part B: An Introduction to the statistical analysis of duration data

1. Why hazard rate analysis?
2. Basic concepts
3. Models of hazard rate analysis
4. Extensions and applications

Part C: Market evolution and the industry life cycle

1. Development of firm populations in innovative industries
   1.1 Empirical findings
   1.2 From Schumpeter to the industry lifecycle
   1.3 Theory: development of shakeout industries
   1.4 Theory: development of submarket industries
   1.5 The transition from submarkets to the shakeout
   1.6 The approach of organization ecology: substitute or complement?
   1.7 The international dimension of industrial dynamics

2. Pre-entry experience and firm performance
   2.1 Introduction
   2.2 Theory: the extended Klepper model
   2.3 Related diversification
   2.4 The spin-off process
   2.5 When does experience have adverse effects on firm performance?


3. Labor mobility, non-compete clauses and embodied knowledge transfer

Topics for seminar papers

Topic 1: How much historical truth is in the „Fable of the Keys“? And how relevant is this for the lock-in concept?


Topic 2: Firms, technology and institutions: How the German synthetic dye industry became a global market leader in the 19th century


Topic 3: Ernst Heuss’ „Marktphasentheorie“ – an early model of industry evolution still useful today? (Note: This topic requires the ability to read German)


Topic 4: The Schumpeter Hypotheses: content and empirical evidence


Topic 5: Knowledge and market exit in the early German automobile industry


Topic 6: Pre-entry experience and diversification in the digital camera market


Topic 7: Pre-entry experience, timing of entry and firm performance in the market for MP3 players


Topic 8: Imprinted by the early career? The „Baxter-Boys“ and the U.S. biotechnology industry

Topic 9: Leadership and firm success in Silicon Valley


Topic 10: Social capital and firm performance in the U.S. hotel industry


Topic 11: Independence as key to success? The example of the Xerox spin-offs


Topic 12: Employment effects of young U.S. firms


Topic 13: Employment effects of spin-offs: evidence for Denmark


Topic 14: Does Toughness in patent litigation reduce brain drain from firms?


Topic 15: Non-compete clauses, compensation and investments into human capital


Topic 16: Non-compete clauses and regional development


Registration and choice of topics by E-Mail to ak.blankenberg@uni-kassel.de