Seminar (M.Sc.)

Industrial Dynamics

Fachbereich Wirtschaftswissenschaften

Economic Policy Research Group (Professor Dr. Guido Bünstorf)

Summer Term 2015

Time and location
Monday, 16.00-18.00 (first class on April 20, 2015); Systembau 2 Moritzstrasse, Room 0205

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 game-theoretic approach to 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 current work in entrepreneurship and strategic management.

This course differs from earlier courses with the same title in that it will adopt a seminar format throughout the term. Based on students’ classroom presentations, we will discuss the key theoretical and empirical contributions to the literature on industry evolution. To be successful, this requires that all participants prepare the mandatory readings ahead of class.

Requirements (6 ECTS Credits):
- Seminar paper (about 15 pages; due date September 30, 2015) plus oral presentation (about 20 minutes)
- Completion of mandatory reading assignments before the respective seminar session
- Attendance throughout the course and active participation in the seminar discussion

Registration and choice of topics by E-Mail to buenstorf@uni-kassel.de (starting immediately; please name three preferred topics).

Maximum number of participants: 30
Topics and reading assignments

Part A: Models of industry evolution

Week 1 (April 20, 2015): Stylized facts of industry evolution / Introduction to survival analysis

No reading assignment

Week 2 (April 27, 2015):


Topic 1: Cost spreading and the shakeout: the model of Klepper (1996)


Type of reading: Advanced mathematical model (Note: Cantner and Dressler (2006) provide a good German-language introduction)

Week 3 (May 4, 2015):


Topic 2: Dominant designs and the shakeout: the theory of Utterback and Suarez (1993)


Type of reading: Verbal theorizing

Topic 3: Technology shocks and the shakeout: the model of Jovanovic and MacDonald (1994)


Type of reading: Advanced mathematical model
Week 4 (May 11, 2015):


Topic 4: From submarkets to the shakeout: Bhaskarabhatla and Klepper (2014)


Type of reading: Mathematical model and econometric analysis

Part B: Incumbents versus entrants

Week 5 (May 18, 2015): First-mover advantage, innovation and survival

No reading assignment

Topic 5: Survival in different stages of the industry life cycle


Type of reading: Econometric analysis

Topic 6 Time of entry and innovation as determinants of firm survival


Type of reading: Econometric analysis

Week 6 (June 1, 2015): When and why are incumbent firms disadvantaged?


Topic 7: Incumbent disadvantage (I): Architectural innovation


Type of reading: Verbal theorizing and qualitative empirical analysis
Topic 8: Incumbent disadvantage (II): Value networks


**Type of reading:** Verbal theorizing and qualitative empirical analysis

**Part C: Pre-entry experience and firm performance**

**Week 7 (June 8, 2015): Related diversification**


**Topic 9: Diversification and firm performance in historical U.S. shipbuilding**


**Type of reading:** Econometric analysis

**Topic 10: Diversification and firm performance in the U.S. television receiver industry**


**Type of reading:** Econometric analysis

**Week 8 (June 15, 2015): Spin-offs (I)**


**Topic 11: Intra-industry spin-offs: determinants**


**Type of reading:** Econometric analysis (note: if requested by student, this topic can alternatively be based on a theoretical introductory reading)
Topic 12: Intra-industry spin-offs: performance


**Type of reading:** Econometric analysis

Week 9 (June 22, 2015): Spin-offs (II)

**No reading assignment**

Topic 13: Intra-industry spin-offs: effects on parent firms


**Type of reading:** Econometric analysis

Topic 14: Entry from downstream markets


**Type of reading:** Econometric analysis

Part D: Where do new industries emerge and evolve?

Week 10 (June 29, 2015): Entry into new industries at the regional level


Topic 15: The theory of regional branching


**Type of reading:** Verbal theorizing with sketch of mathematical model

Topic 16: Empirical evidence of regional branching


**Type of reading:** Econometric analysis
### Week 11 (July 6, 2015): Entry into new industries at the country level


**Topic 17: New industries and economic development**


**Type of reading:** Empirical analysis using various methods – prior knowledge of international trade theory and/or social network analysis is helpful

**Topic 18: Industrial policy – did economics get it wrong?**


**Type of reading:** Verbal argument

### Week 12 (July 13, 2015): How is industry evolution shaped by external factors?

**No reading assignment**

**Topic 19: Institutions and industry evolution**


**Type of reading:** Qualitative empirical analysis

**Topic 20: Co-evolution of public research and industry**


**Type of reading:** Verbal theorizing and qualitative empirical analysis

### Background reading for the course: