

Understanding the emergence of new industries. Between path dependency and path plasticity

University of Torino, Department of Economics & Collegio Carlo Alberto, 7. - 8. Okt. 2010

The workshop "Understanding the emergence of new industries: Between path dependence and path plasticity" was held in cooperation of IZO (Cornelia Storz), EHES (Sebastien Lechevalier), GREDEG (Jackie Krafft) and BRICK (Francesco Qutraro and Cristiano Antonelli) at the University of Torino at the Collegio Carlo Alberto on 7th and 8th October 2010. Invited keynote speakers were David Audretsch (Max Planck Institute of Economics – Jena & Indiana University), Kenneth L. Simons (Rensselaer Polytechnic Institute) and Dominique Foray (Ecole Polytechnique Federale de Lausanne). Papers on the emergence of new industries in Asia were presented by Cornelia Storz and Sebastien Lechevalier, Masatoshi Kato, Marie Anchordoguy and Peter Pawlicki. Totally, 19 papers were presented.

The workshop was led by the question why and how new industries emerge. Some studies have focused on this question, but so far no consensual view can be characterized on how the process of emergence of new industries starts and develops. This is all the more surprising since economic development all times has been essentially nurtured by the emergence of new industries. In the last two decades, new industries like software and biotechnology have contributed to a large extent to the economic growth of modern economies, and we expect further growth stimuli by new industries like nanotechnology or next generation robotics.

The workshop focused on the process of emerging new industries. In our understanding this process takes place between path dependence and path plasticity. Path dependence refers to the stability of configurations in given systems and the more or less stable way how these configurations incentivize the innovative behaviors of actors, while the concept of path plasticity refers to the variety of configurations in these systems. At the same time, the concept of 'new industry' requires some clarification especially if one needs to structure empirical work since this concept often assumes that sectors emerge from nothing. However, from the late 1970s a number of important industry sectors emerged as a result of certain radical innovation, which substantially changed the path of former sectors and their rebirth into new ones, becoming eventually sub-industries of former sectoral categories. These processes are often differently influenced depending on the respective institutional setting.

The purpose of this workshop was to gather papers which contribute to the understanding of the emergence of new industries, the role of innovation systems in which they are embedded and the role of path dependence. In the end the workshop aimed at reaching a deeper theoretical and empirical understanding of the logic of emerging industries. Therefore it is necessary to employ different theoretical perspectives and a variety of research methodologies. To this end, we invited contributions from different disciplines, which focus on one or more of the following issues:

- The conditions under which new industries emerge;
- The respective roles of incumbent and new firms in the emergence of new industries;
- Role of technological and organizational regularities in the emergence of new industries;
- The role of institutions, knowledge stocks and demand in the emergence of new industries;
- The various degrees of impact of given structures on innovative activities and their creative interpretation by entrepreneurs for the emergence of new industries;
- Cognitive processes and mechanisms under which actors recognize opportunities for the emergence of new industries.

We appreciate the support of the members of the scientific committee (Björn Asheim, Michel Callon, Steven Casper, Dietmar Harhoff, Franco Malerba, Simone Strambach, Jörg Sydow, Nick Von Tunzelmann, Seiichiro Yonekura) (in alphabetical order). It is planned to publish the results. For further information please look at www.brick.carloalberto.org.

Cornelia Storz