MINISTRY OF EDUCATION
Federal University of Paraná
Applied Social Sciences Sector
Graduate programme in public policies
COURSE: PPUB-7019 - INDUSTRIAL STRUCTURES-2022

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SYLLABUS:

The course is focused on the subject of the industrial organisation, fundamentally in the debate about **market/competition**. It begins with a discussion on the bases of competition which is the concept of the firm, its functions and characteristics. Basically, the firm is seen as a unit that takes decisions to produce under uncertainty defined by the environment. As a result, the focus shifts to the market analysing firms within a (market) structure in a dynamic perspective that implicates differentiation of specific firms and conduct. Therefore, four essential structural competitive elements are added. These elements are **networking, innovation systems, university-enterprise relations and industrial policy**. In the discussion about Networks is vital to understand that competition no longer occurs between individual firms, but between a series of inter-firm relationships and institutions. Deriving from the generic concept of networks, we address innovation systems and the University-business relationship as essential elements of technological/industrial development. These are two forms of technological/institutional organisation that promote development. Industrial policy is an important element in defining the competitive environment and development.

1 THE APPROACH ABOUT THE FIRM

1. FRANSMAN, M.. Information, knowledge, vision and theories of the firm. In: DOSI, G., TEECE, D. J. & CHYTRY, J.. Technology, organization and competitiveness – perspectives on industrial and corporate change. Oxford, 1998.
2. WINTER, S. (1991). "On Coase, Competence, and the Corporation", In: WILLIAMSON, O. E. e WINTER, S. (Eds.) (1991). The Nature of the Firm: Origins, Evolution, and Development. Oxford: Oxford University.
3. CHANDLER JR., A. D.. Scale and scope. The dynamics of industrial capitalism. Cambridge. 1990. Parte I. 338.6440973 C455
4. NELSON, R.. As fontes do crescimento econômico. Editora Unicamp, 2005 (cap. 4).
5. GRANSTRAND, O. Towards a theory of the technology-based firm. Research Policy 27 1998.465–489

2 MARKET STRUCTURE DYNAMICS AND TECHNOLOGICAL INNOVATION

1. POSSAS, M.. Estrutura de Mercado em Oligopólio Cap. 3 e 4. 1986. HUCITEC.
2. PORTER, M. CAVES, R. E.. From entry barriers to mobility barriers. The Quarterly Journal of Economics, v. XCI, No 2, p. 241-261, may, 1977.
3. ROSENBLOOM, R. & CHRISTENSEN, C. M.. Technological Discontinuities, Organizational Capabilities, and Strategic Commitments. In: DOSI, G., TEECE, D. J. & CHYTRY, J.. Technology, organization and competitiveness – perspectives on industrial and corporate change. Oxford, 1998.

4. NELSON, R. R.. The Co-evolution of Technology, Industrial Structure, and Supporting Institutions. In: DOSI, G., TEECE, D. J. & CHYTRY, J.. Technology, organization and competitiveness – perspectives on industrial and corporate change. Oxford, 1998.
5. SCHERER, F. M. & ROSS, D.. Industrial market structure and economic performance. Cap. 3 Houghton. 1990 (338.0973 S326)
6. MUELLER, D. C.. First-mover advantages and path dependence. International Journal of Industrial Organization. 15 (1997) 827-850

3 NETWORK ECONOMY

1. BRITTO, J. Características Estruturais e Modus Operandi das Redes de Firma Em Condições de Diversidade Tecnológica - Tese de Doutorado IE/UFRJ, 1999. Cap. 1, 2 e 3.
2. JOERGES, B.. "Large Technical Systems: Concepts and Issues", In: MAYNTZ, R. & HUGHES, T. P. (eds.). The Development of Large Technical Systems, Frankfurt: Campus/Westview 1988, cap. 1.
3. GALAMBOS, L.. "Looking for the Boundaries of Technological Determinism: A Brief History of the Telephone System," In: MAYNTZ, R. & HUGHES, T. P. (eds.), The Development of Large Technical Systems, Frankfurt: Campus/Westview 1988, cap. 5.
4. DUYSTERS, G. & HAGEDOORN, J.. A colaboração tecnológica internacional: suas consequências para as economias de industrialização recente. In: KIM, L. & NELSON, R.. Tecnologia, aprendizado e inovação – As experiências das economias de industrialização recente. Ed. UNICAMP. 2005.
5. FREEMAN, C.. Network of innovators: a synthesis of research issues. Research Policy, 20 (1991) 499-514.
6. HAGEDOORN, J. & SCHAKENRAAD, J.. Leading companies and networks of strategic alliances in information technologies. Research Policy, vol. 21, p. 163-190, 1992.
7. NOOTEBOOM, B.. Innovation and inter-firm linkages: new implications for policy. Research Policy 28 1999.793–805

4 INNOVATION SYSTEMS

1. LUNDVALL, BENGT-ÅKE. The learning economy and the economics of hope. Cap.4 - National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning. ANTHEM PRESS.
2. LUNDVALL, BENGT-ÅKE. The learning economy and the economics of hope. Cap.5 – The Learning Economy. ANTHEM PRESS.
3. FREEMAN, C. & SOETE, L. A Economia da inovação industrial. Cap. 12 – Os sistemas nacionais de inovações.
4. MALERBA, F. Sectoral system of innovation. Cap. 1 - Sectoral system of innovation: basic concepts.
5. MALERBA, F. Sectoral system of innovation. Cap. 9 – National institutional frameworks, institutional complementarities and sectoral system of innovation.

6. Ascania, Andrea; Bettarelli, Luca; Resmini, Laura & Ballandd, Pierre-Alexandre. Global networks, local specialisation and regional patterns of innovation. Research Policy, Volume 49, Issue 8, October 2020, 104031. https://www.sciencedirect.com/science/article/abs/pii/S0048733320301104
7. DODGSON, M. & ROTHWELL, R. The handbook of industrial innovation. Cap. 1 – MARCEAU, J. Cluster, chain and complexes: three approach to innovation with a public policy perspective.
8. DODGSON, M. & ROTHWELL, R. The handbook of industrial innovation. Cap. 3 – COOKE, P. & MORGAN, K. The creative milieu: a regional perspective on innovation.
9. FREEMAN, C. System of innovation. Cap. 6 – Continental, national and sub-national innovation system…
10. LUNDVALL, B.-A., JOSEPH, K.J., CHAMINADE, C. & VANG, J.. Handbook of innovation system and developing countries. Cap. 1. Innovation system research and developing countries.

5 UNIVERSITY-INTERPRISE INTERACTION

1. RIBEIRO, L., BRITTO, G., KRUSS, G. & ALBUQUERQUE, E.. Global interactions between firms and universities: a tentative typology and an empirical investigation.
2. Kang, Yankun & Liub, Ruiming. Does the merger of universities promote their scientific research performance? Evidence from China. Research Policy. Volume 50, Issue 1, January 2021, 104098. https://reader.elsevier.com/reader/sd/pii/S0048733320301736?token=051EF4768EA5A7E3E7E2C6241A04794E069B8E72F2D8D04960AB0C9B9E1FDA7C502677E9D4DCC6FE628E809AE9352AAB
3. PINHO, M. & FERNANDES, A. C.. Relevance of university-industry links for firms from developing countries: exploring different surveys.
4. LUNDVALL, B.-A., JOSEPH, K.J., CHAMINADE, C. & VANG, J.. Handbook of innovation system and developing countries. Cap. 11. The role of universities in innovation system in developing countries: …
5. ETZKOWITZ, H. Triple helix- university - industry - government. Cap. 1.
6. Mowery, D; Nelson, R.; Sampat, B. & Ziedonis, A.. Ivory Tower and Industrial Innovation. Cap. 2 – Historical overview: American universities and technical progress in industry.
7. SHERWOOD, A. L. & COVIN, J. G. (2008). Knowledge Acquisition in University-Industry Alliances: an empirical investigation from a learning theory perspective. The Journal of Product Innovation Management

6 INDUSTRIAL POLICY - FOUNDATIONS

1) EVANS, P. Autonomia e parceria. Caps. 1 e 2. 2004. Editora UFRJ.
2) CHANG, HÁ JOON. Chutando a escada - A estratégia do desenvolvimento em perspectiva histórica. Cap. 2 - Políticas de desenvolvimento econômico: perspectiva histórica das políticas industrial, comercial e tecnológica.
3) STEINMUELLER, W. E.. ICTs and the possibilities for leapfrogging by developing countries. International Labour Review, Vol. 140 (2001), No. 2.

4) Mealy, Penny & Teytelboym, Alexander. Economic complexity and the green economy. Research Policy, Available online 8 April 2020, 103948. https://www.sciencedirect.com/science/article/pii/S0048733320300287

5) SUZIGAN, W.; GARCIA, R. & FEITOSA, P. H. A. Institutions and industrial policy in Brazil after two decades: have we built the needed institutions? Economics of Innovation and New Technology. DOI: 10.1080/10438599.2020.1719629. ISSN 1476-8364 (Online). https://www.tandfonline.com/loi/gein20. 2020.

6) MAZZUCATO, M..O estado empreendedor: desmascarando o mito do setor público vs. Setor privado. ed. São Paulo: Portfolio-Penguin, 2014. Da INTRODUÇÃO ao Cap. 4.

7) EDLER, J. & FAGERBERG, j.. Innovation Policy: What, Why & How. TIK Centre for technology, innovation and culture. University of OSLO. Norway

8) CIMOLI, MARIO; DOSI, GIOVANNI; NELSON, RICHARD R. & STIGLITZ, JOSEPH.. Instituições e Políticas Moldando o Desenvolvimento Industrial: uma nota introdutória. Revista Brasileira de Inovação, Rio de Janeiro (RJ), 6 (1), p.55-85, janeiro/junho 2007.

7 INDUSTRIAL POLICY-EXPERIENCES

1) EVANS, P., IN SEARCH OF THE 21ST CENTURY DEVELOPMENTAL STATE. Working Paper No. 4, December 2008. The Centre for Global Political Economy - University of Sussex.

2) Kanger, Laur; Sovacool, Benjamin K.& Noorkõiv, Martin. Six policy intervention points for sustainability transitions: A conceptual framework and a systematic literature review. Research Policy. Volume 49, Issue 7, September 2020, 104072. https://reader.elsevier.com/reader/sd/pii/S0048733320301505?token=2E9C76F117E748304B9B5F674D6F1551F3C8C5EE69CCA8622E25CD4B47FB6749FA6436737F38BBB7949625EA3CAD89E9

3) Andreoni, A.;Chang, Ha‐Joon & Labruni, M. Natura Non Facit Saltus: Challenges and Opportunities for Digital Industrialisation Across Developing Countries. The European Journal of Development Research (2021) 33:330–370. https://doi.org/10.1057/s41287-020-00355-z

4) Fagerberg, Jan & Verspagen, Bart. Innovation–diffusion, the economy and contemporary challenges: a comment. Industrial and Corporate Change, 2020, Vol. 29, No. 4, 1067–1073. doi: 10.1093/icc/dtaa019

5) MAZZUCATO, M..O estado empreendedor: desmascarando o mito do setor público vs. Setor privado. Ed. São Paulo: Portfolio-Penguin, 2014. Do Cap. 5 ao 9.

6) EVANS, P. Autonomia e parceria. Caps. 4 a 10. 2004. Editora UFRJ.

7) Pereira D. M. Epistemic policies: Sectoral funds, support for innovation, and science in Brazil. ISSN 2178-2822DOI: https://doi.org/10.20396/rbi.v19i0.8654540. Rev. Bras. Inov., Campinas (SP), v.19, p. 1-24, e020003, 2020

8 ASSESSMENT

Position paper* (4.0)*:

1. A position paper on the basic text presented by the teacher.
2. A position paper on other text in which a relevant question should be raised to be exposed and discussed. It is not a presentation or a seminar. It is about raising an issue that needs to be discussed (to take a position on the text). Each one should briefly expose its positions at the open discussion time.

Paper (6.0):

1. A survey based on all texts relating the seven modules of the course.