Innovation Ecosystems: Digital Revolution and Environmental Transition

Research Network on Innovation

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Synopsis

The modern era is marked by a decrease in the share of tangible capital in favor of intangible capital. This evolution is mainly stimulated by investments in training, R&D and dissemination of knowledge (David & Foray, 2002; Laperche & Uzunidis, 2007). The research field of knowledge economy is particularly well suited to the analysis of this dynamic. Indeed, the knowledge economy emphasizes intangible elements related to the production of knowledge, scientific contributions, technical skills and "human capital" (Foray, 2013). Moreover, information as an intangible asset has also been at the center of the digital revolution, shaping much of the economic evolution for several decades. This informational and digital revolution involves a restructuring of economic actors around the generation, storage, processing and transfer of information (Grange & Sponem, 2021). With its roots in the industrial boom of the 1960s, during the 1980s the informational and digital revolution allowed the introduction of new technologies that support or replace activities that had previously been performed solely by humans (Boccara, 2016; Grange & Sponem, 2021). Thus, the information and communication technologies arising from the digital revolution are laying the foundations of a new network economy (Muet, 2006), the knowledge economy being correlated with these innovative processes.

Indeed, innovation is the key factor in this new context, conditioning the prospects for economic growth (Uzunidis, 2008a), and this at the macro, meso and micro-economic levels. In its organizational and service forms, it also contributes to the social dynamics of innovative territories (Mongo, 2021).

Relating to the Oslo Manual (2018), "*Innovation refers to a new or improved product or business process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been commercialized or implemented by the firm*" (OECD, 2018).

From a theoretical point of view, the problem of innovation has been the subject of an abundant literature aimed in particular at characterizing its conditions of emergence. Initially developed by Schumpeter (1939), the analysis of innovation processes has gradually evolved from an individualistic and linear vision to a more systemic one. Indeed, innovation process is now mainly expressed in terms of a "system", characterized in particular by its capacity for change, especially technical, managerial and organizational. It is connected to a complex set of innovation actors constituting an innovation ecosystem (Laperche *et al.*, 2019). There is no single definition of innovation ecosystems. In a recent review of nearly 120 publications on innovation ecosystems, Granstrand & Holgersson (2020) identify 21 definitions of innovation ecosystems. Based on these definitions, the authors conclude that: *"An innovation ecosystem is the evolving set of actors, activities, and artifacts, and the institutions and relations, including complementary and substitute relations that are important for the innovative performance of an actor or a population of actors."*

In addition, innovation ecosystems can be generated at different scales.

At the macro-economic level, it is the National Innovation System (NIS) that forms the innovation ecosystem (Laperche *et al.*, 2019). In this framework, innovation results from the connection and interactions between different actors (notably institutional, political, research and economic) in the same country (Bengt-Åke, 2007) and for which innovation dynamics are at work (Laperche & Uzunidis, 2007). **The meso-economic level** is characterized by a Local Innovation System (including regional innovation systems, industrial districts and innovative environments) in which the relationships that link the different actors of the system have a very strong operational dimension (Uzunidis, 2008b). Sectoral systems can be added, that link the institutional representatives of a profession (in particular professional unions) with public authorities and companies. These interconnections between actors contribute to the territorial dynamics of innovation (Breschi & Malerba, 1997). Finally, **the micro-economic level** refers to an innovation system centered on the firm. In this system, companies form a coalition around the pivotal actor who has succeeded in imposing his standard while at the same time creating value for his partners through processes of coopetition (which combine both competition and cooperation, in particular through subcontracting and co-contracting activities). In this context, we speak of a business ecosystem (Moore, 1993; Boutillier *et al.*, 2015).

These different innovation systems can be interconnected and lead to the formation of innovation networks in which actors interact through processes of "translation" referring to the sociology of innovation (Callon, 1986).

It is therefore essential to explain the role played by innovation ecosystems in the processes of innovation generation, adoption and diffusion. Therefore, understanding the innovation processes inherent in innovation ecosystems is based on identifying the collaboration’s factors between actors in

the network. It is thus a matter of examining the different communication channels that can facilitate exchanges and the circulation of knowledge between stakeholders and that allow the establishment of consortia and cooperative processes (Laperche, 2017). These mechanisms must also be studied in light of the contextual health crisis and the societal transformations induced by the ecological transition and the expanding digital revolution.

Indeed, the crisis related to the pandemic of COVID-19, and its dramatic consequences on the sanitary level, forced many governments to implement drastic measures in order to limit the spread of the virus (in particular wearing of the mask, social distancing, restriction in mobility and confinement) (Wang *et al*., 2020). These measures have engendered socio-economic upheavals, including the implementation of teleworking[1] for many employees. In this context, the question arises as to the relevance of the "local thesis" (Audretsch & Feldman, 1996; Bottazzi & Peri, 2003; Jaffe, 1989; Santamaría *et al*., 2021), which is dominant today[2] and which emphasizes the fundamental role of geographical proximity in the innovation dynamics of enterprises (Aouinaït, 2021; Uzunidis, 2010). A study by Coenen & Kok (2014) indicates that in a teleworking situation, the team performance in developing new project is improved when they maintain sufficient face-to-face communication. For Massard & Torre (2004), face-to-face contacts at the origin of the transmission of tacit knowledge do not necessarily imply a geographical proximity. For the authors, "*knowledge is more easily transmitted within the same professional world (even at a distance) than between different worlds (even in close proximity)*" and conversely when the knowledge is codified, in particular due to the essential absorptive capacities to understand the transmitted knowledge. It is therefore possible to exchange knowledge through membership in cognitive communities (Zouaoui & Hedhli, 2014) and/or by relying on increasingly sophisticated means of communication, used notably in the context of the digital revolution.

Far from the theses predicting the end of the local (Cairncross, 2001; Soltwedel & Laaser, 2003) due to the advent of ICT, it is important to consider that the digital transformations underway in our societies (Shift Project, 2018) have largely disrupted the conditions of formation, organization and deployment of innovation systems. An illustration is the development of e-commerce and second-generation sites offering a variety of delivery methods to consumers (Belin-Munier, 2017). The latter tend to be loyal to brands or merchant sites through new services offered. The *outside-in* strategies of open innovation, which involve enterprises mobilizing a wide range of actors and external sources of knowledge (including enterprises, consumers and suppliers) in order to benefit from an innovation without being at the origin from them and to create value through external innovation, are full illustrations of this (Chesbrough, 2006; Laperche, 2017). In addition, there are the *inside-out* strategies of the reverse and complementary flow of open innovation that rely on the outsourcing of knowledge or technologies initially developed within the organization (Chesbrough & Bogers, 2014).

Thus, innovative internal concepts embedded in patents may be intended to be valorised and developed externally following their sale to third party companies. Some *startups* are specialized in these business models that generate innovation ecosystems, particularly in the pharmaceutical (Dupouët *et al*., 2019;

1 In a broad sense, telework can be defined as a form of work organizing performed remotely from the employer's premises or at home and making use of information and communication technologies (Aguilera *et al*., 2016; Pontier, 2014; Taskin, 2003).

2 This local thesis, which is now dominant, has been the subject of numerous national public policies with the main objective of deploying the innovation dynamic within territories. In France, these policies are reflected in the support and implementation of competitiveness clusters, whose networking of actors is supposed to contribute to the innovation dynamics of territories.

Hamdouch *et al*., 2009) or healthcare industry (including *Living Labs*, Béjean *et al*., 2021). *Open source*, *software* and *hardware*, are also parts of this flow when organizations make the sources of technologies they have developed to be externally and universally readable (source code of computer software for *open source software*, plans and specifications allowing the construction of hardware for *open source hardware*). Moreover, these open sources have the particularity of being modifiable according to different *open source* licenses with specific intellectual property elements, allowing it to adapt to the multiple strategies and business models of organizations (Adatto, 2021). The contributions from external communities of developers along with those of the initial stakeholders of projects illustrate the symbiotic potential of *inside-out* combining with *outside-in* in the creation of open innovation ecosystems, of which open source is considered an exemplary case by Jullien & Zimmermann (2009).

In addition, the climate crisis and its sometimes-irreversible effects on ecosystems (IPCC, 2018) warns about the end of a linear growth model that aimed at "produce, consume and throw away" in order to move towards an economic development that tends to limit the waste of resources and environmental impact, while increasing efficiency at all stages of the product economy. This is the principle of the circular economy and industrial ecology strategies (Boldrini, 2018; CE, 2019; Diemer, 2016; Ghisellini *et al*., 2016; Gallaud & Laperche, 2016). Here again, the circular economy raises the question of responsibility and ownership of climate issues for all actors in an ecosystem (Asayehegn *et al*., 2017). This responsibility raises more general questions about the modalities of governing common resources (Holland & Sene, 2010; Ostrom, 1990). Until their benefit extends to the basic needs (which include the possibilities of feeding, housing, dressing, taking care, having heating and energy, in the best case according to eco-responsible dynamics). In this context, innovation must be responsible and at the service of a more sustainable development (Mobhe Bokoko, 2020). In this sense, it can take several forms: eco-innovation (Arundel & Kemp, 2009); social innovation (Dandurand, 2005; Richez-Battesti *et al*., 2012); frugal innovation (Radjou & Prabhu, 2015; Le Bas, 2016; Haudeville & Le Bas, 2016) and reverse innovation (Hussler & Burger-Helmchen, 2016; Laperche & Lefebvre, 2012) and develop more or less strongly depending on the geographical context (developed and developing countries (Le, 2020)) and the resource constraint of the ecosystem (Semaan, 2020).

All these elements promote the birth of this book whose objective is to explore the role played by innovation ecosystems and the economic actors integrated in them during the processes of generation, adoption and diffusion of innovation, as well as their evolution with regard to the current societal transformations. The book will be composed of three parts. The first part, an introduction, will be devoted to the issues related to the knowledge economy and innovation. The second part will address the key role of innovation ecosystems in the mechanisms of innovation generation, adoption and diffusion. Finally, the third part will analyse the evolution of these mechanisms in the face of new societal challenges (climate and environment, access to basic needs and digital transformations).

References

Adatto, L. (2021). Open Source and Open Data: Filiation, Analogies and Common Dynamics. Dimitri Uzunidis, Fedoua Kasmi and Laurent Adatto eds. *Innovation Economics, Engineering and Management Handbook Volume 2*. ISTE Ltd and John Wiley & Sons, Inc: 217-223.

Aguilera, A., Lethiais, V., Rallet, A., & Proulhac, L. (2016). Home-based telework in France : Characteristics, barriers and perspectives. *Transportation Research Part A*, 92, 1–11. https://doi.org/10.1016/j.tra.2016.06.021

Aouinaït, C. (2021). Innovation collaborative et innovation ouverte : caractéristiques de leur mise en œuvre. *Technologie et Innovation.* 6(1), 1-12.

Arundel, A., & Kemp, R. (2009). *Measuring eco-innovation*. Maastricht.

Asayehegn, K., Iglesias, A., Triomphe, B., Pédelahore, P. & Temple, L. (2017). The Role of Systems of Innovation in Adapting to Climate Change: The Case of the Kenyan Coffee and Dairy Sectors. *Journal of Innovation Economics & Management*, 3(3), 127-149. https://doi.org/10.3917/jie.pr1.0015

Audretsch, D. B., & Feldman, M. P. (1996). R&D Spillovers and the Geography of Innovation and Production. *American Economic Review*, 86(3), 630–640. https://doi.org/10.2307/2118216

Belin-Munier, Christine. (2017). Modèles d'affaires, logistique et innovation : le cas du e-commerce. *Technologie et innovation*. 17 (2). 10.21494/ISTE.OP.2017.0145.

Bengt-Åke, L. (2007). National Innovation Systems - Analytical Concept and Development Tool. *Industry and Innovation*, 14(1), 95–119. https://doi.org/10.1080/13662710601130863

Béjean, M., Picard, R. & Bréda, G. (2021). *Living Labs*, innovation collaborative et écosystèmes : le cas de l'initiative « *Concept Maturity Levels* » dans les Medtech. *Innovations*, https://doi.org/10.3917/inno.pr2.0105

Boccara, P. (2016). La révolution informationnelle, ses ambivalences, ses antagonismes, ses potentialités. *Economie et Politique*. Retrieved from http://66.pcf.fr/sites/default/files/eco_po_742_743_dossier_0.pdf

Boldrini, J.C. (2018). La co-création de valeur dans un projet d'innovation collaboratif : un cas de transition vers l'économie circulaire. *Innovations*, 1(55), 143–171.

Bottazzi, L., & Peri, G. (2003). Innovation and spillovers in regions : Evidence from European patent data. *European Economic Review*, 47(4), 687–710.

Boutillier, S., Levratto, N., & Carré, D. (2015). *Les écosystèmes entrepreneuriaux: rencontre entre entreprise et territoire* (Vol. 2). ISTE Group.

Cairncross, F. (2001). *The Death of Distance: How the Communications Revolution Is Changing Our* (Harvard Bu).

Callon, M. (1986). Éléments pour une sociologie de la traduction: La domestication des coquilles Saint-Jacques et des marins-pêcheurs dans la baie de Saint-Brieuc. *L'Année Sociologique* (1940/1948-), 36(troisième série), 169–208. Retrieved from www.jstor.org/stable/27889913

CE. (2019). *RAPPORT DE LA COMMISSION AU PARLEMENT EUROPÉEN, AU CONSEIL, AU COMITÉ ÉCONOMIQUE ET SOCIAL EUROPÉEN ET AU COMITÉ DES RÉGIONS relatif à la mise en œuvre du plan d'action en faveur d'une économie circulaire*. Bruxelles.

Chesbrough, H. (2006). *Open Innovation: The New Imperative for Creating And Profiting from Technology* (Harvard Bu).

Chesbrough, H., & Bogers, M. (2014). Explicating Open Innovation: Clarifying an Emerging Paradigm for Understanding Innovation. Henry Chesbrough, Wim Vanhaverbeke and Joel West eds. *New Frontiers in Open Innovation*. Oxford: Oxford University Press, Forthcoming: 3-28.

Coenen, M., & Kok, R. A. W. (2014). Workplace flexibility and new product development performance: The role of telework and flexible work schedules. *European Management Journal*, 32(4), 564–576. https://doi.org/10.1016/j.emj.2013.12.003

Dandurand, L. (2005). Réflexion autour du concept d'innovation sociale, approche historique et comparative. *Revue Française d'administration Publique*, 3(115), 377–382.

David, P. A., & Foray, D. (2002). Une introduction à l'économie et à la société du savoir. *Revue Internationale Des Sciences Sociales*, 171(1), 13–28.

Diemer, A. (2016). Les symbioses industrielles : un nouveau champ d'analyse pour l'économie industrielle. *Innovations*, 2(2), 65-94. https://doi.org/10.3917/inno.050.0065

Dupouët, O., Bernela, B., & Ferru, M. (2019). Network Dynamics and Communities in Applied Biomedical Research. *Journal of Innovation Economics & Management*, *n°30*(3), 213. https://doi.org/10.3917/jie.pr1.0053

Foray, D. (2013). L'industrie du luxe et l'économie de la connaissance. *Innovations*, 2(2), 71-90. https://doi.org/10.3917/inno.041.0071

Gallaud, D., & Laperche, B. (2016). *Économie circulaire et développement durable: écologie industrielle et circuits courts* (Vol. 5). ISTE Group.

Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy : the expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, 114, 11–32. https://doi.org/10.1016/j.jclepro.2015.09.007

Grange, C. & Sponem, S. (2021). Les travailleurs du savoir face au bouleversement technologique. *Gestion*, 1(1), 42-49. https://doi.org/10.3917/riges.461.0042

Granstrand, O., & Holgersson, M. (2020). Innovation ecosystems: A conceptual review and a new definition. *Technovation*, *90–91*(May 2019). https://doi.org/10.1016/j.technovation.2019.102098

Hamdouch, A., & He, F. (2009). R&D offshoring and clustering dynamics in pharmaceuticals and biotechnology: key features and insights from the Chinese case, *Journal of Innovation Economics*, *2*, 95–117.

Haudeville, B. & Le Bas, C. (2016). L'innovation frugale, paradigme technologique naissant ou nouveau modèle d'innovation ?. *Innovations*, 3(3), 9-25. https://doi.org/10.3917/inno.051.0009

Holland, G., & Sene, O. (2010). Elinor Ostrom et la Gouvernance Economique. *Revue d'économie Politique*, 120(3), 441–452.

Hussler, C., & Burger-Helmchen, T. (2016). Inversée vous avez dit inversée ? - Une typologie stratégique de l'innovation inversée. *Revue Française de Gestion*, 42(255), 105–119. https://doi.org/10.3166/rfg.2016.00024

IPCC. (2018). *Global warming of 1.5 Degrees*. Retrieved from https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

Jaffe, A. B. (1989). Real Effects of Academic Research. *The American Economic Review*, 79(5), 957–970.

Jullien, N. & Zimmermann, J.B. (2009). Firms' contribution to open source software and the dominant user skill. *European Management Review*, 6(2), 130–139.

Laperche, B. (2017). *Enterprise knowledge capital*. John Wiley & Sons.

Laperche, B. & Lefebvre, G. (2012). The globalization of Research & Development in industrial corporations: Towards "reverse innovation": The cases of General Electric and Renault. *Journal of Innovation Economics & Management*, 2(2), 53-79. https://doi.org/10.3917/jie.010.0053

Laperche, B., Lima, M., Seuillet, E., & Trousse, B. (2019). *Ecosystèmes d'innovation : regards croisés des acteurs clés* (No. hal-02418541).

Laperche, B. & Uzunidis, D. (2007). Le Système national d'innovation russe en restructuration : Réformes institutionnelles et politique industrielle. *Innovations*, 2(2), 69-94. https://doi.org/10.3917/inno.026.0069

Le, S. T. K. (2020). Measuring innovation efforts of developing countries: Empirical evidence from Vietnam. *Journal of Innovation Economics Management*, (3), 163-194.

Le Bas, C. (2016). The importance and relevance of frugal innovation to developed markets: milestones towards the economics of frugal innovation, *Journal of Innovation Economics & Management*, 3(21) , 3-8.

Massard, N., & Torre, A. (2004). Proximité Géographique et Innovation. In *Economie de proximités* (pp. 1–23). Retrieved from http://andre-torre.com/pdf/PDFpub108N1.pdf

Mobhe Bokoko, D. (2020). Responsible Innovation and Social Innovation. *Journal of Innovation Economics & Management*, *n° 32*(2), 229. https://doi.org/10.3917/jie.032.0229

Mongo, M. (2021). Services innovants et action publique pour dynamiser les économies territoriales: éléments d'analyse. Technologie et Innovation, 6(1), 1–11.

Moore, J. F. (1993). A New Ecology of Competition. *Harvard Business Review*, 71(3), 75–86. Retrieved from http://blogs.law.harvard.edu/jim/files/2010/04/Predators-and-Prey.pdf

Muet, P. (2006). Impacts économiques de la révolution numérique. *Revue économique*, 3(3), 347-375. https://doi.org/10.3917/reco.573.0347

OCDE. (2018). *Manuel d'Oslo 2018 : lignes directrices pour le recueil, la communication et l'utilisation des données sur l'innovation, 4ème édition*.

Ostrom, E. (1990). *Governing the Commons : The Evolution of Institutions for Collective Actions* (Cambridge). Cambridge.

Pontier, M. (2014). Télétravail indépendant ou télétravail salarié : quelles modalités de contrôle et quel degré d'autonomie. *La Revue Des Sciences de Gestion*, 265, 31–39.

Radjou, N., & Prabhu, J. (2015). Frugal Innovation: how to do more with less. *The Economist*.

Richez-Battesti, N., Petrella, F. & Vallade, D. (2012). L'innovation sociale, une notion aux usages pluriels : Quels enjeux et défis pour l'analyse ?. *Innovations*, 2(2), 15-36. https://doi.org/10.3917/inno.038.0015

Santamaría, L., Jesús, M., & Rodríguez, A. (2021). Failed and successful innovations : The role of geographic proximity and international diversity of partners in technological collaboration. *Technological Forecasting & Social Change*, 166(December 2020), 1–13. https://doi.org/10.1016/j.techfore.2021.120575

Schumpeter, J. (1939). *Business Cycles: A Theoretical, Historical, And Statistical Analysis of the Capitalist Process* (Volume 2). New York.

Semaan, M. (2020). Effectuation and innovation in resource constrained contexts: A literature review. Innovations, 63(3), 153–178. https://doi.org/10.3917/inno.063.0153

Shift Project. (2018). Lean ICT : pour une sobriété numérique.

Soltwedel, R., & Laaser, C. (2003). Spatial Impacts of the New Economy: Death of Distance and Decline of Cities? In R. Pethig & Rauscher M. (Eds.), *Challenges to the World Economy* (Springer, pp. 151–164). Retrieved from https://doi.org/10.1007/978-3-642-19018-6_13

Taskin, L. (2003). Les enjeux du télétravail pour l ' organisation. *Reflets et Perspectives de La Vie Économique*, 1, 81–94. https://doi.org/https://doi.org/10.3917/rpve.421.0081

Uzunidis, D. (2008a). The logic of the innovative milieu. In Laperche, B., Uzunidis, D. & Von Tunzelmann, G. N. (eds). (2008) *The Genesis of Innovation, Systemic Linkages between Knowledge and the Market*, E. Elgar, Cheltenham, 187-207.

Uzunidis, D. (2008b). Milieux innovateur et gestation d'un entrepreneuriat innovant. *Marché et organisations*, 1(1), 119-145. https://doi.org/10.3917/maorg.006.0119

Uzunidis, D. (2010). Innovation et Proximité: Entreprises, Entrepreneurs et Milieux Innovateurs. *La Revue des Sciences de Gestion*, 1(1), 13-22. https://doi.org/10.3917/rsg.241.0013

Wang, Y., Wang, Y., Chen, Y., & Qin, Q. (2020). Unique epidemiological and clinical features of the emerging 2019 novel coronavirus pneumonia (COVID-19) implicate special control measures. *Journal of Medical Virology*, 92(6), 568–576. https://doi.org/10.1002/jmv.25748

Zouaoui, S. K., & Hedhli, R. H. (2014). Communautés de savoir et innovation : le rôle de l'apprentissage. Une analyse sous l'éclairage d'une théorie basée sur les connaissances. *Management & Avenir*, 1(67), 155–176. https://doi.org/10.3917/mav.067.0155

Reminder of editorial priorities integrated in the synopsis and that have to be considered by authors

- The main keyword and central concept of the book is the one of ecosystem (in the context of innovation ecosystem).
- Inside ecosystems, cooperation will be highlighted (in particular system of collaboration, association).
- The economic approach will be prioritized over technical/engineering approaches.
- Similarly, the orientation will be first linked to economic actors before technologies.
- For the analysis of innovation ecosystems, the three micro/meso/macro-economic levels will be highlighted from the proposals of chapters.
- Innovation ecosystems should be treated in terms of information, ICT, knowledge, creative processes and environment. These themes are part of the "new economy".

Notes to authors on the submitted chapters

- The level of the micro-economic treatment of issues may concern analyzes of companies and organizations, for example, firms purchasing smaller companies in their innovation strategies.
- The meso-economic level may be linked to areas and networks. These could include analyzes of innovation centers, clusters and technopolies.
- The macro-economic level could include analyzes of countries or economic zones with dynamic innovation ecosystems (e.g. the USA concerning the pharmaceutical and space sectors, China in relation with green economy).
- Several chapters will concern the basic needs (which include food, shelter, clothing, care, heating and energy), the eco-responsible dynamics, and will be linked to the theory of commons (at the macro level for example, which innovation ecosystems can improve the generation of commons). Another part will be related to ICTs (for example, how giant digital firms as Google can acquire start-ups to develop their innovation ecosystem).

Terms of the call for chapters

Chapter Format: Final chapters could contain between 8,000 and 10,000 words.

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Steps and Timeline:

- Deadline to submit intentions (details below): **September 15th, 2021**.

- Deadline to submit finalized chapters: **March 1st, 2022**.

Prior requirements that must me included in the intentions

Authors interested in the call have to submit their intentions by September 15th, 2021. Authors must indicate:

1.) Names, given names and institutions of authors and co-authors: a chapter may be written by an author directly involved in the call with up to three co-authors.

2.) Language of writing (English or French): the chapters may be written in French or English and be edited in volumes referring to the language. Authors should be aware that if the English texts require linguistic corrections and rewriting, related fees will be the responsibility of the authors.

3.) Selected axes: an integrated table at the end of this document indicates axes in connection with the sections of the book, and indicative macro/meso/micro-economic focals. The authors will have to choose and indicate in their intentions the axes they wish to develop. The axes of the call were selected according to the specialties of the RNI and anchor points related to the book. The list is not exhaustive and the authors may propose third-party axes in relation with the synopsis. One or two axes can be highlighted per chapter.

4.) Title of chapter

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Proposed Axes, Not Exhaustive List (1 or 2 Axes per Chapter), and Sections and Indicative Levels		
Sections	**Proposed Axes**	**Levels**
Section 1: Economic Issues of Knowledge and Innovation	1/ Sustainable Development	Macro
	2/ Industrial Property and Innovation	Micro
	3/ Sciences in Society by Participative Researches	Macro
	4/ Economic Analysis of Innovation Processes	Macro
	5/ Organizational Routines of Firms	Micro
	6/ Innovation and Entrepreneurship by Systemic Approach	Micro
Section 2: Key-role of Innovation Ecosystems in Mechanisms of Generation, Adoption and Diffusion of Innovation	1/ Corporate Knowledge Capital	Micro
	2/ Management of Innovation and Sustainable Development	Micro
	3/ Dynamics of Networks	Meso
	4/ Clusters	Meso
	5/ ICT and Innovative Technologies	Macro
	6/ Open Source	Macro
	7/ Open Innovation, in particular related to Open Platforms	Micro
Section 3: Evolution of these Mechanisms Facing New Societal Issues (Climate/Environment, Access to Basic Needs and Digital Transformations)	1/ Environmental Innovation	Micro
	2/ Policies of Sustainable Innovation	Macro
	3/ Entrepreneurial Ecosystems	Micro
	4/ Intermediaries, Collaborations and Networks	Meso
	5/ Climate Changes and Economic Adaptation	Macro
	6/ Environmental Industry, Sustainable Development and Circular Economy	Meso
	7/ Innovation in Systems, Agricultural and Food Processing Industries and Short Food Supply Chains	Micro
	8/ Commons and Basic Needs	Macro