Event Report – Regional Studies Association Research Network – KIRDSA: Interdisciplinary Workshop on ‘Econometrics and Complex Networks’.



Event Report by Sergio Palomeque (email), University of the Republic, Montevideo, Uruguay.

RESEARCH NETWORK TITLE:

Regional Studies Association Research Network on Knowledge, Innovation and Regional Development in South America (KIRDSA)

This research network aims to promote research on regional development in South America, focused on knowledge flows and innovation capabilities. Knowledge capabilities are unevenly distributed within national and subnational

territories in South America, a region characterized by a peripheral but significant role in global knowledge production. These countries have a rich background of research in this field, which is associated with urban development, production agglomerations, emigration fluxes, and the role of universities, among others. It is highly relevant to articulate research activities to advance our understanding of the regional development processes that promote knowledge creation and improve access to global knowledge flows. This network aims to contribute to facing these challenges by producing relevant evidence and discussing it with policymakers (KIRDSA).

The research network organisers are Dr Pablo Galaso (University of the Republic – Uruguay), Sergio Palomeque (University of the Republic – Uruguay) and Andrea Belmartino (Gran Sasso Science Institute – Italy).

EVENT TITLE:

Interdisciplinary Workshop on 'Econometrics and Complex Networks'.

DATE AND PLACE OF EVENT:

October 24-25, 2024, Buenos Aires, Argentina

ORGANISER(S)' NAME(S):

Andrea Belmartino, Pablo Galaso and Sergio Palomeque

Event summary

The Workshop aimed to bring together teachers, researchers, and professionals from different areas dedicated to econometric applications and complex networks in economics to present their research, open interdisciplinary debate, discuss the field's future prospects, and generate new scientific knowledge.

30 participants and 13 presenters from 3 countries.

- Tobias Carreira-Munich: Estudio de escenarios de bloques comerciales mediante simulación del Espacio de Productos Dinámico
- Emiliano Alvarez: Diffusion analysis of inflationary shocks in the Mexican economy: a study using dynamic network analysis

- Federico Scenna: Análisis de grafos del mercado de criptomonedas
- Matías Gutman, Paula Luvini: ¿Qué podemos inferir de los datos sobre las capacidades y oportunidades productivas al interior del país?
- Sergio Palomeque: Cities' Knowledge Base: internal absorptive capacities and external collaboration complementarity
- Gabriel Montes Rojas: Los determinantes del riesgo sistémico en el mercado interbancario argentino
- Daniel Aromí: Synthetic surveys of monetary policymakers: perceptions, narratives and transparency
- María Paula Bonel: Listening to the price-setters: Inferring inflation expectations from synthetic surveys
- Santiago Picasso González: Using a network to infer the complexity measure of services
- Ignacio Girela: Sobre la no-positividad en redes de Markov discretas: una aplicación para el análisis de la pobreza multidimensional
- Sergio Petralia: Innovation Complementarities in Open Source Software
- Sergio De Raco: Skill Relatedness Networks y diversificación productiva
- Catriel D'Elía El impacto de la política productiva sobre la complejidad de los países: una mirada desde el Product Space

The selected papers emphasize interdisciplinary research at the intersection of econometrics and complex networks, with a strong focus on understanding economic, social, and systemic interconnections.

Selection Criteria

- Papers were chosen to highlight innovative econometrics and network theory applications to real-world issues, aligning with the workshop's emphasis on interdisciplinarity.
- Many papers investigate economic systems' dynamics, exploring productive capabilities, diversification, and systemic risk. These studies provide insights into the global economy's structural interdependencies.
- Relevance to global knowledge flows:
    - The interplay between local capacities and global linkages (e.g., "Cities' Knowledge Base: internal absorptive capacities and external collaboration complementarity").
    - Cross-country influences economic policies and innovation, such

as analyzing inflationary shocks or diversification strategies.
- The selection highlights research with clear implications for public policy and development strategies, particularly in leveraging global knowledge flows for regional development and addressing systemic challenges.
- Topics like cryptocurrency markets, systemic risks, and open-source innovation reflect emerging trends that resonate with contemporary global challenges.

Why these papers matter

- They examine how local capabilities can leverage global networks for economic growth, offering valuable lessons for policy design in diverse contexts.
- The selected papers use network analysis and simulations to provide cutting-edge techniques for studying knowledge flows and their impact.
- Policymakers, academics, and practitioners can use these insights to understand better and optimize global knowledge-sharing mechanisms, enhancing economic and social resilience.

Program (PDF)

- **Workshop Interdisciplinario en "Econometría y Redes Complejas" (PDF)**

Program (webpage)

- **Workshop Interdisciplinario en "Econometría y Redes Complejas" (Link)**

Conclusions

Following the workshop's conclusion, we seized the opportunity to announce and introduce the upcoming KIRDSA-RSA event. By leveraging the attendees' presence, we effectively disseminated and elucidated the event's objectives

(Source).

The event, which brought together experts and students from diverse disciplines, highlighted the role of interconnected economic systems, innovative methodologies, and regional collaboration in shaping the future of economic development.

Key conclusions included:

- **Economic Complexity as a Tool for Regional Growth:**
  - Studies showcased how South American economies can leverage economic complexity metrics to identify comparative advantages and diversify their production structures.
  - Focusing on local capacities and their connection to global markets provided a roadmap for enhancing productivity and fostering innovation.

- **Knowledge Absorption and Collaboration**:
  - Presentations emphasized the importance of cities' absorptive capacities in integrating global knowledge into local ecosystems, demonstrating how collaboration networks can complement internal development efforts.

- **Systemic Risks and Resilience:**
  - Discussions on systemic risks in financial and trade networks underlined the importance of robust systems capable of adapting to global shocks, with implications for regional policy frameworks.

- **Innovation Networks and Open Collaboration:**
  - The session on open-source software highlighted how global collaboration platforms can accelerate knowledge transfer and innovation in resource-constrained environments like South America.

This event underscored the critical role of understanding and optimizing global knowledge flows in South America’s development, clearly calling for sustained interdisciplinary research and policy innovation.

The next confirmed event will be the “II INTERNATIONAL CONFERENCE ON REGIONAL DEVELOPMENT IN SOUTH AMERICA“.

Photo report

About the author of this report

Sergio Palomeque. PhD candidate at Universidad de Buenos Aires, Argentina. Researcher at the Institute of Economics – Universidad de la República, Uruguay. His research areas are economic geography, economics of innovation and economic complexity.