

# **THE INNOVATION SYSTEM, COMPETITIVENESS OF THE ZAGREB URBAN AREA**

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# THE OBJECTIVE

- **Urban development and competitiveness largely depends on the availability of adequate human resources as well as optimal use of various type infrastructure (e.g. entrepreneurial – technological infrastructure);**
- **The purpose of this presentation is to give a overview about IS on subnational level, explain competitiveness of the Zagreb Urban Area and propose recommendations for the fostering competitiveness , based on the principles of functioning of the innovation system.**

| <p><b>The main political/economic process</b><br/> <b>In terms of international business and use of technology relevant for Eastern Europe</b></p>   | <p><b>The Main challenges on subnational level</b></p>  |
|--|---|
| <p><b>Competition in the field of research and development and innovation became increasingly important on the global level (e.g. China overtook the EU in terms of R&amp;D intensity in 2013)</b></p> | <p><b>Emergence of territory defined conception that emphasise the absorptive capacity for use of technology and knowledge (Regional innovation system, learning region, Smart Cities).</b></p>       |
| <p><b>Productivity growth, measured by TFP is slower in recent years, compared to the period before the financial crisis</b></p>   | <p>Development of new concepts</p> <ul style="list-style-type: none"> <li>• Welfare Economy – importance of ethical norms in the construction of attitudes;</li> <li>• The quality of life</li> </ul> |
| <p><b>Deindustrialisation of national economies /dematerialization of the technology in the last twenty years;</b></p>   | <ul style="list-style-type: none"> <li>• Local and regional product/services, value added chain;</li> <li>• Reindustrialisation as a policy approach;</li> </ul>                                      |
| <p><b>Emergence of non-credit financing of the investements comparing classical credit instruments</b></p>   | <ul style="list-style-type: none"> <li>• Importance of boundaries of institutions,</li> <li>• How to interact with other institutions/organisation especially from the financial sector;</li> </ul>   |

# EVOLUTION OF IDEA OF REGIONAL INNOVATION SYSTEM

## OMNIPRESENCE OF INNOVATIONS ARE SUBSTITUTED BY DOMINANCE OF TECHNOLOGIES

The emergence of the Regional innovation system (RIS) meant focus on regions in terms of competitiveness as well in terms development;

- **Catching up mechanism on subnational level**

In the last twenty five years following types of innovation system appeared regional innovation system (Cooke 1996; Cooke *et al.*, 1997), technological innovation system (Carlsson, Stankiewicz, 1991) and finally sectoral innovation system (Malerba, 2002, Malerba 2005);

- **Adequate sectors and technology create opportunities for innovation**

In the context of Eastern European countries innovation activities characteristics is strong reliance on foreign sources of knowledge (Fagerberg, 2005).

- **Importance of absorptive capacity**

Recently, competitive transformation depend on availability of adequate human resources especially in terms of Knowledge Intensive Business Services, as catalyzator of transformation technology to the competitiveness;

# DIMENSIONS OF REGIONAL INNOVATIONS SYSTEM (BAČIĆ, ARALICA, 2016)

| Dimensions and elements<br>2006-2010   | Northwest Croatia | Central and Eastern<br>Croatia | The Adriatic Croatia   |
|--|-------------------|--------------------------------|------------------------|
| A) Knowledge creation and dissemination  | 1                 | 3                              | 2                      |
| Human resources development  | 1                 | 3                              | 2                      |
| Scientific infrastructure  | 1                 | 3                              | 2                      |
| Scientific output  | 1                 | 3                              | 2                      |
| A) Firm innovation activity  |                   |                                |                        |
| Industrial structure, % of firms in:   | LKIS, LT, KIS,    | LT, LKIS, MLT                  | LKIS, <b>LT</b> , KIS, |
| Firms size   | 1                 | 3                              | 2                      |
| Innovation input   | 1                 | 2/3                            | 2/3                    |
| Turnover/Innovation  | 3                 | 1                              | 2                      |
| A) System's performance  |                   |                                |                        |
| Diffusion of innovation  | 1                 | 2/3                            | 2/3                    |
| Public financial support, % of firms that received financing for innovation activities from: | 2                 | 1                              | 3                      |
| Infrastructure and competitiveness   | 1                 | 3                              | 2                      |
| SMEs' investment of into new long-term assets/total revenues                                 | 2                 | 3                              | 1                      |
| Gross value added (GVA) per employee in industry, in 000 kuna                                | 1                 | 3                              | 2                      |

# LESSONS FROM THE INNOVATION SYSTEM AS ANALITICAL APPROACH

- **A stronger internationalization activities of the City of Zagreb , linking global - national and local strategies**
- **Synchronization in the implementation of local regional national and international sources of funding;**
- **Strengthening scientific and technological business - inclusive infrastructure**
- **Proactive policies aimed anticipation of skills needs in the future in order to increase the efficiency of investment**
- **Strengthening accountability and citizen involvement at the level of planning and implementation activities**
- **The introduction of evaluation practices of policy programmes and policy instruments**