Labor market regional disparities: Croatia
Hello!

My name is Davor Bernardić

I am here to share a knowledge and ideas with you.
Starting notes®
15 minutes
Please do ask questions.

GOAL: Where do we stand? What can be done?

Content

Starting point
Theoretical background
Analysis
Findings
Policy recommendations
Let’s start with the role of human capital in process of development policy enforcement
Labour – holder

Lunching any reform requires squarely defined answer to at least two questions:
■ is the economy structure able to adequately obtain implementation of these reform
■ and what effects the reform will produce (cross – sectional).
2. Theory

Regional economics
...understanding of regional competitiveness conditions - the emergence, persistence, and variations of spatial socio-economic disparities.

Alfred Weber – Lucas, Romer - Krugman

technology cannot be observed as fix asset-performing production, but is to be observed as complex formation of elements constituting the process of production, largely depending on human component, creating the process.
a) Economic convergence

Charles Tiebout and Douglass North (1956, 1955)
Export based model - region’s response to exogenous, world, demand, produces growth in both - export sector, and the “residential,” or nonbasic sector.

Roy F. Harrod (1939), Evsey D. Domar, Salter-Swan, Barro and Sala-i-Martin 1999
generate predictions of conditional convergence of growth rates over time across countries and the leveling off of per capita incomes within countries
b) Economic divergence

**Cumulative causation theory**
Myrdal (1957): underdeveloped regions may benefit from growth in developed regions.

“Spread” effects - diffusion of innovations into a “lagging” region

“Backwash” effects - resulting from the flow of capital and labor from the lagging region into the developed region.

Williamson (1965): limited number of growth poles and impact of congestion and high factor costs produces curve.
Growth Pole Theory
Francois Perroux (1955):
- Certain business units and limited number of them act as the engine of development.
- Free market economy relies on spontaneous reduction of disparities due to the progress spillovers generated by growth poles.
- Shedding phenomenon: progress is higher in centers of growth poles, and dissipating towards the periphery inconvenience.

Lack of coherence between traditional notions of growth poles and empirical reality.
c) Structure/Sector theories

**Profit/Product Cycle theories**

Vernon’s (1966): innovative products have low price elasticity of demand, require highly skilled labour force and market access. Once the product becomes standardized, they need low skilled and cheap labour force.

Porter (1990): geographic clustering can be viewed as an organizing force for national industrial competitiveness.

**Flexible Specialization and Network Theory**

...based on the use of flexible labor and capital that can easily be tailored to the needs of changing markets.
d) Emerging neoclassical theory

**Base**
Heckscher-Ohlin-Samuelson (HOS) theory: factor-abundant region will have a comparative advantage in the production of goods that require the intensive use of that factor (gives a “why” to Ricardo theory of comparative advantage)

**The New Institutional Economics**
Coase- owners tend to minimize the transaction costs of production. For transactions that involve substantial uncertainties and for which contractual monitoring costs are high, vertically integrated nonmarket institutions may have cost savings over market forms of organization.
**New endogenous growth theories**

Schumpeter (1947) was the first to point out that the process of innovation is largely a race for monopoly control over the stream of rents from new innovations, which are essentially public goods once introduced.

Arrow’s (1962) “learning-by-doing”: firm can internalize knowledge and experience reducing future costs directly.

Romer’s model is based on the crucial assumption that knowledge exhibits increasing marginal productivity characteristics.

North (1991): institutions increase the social benefits of long-term cooperation.

**New Economic Geography**

Paul Krugman’s “core-periphery” model (not John Friedmann’s center-periphery model), introduces centrifugal and centripetal forces.
all "manufacturing" is located in the core and all agricultural production is located in the periphery, is sustainable with some combination of (1) large internal economies of scale, (2) low transportation costs, and/or (3) a large share of the regional population that is employed in manufacturing.
On the political as on the economic front it's important not to fall into the "not as bad as" trap. High unemployment isn't O.K. just because it hasn't hit 1933 levels; ominous political trends shouldn’t be dismissed just because there’s no Hitler in sight.”

— Paul Krugman.
3. Analysis

a) Sector analysis

Most (economicaly) important sectors differ significantly between regional counties

- County with above-average proportion of industry are mainly located in the Northwest of Croatia.
- Virovitičko – podravska has Main GVA part generated by agriculture, Karlovačka form public services, South regions from leisure and retail and tourism related utilities.
As expected, the highest impact on the economic growth is made by tertiary sector, placing services at central spot for policy formation and consideration. But this information does not reveal a lot, since the services can be built-up of many individual components, as well as part of the diverse group activities.

**Right graph: initial sectoral structure plays a low and inferior role explaining reached growth rate**
City of Zagreb dominates with 33.9% share of entrepreneurs and 40.6% share in total employment.

Second place is taken by Splitsko-Dalmatinska county, third by Primorsko-Goranska.

Those 3 out of 21 counties, contain 53.5% of total number of business enterprises, employing more than 56% of totally employed people in economy.
Ratio of migration to active number of enterprises

- Pointing out that raising and negative net migration ratio is related to the share of active in overall registered number of enterprises

- Why?
Education and (un)employment

- no track of unemployment trend change

- smallest proportion of unemployed people within county’s economically active population, is the one of highly educated people

- Slower employment of **economically active population** with lower educational level
3. Findings

Migration and (un)employment

Panel analysis of percentage change in unemployment share within economically active population in period between 2010 and 2015:

- indicates its negative correlation with migration balance and GDP per capita,
- and positive correlation with an average net earnings change.
\[ y = 6701.7x - 4100 \]
\[ R^2 = 0.5324 \]

\[ y = -6988.3x + 1480.9 \]
\[ R^2 = 0.4449 \]
A picture is worth a thousand words

Simple linear regression of two listed variables indicates that raise of migration will surely lead to raise of unemployed youth emigration, since the model with just two variables explains 54.02% of overall data variation.

\[
y = -5E-06x + 0.0574 \\
R^2 = 0.0439
\]

\[
y = -4E-05x + 0.0667 \\
R^2 = 0.5402
\]
So where do we stand?
Conclusion.

Unemployment and lower life quality (measured by GDP per capita), represent strong incentive of emigration process.

Quantity is not guarantee for quality, and first crucial action step requires synchronization of labor market needs, with output formed by collages.

Croatia is currently in phase of progressive raise of regional disparities.
Thanks!

Any questions?
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