Labor market regional disparities: Croatia

Hello!

My name is Davor Bernardić

I am here to share a knowladge and ideas with you.

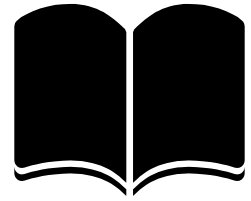# Content

Staritng notes®

15 minutes

Plese do ask questions.

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

1.

Starting point

Let's start with the role of human capital in process of development policy enfocement

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, wold, demand, produces growth in both - export sector, and the "residentiary," 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.
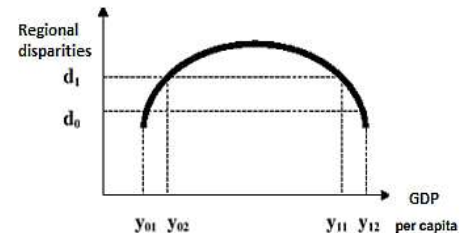
Growth Pole Theory

Francois Perroux (1955.):

-certain business units and limed 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

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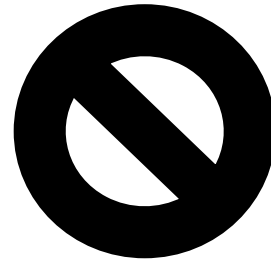
# c) Structure/Sector theories

Profit/Product Cycle theories

Vernon's (1966): innovative products have low price elasticity of demand, require highy skilled labour force and market access. Once the product becames standardized, they need low skilled and chiep 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
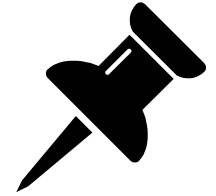
Base

HeckscherOhlin-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 adventage)

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 knowladge and experince 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.
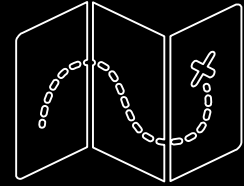
PATTERN

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 lesiure and retail and tourisam related utilities
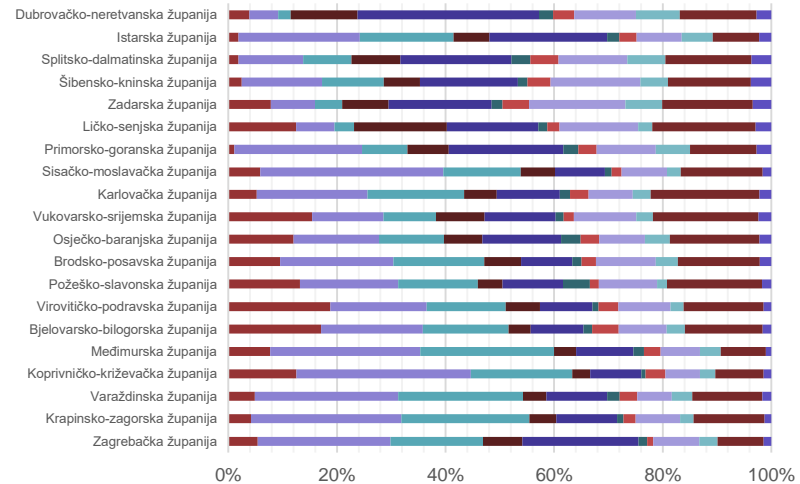

Blue(1) Agriculture, (2) Mining and quarrying and manufacturing, (3) Manufacturing, (4) Construction, (5) Retail, Logistic, Transporatition & Food Services, (6) Information & Communication, (6) Financial services, (7) Real estete, (8) Advice, Legal and Expert Services (9) Public administation, education, health and social care, (10) rest of acitivities
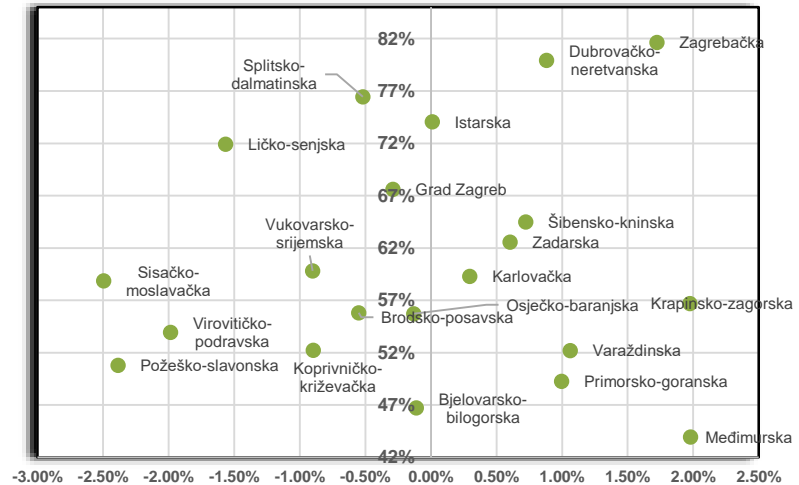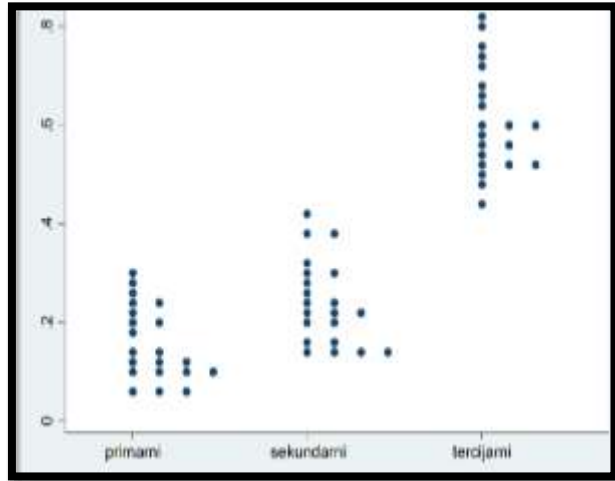
As expected, the highest impact on the economic growth is made by tertiary sector, placing a services at central spot for policy formation and consideration. But this information does not reveal a lot, since the services can be built-up of many individual components, as well as part of the diverse group activities.

Right graph: initial sectoral structure plays a low and inferior role explaining reached growth rate
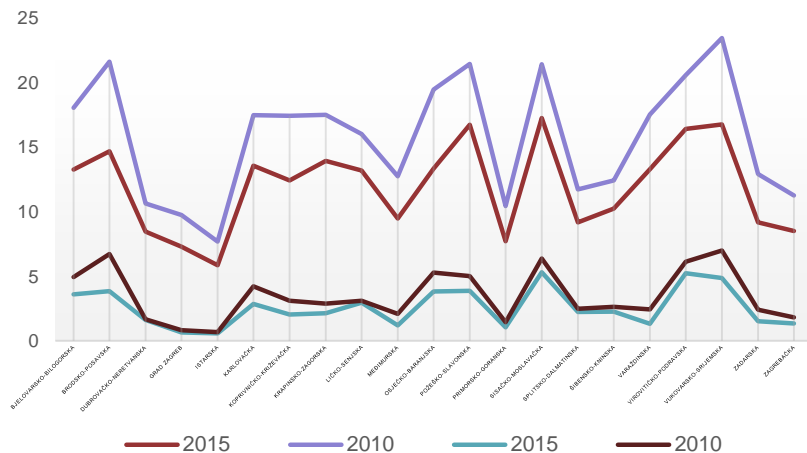
- ❑ City of Zagreb dominates with 33,9% share of entrepreneurs and 40,6% share in total employment.

- ❑ 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 registrated number of enterprises

❑ Why?
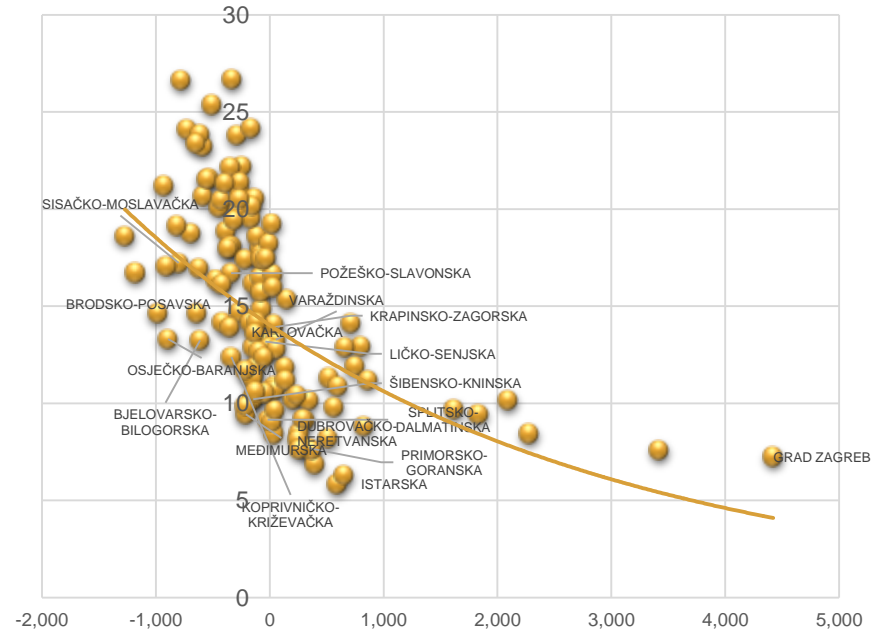
Education and (un)employment

☐ 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
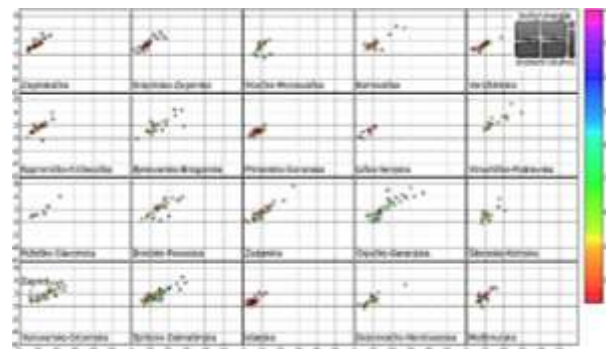
Elementary school ↑ and tertiary education ↓

3. Findings

Migration and (un)employment

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Random-effects GLS regression              Number of obs     =        126
Group variable: zup                        Number of groups  =         21

R-sq:   within  = 0.0905                    Obs per group: min =         6
        between = 0.7111                                   avg =       6.0
        overall = 0.6648                                   max =         6

                                            Wald chi2(4)      =      42.52
corr(u_i, X)   = 0 (assumed)                Prob > chi2       =     0.0000

     ukupnez |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]

      imizup | -.0000294     .00001     -2.93   0.003    -.0000491    -9.69e-06
         imi |  3.44e-06   5.72e-06      0.60   0.547    -7.77e-06     .0000147
      nplace |  2.67e-06   8.27e-07      3.23   0.001     1.05e-06     4.29e-06
        var4 | -1.18e-06   2.92e-07     -4.03   0.000    -1.75e-06    -6.04e-07
       _cons |  .2772669   .0218186     12.71   0.000     .2345033     .3200305

     sigma_u |  .03123925
     sigma_e |  .01426307
         rho |  .82749869   (fraction of variance due to u_i)
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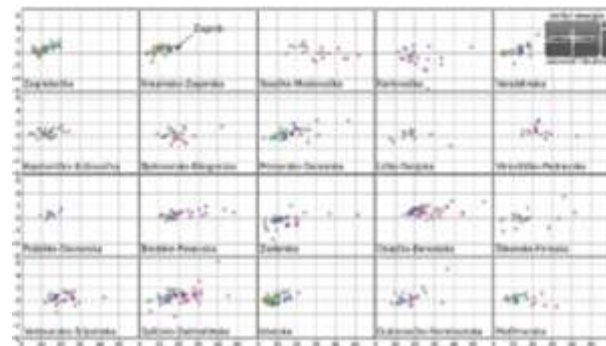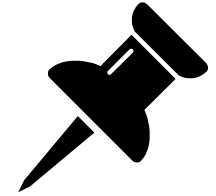
GDP per capita in 2015 indicates great velocity between counties

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,

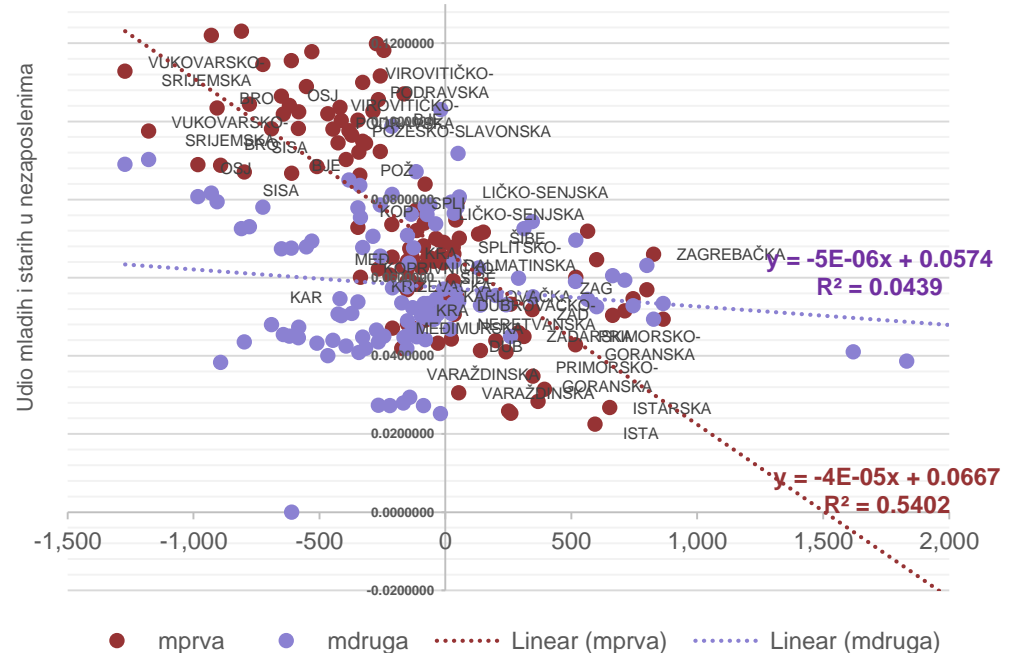- and positive correlation with an average net earnings change.

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←Ratio between share of unemployment and migration balance, county level 2010 -2015.
→ Ratio between share of employment and migration balance, county level 2010-2015.
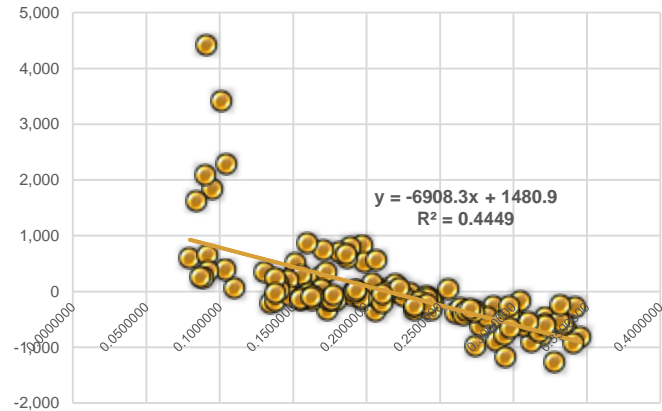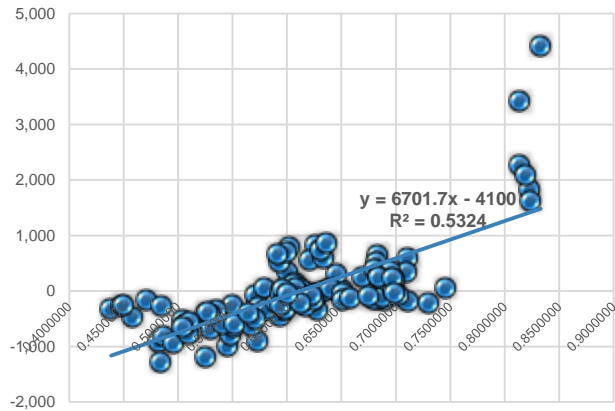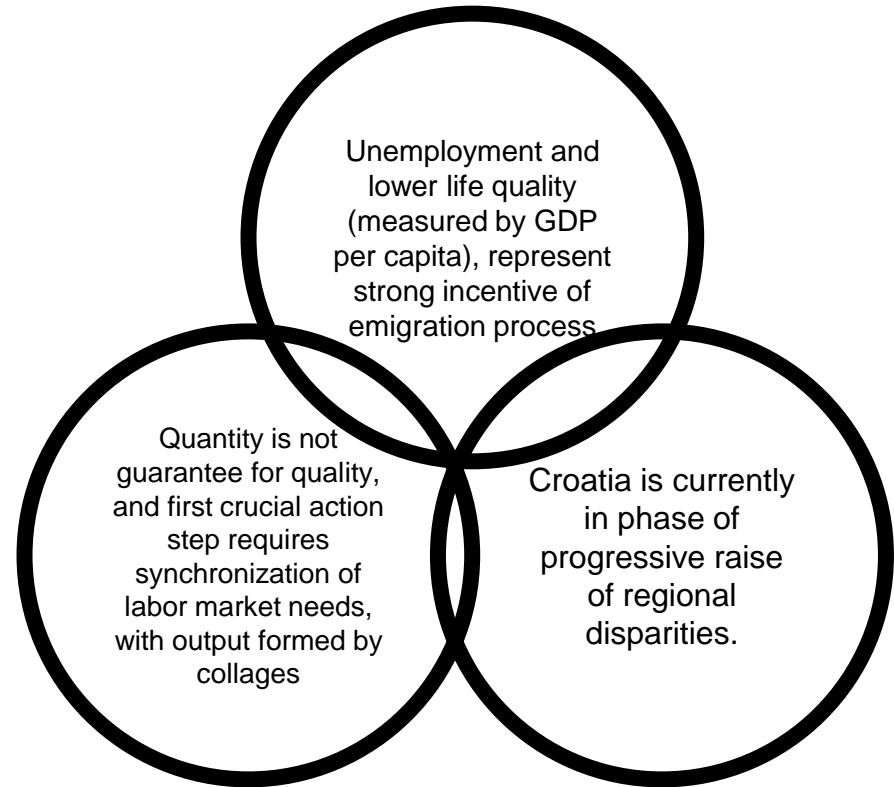
A picture is worth a thousand words

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.

Ratio of youth (20 to 34 years) and old (55-65 years) share to migration

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?

You can find me at

- davor.bernardic@sdp.hr