

The contribution of the digital economy and skills to local economic development in the EUSAIR region

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Western Balkans regional cooperation

- The Western Balkans has been involved in a process of creating its own macro-region promoted by the EU, which parallels and overlaps that of the EUSAIR.
- The Western Balkans Investment Framework is financing the digital economy, and the EU has allocated €30 million to digital projects in the region.
- The emphasis on the digital economy is also a key feature of the plan to create a *Regional Economic Area (REA)*.
- This has been developed within a major policy initiative for regional economic development known as the Berlin Process and is managed under the auspices of the Regional Cooperation Council (RCC) based in Sarajevo.

Western Balkans Regional Economic Area

- The pillars of the REA are:
 - i. Trade integration
 - ii. Industrial policy based on FDI attraction and smart specialisation strategies
 - iii. Mobility of professionals and researchers
 - iv. Digital integration
- These themes can be relevant to EUSAIR (with the obvious exception of (i))
- This presentation focuses on (i) – (iii) on the ways in which smart specialisation, as a local industrial development strategy, relies on the development of Internet connectivity and skills to promote local economic development.

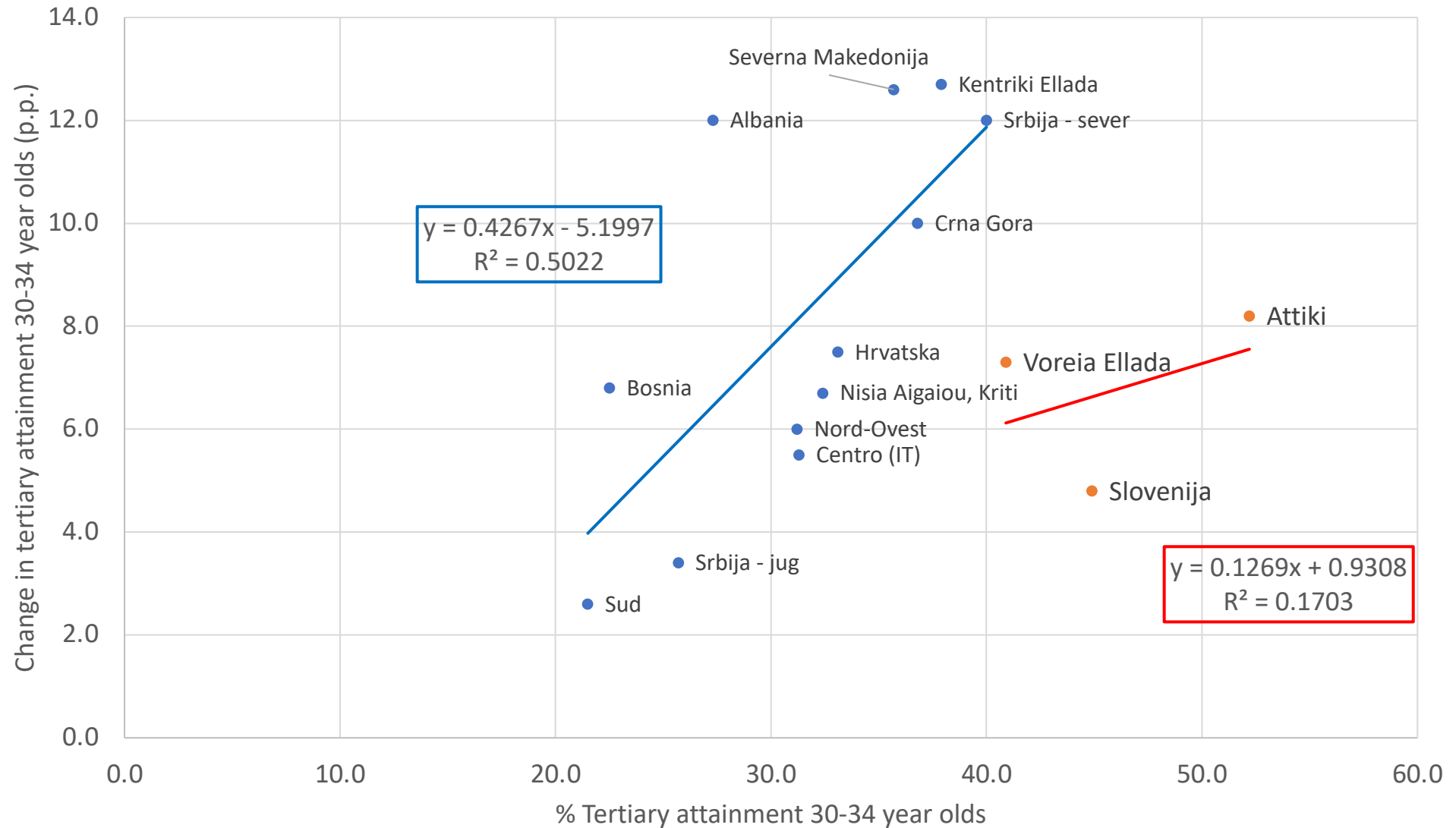
Empirical analysis

- The paper aims to investigate the contribution of digital access and labour force skills to local economic development.
- Data is taken from Eurostat and bivariate correlations between variables representing the two key factors and the growth of real gross value added (GVA) are calculated
 - Proportion of population aged 30-34 with tertiary education
 - Proportion of population lacking at least primary or lower secondary education
 - Proportion of labour force classified as having tertiary education or in science and technology sectors (human resources in S&T)
 - Proportion of labour force employed in high technology sectors
 - Proportion of households with internet access
 - Proportion of individuals who use Internet regularly (at least once a week)

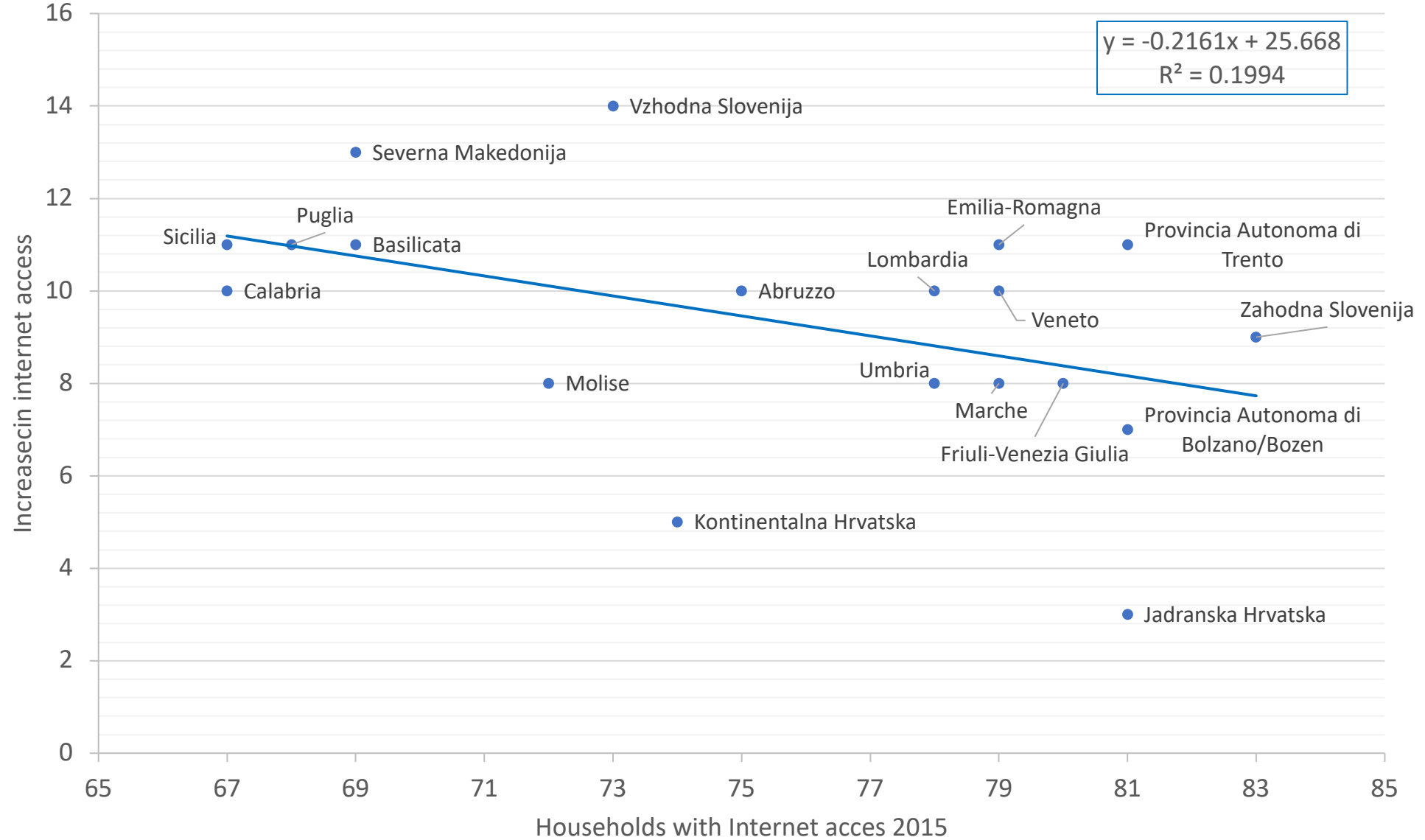
Empirical findings: Digital economy & skills in EUSAIR

- 1. Regions with higher share of tertiary attainment are increasing that share *faster* than regions with low share of tertiary attainment => widening divide in skilled resources
- 2. Regions with higher proportion of households with Internet access are increasing that share *slower* than regions with lower proportion of households with Internet access => decreasing divide in Internet access
- 3. Wide divergence in proportion of employees in high technology sectors in EUSAIR NUTS 2 regions. Six mainly urban regions have share above 5% (Belgrade, Ljubljana, Athens, Zagreb); below 2% in rural Greece, Italy and Serbia.
- 4. Similar picture for human resources in Science & Technology, variation from over 50% in Ljubljana and Belgrade to c.25% in Western Greece and Western Serbia

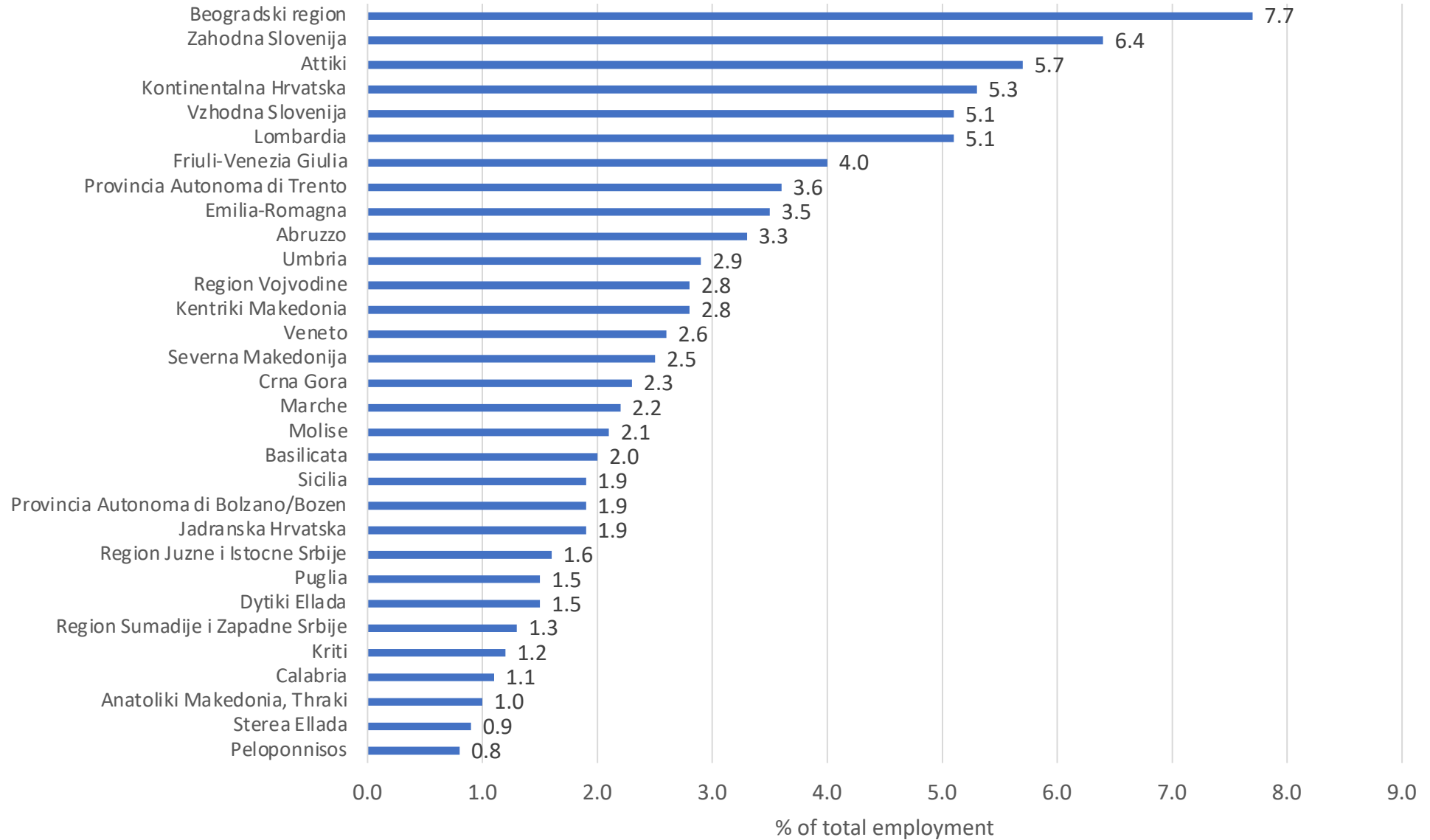
Tertiary attainment 3-34 year olds 2019 (%) vs Change in tertiary attainment 30-34 year olds (p.p.) (NUTS 1)



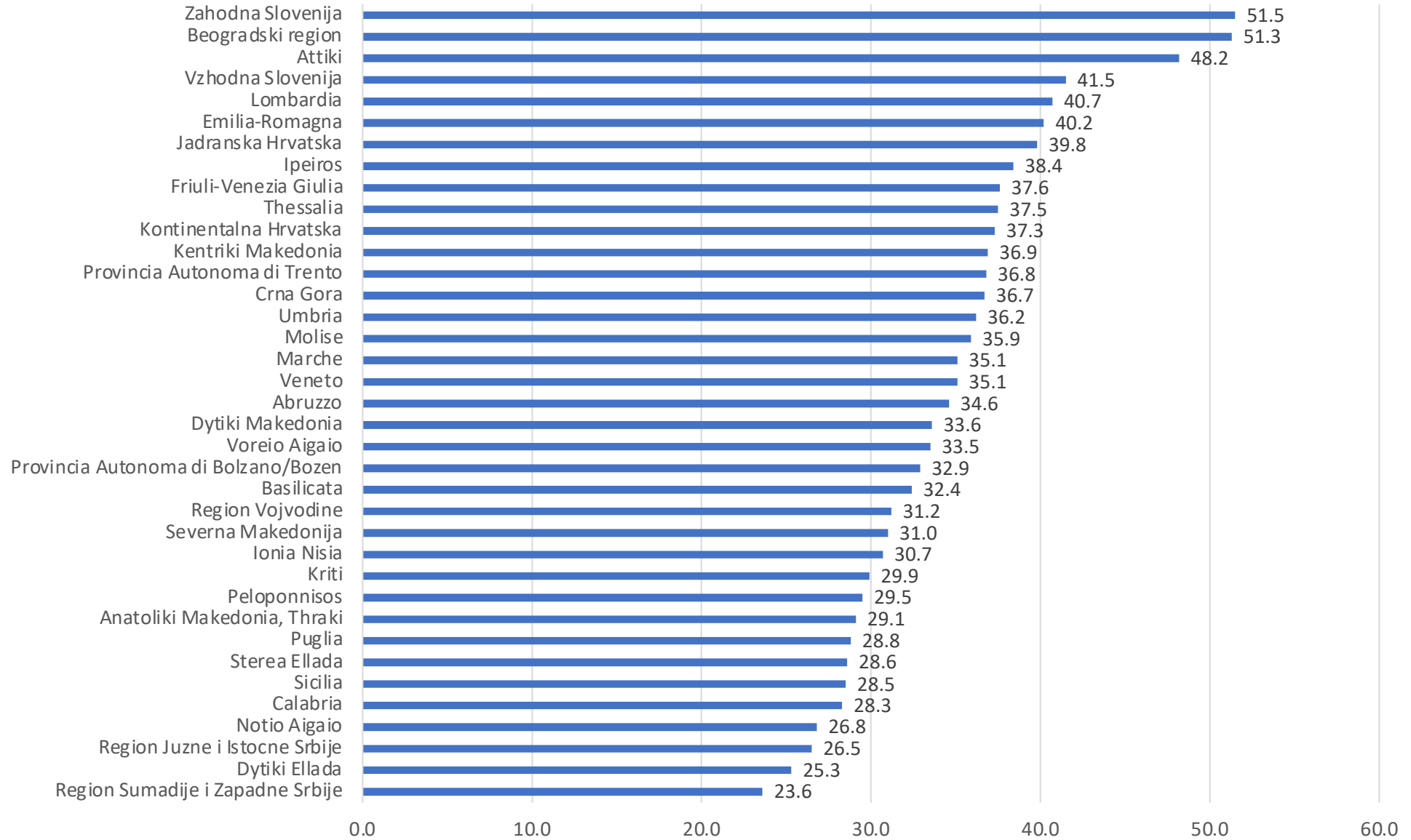
1. Households with internet access in 2015 by increase in access to 2019



Employment in high tech sectors by NUTS 2 region in EUSAIR



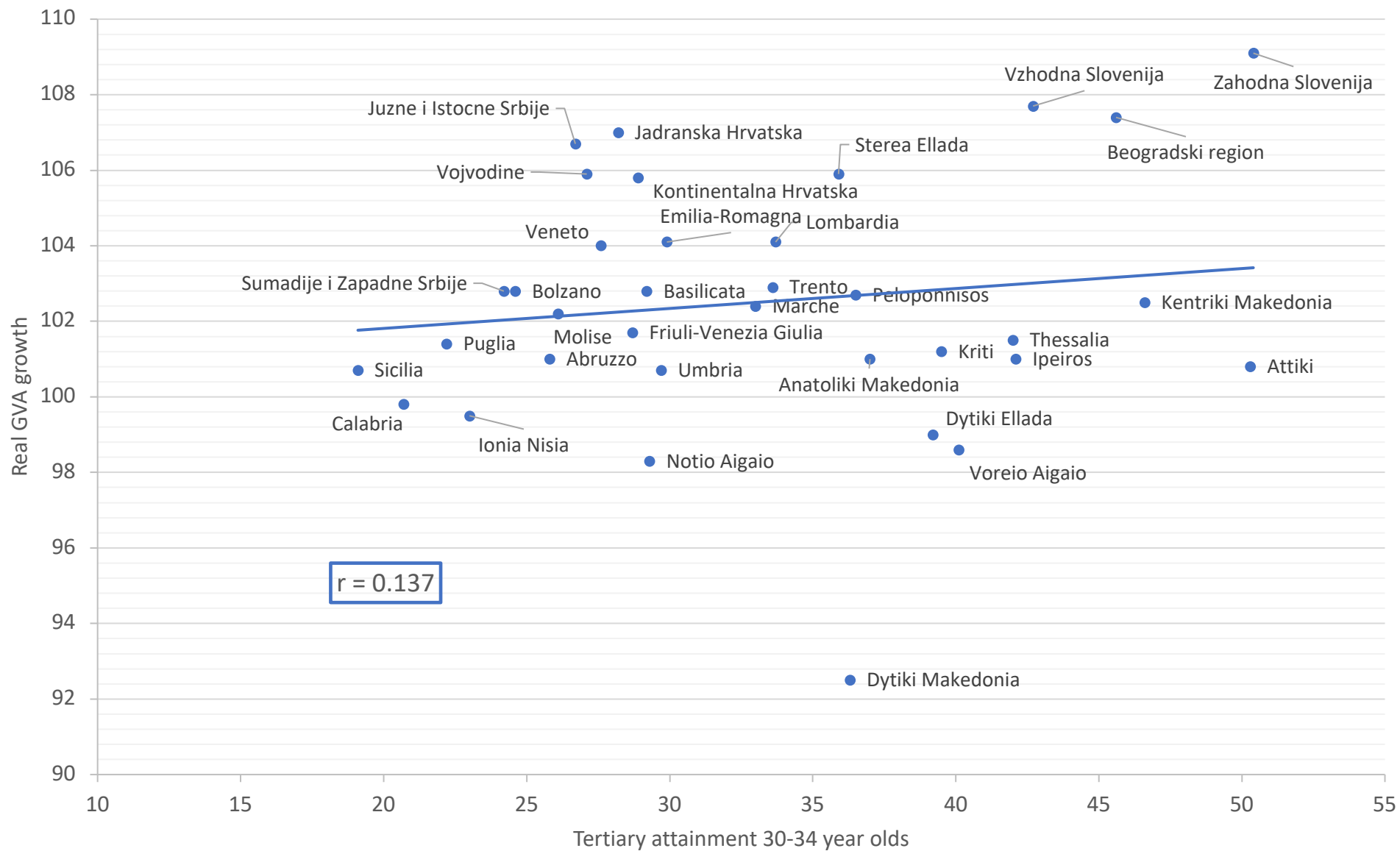
Human resources in S&T 2019



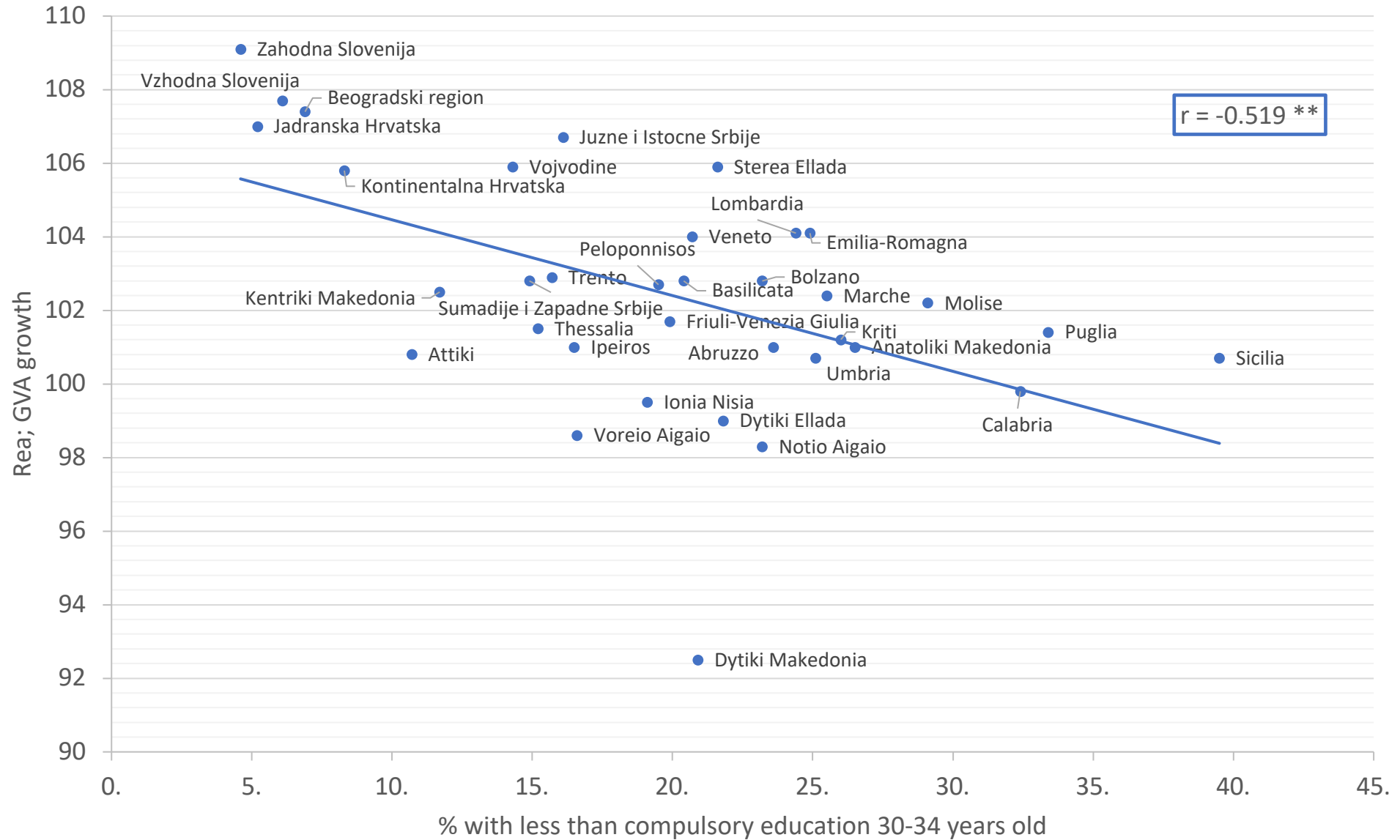
Empirical findings: Digital access, skills and growth in EUSAIR regions

- Economic growth is:
 - 1) Weakly correlated with the proportion of 30-34 year olds with tertiary education (not statistically significant)
 - 2) Strongly (negatively) correlated with the proportion of populations who fail to complete compulsory (primary and lower secondary) education (**5%)
 - 3) Strongly (positively) correlated with proportion of employees classified as science and technology employees. (**5%)
 - 4) Strongly correlated with employment in high technology industries. (**5%)
 - 5) Strongly (positively) correlated with the the regular use of the Internet by surveyed individuals.

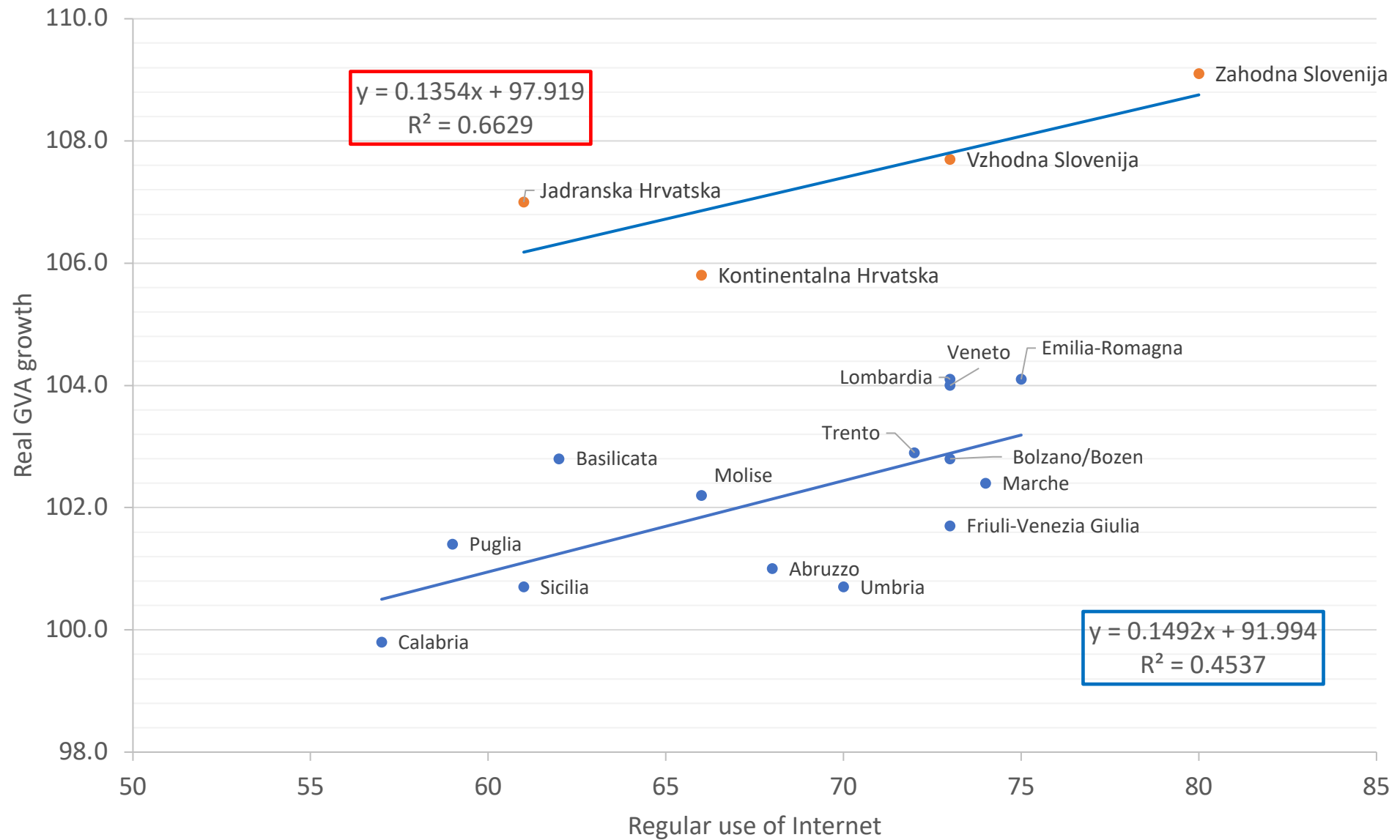
GVA growth vs Tertiary attainment 30-34 year olds



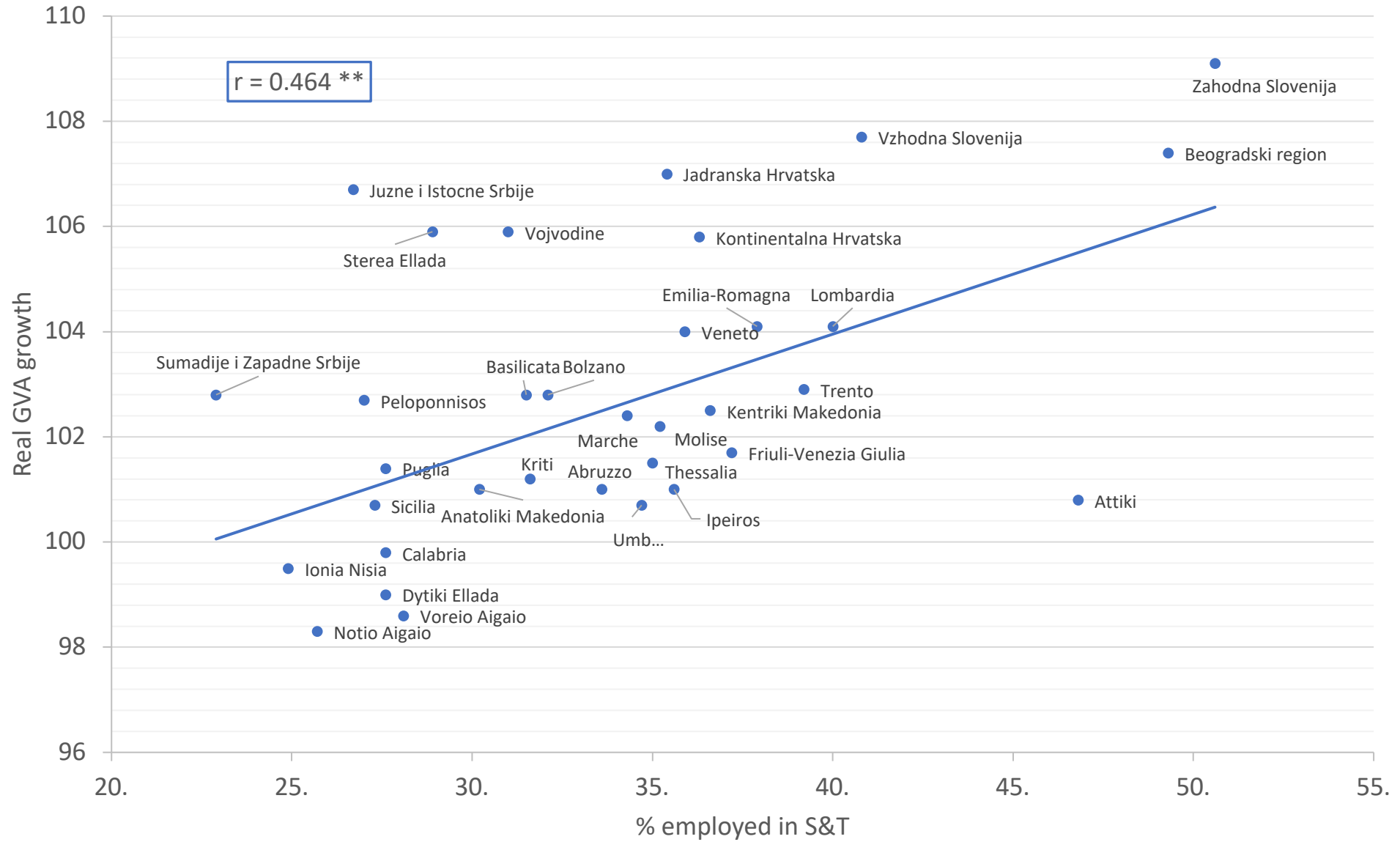
Real GVA growth vs Less than primary or lower secondary education, 2017



Real GVA growth and individuals who regularly use the internet , 2017, EUSAIR



Real GVA growth vs Employment in S&T, 2017



Real GVA growth vs Employment in high-tech industries, 2017

