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# A brief overview on the uneven impact of the Covid-19 pandemic upon employment and the young NEETs: 

Evidence from Greek regions and sectors

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## Regional change of employment

The Covid-19 pandemic, the health emergency and the subsequent economic crisis have strongly affected socio-economic life across the globe. The health crisis has implied severe economic turbulence, caused mainly by unprecedented mitigation policies and lockdown measures, with significant disruptive effect on economic activity and detrimental effects on employment. ${ }^{1}$ However, these effects have been geographically differentiated. ${ }^{2}$ Particularly, in Greece, provisional data for 2020 Q2 (i.e. second quarter, April to June) published by the Greek Statistical Agency highlight a rise in unemployment, compared to 2020Q1, despite the economic recovery plan adopted by the Greek government, and a spatially uneven footprint of Covid-19 crisis on employment.

The analysis shows that the insular regions, whose economies are strongly dependent on tourism, have recorded the greatest decline in the number of employed people (Figure 1). The region of Notio Aigaio saw its employment declining by $4.3 \%$ between 2020Q1 and 2020Q2, followed by Voreio Aigaio region ( $2.9 \%$ quarterly fall). Notio Aigaio recorded the greatest quarterly increase in unemployed persons in 2020Q2 (113\%), followed by other two insular and tourism-dependent regions (Ionia Nisia with $56.5 \%$ and Kriti $17.6 \%$ ). By contrast, Attiki, the capital region, and Kentriki Makedonia, including Thessaloniki urban area, recorded a quarterly positive change in employment between 2020 Q 1 and to $2020 \mathrm{Q} 2\left(0.2 \%\right.$ and $0.5 \%$, respectively). ${ }^{3}$ This could indicate a relative resilience of the regions with large urban centres (Attica and Central Macedonia) in the present conjuncture, contrasting evidence about the impact of the 2008/09 global economic crisis which has been relatively important on the regions with metropolitan areas. ${ }^{4}$

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Figure 1. Annual and quarterly change in the number of employed persons by NUTS 2 regions, Greece, 2020Q2


Source: Greek Statistical Agency

Table 1. Annual and quarterly change in the number of employed and unemployed persons by NUTS 2 regions, Greece, 2020Q2

|  | Change (\%) Q2 2020-Q1 2020 |  | Change (\%) Q2 2020-Q2 2019 |  |
| :--- | ---: | ---: | ---: | ---: |
|  | employed persons | unemployed persons | employed persons | unemployed persons |
| Greece | -0.22 | 3.11 | -2.84 | -4.57 |
| Anatoliki Makedonia, Thraki | -0.96 | -7.34 | -5.34 | -6.16 |
| Kentriki Makedonia | 0.52 | -2.12 | -2.29 | -7.08 |
| Dytiki Makedonia | -1.02 | -9.98 | -2.70 | -34.68 |
| Ipeiros | -2.13 | -8.39 | -5.71 | -1.50 |
| Thessalia | -0.30 | 12.19 | -1.48 | -1.40 |
| Ionia Nisia | 3.96 | 56.46 | -15.59 | 48.23 |
| Dytiki Ellada | -0.65 | 10.53 | 1.42 | -7.65 |
| Sterea Ellada | -0.05 | 2.43 | -5.76 | 25.22 |
| Attiki | 0.18 | -4.44 | 1.70 | -22.36 |
| Peloponnisos | -0.97 | -8.30 | 1.86 | -18.30 |
| Voreio Aigaio | -2.90 | -5.26 | -5.22 |  |
| Notio Aigaio | -4.34 | 113.04 | -28.68 |  |
| Kriti | -0.34 | 17.66 | -13.30 |  |

Source: Greek Statistical Agency
At annual basis, figures demonstrate that again the insular regions have been most acutely affected. Table 1 indicates that Notio Aigaio region saw the greatest decline in employment between 2019Q2 and 2020Q2 ( $-28.7 \%$ ), followed by Ionia Nisia ( $-15.6 \%$ ) and Kriti ( $-13.3 \%$ ). Similarly, these regions recorded the greatest annual rise in unemployed people from 2019Q2 to 2020Q2 (Notio Aigaio $194.8 \%$, Kriti $103.5 \%$ and Ionia Nisia $48.2 \%$ ). By contrast, Peloponnisos (1.8\%), Attiki (1.7\%) and



Dytiki Ellada (1.4\%) were the only regions that saw a positive annual change in the number of employed persons between 2020Q1 and 2020Q2. Dytiki Makedonia ( $-34.7 \%$ ), Attiki ( $-22.3 \%$ ) and Peloponnisos ( $-18.3 \%$ ) were the regions with the greatest annual decline in the number of unemployed persons between 2019Q2 and 2020Q2.

Evidence suggests that the geographical footprint in employment could be related to the diversified impact on local industries and specialization, with tourism-dependent insular regions recording the most important effects on employment.

## Change of employment by industry/ sector

In fact, the effects on employment are likely to vary by region due to specific socio-economic factors, such as the industrial base and local mix of productive activities. That is generally expected since the level of measures' restrictiveness has been differentiated across the sectors of the economy. For instance, the operation of enterprises in hospitality and tourism has been significantly disrupted, while the food processing and manufacture of pharmaceutical products may have been less affected.

Indeed, Figure 2 shows that tourism and hospitality was the sector that recorded the greatest annual decline in the number of employed persons between 2019Q2 and 2020Q2 (-20.4\%), followed by water supply ( $-17.4 \%$ ), activities of households as employers ( $16 \%$ ) and construction ( $-9.5 \%$ ). By contrast, electricity supply ( $9.1 \%$ ), other service activities ( $6.9 \%$ ), human health activities ( $6.3 \%$ ) and transportation and storage ( $4.6 \%$ ) were the industries that demonstrated the greatest annual increases in employment between 2019Q2 and 2020Q2.

Figure 2. Annual and quarterly change in the number of employed persons by industry, Greece, 2020Q2


Source: Greek Statistical Agency



Between 2020Q1 and 2020Q2, activities of extraterritorial organisations and bodies was the industry with the deepest decline in the number of employed persons ( $-16.2 \%$ ), followed by arts, entertainment and recreation activities ( $-7.1 \%$ ) and finance and insurance ( $-4.1 \%$ ). Electricity supply ( $6.8 \%$ ), activities of households as employers ( $3.5 \%$ ) as well as professional, scientific and technical activities $(2.7 \%)$ saw the greatest quarterly increase in employment (Table 2).

In conclusion, as shown in Maps 1, 2 and 3 below, the regions specialized in tourism and hospitality and which proved to be less vulnerable against the impact of the 2008 global economic crisis, seem to be in the worst position in the aftermath of the first outbreak of Covid-19. Finally, metropolitan areas are identified as more resilient, with this possibly related to the expansion of the economically inactive population compared to the total population in working age.

Table 2. Annual and quarterly change in the number of employed persons by industry, Greece, 2020Q2

|  | \% Change in employed <br> persons Q2 2020-Q1 2020 | \% Change in employed <br> persons Q2 2020-Q2 2019 |
| :--- | ---: | ---: |
| Accommodation and food service activities | -2.41 | -20.42 |
| Water supply | -2.22 | -17.4 |
| Activities of households as employers | 3.57 | -16 |
| Construction | -3.67 | -9.54 |
| Administrative and support service activities | -1.06 | -8.39 |
| Mining | -1.29 | -7.72 |
| Information and communication | -3.82 | -7.03 |
| Agriculture, forestry and fishing | 0.53 | -6.5 |
| Real estate activities | -3.21 | -4.98 |
| Financial and insurance activities | -4.15 | -4.21 |
| Activities of extraterritorial organisations and bodies | -16.19 | -3.24 |
| Total Greece | -0.22 | -2.84 |
| Public administration and defence, compulsory social security | 1.27 | -2.19 |
| Arts, entertainment, recreation activities | -7.08 | -2.16 |
| Manufacturing | -0.32 | -1.41 |
| Education | 1.71 | 0.87 |
| Professional, scientific and technical activities | 2.72 | 1.33 |
| Wholesale and retail trade, repair of motor vehicles and <br> motorcycles | -0.22 | 2.74 |
| Transportation and storage | -1.36 | 4.6 |
| Human health and social work activities | 0.66 | 2.06 |

Source: Greek Statistical Agency

Map 1: Annual percentage change of total employment by NUTS 2, Greece, Q2 2020-Q2 2019


Map 2: Annual percentage change of employment in accommodation and food services by NUTS 2, Greece, Q2 2020-Q2 2019


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## Map 3: Annual change of total employment vis-a'-vis change in employment in accommodation and tourism by NUTS 2, Greece, 2nd quarter 2020



The young people which are either unemployed or not seeking a job, while they are not in education or not following a training program, also known as NEETs, have seen an important but regionally uneven growth. The greatest increase is observed in the insular regions of Kriti, Voreio Aigaio and Notio Aigaio; all of them specialized in tourism. Meanwhile, across all the Greek regions, the increase in NEETs is positively associated with the significant growth of the economically inactive young people.

The regional unevenness issue seems to increase in significance in the context of the Covid-19 pandemic, since regions, even within the same country, demonstrate different infection rate and readiness in the implementation of mitigation policies. Considering, in addition, that the restrictiveness of the mitigation measures has been differentiated across the economic sectors, important changes are anticipated to take place in the regional industrial structure. Figures reveal that in 2020Q2, the Greek regions that have been most acutely affected in terms of employment include areas dependent on tourism, in contrast with the evidence regarding the 2008/09 global economic crisis, when regions specialised in tourism have proved to be relatively resilient. Reflecting on the evidence from previous economic crises, the socio-economic impacts are expected to be largely uneven across regions and industries. The Coronavirus Response \& Labour Statistics team will be closely monitoring and analysing this geographical and industrial differentiation.
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Table 3: Annual and quarterly \% change in the number of unemployed and economically inactive (NEETS) by NUTS 2, Greece, 2020Q2

|  |  | Unemployed |  |  | Economically inactive |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NEET |  |  | NEET |  |  |
|  |  | 15-19 | 20-24 | 25-29 | 15-19 | 20-24 | 25-29 |
| $\begin{gathered} \text { \% Change in } \\ \text { employed } \\ \text { persons Q1 } \\ 2020-\text { Q1 } 2019 \end{gathered}$ | Greece | -53.2 | -20.2 | -14.2 | 35.7 | 0.7 | 29.5 |
|  | Anatoliki Makedonia, Thraki | -47.9 | 9.9 | -8.7 | 31.1 | 134.0 | 56.0 |
|  | Kentriki Makedonia | -0.4 | -5.7 | -4.6 | 6.2 | -22.3 | 34.6 |
|  | Dytiki <br> Makedonia | -73.1 | -31.5 | -48.9 | 2.3 | 31.8 | 289.2 |
|  | Ipeiros | -100.0 | -12.7 | 70.9 | 100.7 | 2.9 | -45.8 |
|  | Thessalia | 16.3 | 2.1 | -46.5 | 116.7 | -65.9 | 57.5 |
|  | Ionia Nisia | -0.8 | -70.0 | -43.7 | 500.3 | 16.3 | 32.4 |
|  | Dytiki Ellada | -31.8 | -5.5 | -5.5 | -40.9 | 15.7 | 210.8 |
|  | Sterea Ellada | -59.9 | 19.3 | 45.7 | 90.3 | -34.2 | -4.4 |
|  | Attiki | -100.0 | -40.7 | -18.3 | 40.7 | 8.1 | -2.1 |
|  | Peloponnisos | 32.6 | -15.1 | -37.5 | 84.4 | -39.3 | 39.6 |
|  | Voreio Aigaio | -69.9 | -54.4 | -34.3 | 712.3 | -10.5 | 0 |
|  | Notio Aigaio | -57.6 | -43.8 | -63.9 | -9.8 | 53.2 | 234.3 |
|  | Kriti | -25.6 | 14.8 | 11.5 | -48.4 | 15.0 | -9.6 |
| $\begin{gathered} \text { \% Change in } \\ \text { employed } \\ \text { persons Q2 } \\ 2020-Q 22019 \end{gathered}$ | Greece | -35.5 | 4.4 | 2.6 | 82.7 | 29.1 | 40.5 |
|  | Anatoliki Makedonia, Thraki | -63.1 | 3.5 | 18.8 | 56.6 | 89.6 | 49.1 |
|  | Kentriki Makedonia | -1.4 | 34.6 | -18.5 | 6.8 | -18.1 | 25.3 |
|  | Dytiki Makedonia | -100.0 | -1.1 | -36.7 | -16.7 | 1.3 | 199.9 |
|  | Ipeiros | 0 | -32.6 | 23.4 | 86.6 | 154.3 | 71.9 |
|  | Thessalia | 5.2 | 12.8 | -35.0 | 151.3 | -1.2 | 55.5 |
|  | Ionia Nisia | 2.4 | 320.7 | 10.0 | 255.8 | -38.1 | 44.2 |
|  | Dytiki Ellada | 112.5 | 72.4 | -16.6 | -20.1 | 140.6 | 130.7 |
|  | Sterea Ellada | -71.7 | 18.0 | 69.5 | 61.7 | 3.3 | -22.4 |
|  | Attiki | -90.2 | -32.7 | -7.8 | 321.8 | 92.1 | 18.1 |
|  | Peloponnisos | 57.3 | 43.9 | -17.6 | 259.0 | -43.5 | 17.7 |
|  | Voreio Aigaio | 42.3 | -34.4 | -16.1 | 304.1 | -66.8 | 0 |
|  | Notio Aigaio | -18.0 | 120.4 | 184.7 | -18.6 | 101.8 | 191.0 |
|  | Kriti | 4.3 | 22.0 | 154.2 | -28.9 | -28.9 | 11.2 |

Source: Greek Statistical Agency

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#### Abstract

COVID-19_Regional_Labour and its contents -University of the Aegean/ YOUTHShare project, all rights reserved-are provided to the public strictly for informative, educational and academic purposes. The data of the Dashboard are sourced from publicly available data from Eurostat, Johns Hopkins University (JHU), WHO, Statista, Wikipedia and the national authorities of the countries under study, and their consolidation reveals minor discrepancies. The Dashboard is not funded by any source and it relies upon publicly available data from the above sources that do not always agree. The reliability of the that data sources cannot be verified. The data are updated on a regular basis by the members of 'COVID-19_Regional_Labour' team, who volunteer for the development of the Dashboard and the overall result is a work in progress. For any remarks or inquiries please contact: youthshareproject@gmail.com ; stgialis@aegean.gr .


[^0]:    ${ }^{1}$ Woods, M. (2020) COVID-19, Territorial Inequalities and Spatial Justice - part one. Available at: http://imajine-project.eu/2020/05/13/covid-19-territorial-inequalities-and-spatial-justice-part-one/
    ${ }^{2}$ Kapitsinis, N. (2020) The underlying factors of the Covid-19 spatially uneven impact. Initial evidence from EU regions. Regional Science Policy \& Practice. DOI: 10.1111/rsp3.12340
    ${ }^{3}$ The region of Ionia Nisia recorded a quarterly increase in both employed and unemployed persons. This is explained by the fact that the economically inactive population declined by $8.7 \%$ in the quarter to 2020Q2.
    ${ }^{4}$ Gourzis, K. and Gialis, S. (2019) Dismantled Spatial Fixes in the Aftermath of Recession: Capital Switching and Labour Underutilization in the Greek Capital Metropolitan Region. International Journal of Urban and Regional Research 43, 741-759. Implemented By

