

# Regional industrial mix, specialization and underemployment across Greek regions:

Estimating the harsh impact of austerity based on location quotient & shift – share analysis

---

GOURZIS KONSTANTINOS, SERETIS STERGIOS, MARIA TSAMPRA, ANDERS UNDERTHUN AND **GIALIS STELIOS** (STGIALIS@GMAIL.COM)

*"THE AUTHOR OF THIS PRESENTATION HAS GIVEN IIPPE THE PERMISSION TO UPLOAD THIS FILE ON IIPPE'S WEBSITE. THE WORK PRESENTED IN THIS FILE IS ENTIRELY MY OWN EXCEPT WHERE OTHER AUTHORS HAVE BEEN REFERRED TO AND ACKNOWLEDGED IN THE TEXT. IT IS NOT IN THE PROCESS OF BEING PEER REVIEW AT ANY ACADEMIC JOURNAL. THE VIEWS EXPRESSED IN THE PRESENTATION IS MY OWN, AND IIPPE OR ANY MEMBER OF IIPPE CANNOT BE HOLD RESPONSIBLE FOR ANY STATEMENTS MADE IN THIS PRESENTATION, WHATSOEVER."*

*"ACTION: 'PARTICIPATORY ACTION RESEARCH TO ADDRESS UN/UNDER-EMPLOYMENT AT THE LOCAL LEVEL (EEA GR07/3694)'"*

# what about underemployment?

---

- Are there territory-specific patterns of underemployment?
- is there an expansion of underemployment and if so, in which sectors and regions?

Aiming to reveal the interface between

- local specialization, restructuring and increasing labour surplus

# Research hypothesis

---

The phenomenon of underemployment

- is an individual aspect of flexible labour trends
- triggered by recession and expanding amid crisis
  - in uneven, geographical and sectoral, terms

Underemployment comprises but a part of the **Industrial Reserve Army**  
(labour surplus)

# Underemployment and the Industrial Reserve Army (*definitions...*)

---

- **Underemployed employees/ workers:**
  - *...usually work on a part-time basis while need and desire full-time employment or are employed at a low-paying job that requires less skill or training than they possess*
- **Industrial Reserve Army:**
  - Re-produced by capitalism and expanding amid crises
  - pivotal to overcome the crises of over-accumulation

**A key element hindering the radicalization of the labourers**

# Methodological approach

---

**Part-time work** : a good proxy of underemployment

**LQ index** for analyzing specialization/ uneven concentration:

$$LQ = \frac{E_{ir}}{E_r} / \frac{E_{in}}{E_n}$$

**Shift-share analysis** to clarify the factors causing employment change

$$\Delta E = NS + IM + RS$$

$$\diamond NS = \Omega_n$$

$$\diamond IM = \sum_i \{ (E_{ir}/E_r - 1/i) \times \Omega_r \} - \{ (E_{in}/E_n - 1/i) \times \Omega_n \}$$

$$\diamond RS = \sum_i \{ 1/i \times (\Omega_r - \Omega_n) \}$$

➤ Study period: 2005-2008 & 2009-2012

➤ Implemented across all 13 Greek regions and 9 grouped sectors

# Methodological approach

---

## LQ index

	Value	Implication
$LQ = \frac{\left( \frac{\text{Regional Industry Employment}}{\text{Regional Total Employment}} \right)}{\left( \frac{\text{State Industry Employment}}{\text{State Total Employment}} \right)}$	$LQ > 1$	Area has proportionally more workers employed in a specific industry sector than the larger comparison area
	$LQ \geq 1.25$	Area industry has potential to be classified as exporter
	$LQ < 1$	May indicate opportunity to develop businesses in the local area

## Shift-share analysis

$$e_i^{t+n} - e_i^t = NS_i + IM_i + RS_i$$

Where,

$e_i^{t+n} - e_i^t$  is the total employment change from time t to t+n for industry, i

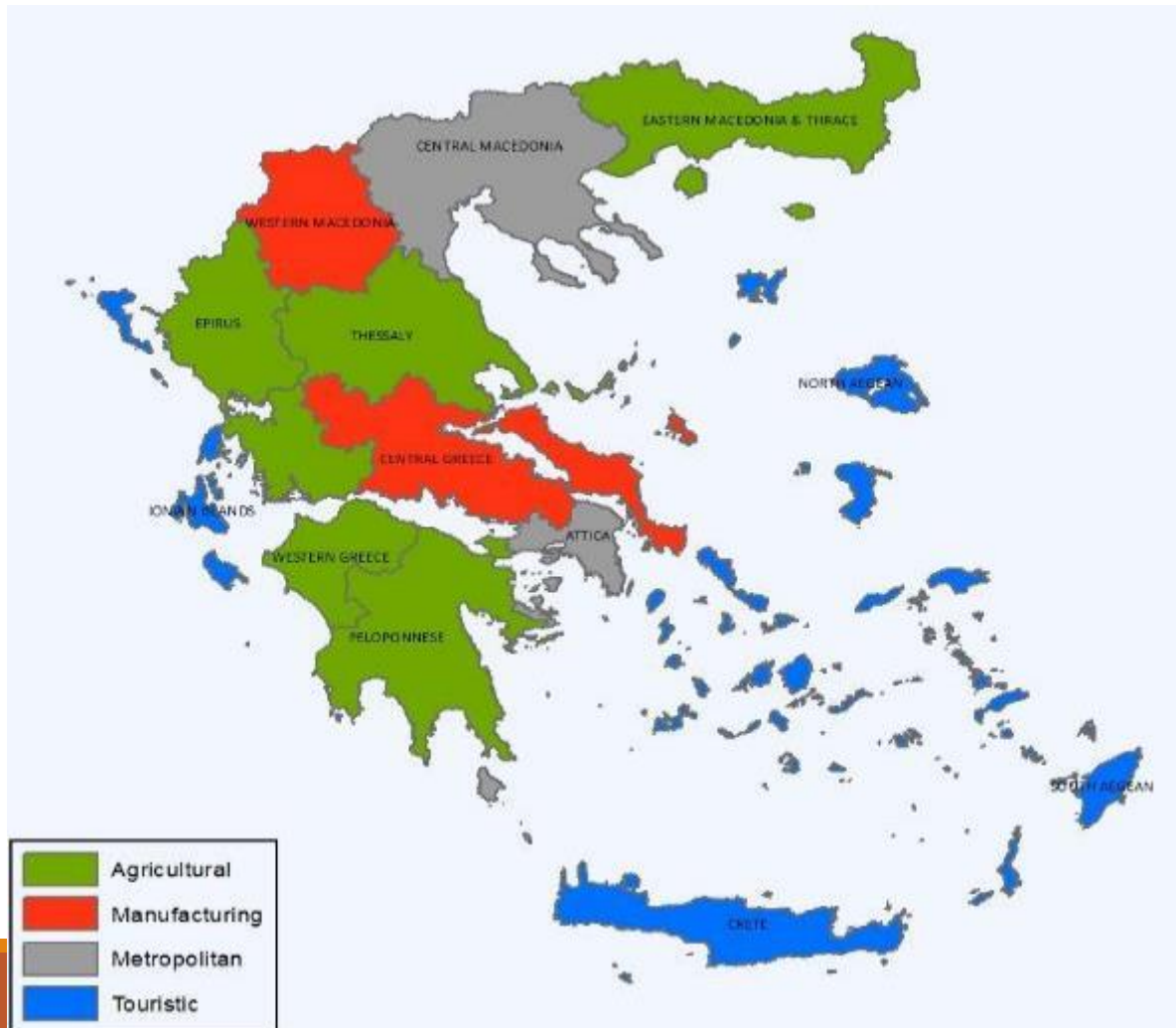
$NS_i$  The national effect (national growth rate)

$IM_i$  The industry mix effect for industry, i

$RS_i$  The local (regional) share effect for industry, i

# Greek regions per productive profile

---



# Waged part-time employment regional concentrations

---

Main regions of underemployment:

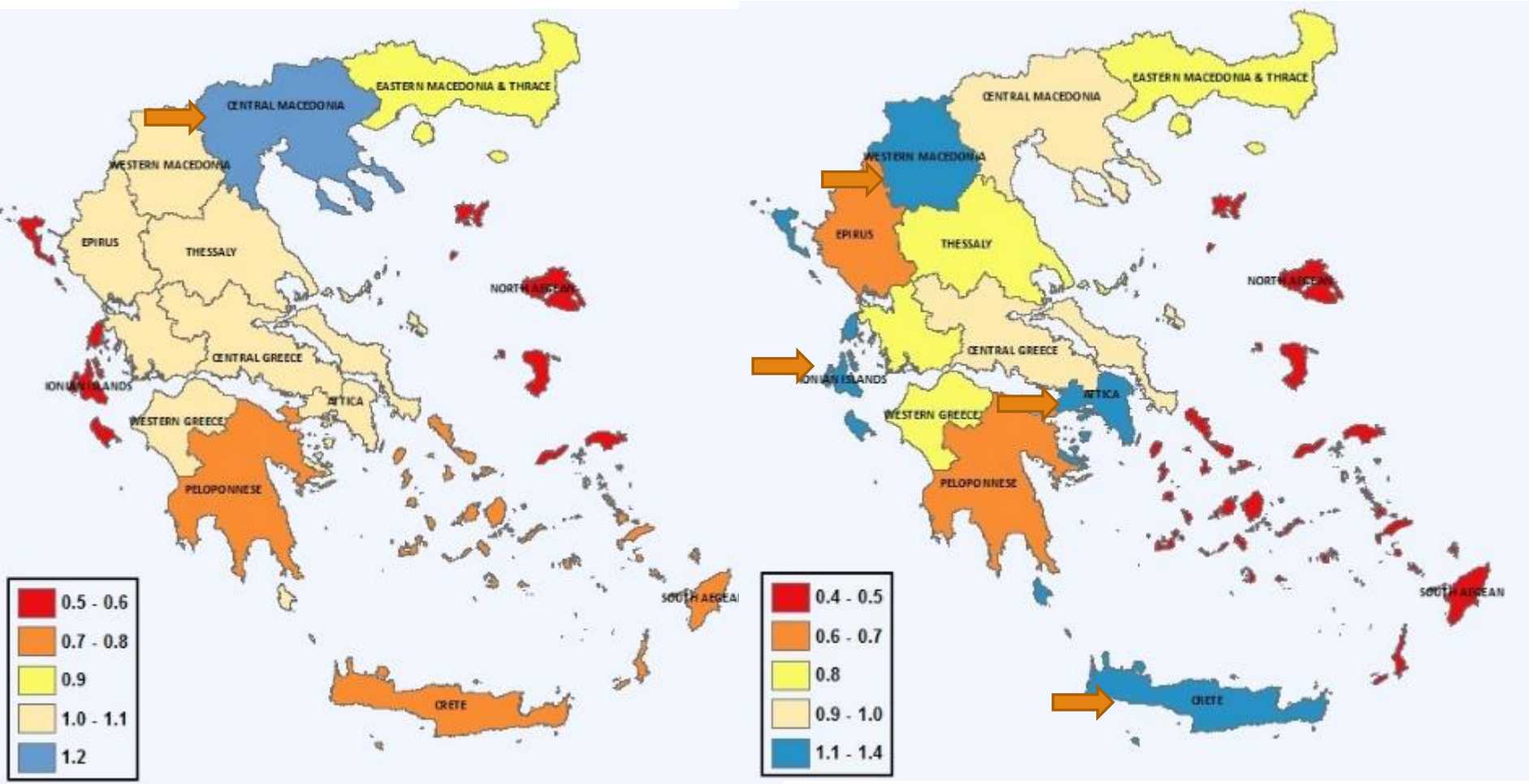
- Metropolitan Attica
- Secondarily, also metropolitan Central Macedonia

Sharp increases after 2009 in:

- Touristic regions (especially the Ionian Islands)
- Manufacturing Western Macedonia



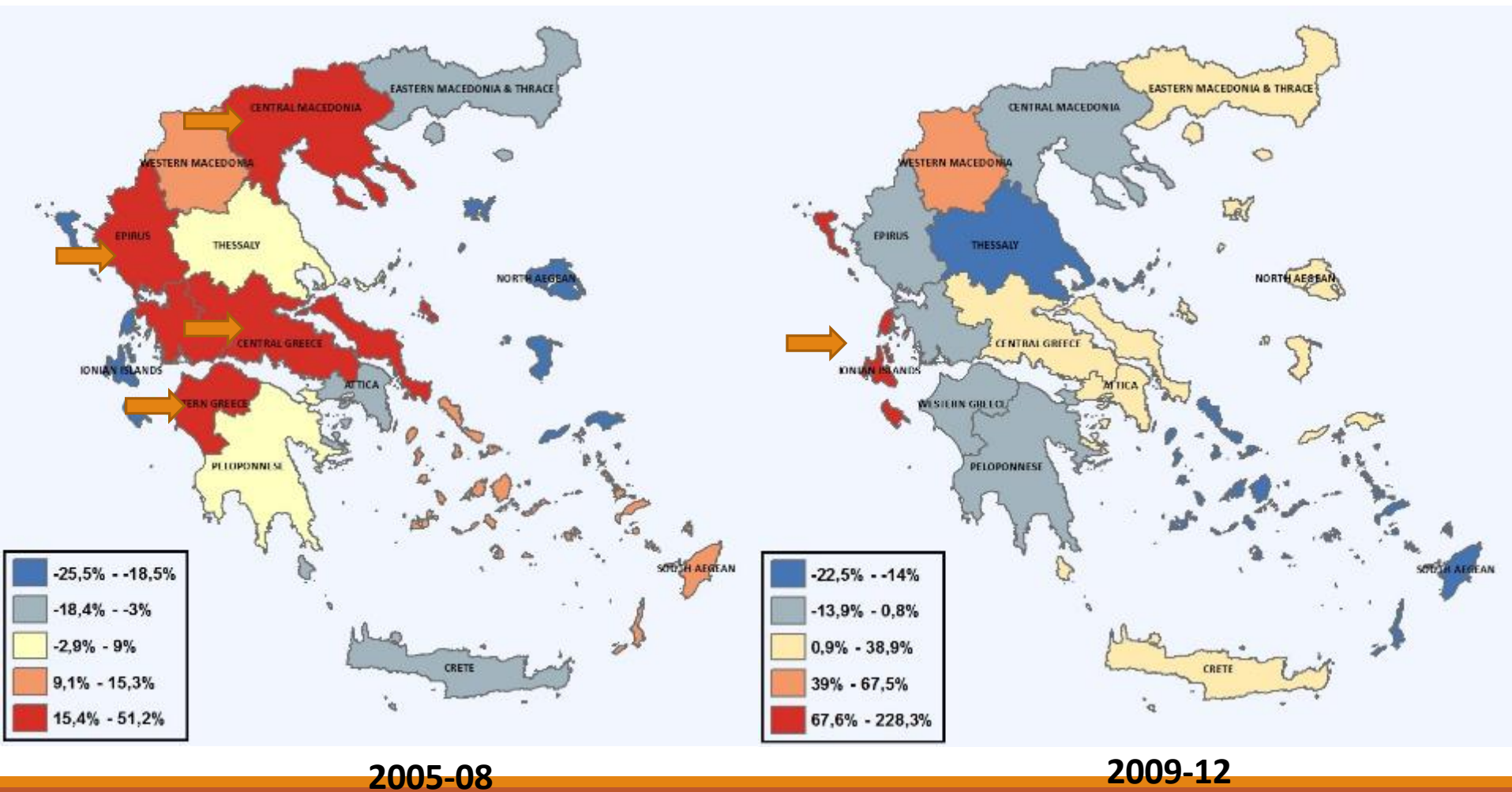
# Waged part-time concentrations



2008

2012

# Waged part-time employment changes



# Waged part-time employment sectoral concentrations

---

Main sectors:

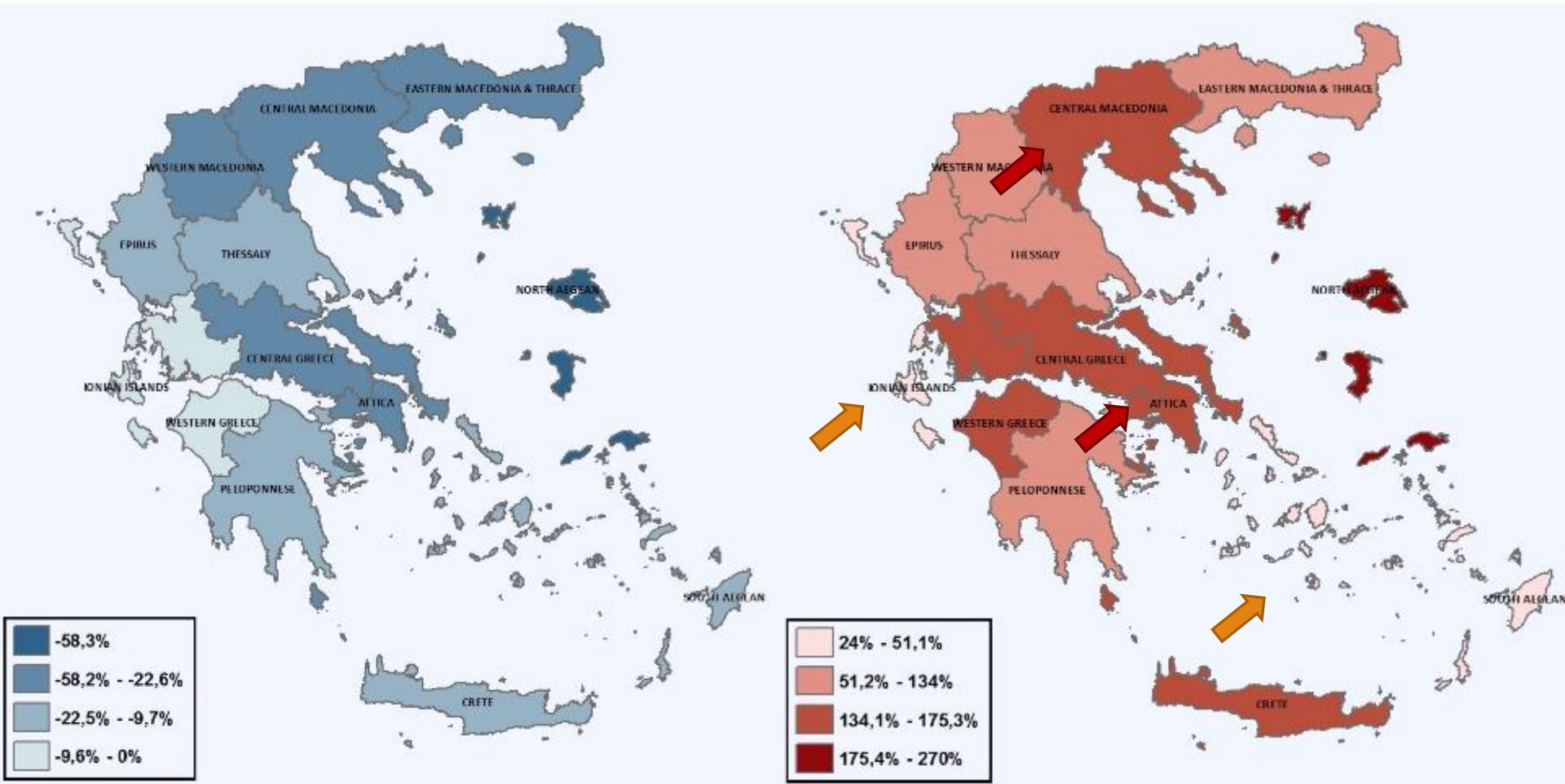
- Primarily in **leisure, arts and similar activities**
- Followed by **hotel, food and catering**

**Construction:** nearly doubled its numbers during recession

**Public administration, healthcare & education:** salient sector losing ground

- Receded after the abrupt mass termination of temporary part-time contracts in the public sector

While unemployment rates skyrocket...



2005-08

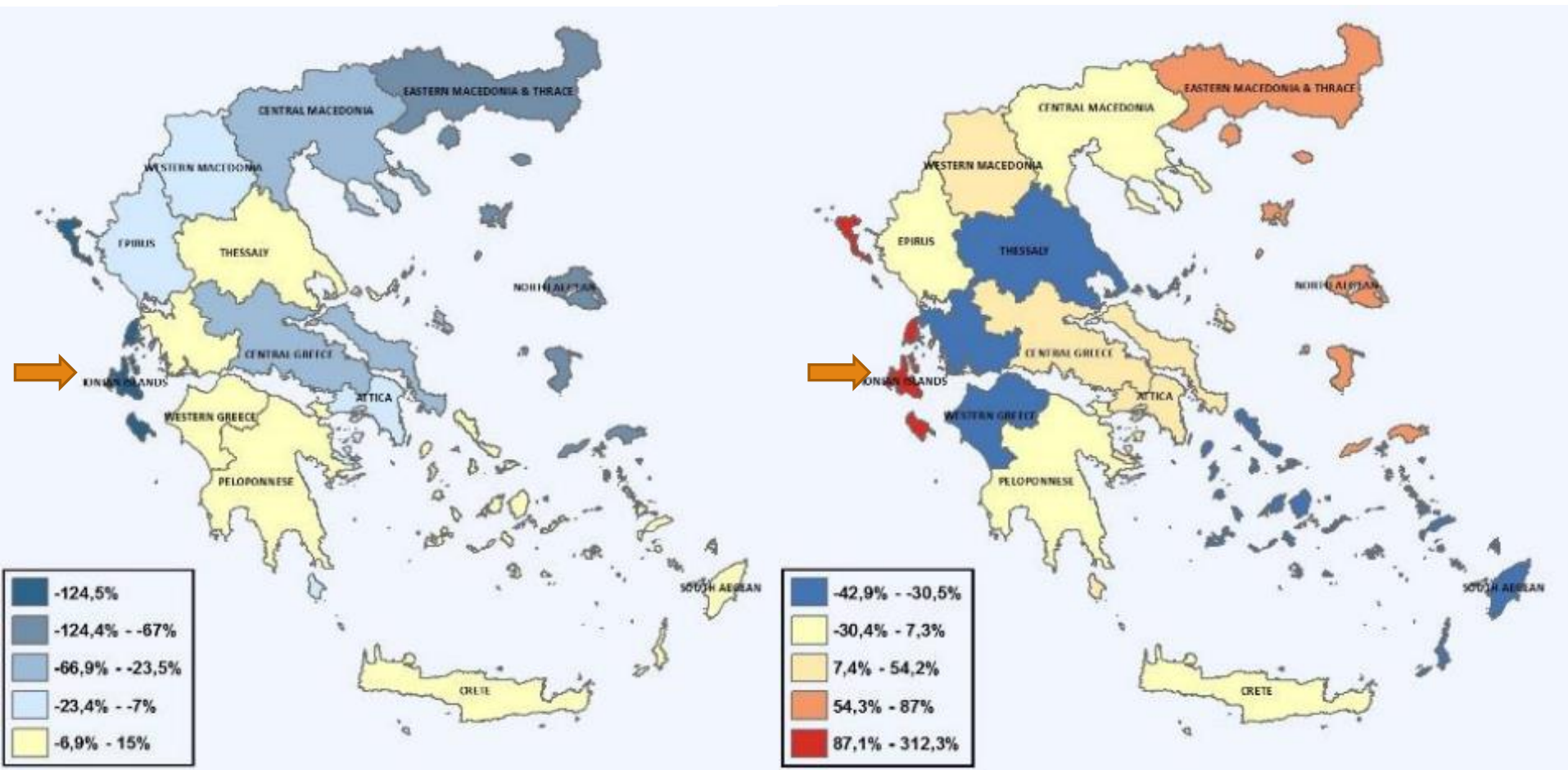
2009-12

## Factors of influence: Shift-share analysis

---

- i. Regional characteristics the main drive of waged part-time employment changes in both periods
  - Sectoral impact sticks out only in some touristic regions, and only in the first period
  
- ii. RS is mainly positive while IM is negative, with the former boosting the overall numbers of waged part-timers
  
- iii. National impact is weak in both periods

# Dominant factor: Regional effects



2005-08

2009-12

# Conclusions - Discussion

---

Uneven underlying tendencies, even within regional production groups

- Driven mainly by each region's local characteristics

part-time employment increase amid labour market collapse

- pro-crisis deregulation and flexibilization trends failed to tackle recession
- sectors with biggest losses in total employment (e.g. **constructions**), had the sharpest raises (i.e. cannot sustain their full-timers)



*Every single stage in capital's reproduction is **place-based** while combinations of different stages produce different, though overlapping, **spaces of production and consumption***

## Deeper political – economic causal mechanisms

---

Productive & technological priorities (profit- oriented)

low-technology semi-dependent structures,  
intense capital devaluation, high fall in consumption...

Market – driven organizational changes

Producing not only underemployment but also overtime work

Institutional and welfare reforms

Making underemployment very cheap for the employers



# Final remarks

---

- post-crisis patterns reveal a geographically uneven shift in many -even the regional labor markets to larger shares of under-employment
- ***“Uneven development is both the product and the geographical premise of capitalist development”*** (Smith, 1982)
- unions and workers should take into account the complex socio-geographical realities of underemployment ...
  - in order to be able to make their agency more effective...

# Thanks for your interest

---

**Co-funding for this research :**

**European Economic Area grants (EEA Grants, 2009 – 2014, [www.eeagrants.org](http://www.eeagrants.org)) and Public Investments Programme, General Secretariat for Research and Technology of the Ministry of Education and Religious Affairs (Programme Operator, [www.gsrt.gr](http://www.gsrt.gr) )**

