

# Regional patterns of employability in the Greek Labour market

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#### Introduction

Massive unemployment and underemployment has been the major implication of 2008-crisis in Europe, as the labour market is the field where downturn outcomes are primarily recorded when consumption drops. The economic shock has resulted to mismatch between (decreasing) job-vacancy and (increasing) job-seeker rates, as post-crisis structural shifts in the European economy changed employers' needs (Zimmer 2012). Yet, the implications of the crisis are diverse and form a new landscape of uneven development between EU 'core' and 'peripheral' economies, as well as among regions within national economies. In countries moderately hit, economic recovery signaled the rise of job-vacancy rate, though just a small drop of unemployment rate (which is still above pre-crisis level). But in severely hit countries, the mismatch is wider: in Greece, low-skilled workers (one-third of the labour force) recorded a proportional unemployment share; but highly-skilled workers recorded the biggest employment rate drop (World Economic Forum 2014).

In order to explain diverse levels of labour market resilience and recovery across countries and regions, much of the recent literature adopts macroeconomic and structural views (i.e. global division of labour, industrial competitiveness), but largely neglects regional and territorial factors (i.e. path-dependent specialisation, place specificities) (Martin et al 2015, Lagravinese 2015). Seeking to provide a spatially informed account of the ongoing shifts and changes in the Greek labour market, a recent research (Gialis and Tsampra 2015) explored pre- and post-crisis patterns of employment, unemployment and flexible employment on regional level (NUTS2). According to that study, regional variations of lower or higher, increasing or decreasing rates of employment (unemployment, or atypical employment), and lower or higher levels of employment flexibility and precariousness, correspond to different regional production specialisation (e.g. in tourism, manufacturing, or agriculture).

Along this research line, the more recent study (EEA-GR07/3694) presented here explores post-crisis changes across regional labour markets in Greece with particular focus on the discrepancy between labour demand and supply. In specific, we seek to identify the key-aspects of employability from both the demand-side (small and micro enterprises) and the supply-side (un/underemployed job-seekers) of the labour market. Our research assumption is that the mismatch in the Greek labour market – evidenced in high unemployment and underemployment

rates – is the outcome of labour 'overqualification' on the one hand, and acute employment deregulation/flexibilisation on the other. To establish our hypothesis we examine: (a) the contribution of regional entrepreneurship in employment, taking into account job offers, requirements and terms of employment (qualifications, wages, stability, etc.); and (b) the suitability of unemployed and underemployed job-seekers to the needs of local entrepreneurship, considering their skills/qualifications, socio-demographic profile, employment perception and career expectations.

#### 1 Literature review

In literature, the imbalance between labour demand and supply is identified either as 'shortage' in the number of workers in the labour market, or as 'mismatch' between the specific skills of workers and employers' needs (Zimmer 2012). It is a widespread phenomenon affecting about one third of the higher educated employed population in advanced economies; and has further increased across Europe, in the form of 'overqualification', as a result of the 2008 economic crisis (ILO 2014). Many studies distinguish skills from qualifications, despite their strong interdependence. But it is difficult to measure skills in times of soaring unemployment, as they grow in work, at the workplace (Zimmer 2012). Thereby, qualifications defined by the level of educational attainment are quite commonly considered as equivalent to skills. On this ground, 'employability' has become an issue of vital importance for policy makers.

Yet, the notion of employability has been mainly viewed from the perspective of employers and large enterprises as the required competences of individuals to be in employment (Hartshorn & Sear 2005). The point of view of small and micro enterprises (SmEs) is neglected, despite their larger share in employment. Moreover, the point of view of employees and job-seekers is largely ignored. Crisp and Powell (2017) provide a critical analysis of employability as a tool of labour market policy tackling youth unemployment since the late 1970s in the UK. They suggest that perceptions of employability rooted in 'supply-side orthodoxy' fail to capture its function as a tool to legitimize welfare retraction. Hence, the value of 'employability' is undermined as a broader notion to understand demand-side factors impeding young graduates' access to employment. (Crisp and Powell 2017)

Wider social and economic transitions have undoubtedly transformed the content of 'employability' over the last decades along with the recognition of 'old' and 'new' employability competences in contemporary fluid labour market is growing (Van der Heijden 2001). 'Skills' and 'qualifications' are critical terms in the debate of 'labour demand and supply mismatch', as is the way to measure them. Even before this crisis, low-skill jobs had been gradually marginalized by technological advancement requiring jobs of higher qualifications and skills (CEDEFOP 2010). The crisis-induced recession however, has delayed this course and even reversed it in the more distressed EU economies. As innovation-based economic restructuring slowed down in Greece, the share of high-skilled in unemployment increased (Herrmann and Kritikos 2013).

In his recent study, Montt (2017) addresses gaps of 'field-of-study' and qualification mismatch. As explained, field-of-study mismatch occurs when a worker trained in a particular field, works in another (e.g. a worker trained in the law, business and social sciences field works in the trade sector). Findings suggest that around 40% of workers are mismatched by field at their qualification level, 11% overqualified in their field and 13% overqualified and working outside their field (Montt 2017). In Montt's study, the incidence of field skills' transferability is perceived as a result of the saturation of the field in the labour market. The latter means that there are more qualified workers in the occupational field than corresponding available jobs, thus workers are forced to search for a job in a different field. Still, neither the source of saturation nor the reason is identified.

All aforementioned notions and findings are taken into account as elements of the analytical framework in our research. Regional-level data (i.e. employment conditions related to economic structures, industrial specialization and labour market specificities) are combined with individual-level data (i.e. qualifications/skills, personal attitudes and socio-demographic factors) in order to provide a coherent outline of employability patterns and outcomes in the explored labour markets (Baum & Mitchell 2010). Our main research argument is that vast un/underemployment in post-crisis Greece is the outcome of widened mismatch between labour demand and supply, in the sense that: jobs provided by local enterprises/employers are largely in low-specialisation economic activities (restaurants, bars, hotels and retail trade) requiring low-qualified work of low cost and high flexibility; while jobs pursued by un/underemployed are mainly in high-specialisation service industries corresponding to high-level qualifications and career aspirations.

## 2 Research background and analysis

In the prolonged period of the Greek economy's contraction, unemployment rate has reached the highest score in Europe and the second highest among OECD countries (24.7% against 6.7% OECD average, 2015Q3). Long-term unemployment also reached the highest rate in Europe and among OECD countries (73.7% against 32.7% OECD average, 2015Q3). While nearly 50% of people aged 15-24 years old are unemployed (three times higher than OECD average); and the rate of those neither in employment nor in education or training was higher by 13% more than the OECD average in 2014 (OECD 2015). Meanwhile, employers report difficulties in finding workers suitable for their needs (Manpower Group 2013). Arguably, jobseekers' skills do not correspond to changed employers' needs and crisis-triggered structural shifts in the economy have resulted to labour demand and supply mismatch.

To establish our hypotheses and assumptions for the causes of extensive worklessness in Greece, secondary and primary data are analysed in the following sections. The research objective is to identify the key-aspects of employability in the regional labour markets of Greece. Thereby, the focus of the research analysis is on demand- and supply-side factors that determine employability across various regional settings. For the exploration of labour demand we employ data provided by ERGANI Information System (Hellenic Ministry of Labour, Social Insurance and Welfare) since 2013, for country- and region-level entrepreneurship (i.e. number of SmEs with employees, new entries across industries, flows of hires and layoffs, types of employment contracts, level of wages, etc.). The analysis of the supply-side is based on primary data collected through cross-regional field-survey of the unemployed and underemployed (casually or atypically employed) job-seekers (i.e. socio demographic profiles, educational qualifications, previous employment, last or current employment status, career prospects and priorities, etc.)

#### 2.1 Exploring the demand-side

Since the crisis outbreak, small and micro enterprises (SmEs) in Greece have struggled with economic contraction unprecedented in the EU, which resulted to more than 450,000 job losses from 2008 to 2014 (2015 SBA Fact Sheet: Greece). Yet, data for 2010-2016 suggest stabilized employment trends for the majority of surviving SmEs: firms of decreasing employment are becoming less, while a modest share shows increasing employment since 2014 (IME-GSEVEE

2016). However, recent positive trends cannot adequately establish labour market resilience or recovery. To this purpose it is critical to explore the *form* (stability, earnings, security etc.) and the *content* (qualification and skill requirements, career prospects, etc.) of emerging employment. Data are derived from ERGANI publications: (i) monthly issues (March 2013 to March 2017) recording flows (hires and layoffs) of waged employment on the national level; and (ii) annual special issues recording total number of paid employees, working hours and wages. Additional evidence is retrieved from the recent publication of the National Institute of Labour and Human Resources (NILHR 2016) compiling ERGANI data on regional level (NUTS2) for economic activities (NACE2) and occupations (2-digit Statistical Taxonomy of Occupations – STO2: i.e. Greek adjustment of International Standard Classification of Occupations – ISCO2).

With regard to the form/type of employment, flexible or atypical employment had already emerged prior to the last crisis as a business practice to adjust labour costs to global competition. Hence, recession has given further impetus to labour flexibility and increased precariousness. According to ERGANI data for hires by type of contract, the share of part-time and rotation workers in total SmEs hires has particularly increased between 2013Q2 and 2017Q1; accordingly, the share of full-time jobs dropped by 17.9% in the same period (Figure 1: Authors' compilation of ERGANI monthly data). Data for the same period reveal the significant and increasing number of employment contracts converted from full-time to part-time and rotation work, with or without employee's consent (Figure 2: Authors' compilation of ERGANI monthly data).

In other words, the contribution of Greek SmEs to positive employment trends largely consists of flexible employment forms in jobs of high precariousness: the number of employees working for just 2-4 hours per week increased by 100,8% in 2013-2016, recording the highest increase in the range of weekly working time (from 1-2 up to 35 hours). As monthly earnings are accordingly adjusted, the percentage of part-time or rotation workers paid less than 500€ increased by more than 37% in the same period (ERGANI annual data for 2013, 2014, 2015, 2016). To further illuminate the 'flexibilisation' of the demand-side in the Greek labour market, we proceed with the analysis of its regional diverse patterns. Data provided by ERGANI for the balance of SmEs employment flows (hires and lay-offs) in 2013-2017 are quite revealing of the dramatic fluctuations in most regions (also identified on the national level) (Figure 3: Authors' compilation of ERGANI monthly data).

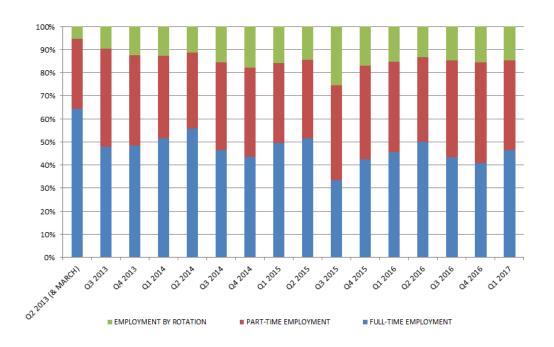


Figure 1: SmEs hires by type of contract, 2013Q2-2017Q1

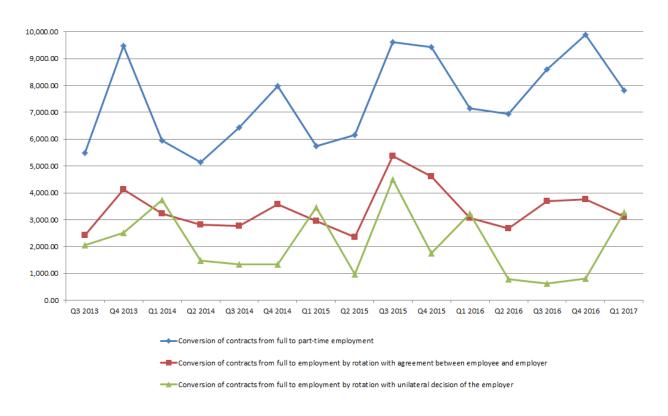


Figure 2: Contracts converted from full-time to part-time and rotation work, 2013Q3-2017Q1

As observed (Figure 3), employment volatility is outstanding in the Greek island regions of South Aegean, Crete, Ionian islands, but also in Central Macedonia – all, following the same temporal pattern of hires and layoffs. Hires peak in the second quarter of each year, evidently at the beginning of the touristic season in Greece; and massive layoffs are recorded in the fourth quarter of the year, at the end of the touristic season. In these regions, with the exception of metropolitan Central Macedonia, layoffs eventually counteract hires. Significant employment fluctuation is depicted for the capital region of Attica as well, in a different temporal pattern though which could be the result of its diverse metropolitan economy. Finally, the curves recorded near zero are ascribed to regions of stable employment levels, but neither a positive nor a negative assessment can be established by our data.

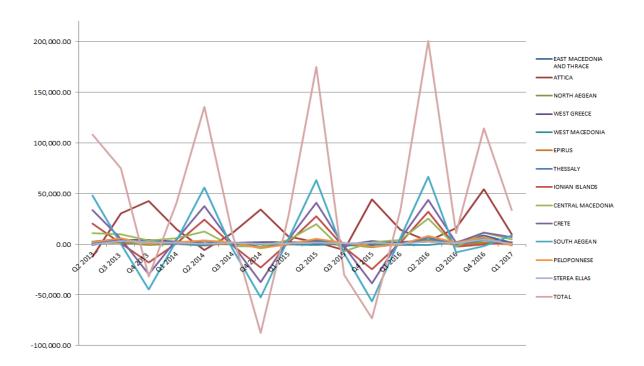


Figure 3: Balance of SmEs employment flows across Greek regions, 2013Q2 - 2017Q1

With regard to the content of jobs offered by SmEs, a comprehensive outline requires evidence for the regional distribution of employment across industries and occupations. Hence, for reasons of analysis, we distinguish all industries (NACE2) and occupations (STO2) into groups according to level of specialisation and hence, of qualification requirements. Industries/economic activities form three groups, characterised as of: (a) high specialization (e.g. health, education, professional

and scientific services etc.); (b) medium specialization (e.g. manufacturing, energy, transportation, wholesales, construction etc.; and (c) low specialization (e.g. services in accomodation, food and beverage sectors: restaurants, bars, hotels and retail trade etc.). Respectively, occupations/jobs are distinguished as: (a) high qualified (in health, education, professional and scientific services), (b) medium qualified (in manufacturing, energy, wholesales, construction etc.) and (c) low qualified (in restaurants, bars, hotels, retail trade etc.).

Regional data on sectoral and occupational level are published by ERGANI just for the second quarter of 2015 and 2016. It is thus essential to stress that this period of time signifies the beginning of the Greek touristic season and the summer closure of schools. Therefore, it is expected that analysis will illustrate increased hires in tourism and layoffs in education. As revealed, layoffs in 2015Q2 and 2016Q2 are recorded for all Greek regions only in industries of high specialisation (as previously defined). As expected, job losses in this sector are higher in the metropolitan regions of Attica and Central Macedonia where such economic activities (and jobs) are mainly located. At the same time, the industries of low specialisation record the highest hires in all regions, followed by medium specialisation industries. In the capital region of Attica, hires in low and medium specialisation sectors counteract layoffs in the high specialisation sector. Yet, South Aegean outnumbers hires in low specialisation industries (assumingly, in tourism) on the regional level, closely followed by the touristic regions of Crete, Ionian islands and Central Macedonia. (Figure 4: Authors' compilation of NILHR data)

An interesting illustration is also provided by shares of high-, medium- and low-specialisation industries in each region's total hires and layoffs in 2015Q2 and 2016Q2 (Figure 5: Authors' compilation of NILHR data). Layoffs in economic activities of high specialisation record extrememy high shares in many of the non touristic regions (Western Macedonia, Sterea, Western Greece, East Macedonia and Thrace), reaching -80% in Western Macedonia (2016Q2). Given the fact that data refer to June 2015 and 2016, job losses possibly concern teachers and tutors with fixed-term contracts in private and public education. Another interesting fact is the clear prevalence of low-specialisation industries, as they record the highest shares in hires in nearly every regional labour market (with the exception of Western Macedonia, recording highest hires in medium-specialisation industries - e.g. energy).

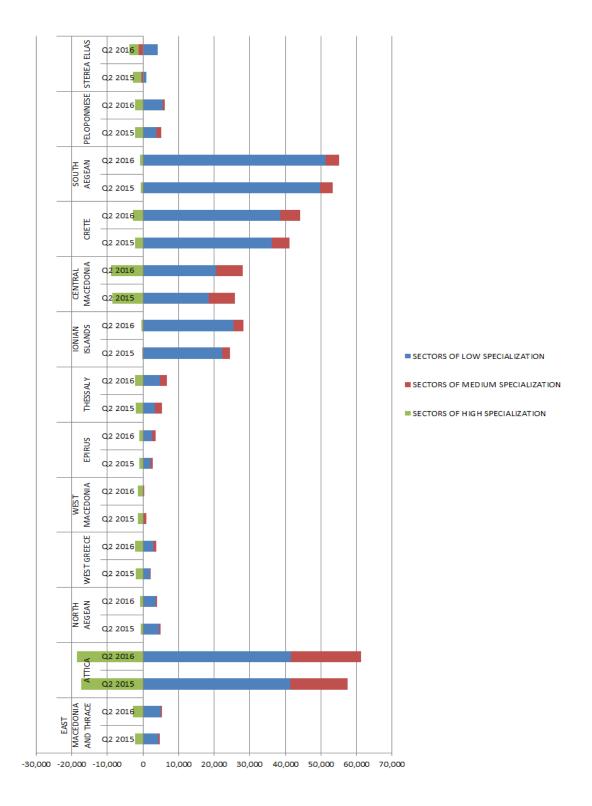


Figure 4 : SmEs hires and layoffs across Regions and Sectors of different specialisation level, 2015Q2 & 2016Q2

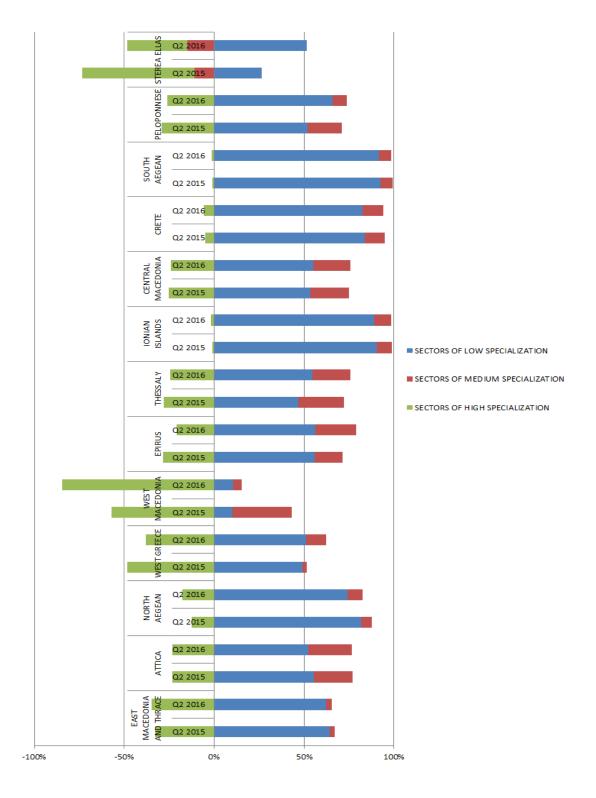


Figure 5 : Shares of hires and layoffs across Regions and Sectors of different specialisation level, 2015Q2 & 2016Q2

A more specific picture is provided by ERGANI monthly publications (March 2013 to April 2017), compiling data on employment flows to rank the top-five economic activities of highest positive and the top-five economic activities of highest negative balance of hires and layoffs. According to our analysis (Table 1), many industries of low-specialisation are among the top-three of positive employment balance in 2013-2016 — namely: Retail trade, Food and beverage services (i.e. restaurants, bars, caffe, etc.) and Accommodation (i.e. hotels and tourism). The very same industries are also among the first of negative employment balance, providing evidence of employment flexibility and precariousness. Economic activities of medium-specialisation are represented in the top-industries of positive employment flows by Food Products Manufacturing and Wholesale Trade. Respective data for layoffs indicate the highly flexible employment in Food Products Manufacturing. Finally, the only high-specialisation industry with steady positive employment flows in all years of reference is Education. Also, as illustrated, jobs in education are largely flexible (verifying previous assumptions for fixed-term employment contracts).

2013**	2014	2015	2016					
POSITIVE BALANCE (HIRES > LAY- OFFS)								
Retail trade (87.5)*	Retail trade (58.3)	Retail trade (58.3)	Wholesale trade (58.3)					
Food and beverage services (62.5)	Education (58.3)	Food and beverage services (58.3)	Food and beverage services (58.3)					
Education (62.5)	Accommodation (50)	Education (58.3)	Education (58.3)					
Accommodation (37.5)	Food and beverage services (50)	Accommodation (50)	Retail trade (50)					
Creative, arts and entertainment (37.5)	Manufacture of food products (41.7)	Manufacture of food products (33.3) Wholesale trade (33.3)	Accommodation (50)					
	NEGATIVE BALANC	E (HIRES < LAY- OFFS)						
Accommodation (66.7)	Accommodation (50)	Accommodation (41.7)	Accommodation (50)					
Manufacture of food products (50)	Food and beverage service activities (50)	Food and beverage service activities (41.7)	Food and beverage services (41.7)					
Social work activities (33.3)	Financial services (41.7)	Creative, arts and entertainment (33.3)	Education (33.3)					
Public administration (33.3)	Public administration (41.7)	Civil engineering (25)	Manufacture of food products (25)					
Financial services (33.3)	Creative, arts and	Retail trade (25)	Retail trade (25)					
Food and beverage services (33.3)	entertainment (33.3)	Public administration (25)  Education (25)	Creative, arts and entertainment (25)					
Travel agency, tour operator services (33.3) Rental and leasing (33.3)								

- \* In brackets: relative frequency (%) of each sector's occurrence in the highest positive and negative monthly balance of paid employment for each year
- \*\* Initially, ERGANI Information System reported data for the ten sectors of highest employment balance; data for the top-five sectors were published only after July 2013.

# Table 1: Sectors with the largest relative frequency of occurrence in the highest positive and negative monthly balance of paid employment, 2013-2016

Drawing on NILHR report for ERGANI data on regional hires and layoffs by occupation (STO2), we analyze data classified into three groups of high, medium and low qualifications (as previously defined). Results illustrated in Figure 6, provide a picture that does not match findings depicted in Figure 4. In other words, hires in low-specialisation sectors across all regions eventually address and absorb workers of medium (and not low) qualifications. This fact is particularly evidenced in the regions of higher hires. On the other hand, layoffs clearly concern the high qualified employees (complying with job losses in industries of high specialisation). It can be therefore argued, that medium qualified workers are pushed to jobs of lower qualification requirements. At the same time, low qualified workers are left out of employment, as happens with highly qualified employees (but for different reasons).

In Figure 7 (Authors' compilation of NILHR data), the shares (%) of high-, medium- and low-qualified employees in each region's total hires and layoffs for 2015Q2 and 2016Q2 provide a clear illustration of employability. In the non touristic regions of Western Macedonia, Sterea, East Macedonia and Thrace the largest shares of labour force that stay out of employment are the highly qualified. On the other hand, the most touristic regions of South Aegean, Crete and Ionian Islands seemingly record only hires which mainly absorb medium-qualified employees in low-specialisation jobs (i.e. in tourism). As previously, assumptions take into account that data refer to a time of the year that signifies the beginning of the touristic season and the summer closure of schools. A more thorough insight of aforementioned evidence is pursued in the investigation of labour markets' supply-side and specifically, the side of unemployed or casually employed job-seekers.

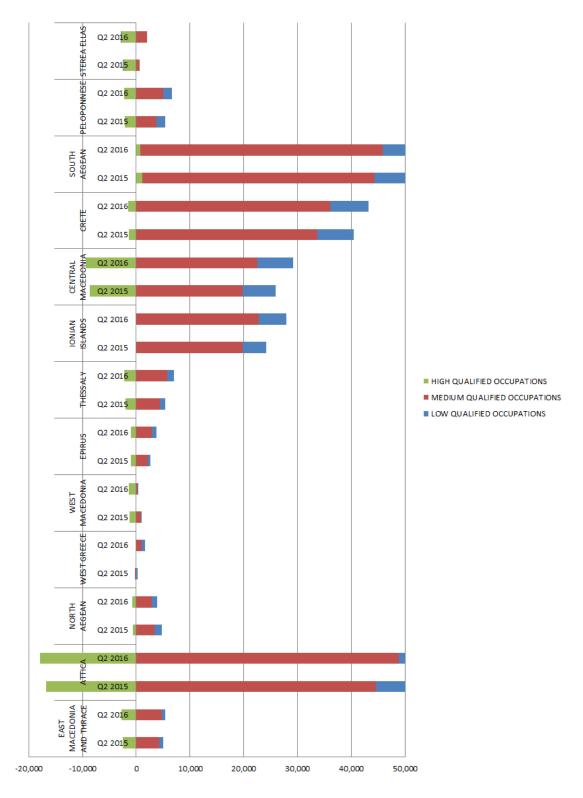


Figure 6 : SmEs hires and layoffs across Regions and Occupations of different qualification level, 2015Q2 and 2016Q2

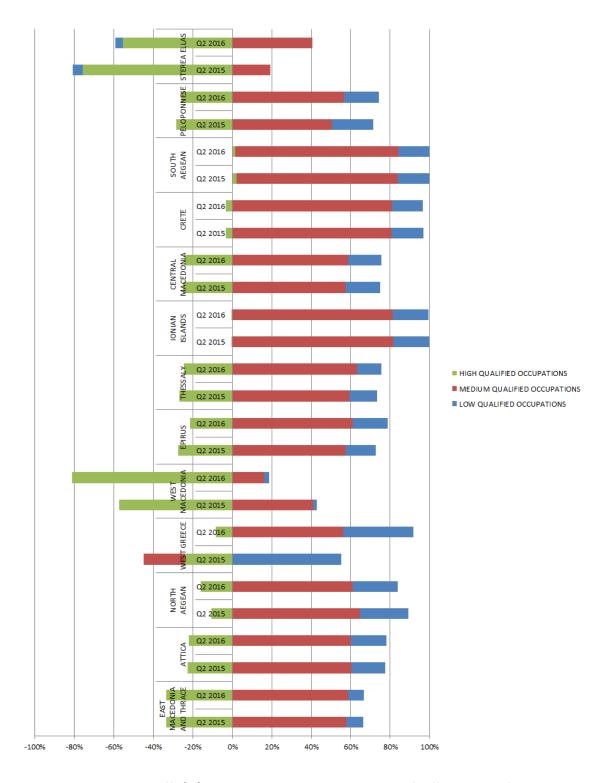


Figure 7 : Hires and layoffs (%) across Regions and Occupations of different qualification level, 2015Q2 & 2016Q2

#### 2.2 Exploring the supply-side

Despite positive trends after 2014, the employment rate in Greece is still the lowest in Europe and among the lowest in OECD (51.1%, against 66.2% OECD average, 2015Q3). The employment rate of low-skilled labour force is below the European average (49.8% against 55.2%, 2015Q3), indicating low employability for those with low qualifications (up to lower-secondary education). Yet, the employment rate of high-skilled labour force recorded the biggest drop since 2009 and is still the lowest in Europe, indicating low employability for those with high qualifications (tertiary education) as well. In specific, 2 in 5 of those with tertiary educational attainment in Greece are out of employment (OECD 2015). Analysis in this section explores the causes of low employability in the Greek labour market, by focusing on the level of qualifications of job-seekers who are out of employment or in atypical/casual employment.

To this purpose we draw upon primary data collected through field-survey with the use of questionnaire administered exclusively to unemployed and atypical/casually employed job-seekers (referred here as underemployed). Questions concern the type of jobs that respondents have occupied or currently pursue, along with related issues of employment stability and security, earnings, suitability of their skills/qualifications, career prospects, personal perceptions and priorities. Due to the fact that our research addresses a sample of unemployed and/or underemployed, we do not divide skills from qualifications in our analysis. Labour skills cannot be assessed in our case as respondents are practically out of the working place for a long or shorter period, or temporarily in work. The field-survey was carried out during 2015Q1 and resulted to 673 valid responses.

Our conclusive sample consists of unemployed by 58.8% and underemployed/atypically employed by 41.2%. The largest age-groups are of 18-24 and 25-34 years old respondents (with equivalent shares) accounting for 62.8% of the sample. In all age-groups (from 18 up to 64 years old), half of respondents are tertiary education graduates. Nearly half (48%) of total sample have been looking for a job for more than one year. Approximately 12% of respondents have never been in employment, i.e. mainly the younger ones. Half of the respondents previously or currently employed (88% of total sample) are in economic activities of low specialization, i.e. mainly restaurants and bars (23.7%), retail trade (14.6%) and hotels (9.5%) (Figure 8). These are arguably

the industries providing the more employment opportunities in the examined local labor markets and at the national level as well (FEIR 2016).

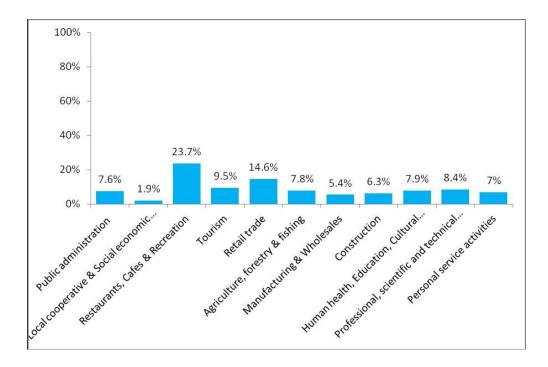


Figure 8: Jobs distribution across industries/economic activities

In order to examine the suitability of skills/qualifications supplied in the regional labour markets of Greece, we distinguish between job-seekers of high, medium and low level of qualifications (as previously mentioned and defined). In specific, we identify three distinct groups of skills/qualifications corresponding to three levels of education attainment: (a) the highly qualified refer to respondents of tertiary & post-tertiary education, (b) the medium qualified include respondents of technical or other post-secondary education and (c) the low qualified refer to secondary or lower education level. Evidently, the vast majority of respondents (62.6% of total sample) has been, or currently is, in job positions of low qualifications, i.e. general duties (Figure 9). As expected, the industrial distribution and concentration of jobs in all regions signifies the expansion of flexible and atypical employment forms, as casual and seasonal work is a structural characteristic of the aforementioned industries (Figure 10). In effect, full-time jobs account just for 20% of our sample; while seasonal/temporary jobs have the highest share (33.4%) followed by part-time jobs (22.9%) and a significant number of undeclared/uninsured jobs (12%).

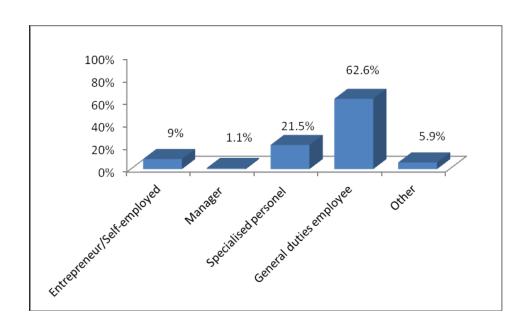


Figure 9. Respondents by job position, Authors' compilation of field-survey data

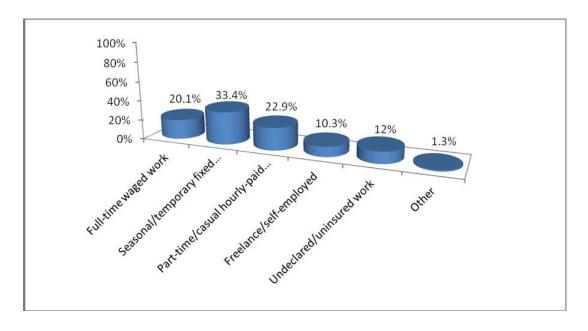


Figure 10: Respondents by employment status

Nevertheless, the highest share of our sample has been seeking for high-specialisation jobs in economic activities of professional, scientific and technical services (18.2%) and health and education services (11.6%). As both these fields of economic activity require the highest professional qualifications, we can safely assume that one-third of our sample of

un/underemployed respondents fulfill these requirements (Figure 11). Comparing with findings on jobs distribution across economic activities (Figure 8), we identify a mismatch between low-skill jobs provided by local enterprises/employers (largely restaurants, bars, hotels and retail trade) and high-skill jobs pursued by local labor force surplus (mainly in high-qualified services).

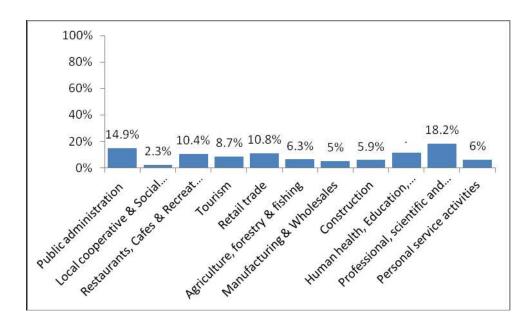


Figure 11: Respondents distribution in sectors they seek employment

To establish 'mismatch' assumptions we proceed with cross-tabulations and t-test analysis based on respondents' level of qualifications and on economic activities' level of specialisation (as both previously classified). Results indicate that the high share of those looking for jobs in high-specialisation industries is strongly related to corresponding qualifications level (Table 2). As depicted, 58.8% of highly qualified respondents are seeking employment in health, education, professional and scientific services. Still, 25.7% of the highly qualified are seeking for jobs in restaurants and bars, tourism and retail trade - arguably due to numerous job vacancies in the respective industries. The shares of those medium and low qualified that look for jobs of lower-than-their-own specialization, are higher (36% and 53% respectively) - assumingly due to respondents' lower employability.

Sector/ Educational level		Tertiary & post-tertiary education	Technical post-secondary education	Secondary or lower education	Tetal
Health, Education, Culture/ Professional, scientific services	Within sector	80.8%	11.6%	7.6%	100%
	Within educational level	58.8%	20.7%	8.9%	35.9%
Agriculture/ Manufacturing/ Wholesales/ Construction etc.	Within sector	27.3%	31.2%	41.6%	100%
	Within educational level	15.4%	43.2%	38.1%	27.9%
Restaurants, Bars/ Tourism/ Retail trade	Within sector	35.2%	20.1%	44.7%	100%
	Within educational level	25.7%	36%	53%	36.1%
Total	Within sector	49.4%	20.1%	30.5%	100%
	Within educational level	100%	100%	100%	100%

Note: Chi squared 132.94; df. 4: sig. 0.000. 0 cells (0.0%) have expected count less than 5

The minimum expected count is 31.02.

Source: Authors' compilation of field-survey data

Table 2. Distribution of respondents in sectors they look for job and educational level

Analysis shows that the level of qualifications is not statistically significant for unemployment or underemployment, but defines the sector/industry of respondents' employment (Table 3). In fact, 60% of respondents in jobs of high specialization (professional and scientific services etc.) are highly qualified. Yet, in jobs of medium/technical specialization (manufacturing, personal services, etc.) 49.5% of respondents are also highly qualified (and just 15.9% are of technical qualifications. In fact, half of the highly qualified respondents are, or were, in jobs of medium specialization. In other words, under current conditions of high unemployment, employers have the opportunity to recruit personnel of qualifications higher than required for the job.

Educational level / Sector	Tertiary & post- tertiary education	Technical post- secondary education	Secondary or lower education	Total
Public administration	71.8%	15.5%	12.6%	100%
Restaurants & bars/ Tourism/ Retail trade	32.9%	32.9%	39.5%	100%
Agriculture / Manufacturing/ Wholesales/ Construction/ Personal services	49.5%	15.9%	34.6%	100%
Health, Education, Culture/ Professional, scientific & technical services	60%	16.7%	23.3%	100%

Note: Chi squared 63.2; df. 6: sig. 0.000, 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.27.

Source: Authors' compilation of field-survey data

Table 3. Respondents in sectors of employment according to educational level

In terms of employment relations, it was found that proportionate large shares of highly, medium and low qualified respondents are, or were, in flexible/atypical employment (seasonal/temporary,

part-time, casual/hourly-paid, freelance/self-employed). As indicated, a higher level of qualifications does not ensure employment of lower precariousness (Chi squared 2.714; df. 6; sig. 0.606). Furthermore, in each distinct group of qualifications level, 10.8% to 13.2% of respondents are in undeclared/uninsured employment. This is evidence of labour market's post-crisis deterioration, because although undeclared work has always been a significant feature of the Greek economy, it was limited to the unqualified workers (in clothing and garments manufacturing, catering and restaurants) (ILO 2016).

#### Conclusion

Our analysis of targeted labour markets in post-crisis Greece primarily identified the vast expansion of atypical employment in all industries and localities. This has led to drastic compression of working time and earnings; rise of part-time and rotation work at the expense of typical full-time work, largely through conversion of full-time employment contracts to casual work arrangements. The extent of labor flexibilization is regionally differentiated due to diverse structural and territorial factors that shape local economies. The case of touristic regions provides example of towering hires and also massive layoffs, following the peaks and troughs of the touristic period in Greece. Still, intense labour flexibilization has arguably contributed to a modest increase of employment rate on the national level.

But despite positive employment signs - following positive trends in entrepreneurship - we argue that evidence does not establish labour market resilience, or recovery. Our research findings for all Greek regions indicate that local business cannot provide employment opportunities that meet the qualifications and make use of the capacities of available highly educated labour force. Instead, job offers in all regional economies undervalue qualified labour and professional expertise in every aspect: skills and duties requirements, earnings, , stability and security, career prospects etc. As indicated, highly qualified labour supply outpaces demand and thus, vast unemployment and atypical/casual employment at the local level is the outcome of prevalent entrepreneurship's weakness to adjust to high-value competitiveness. Hence, we argue that increased employment flexibilisation is not merely the outcome of employers' strategy and practice to minimize costs in times of downturn. It is also strongly associated with specific types and structures of business, mainly in low-specialisation industries and low value-added activities.

Furthermore, the persistent imbalance between labour demand and supply is costly for both the economy and society and severely undermines recovery prospects. Employment deterioration below threshold standards is likely to lead the economy to a path of limited growth in sectors of low added value. Compressed wage distribution is associated with compressed skill structures and high unemployment (Jovicic 2016). On this ground, we suggest future research towards an innovative approach for inclusive socio-economic recovery and sustainable growth, through the smart capitalization of place-based skilled and qualified human resources.

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