Women's Employment and Family Business

Ermela Gianna

PhD Candidate

Panteion University of Social and Political Sciences

Abstract

The vast majority of firms in Greece are small family owned businesses. Most of the times, the women of the family contribute to the family business by working either paid or unpaid. Women are expected to organize their involvement in the family business in ways that do not "distract" them from their family responsibilities and thus they are able to enjoy flexible working arrangements, which are not that common for the Greek labor market, except for the public sector. This paper intends to examine whether working in the family business is really an entry point to the labor market or an obstacle to higher activity rates for women. This question, will be approached by analyzing secondary sources as well as evaluating the qualitative results from the fieldwork in a sample of 145 small family -owned enterprises in Athens.

Key words: women, family business, labor market, unpaid work, economic crisis

Introduction

The vast majority of firms in Greece (96.75%) are small and medium enterprises SMES, owned and managed by the family as a unit. Even though they concentrate about 85% of private employment and play vital role in the Greek economy- two observations are addressed below:

- With the right policy interventions and structural reforms in the labor market, SMEs could have contributed even more in the creation of new jobs than they actually did in the precrisis period
- ii. SMEs are dealing with the problems of liquidity, low demand and political and financial instability, the end up either firing their employees, or even worse shutting down.

Family firms tend to hire more easily family members than people outside the family. The latter has deep roots in the Greek or the broader Mediterranean tradition, in which the family constitutes a mechanism of solidarity and social protection for its members. As Campbell (1968) argues, families not connected by kinship or marriage are related through institutions of mutual hostility and competition; unrelated view one another at all times with intense distrust. However, apart from the sense of obligation towards the family members and the trust they enjoy (just because they are family), relatives are also less likely to complain about low or no wages and longer hours of work.

In the majority of family SMEs and especially in the smaller ones, the structure of the business corresponds to the structure of the family. We have the leader of the company who is usually the husband/father (leader of the family), the wife/mother who gets involved formally or informally in order to support the operation of the business. In both the above cases, women, rather than playing any significant role in decision making, they usually take over gender based activities and even act behind the scenes, without sometimes getting much appreciation of their work.

Historically in Greece as in many other countries, women's professional roles whether outside the family or in the family business have been secondary to their obligation to manage the domestic life of the family. Men on the other hand organize their lives around the demands of their work and career (Gillis-Donovan and Moynihan-Brandt, 1990); Moen 1992).

However, many male family business owners ask their wife to join the business and offer support where and when necessary. The wife often receives no or very low remuneration. These strategies apply not only to wives, but also to mothers and daughters (Barbara Rowe and Gong-Song Hong, 1997). By contrast, business owners rarely ask or expect fathers, brothers or sons to regularly work for the firm or store on a volunteer basis (Kaslow, 1992).

Wives who are involved in the family business contribute both paid to the family's well-being. Often, taking some of the responsibilities of the business does not necessarily means that there will be any relief from the burden of housework and childcare. Some women hold outside employment at the same time they manage a household and work in the family business.

This paper intends to examine the role of women in the family business during the period of the economic crisis and to answer to whether the family business represents for women an entry point in the labor market or an obstacle.

Family Businesses and Female Employment in Greece

Stating that SMEs in Greece are the backbone of the country's economy may sound as a cliché or as an exaggeration, but in this case it is just facts. SMEs in Greece cover an important part of the business sector with 60% turnover (compared with 40% on average in Europe) and concentrate about 85% of private employment. Greek SMEs tend to be more active in sectors such as trade and construction and less in industry. Another significant element is that the vast majority of them (96.75 %)¹ are micro-enterprises, meaning that they have less 9 employees.

Micro-enterprises in Greece are usually family owned and family managed with individual legal status. Parents, siblings and extended family-members work in family businesses (Sardeshmuck, 2006), but this does not necessarily mean that they are legally paid (or at least not all of them). According to the European Employment Observatory Review (2004) undeclared work is bound to be higher in activities with a high incidence of family workers and the self-employed.

According to Vaiou (2001), the majority of family workers are females who are registered by the National Statistical Services of Greece as housewives but contribute as unpaid workers to the survival of microenterprises (Anagnostopoulos, 2006). The workplace in these businesses is considered as a kind of extension of the family relationship (Vaiou, 2001). In other words, being a woman and working unpaid for the family firm is considered by the society as part of women's family obligations.

In the early 1980s, when today's seniors made up the working age population, the labor market in Greece had the following composition: Of those in employment, seven out of ten were men and only three were women. However, out of the three women, only two were in paid employment - the third was working unpaid for the family business run by her husband. In the early 1980s, the overall employment rate (whether paid or unpaid) of women between 20 and 64 years old did not exceed 36%, while men's employment rate raged around 84%.

Women's performance in the Greek labor market was not just weaker in comparison to other European countries. It was so weak that in a way it allowed a consolidation of a two speed labor market – on one hand the "regular workers" (men) and on the other hand women.

.

¹ Source Eurostat, SBE Survey

Table 1. Female paid and unpaid employment in Greece, 1983-2008

Women 20-64 years old	1983	1988	1993	1998	2003	2008	Change 2008-1983			
Unpaid employment	361.6	375.8	299.3	282.6	209.6	165.0	-54.4%			
Paid employment	677.7	823.5	936.5	1122.0	1403.6	1622.0	139.3%			
Total	1039.3	1199.3	1235.8	1404.6	1613.3	1787.0	71.9%			
Unpaid employment in %	35.0%	31.4%	24.5%	20.5%	13.4%	9.5%	-25.5pp			
Employment rate in %										
Unpaid employment	12.8	12.7	9.7	8.9	6.3	4.9	-8.0 pp			
Paid employment	24.0	27.7	30.2	35.4	42.1	47.8	23.8 pp			
Total	36.8	40.4	39.9	44.3	48.4	52.6	15.8 pp			

*Source: ELSTAT

Nevertheless, since the mid-1980s and until the outbreak of the financial and economic crisis in 2008, we experienced a significant increase in women's employment rate- from 36% in 1983 to 52% in 2008. More specifically, the greatest progress occurred during 1993 and 2004, when female migrants from neighboring, former communist countries started moving to Greece and worked in the fields of care and housework. In doing so they eased the burden of the so-called family obligations at a relatively affordable cost, and as aresult the increase in female (formal) participation was accelerated (Lyberaki, 2008).

In relation to paid employment, changes were even more profound. The number of women in paid employment raised by 139% during the period 1983-2008, and the respective number of women in unpaid employment decreased by 54.4%. As a result, while in 1983 one out of three female employees was unpaid, the respective number in 2008 was one out of ten.

During the crisis, there was a major setback in women's employment especially in the private sector. According to the 2013 data of the Greek Labor Force Survey, female employment rates in the private sector have moved abruptly backwards, calling into question the progress of the last 15 years, and being today at the same level as in 1997. The situation is quiet similar in the public sector, with the exception that the decrease in female employment is less sharp and less rapid. The most important observation when interpreting these figures is that the decrease in private sector occurred due to layoffs while in the public sector due to early retirement.

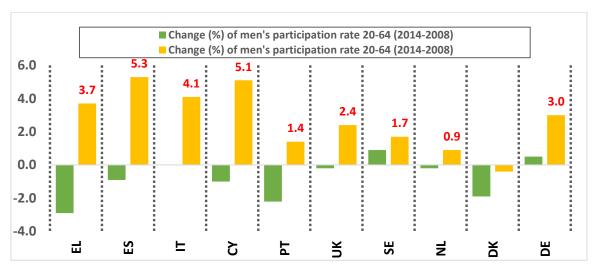
Table 2. Female paid and unpaid employment in Greece, 2009-2014

Women 20-64 years old	2009	2010	2011	2012	2013	2014	Change 2014-2009				
Unpaid employment	164.7	152.3	133.5	113.8	107.1	99.1	-39.8				
Paid employment	1632.3	1602.8	1502.3	1392.1	1321.0	1358.3	-16.8				
Total	1797.0	1755.1	1635.7	1505.9	1428.1	1457.3	-18.9				
Employment rate (in %)											
Unpaid employment	4.8	4.5	4.0	3.4	3.2	3.0	-1.8 pp				
Paid employment	48.0	47.3	44.7	41.8	40.1	41.3	-6.7 pp				
Total	52.9	51.8	48.7	45.2	43.3	44.3	-8.6 pp				

*Source: ELSTAT

Another important evidence is that one out of five women lost her job during the crisis. Female paid employment was reduced by 17% between 2009 and 2014. The good news is, that the decrease in unpaid employment continued, but unfortunately at a slower pace. This means, that even during these very severe economic years, women continued looking for a paid job, rather than remaining unpaid in the family business, which now has lower revenues and profits.

Figure 1. Change in men's and women's participation rate: The added worker effect versus the discouraged worker effects in specific European countries, 2008-14



*Source: Eurostat

Some people who can't find a job may decide to stop looking and hence drop out of the labor force — what is known as 'the discouraged worker effect'. Others may decide to supplement falling incomes by working more in order to compensate — 'the added worker effect'. In this way, some individuals who were not on the labor market previously may start looking for a job. Figure 1 shows that the 'discouraged worker effect' is overwhelmingly a male phenomenon, while 'added workers' are predominantly female. In a majority of countries, women are more likely than men to increase their offer of labor during the crisis.

Research Findings – Interim Report

The following (interim) report is part of the of the field work in 145 family owned small and medium enterprises (SMEs) in the city of Athens and aims to present the first results on the performance of Greek SMEs during the economic crisis. Integral part of this particular academic research is the exploration of the role of women in family business and the changes in the trends relating to female entrepreneurship in Greece.

A sample of Greek family SMEs was compiled by four PhD students², members of the research team operating under the "Aristeia project³" from different public sources like magazines, public presentations etc. During the summer-autumn of 2014, 62 questionnaire-based interviews were conducted. The family SMEs which were interviewed met the following criteria (1) firm to be family – owned (2) employees not to exceed the number of 50.

The questionnaires were filled under the thorough guidelines of our team's scientific supervisors and coordinators⁴, and included the following sections: (a) general data on the family firm (b) the effect of the economic crisis and the overall financial instability (c) SMEs and family: networks of solidarity (d) family firms and employment (e) family firms and insurance system.

Based exclusively on the observations of our sample, the following main conclusions are drawn:

- ➤ The majority of the SMEs was founded before the 2000s, with 40% being founded before the 1990s. Since 2000 and onwards, this rate is steadily declining. The decrease became more abrupt and intense during the last five years (2009-2014).
- ➤ Only a small minority of family firms exports products or services abroad.
- ➤ During the economic crisis, there was a dramatic decrease in SME's turnover and profits. Numerous business owners stated that since 2009 and until 2013, their business turnover shrank by 70%. Nevertheless, the situation seemed to stabilize in 2014.
- Most of the SMEs were forced to lay off members of their staff and reduce their fixed costs in order to cope with the adversities of the economic crisis.

² Stavros Vougioukas, Ermela Gianna, Thomas Georgiadis, Aikaterini Glyniadaki

³ Aristeia is a research program funded by the Ministry of Education and the European Commission. It investigates informal social protection, the hybrid Greek welfare state and economic crisis dynamics.

⁴ **Antigone Lyberak**i, Economics Professor at Panteion Univeristy and **Platon Tinios**, Economics Professor at Univeristy of Piraeus

Family business and the role of women in Greece

In the vast majority of the family firms that were interviewed (75.8%), there was at least one member of the family (besides the owner), who works unpaid on a regular basis. In most of the cases, this person was the wife of the owner. In the rest of the cases, there were the usually unemployed children of the family- son or daughter.

Wives' participation varied more than perhaps anticipated. Some wives worked (unpaid) for the family business only (39%), others worked outside the family firm but were also contributing when necessary (43.9%), and 17.1% were working in the family business while in retirement. The latter case is not an unusual phenomenon in Greece, since a high percentage of women prefer early retirement rather than working until the standard age of retirement.

Women who worked (either paid or paid) in family businesses controlled and managed by their husbands, usually were not entrusted with tasks under a specific job description. On the contrary, their job was to help where and when necessary. However, we observed that even though most of women were performing different activities and were valuable to the family business, gender stereotypes still existed – i.e. the role of women was related to activities that included strong communication skills and interpersonal abilities.

Out of 62 family SMEs that were interviewed, only 11 of them were founded and managed by women. This empirical observation corresponds to the idea that entrepreneurship, in almost every country, constitutes a men's activity. According to GEM⁵, there are only a few countries in the world, in which women's participation rates in entrepreneurship are approaching those of men. Usually, these countries belong to the poorest parts of the planet, in which many women choose to open up their own businesses, as a reaction to extremely high unemployment rates.

Furthermore, none of the 11 firms that were founded by women were providing B2B services or were being involved in sectors with high technological intensity. All of these women were entrepreneurs who provided services to consumers.

Conclusions

SMEs in Greece were affected profoundly and disproportionally more than large firms by the prolonged recession, which is exacerbated by the delay of structural reforms.

Before the economic crisis, significant progress was made in relation to female paid employment, which increased by 139% and the respective number of women in unpaid employment decreased greatly by 54.4%. During the crisis there was a major setback in women's employment, calling into question the progress made during the last fifteen years.

⁵ For more details, read Xavier et al (2013), Global Entrepreneurship Monitor (GEM)

However, women's rates in unpaid employment continued to decrease - unfortunately at a slower pace-, indicating that steadily more women aim for paid employment. In a way, the family business has been an entry point for women in the formal sector of the labor market. Many of them starting working unpaid in the family firm in order to support the family and later on they moved on to paid employment. Still, the issue is under investigation and the final remarks will be made after all interviews have been conducted.

References

Anagnostopoulos, A.,2006. Labour market flexibility in Central Greece: Findings from Workplace Employment Relations Survey. LSE Hellenic Observatory Symposium

Bettio, F., & Villa, P. 1998. A Mediterranean perspective on the breakdown of the relationship between participation and fertility. Cambridge Journal of Economics, 22(2), pp. 137-171

Bowman-Upton, N., & Moynihan-Brandt C.,1990. The power of invisible women in the family business. Family Business Review, 3(2), 153-167

Burtless, G., 2001. The Greek labor market. In: R.C. Bryant, N. C. Garganas and G. S. Tavlas, eds. 2001. *Greece's economic performance and prospects*. Athens and Washington: Bank of Greece and the Brookings Institution, pp. 453-493

Cambell, J., 1974. Honour, family and patronage. Oxford University Press

Coomans, G., 2001. The role of women in the labor market in ageing societies. In: Kikilias, Bagavos, Tinios&Hletsos, eds., *Demographic ageing, the labor market and social protection: trends, challenges and policies*. Athens: National Institute for Labor (in Greek). pp. 187-198

European Commission (2004). 'European Employment Observatory', p. 88-89, Review: Spring 2004.

Ferrera, M. 1996. The Southern Model of Welfare State in Social Europe. Journal of European Social Policy, 6 (1), pp. 17-37

Ferrera, M., 2010. The South European Countries. In: Castles, et al.,eds. 2010. *The Oxford handbook of the welfare state*. Oxford: Oxford University Press, pp. 616-629

IMF, 2006. Country Report: Greece, no 6 (5), January. Washington DC: IMF

Kan, M.Y. and Gershuny J., 2009. Gender and time-use over the life-course. In: Btynin and Ermish, eds. 2009. *Changing relationships*. New York and Oxford: Routledge. Ch.9.

Karamessini, M., 2005. *Reconciliation of work and private life in Greece –The Greek national report*. European Commission's Expert Group on Gender, Social Inclusion and Employment.

Kaslow, F.W., & Kaslow, S., 1992. The family that works together: Special problems of family businesses. In S. Zedeck (Ed.), Work, families and organizations, pp 312-351, San Francisco: Jossey -Bass

Lyberaki, A., 2010. The record of gender policies in Greece 1980-2010: legal form and economic substance. *GreeSE Paper No 36*. Hellenic Observatory Papers on Greece and Southern Europe.London School of Economics.

Lyberaki, A., 2011a. Migrant women, care work and women's employment in Greece. *Feminist Economics*, 17(3), pp. 103-131

Lyberaki, A. and Tinios, P., 2002. Work and Cohesion: the Greek National Plans for Employment and Social Inclusion. Athens: Papazisi (in Greek).

Lyberaki, A., & Tinios, P. 2014. The Informal Welfare State and the Family: Invisible Actors in the Greek Drama. *Political Studies Review*, *12*(2), pp. 193-208

Moen, P., 1992. Women's two roles, Westport, CT: Auburn House

National Action Plan for Social Inclusion (NAPincl) 2001-2003. Greece (2001). In: A. Lyberaki and P.Tinios, eds. 2002. *Work and cohesion: the national action plans for employment and social inclusion*. Athens: Papazisi [in Greek].

National Bank of Greece, 2013. Survey of Greek SMEs: https://www.nbg.gr/english/the-group/press-office/e-spot/reports/Documents/SMES_2013H2_en.pdf

Risman, B. J. 2004. Gender as a social structure theory wrestling with activism. *Gender & society*, 18(4), pp. 429-450

Rowe B.R., & Hong G.S, 1997. The paid and unpaid contributions of wives to family businesses. Consumer Interests Annual Vol. 43

Sardeshmuck S. R (2005). 'Do family employees get paid better than non-family employees?' Family Enterprise Research Conference 2005 Available at http://www.familybusinessonline.org/programs/ferc/schedule.aspx

Smyrnios, K., Poutziouris, P., and Sanja Goel. 2013. Handbook of research on Family Business, Edward Elgar Publications.

Title: Greece: The new stratification in digital era

Author: Panagiotopoulou Milena Affiliation: University of Crete

Abstract

This paper represents preliminary theoretical considerations about the development of the digital agenda in Greece. It is part of an ongoing thesis about the public policies and the initiatives were promoted during the last three decades in Greece focusing directly on the diffusion of the information and communication technologies (ICT). The research aims to evaluate the adoption of digital agenda in Greece for the period 2009-2014 through data analysis. The report concludes that during this period there is a rise in inequalities due to different levels of access to digital resources. The Information Society is not still a society for all. The discriminations between information haves and have-nots are still alive, shaping the new "digital divide" which underlines the need for more human-centered digital policies and regulations.

Introduction

Digital Revolution: Does it reproduce inequality?

The digital revolution has led to many fundamental changes all over the world. The digital transformation of the economy reshape the way people live, communicate, learn, work, and do business. As a result, this shift created a gap between the poor and the rich, the people with internet access and those with not, the computer literates and the computer illiterates, the big companies and the small ones, and other new dichotomies stemming mainly from the limited capability to follow the rapid technological growth. Economists, policy makers and social scientists who believed in the progressive reforms from the industrialization, they are now skeptical about the real economic and social gains.

There is ongoing discourse among progressives whether the creative destruction caused by the technological innovation is beneficial for the overall economy with many theorists to argue that benefits from the diffusion of innovations are not spread to all, since there has not been "a new government to humanize that new economy" (Atkinson and Mcternan, 2015). This argument is better developed in Thomas Piketty's *Capital in the Twenty-First Century* who expands on the idea that the technology boom generates inequality in wealth production in favor of the already rich. Despite the general principle that innovation can push forward the economy and achieve higher rates in productivity growth, more and better jobs and greater social integration, the linkages among the needed steps are neither coherent nor resilient and should be fostered by more simulative macroeconomic policies that eliminate social problems (Atkinson and Mcternan, 2015).

While economies increasingly depend on knowledge-intensive activities that demand Internet access and ICT skills across the population, the unequal dimensions of Internet access and the limited diffusion of knowledge may be linked to stratification (Hargittai 2008). The different rates of Internet connectivity can create social inequalities rather than alleviate them. People who live in "connected" towns with a high-speed Internet access, or people who have a higher income to support access to digital resources, are in advantageous positions. Hence, the different dimensions to Internet usage and access can benefit the already privileged rather than the unprivileged (Hargittai 2008). It seems that the old debate about the social implications of ICT on political participation has reached a clear answer. Reinforcement theories that claim that the Internet will not bring equality but strengthen the existing differences in civic participation have been confirmed instead of the mobilization theory, which claims that the Internet lowers the costs and reinforces the civic engagement.

According to DiMaggio and Hargittai there are five dimensions of inequality:

- i. Inequality due to technical means (hardware and connections)
- ii. Inequality due to the autonomy in the internet usage

_

¹ Norris, P. (2000). A Virtuous Circle: Political Communications in Post Industrial Societies, Cambridge University Press, New York.

- iii. Inequality due to skills
- iv. Inequality due to social support
- v. Inequalities to purpose for the internet usage

At that point, inequality is created at the beginning of the diffusion process and refers in privileged positions people may have.

What factors create the digital gap?

A brief description of the available literature is needed to point out what factors create the digital gap among people, households, businesses, workplaces and countries. Wilson (2004:300) supports that there are eight aspects of the digital divide²: physical access, financial access, cognitive access, design access, production access, institutional access, and political access.

Researchers have recently started to discuss the implications of demographic patterns of access to digital resources in correlation with the inequalities that are caused (Hoffman 'et al.' 1996; Katz and Aspden 1997). Variables like income, age, education and geographical location appear to be the key factors affecting the digital gap. These variables do not only reflect the society's inequalities but also reinforce them.

The Greek example

Methodological Approach

In my research, I focused my analysis upon the level of the frequent Internet usage in relation to three variables: employment status, household income in quartiles, and urban-rural density of the living area. The first variable is related to employment status with regard to employees/ self-employed/family workers, unemployed, students, retired and other inactive. The second variable is related to household income in quartiles with regard to income among 25% highest incomes observed, 25% lowest incomes observed, among 50% highest incomes observed and among 50% lowest incomes observed. The third variable is related to urban-rural density of the living with regard to individuals living in sparsely populated area³, in densely-populated area⁴, and in intermediate urbanized area⁵. The analysis is based on the secondary data provided by the European Commission and specificaly on the Digital Economy and Society Index (DESI)⁶.

DESI

-

² Term developed by the OECD and described as "the gap between individuals, households, businesses, and geographical areas at different socioeconomic levels with regard both to their opportunities to access information and communication technologies (ICTs) and to their use of the internet for a wide variety of activities". Available at http://www.oecd.org/sti/1888451.pdf

³ Area with less than 100 inhabitants/km2.

⁴ Area with at least 500 inhabitants/km2.

⁵ Area with between 100 and 499 inhabitants/km2.

⁶ Available at http://ec.europa.eu/digital-agenda/en/digital-agenda-scoreboard

The i2010 initiative⁷, launched in 2005 as the European Commission's new strategy laying out broad policy guidelines for a fully inclusive information society. The purpose of this new, integrated policy was to encourage the development of ICT in public services, SMEs and households in the member-states of European Union (EU) with a view to promoting growth and better- quality jobs. On 27 September 2009 the i2010 High Level Group of the European Commission adopted a new benchmarking framework for the European digital agenda for the period 2011-15 in order to monitor the progress in the Information Society⁸ in the 3 pillars of the i2010 initiative. For this purpose the collection of the ICT indicator was necessary.

DESI was developed by the European Commission (DG CNECT) as an index to monitor the progress of EU countries towards a digital economy and society. It includes five main dimensions (Connectivity, Human Capital, Use of Internet, Integration of Digital Technology, Digital Public Services) and summarizes data collected from the 28 EU Member States.

Findings

The findings of the secondary research are presented in the Figures 1,2,3,4,5, and 6. As it can be seen in Figure 1, Greece in 2009 is below the EU average in all the clusters. According to the findings for the sample of individuals with regard to employment status Greece occupies a worse position compared to the EU average. Regarding those who are employees, self-employed, and family workers, the mean value for EU is 57.3% while in Greece is 35.6%. Concerning the average use of the Internet by individuals who are unemployed, the mean value for EU is 40.4% while in Greece is considerably lower, 25.5%. As it was expected, students are more frequent users than the other samples in both cases. The EU average is 81.3% while in Greece is 65.9 %. Concerning the retired and other inactive citizens the highest percentage appears in EU (20.6%) while in Greece is 7.12%.

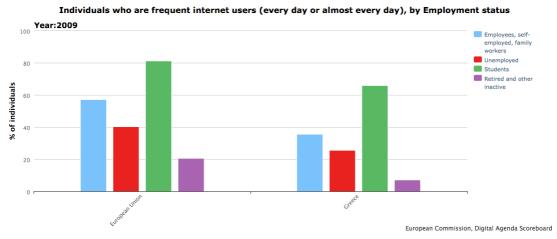


Figure 1: Percentage of individuals who are frequent internet users (every day or almost every day), by Employment status in 2009.

In Figure 2 for 2014 a rise following the previous trends can be observed. However, it should be mentioned that concerning the average use of the Internet by individuals

⁷ Available at http://ec.europa.eu/smart-regulation/impact/ia carried out/docs/ia 2007/sec 2007 1469 en.pdf

⁸Available at https://ec.europa.eu/digital-agenda/download-scoreboard-reports

who are retired or inactive the percentage difference rises between Greece and EU in favor for the mean value for EU.

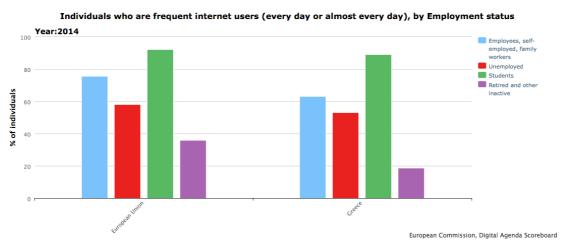


Figure 2: Individuals who are frequent internet users (every day or almost every day), by Employment status in 2014.

As it can be seen in Figure 3, Greece in 2009 is below the EU average in all cases. According to the findings for the sample of individuals with regard to the household income in quartiles, Greece occupies a worse position compared to the EU average. Concerning the average Internet usage by individuals who live with income in first quartile, the mean value for EU is 25.6 % while in Greece is 9.96 %. The 34.8 % of individuals in EU whose income is among the 25% lowest incomes observed, use the Internet every day or almost every day, while only 15.2 % of Greeks do the same thing. According to the findings for the sample of individuals with regard to income among the 50% highest incomes observed, Greece occupies a worse position (23.5%) compared to EU average (45.4%). The percentages are augmented in both cases, when individuals living in a household with income among the 50% highest incomes observed are examined. The EU average is 62.6% while in Greece is 42.5%.

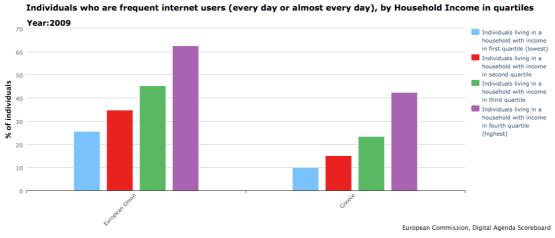


Figure 3: Individuals who are frequent internet users (every day or almost every day), by Household Income in quartiles in 2009.

A major finding that can be observed in Figure 4, is that in 2014, this percentage is higher for Greek individuals (82%) whose income is among the 25% highest incomes observed compared to the EU average (79.9%) unlike what was observed in 2009.

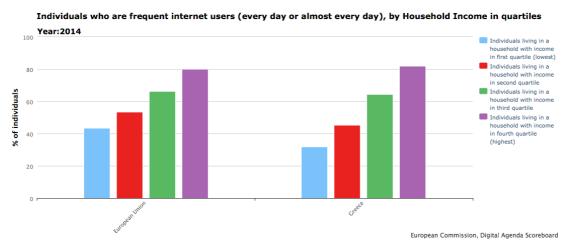


Figure 4: Individuals who are frequent internet users (every day or almost every day), by Household Income in quartiles in 2014.

Analyzing the results in 2009 for the Internet usage with regard the urban-rural density of the living area, it can be observed that Greece occupies a worse position in all results compared to the EU average.

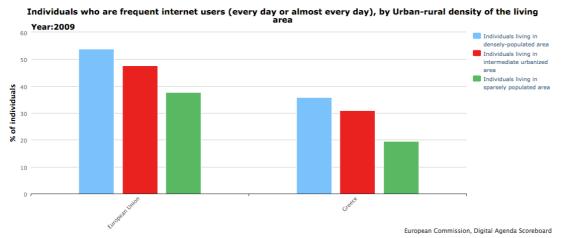


Figure 5: Individuals who are frequent internet users (every day or almost every day), by Urban-rural density of the living area in 2009.

All results in 2014 (Figure 6) follow the digital gap between EU average and Greece that was observed in 2009, but with downward trend.

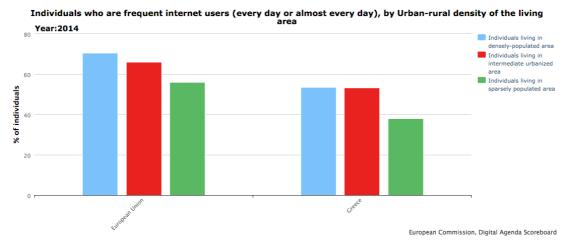


Figure 6: Individuals who are frequent internet users (every day or almost every day), by Urban-rural density of the living area in 2014.

DESI 2014: Greece profile

According DESI mostly during the year 2014, Greece is characterized among the "slow performing countries" with an overall score of 0.36⁹, remaining at the 26th position in the ranking. As stated in the report "Relative to last year, Greece has progressed in terms of Connectivity; but despite 10% of Greek households being covered by fixed broadband, 37% do not yet subscribe to it. Greece lags behind on the demand side, with low levels of digital skills (only 59% are regular Internet users, while 33% have never used the Internet) and trust (most Greeks still don't shop online or do online transactions). These seem to be holding back the development of its digital economy. Online public services are a key challenge for Greece, as it is among the last in the EU; it is positive to note, however, that 38% of Internet users have exchanged filled forms with public administration online."

It is clear, hence, that the country has not fully developed its digital economy and society, as it has not engaged its citizens to the use of the Internet. However, it has been great progress since 2002, when the percentage of regular internet users was 14.7%. In 2014, this number rose to 64.9% below the EU average of 75%.

Evaluation Results

According to the followed methodology described previously, the results indicate that the digital gap with regard to Internet usage between EU average and Greece indeed declines. However, there are also different levels in the Internet among groups of people regarding the employment status, the income, and the geographical location. We can see that the most significant rise appears in the group of individuals who are unemployed, while the Internet usage in groups with income in third quartile has tremendously augmented. We can also see that groups in intermediate urbanized area experience the same increase in the Internet usage. In Greece since the adoption of the

⁹ DESI scores range from 0 to 1, the higher the score the better the country performance.

first White Paper¹⁰ in 1995, the information society agenda is still in the main concerns of each government. In Greek politics, achieving "an information society for all", "an inclusive society" has become a political priority since then. However, it is doubtful whether there has been an effective promotion of the use of new technologies and tools for integrating citizens and businesses in the new digital era.

Conclusions

Greece needs to focus on human capital development. In line with the DESI "Greece needs to address its severe digital skills gap, as insufficient levels of digital skills limit exploitation of benefits for investments in digital technologies as well as gains for the citizens for engaging in a wide range of on-line activities. Digital skills are nowadays needed in every corner of the workforce, and the fact that only 45% of Greeks possess at least basic levels of digital skills can be an important barrier to the country's economic development."

Bibliography

Atkinson, R., Mcternan, eds. (2015). 'Sharing in the success of the digital economy. A progressive approach to radical innovation'. Policy Network: ITIF.

Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions. '*A Digital Single Market for Europe*'. (2015). European Commission, available at http://ec.europa.eu/priorities/digital-single-market/docs/dsm-communication_en.pdf

Digital Economy and Society Index. (2015). Country Profile: Greece, available at https://ec.europa.eu/digital-agenda/en/scoreboard/greece (accessed 13 May 2015).

DiMaggio, P., Hargittai, E. (2001). 'From the 'Digital Divide' to 'Digital Inequality': Studying Internet Use as Penetration Increases'. Center for Arts and Cultural Policy Studies, Working Paper #15, Princeton University.

Hargittai, E. (2008). 'The digital reproduction of inequality', Social *stratification*, 936-944.

Hoffman, Donna L., William .D. Kalsbeek and Thomas .P. Novak (1996), 'Internet and Web Use in the United States: Baselines for Commercial Development', Special Section on *Internet in the Home*, Communications of the ACM , 39 , 36-46.

Katz, J., and Aspden P. (1997), 'Motivations for and Barriers to Internet Usage: Results of a National Public Opinion Survey', Paper presented at the 24th Annual Telecommunications Policy Research Conference, Solomons, Maryland.

_

¹⁰ White Paper "The Greek Strategy for Information Society: A Tool for Employment, Development and Quality of Life.", 1995, Ministry of Industry, General Secretariat for Research and Technology- GSRT, Information Forum Society http://ecdl.com.cy/assets/mainmenu/131/docs/EU-MemberStatesStrategies.pdf

Kotkin, J. (2001). *The New Geography: How the Digital Revolution is reshaping the American Landscape*. Random House Trade Paperbacks.

Mazzucato, M. (2013). 'Debunking the Market Mechanism: Organizations, Innovation and Inequality- A Response to John Kay', *The Political Quarterly*, 84:1, 444-447

Norris, P. (2000). *A Virtuous Circle: Political Communications in Post Industrial Societies*, New York: Cambridge University Press.

OECD (2001). 'Understanding the Digital Divide'. OECD Publications, Paris.

Piketty, T., and Goldhammer, A. (2014). *Capital in the twenty-first century*. Belknap Press.

Wilson, E. J. (2004). The information revolution and developing countries. Cambridge, MA: MIT Press.