# UNIVERSITY OF GDANSK - FACULTY OF ECONOMICS

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Field of science: Social Sciences Scientific discipline: Economics and Finance

# THE IMPACT OF THE 2008 FINANCIAL CRISIS ON GREEK FOOTBALL CLUBS. FOCUS ON REVENUES FROM TICKETS SALE

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### **STRESZCZENIE**

#### WPŁYW KRYZYSU FINANSOWEGO NA GRECKIE KLUBY PIŁKARSKIE

Badanie przedstawione w rozprawie dotyczy wpływ kryzysu finansowego na greckie kluby piłkarskie Ligi Mistrzów. W badaniu przeprowadzono analizę ekonometryczną dotyczącą wpływu zmian PKB na przychody klubów piłkarskich, w której stwierdzono, że przy spadku PKB o 1% przychody spadają o 3,83%. Efekt ten jest w pełni uzasadniony, zwłaszcza jeśli chodzi o liczbę kibiców przychodzących na mecze. Przeprowadzono badanie ankietowe z udziałem kibiców różnych drużyn i w różnych miastach oraz badanie jakościowe, tj. wywiady z ekspertami. Analiza wykazała spadek intensywności uczestnictwa kibiców w spotkaniach Ligii Mistrzów w czasie kryzysu.

w porównaniu z okresem wcześniejszym. Pozwoliło to na pozytywną weryfikację głównej hipotezy. Podobnie zweryfikowano (przy użyciu zarówno ilościowych, jak i jakościowych metod) hipotezę pomocnicza, o pogorszeniu poziomu konkurencyjności greckich klubów piłkarskich w okresie kryzysu. Jedną z przyczyn była niższa jakość transferów, przy czym należy zauważyć, że drastyczny spadek atrakcyjności spotkań klubów piłkarskich był obserwowany głównie w małych miastach. Badania ilościowe i jakościowe wykazały, że atrakcyjność i konkurencyjność gry – w oczach ludzi i ekspertów – spadła w czasie kryzysu. Zweryfikowano również hipotezę, że w czasie kryzysu zmieniły się czynniki wpływające na frekwencję, tj. zaobserwowano istotny statystycznie wpływ spadku dochodów i wzrostu bezrobocia na decyzje kibiców o zakupie biletów na mecz, podczas gdy wcześniej czynniki te nie wywierały istotnego wpływu. Nie udało się natomiast pozytywnie zweryfikować hipotezy, zakładającej, że wpływ kryzysu na decyzję zagorzałych kibiców (tzn., osób czynnie wspierających swoje drużyny piłkarskie) o uczestnictwie w widowiskach piłkarskich był nieistotny. W czasie kryzysu kibice ci zmniejszyli częstotliwość odwiedzania stadionów niezależnie od stopnia ich identyfikacji z klubem.

Słowa kluczowe: Kluby piłkarskie, kryzys gospodarczy, Grecja, ekonomika sportu

## **EXECUTIVE SUMMARY**

# THE IMPACT OF THE FINANCIAL CRISIS ON GREEK FOOTBALL CLUBS

# [Stamatiki-Maria Atsave]

The current study examines the impact of the financial crisis on Greek football clubs of Champions League. The research conducted an econometric analysis regarding the effect of GDP changes on the revenues of football clubs, where it was found that when GDP drops by 1%, the revenues decrease by 3,83%. This effect is fully justified, in particular about the number of fans attending matches. Quantitative study with fans of different teams and in different cities and qualitative study, conducting interviews with experts had been conducted. The analysis showed a decrease in participation during the crisis compared to the pre-crisis period. Primary research shows that the competitive performance of football clubs decreased during the crisis, especially for the clubs of smaller cities. Both quantitative and qualitative research showed that the attractiveness and competitiveness of the game –as perceived by the people and the experts – decreased during the crisis. Also, the hypothesis that factors affecting attendance have changed during the crisis has been positively verified, due to the statistically significant effect of falling incomes and rising unemployment as the main parameters of the decisions of spectators to attend the match during the crisis. Such influence has not been existing prior to the crisis. Regarding the fifth hypothesis that the impact of crisis on the decision of supporters (emotionally attached to the club as a difference in comparison to the common spectators) to attend the games was insignificant, was not positively verified. The supporters (hard core or core fans) lowered their frequency of visiting stadia during the crisis as other spectators.

Keywords: football clubs, economic crisis, Greece, sports economics

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I am also grateful to my classmates and cohort members, especially my office mates, for their moral support. Thanks, should also go to the librarians, research assistants, and study participants from the university, who impacted and inspired me.

Lastly, I would be remiss in not mentioning my family, especially my parents, as well as all my friends. Their belief in me has kept my spirits and motivation high during this process.

# LIST OF PUBLICATIONS

The impact of 2007-2008 crisis on NBA attendance (2022) (approved article – publication in print into IBAGE)

#### INTRODUCTION

The global sports market is a market of continuous growth and dynamism, while at the same time it is directly linked to the economic situation, especially in recent years (Leeds and von Allmen, 2005). The sports market shapes – and is certainly shaped by – social reality, as it is the leisure activity of thousands of people (Taylor and Gratton, 2000). Regarding football in particular, it is agreed that it is extremely popular and attractive and that it is acknowledged to have a great influence on various aspects of the organisation and life of modern societies (Giulianotti and Robertson, 2009). Football's<sup>1</sup> presence is spreading dynamically in many ways, in the wider sporting and cultural sector, in the economy, in politics and in international relations. Important aspects of people's everyday lives unfold around football, from the simple anticipation of the thrill of Sunday matches to the formation of dynamic social collectives (Goldblatt, 2007). The examination of the sport market as a separate economic sector is important, due to the fact that it is an economic activity with a significant turnover, a considerable number of employees and many connections with other related economic sectors (forward and backward linkages). In this light, the study aims to determine whether the economic crisis experienced by Greece during the period 2008-2015 has affected the financial situation of professional football clubs, namely their revenues and the number of spectators. As professional sports - consequently, professional football is an economic sector, it is inevitable that they are affected by the overall state of the economy. However, this impact varies from case to case, depending on the specific characteristics of each country and each professional league (Vorobyev, Solntsev and Osokin, 2018). Therefore, the aim of this thesis is to identify the impact of the economic crisis on professional Greek football clubs (FCs), measured mainly by sale of tickets.

Although the analysis could cover the impact of the economic crisis on utility of fans and clubs, on the other hand there is no methodology to cover such wide dimensions; hence, one should decide to narrow the investigations. The problem statement of the study is grounded in the economic crisis. Especially in Greece, as it will be stated in the next chapters, the economic crisis, since 2008 when it started, has had a catalytic effect on all

<sup>&</sup>lt;sup>1</sup> The notion of football will be used consequently in this thesis. However, the author is aware that this type of sport is named soccer or European football in the USA and Canada.

aspects of the Greek society and market. Professional sport and the most popular sport in Greece, football, could not remain unaffected by this factor. It is widely acknowledged that the sports product is composed by a multitude of parameters – social, economic and cultural ones; however, the thesis focuses on the economic dimension of football games as a sport product. The other aspects will be saved for further investigations.

The problems of functioning of the football clubs caused by negative macroeconomic shocks can affect the design and implementation of an effective marketing strategy for professional football clubs, many of which might be unable to respond successfully to the demands of more difficult times. The sports brand and support of its positioning through sports marketing during the economic crisis is a challenge for all professional sports executives in Greece. Particularly in football, the executives have to focus, apart from the negative implications of the economic crisis, on the potential positive effects that can result from it, redefining the role and objectives of the FCs. Especially for Greece, a country that has been severely affected by the crisis, it is more than necessary to investigate and identify both the causes that led to the crisis and the recession, and strategies and ways ensuring recovery and growth, for various economic sectors, including the professional football market.

Professional football, despite the numerous pathologies that characterize it, which are also covered in the study, still attracts people's interest, but it is also a small market in comparison with the rest of the world, with historical clubs operating in two professional categories. The research presented in this study has been undertaken since Greek football clubs have not conducted any specialized post-crisis economic research that relates to their performance in this period and might help them in alleviating negative effect of the crisis. Furthermore, the impact of the crisis on Greek football clubs has not yet been researched, neither the impact of the crisis on spectator attendance at the stadium. Especially with regard to spectators, their importance is not only limited to the economic dimension, but also to the brand value of each football club, since the number of fans shapes the impact of the club in society.

The main hypothesis of the research is that the economic crisis had a negative impact on Greek professional football clubs' revenues in particular from tickets sale. This hypothesis is being substantiated by the following secondary hypotheses:

H1. The stadium attendance – number of attendees – decreased during the period of the economic crisis.

- H2. The competitive performance of football clubs during the crisis diminished, and among the reasons is lower quality of transfers.
- H3. The attractiveness and competitiveness of the game as perceived by the people decreased during the crisis.
- H4. Factors conditioning attendance have changed during the crisis.
- H5. The impact of crisis on the decision of supporters<sup>2</sup>, to attend the games was insignificant.

Three types of research methods have been chosen to be carried out in the thesis:

- 1. Quantitative research, using data obtained through a closed-ended questionnaire, among the public, in order to determine the changes in their decisions with regard to attending football matches during the economic crisis.
- 2. Econometric analysis, by examining Greek football data regarding the revenues of the clubs and the number of spectators, in order to determine the impact of changes in GDP and the level of unemployment on these parameters.
- 3. Qualitative research, using interviews with sports journalists, in order to explore in depth aspects of the Greek football market and the impact of the economic crisis.

The quantitative and qualitative approach to the issue was carried out in the hope that it will lead to a better understanding of the attitudes and opinions of fans and experts on the impact of the crisis, as well as an attempt to highlight other issues, such as changes in the relationship of professional football with the wider commercial market and sponsors, with fans-consumers of the sports product that the football clubs produce.

The first chapter of the thesis describes the sports industry in order to justify why this industry should be considered as a separate economic entity. The chapter lists the structure of this industry, the segments of the market, the business relations between actors at the sport market and the impact of the external environment on the sports industry. Also, the chapter examines what sports production means and how those who distribute it and those who support it through the provision of financial or real services, (i.e. sponsors) relate to it.

The second chapter examines the football industry, by describing the initial stages of professional football, the internationalization of post-war football and television broadcasting and the concept of efficiency in professional football clubs, which, in fact, shaped the professional football market as it is today.

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<sup>&</sup>lt;sup>2</sup> Supporters (or hard core fans) are defined in the latter part of the thesis, but in short, they are persons supporting their teams and this is the main difference in comparison to the common spectators.

In the third chapter the factors that shape the development of the football industry are being examined and the focus in on factors relevant for Greece. A key factor is the institutional environment. The main principles, structure and guidelines of the Institutional Economics as well as those of the New Institutional Economics are examined in order to provide a clearer picture of what they are advocating and to determine the importance of their methodological analysis in relation to the football industry, especially in Greece. Next to that, the political/policy uncertainty is being examined, while the macroeconomic conditions are being highlighted as a key factor as well.

The fourth chapter gives an overview of the Greek economic crisis, by examining the Greek economy before the crisis and, after that, the causes of debt, debt crisis and International Monetary Fund support.

In the fifth chapter the findings of the research are being presented, i.e., the econometric model and the findings of the primary research.

In the last chapter, the conclusions of the thesis are proposed.

# **CHAPTER 1**

# SPORT INDUSTRIES AND ECONOMICS

# 1.1. Essence of sports industry

Sport is a human activity typical of leisure and, therefore, also of fun. At least since the second half of the twentieth century, sports activities carried out both by individuals and by organisations (clubs, associations, companies) have, however, been subjected to the pressure of a very lively economic environment, in which new competitive forces have emerged such as manufacturers of sports articles and equipment, managers of communications and television broadcasts, event organisers, as well as suppliers of services very different from each other, but all focused on the needs of athletes and sports organisations. In addition, financial and industrial sponsors of the most diverse types have increasingly populated this competitive environment. Sports activities can therefore be viewed not only from the point of view of the typical social activities of the use of leisure time, but also from the economic point of view i.e., sport activities as a part of a growing economy (sports business) which has very close relationships with other branches, both industrial and services.

Sport has also become a market. Not only sports producers, sports consumers and other operators are involved in this market, but – by now – also a nascent sport economics and management discipline (Sandy, Sloane, and Rosentraub, 2004; Zimbalist, 2001). The sports market has not only expanded but has also become increasingly differentiated. Hence, this shows how complex the market to which we refer is, and how economics became an integral part of the industry, in every aspect: in the production, the supply, the distribution, the marketing, the demand and the redistribution (Downward, Dawson and Dejonghe, 2009). Although the sports industry includes individual sports without the "commercialized competition" (Stone, 2017), amateur sports and sports without clubs and teams, the current study focuses on professional type of sport, and especially the professional football.

# **1.2.** Overview of the sports industry

Sport is a human activity that focuses on physical activity, but, also, can be considered as a social institution reflecting the norms, values and culture of any given society. For example,

while in ancient Sparta sport was a method of military training (Christensen, 2014), in ancient Athens was considered an integral part of civic education and of strengthening of societal bonds (Kyle, 2014).

Not only in the past but nowadays the uniqueness of sport as a social phenomenon lies in the fact that it performs a series of functions affecting human quality of life such as an educational function by promoting personal development, a function of public health by the physical activity, a humanitarian function by empowering international cooperation and a recreational function, by having a qualitative leisure time (Coatler, 2005; Cooke, 1994; United Nations, 2005)

As an additional aspect regarding the social function of sport, Stevenson and Nixon (2003) identify five basic functions:

- The socio-emotional function, regarding the "socio-psychological stability of the individual" (Stevenson and Nixon, 2003, p. 134)
- The socialization function, regarding how the individual develops of his/her personal characteristics and inculcates the cultural and social norms, standards, rules and beliefs.
- The integrative function, regarding the formation of a collectivity, since sport is "a uniting and bonding source of power between different peoples, social classes, religions, nations, etc." (Lenger and Schumacher, 2015, p. 43).
- The political function, regarding the use of sports as a political instrument and a mechanism to create the national identity (Bairner, 2001).
- The social mobility function, regarding "the movement of the individual between socially defined categories" (Stevenson and Nixon, 2003, p. 134).

One key point that should be considered is about the participants of the supply side of the sports industry – i.e., the producers and the participants of the demand side. First of all, the "amateurs" are sports producers, that is, those who practice activities on an occasional and spontaneous basis (also through competitions, parties, exercises). Secondly, the athletes who practice it on an organised basis (through tournaments, championships, national and international circuits) are sports producers. So, we have "amateurs" or "professionals" of the sport. It is proposed in this thesis that an "amateur", is defined as a person who carries out an activity without this being his/her means of subsistence and without this activity being a mean of earning an income, while a professional is defined as a person who carries out an activity as a mean of income. Both can create or participate in sports organisations. The focus of this thesis is on "professionals".

In general, all the aforementioned agents offer sports to society and the economy. The demand for sport is expressed in a twofold sense: sports producers have, in fact, two distinct "clienteles":

- mass customers, which includes the general public of competitions or other events, the supporters of sport clubs and associations, as well as individuals or families looking for fun opportunities in their free time: all these people can be considered consumers of sports activities,
- sponsors i.e., corporate customers or companies that produce goods and services for sport (or "business market"): without sport amateur or professional as it is these companies would not exist or would do anything else or would do less. These are suppliers for the activity of amateur or professional athletes and manufacturers of sports equipment and facilities (sporting goods companies); it is also a very differentiated number of industrial and commercial enterprises belonging to the most diverse sectors of economic activity (and, therefore, third parties with respect to the world of sport) which provide assistance, funds and other forms of aid for sports. These companies look for sports activities, of the most diverse types, to communicate their industrial or commercial brand, in the hope of stabilizing or increasing their total turnover (Marshall and Cook, 1992).

In conclusion: in the wake of the trend of the world economy towards the production of "new" or "innovative" goods and services (Masi, 2002), the investment opportunities of the sport sector seem particularly attractive. A new field of relations emerges in the economic system, in which several subjects interact, certainly different from each other, but all united by converging interests. In a phase of world economic development in which numerous markets are in decline and many economic activities vanish, on the contrary capital is invested in the sport industry, new employment opportunities arise, and new wealth is created (Westerbeek and Smith, 2003).

Further than the social and other functions, sports have been recognized as an economic activity, thus having major economic and financial functions (European Parliament, 2005). Thus, demand for sport can be also created and supported with spending by e.g., public sector. However, this view should be further clarified, because there is a risk that it may lead to generalizations that do not apply or do not thoroughly examine the real nature of the sports market.

# 1.3. Segments of the sports industry

According to a rather narrow approach to define sport industry, Gerke and Benson-Rea (2017, p. 17) claim that sport industry: "includes industries goods or services necessary to perform sport (e.g., sport shoes, rackets, dance lessons) (and) all industries for which sport is an important input or precondition for the production of their goods and services". (Table 1)

Table 1. Definition of sports industry

Consumer expenditure						
s and services conditional on doing	sport					
Dietary supplements	Sport bets					
Hotels, restaurants (sport tourism)	TV broadcasts					
Doing sport (according to the statistical definition)						
Stadiums Swimming pools						
ods and services necessary to do sp	port					
Racing horses Sport shoes and clothes Sport weapons						
School education Sport cars, motorbikes						
Watches, clocks Sailing equipment Dancing schools						
	Dietary supplements  Hotels, restaurants (sport tourism)  sport (according to the statistical decords and services necessary to do sport shoes and clothes  Sport cars, motorbikes					

Source: Gerke and Benson-Rea, 2017, p. 12

According to Pitts and Stotlar (1996 p. 4 and p. 1), sport industry "is the market in which the products offered to its buyers are sport, fitness, recreation, or leisure related and may be activities, goods, services, people, places, or ideas" and "comprises all products sold as goods, equipment and apparel for use in sports, recreation, and fitness activities".

In fact, the sports market size worldwide, including all the above, in 2018 amounted to 471 billion US Dollars (Figure 1), having a constant growth every year, which is an indication that there is an upward trend and a growing demand for the goods and services of the sector.

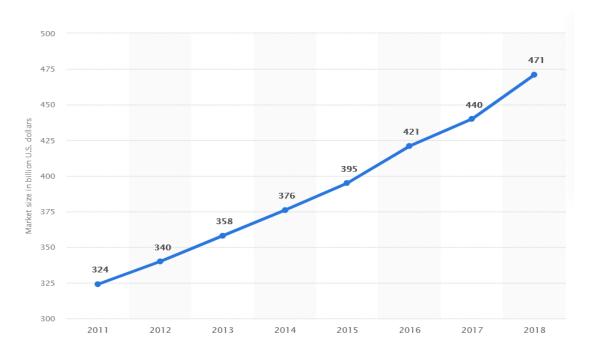


Figure 1. Sports market size worldwide, 2011–2018

Source: Tighe, 2020, p. 18

On the other hand, sporting industry could be viewed in a wider dimension, including multiple segments (Pedersen and Thibault, 2014; Trenbeth, 2012). Since sport industry, by its very nature, includes so many products and services, the segmentation of the whole market has various approaches. One major approach of market segmentation identifies three major segments:

- the sport performance segment, regarding the products and services to the consumer so that he/she has the ability to participate actively in a sport or as a spectator of a sport,
- the sport production segment, regarding the production of the sport and to influence the quality,
- the sport promotion segment, regarding the products offered to promote sports.

Each of these segments has several products and services, as presented in Figure 2.

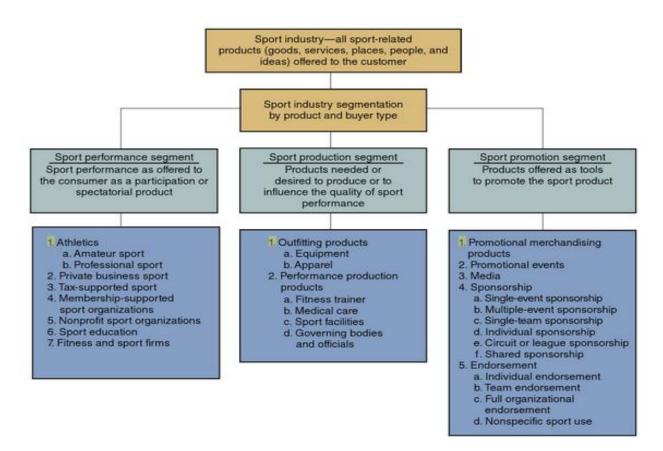


Figure 2. Sport industry segmentation, by product type model

Source: Pedersen and Thibault, 2014, p. 11

Pitts and Stotlar (1996, p. 1) identify the following segments of the sport business industry, having as criteria the category of the products or services offered):

- sports tourism,
- sporting goods,
- sports apparel,
- amateur participant sports,
- professional sports,
- recreation,
- high school and college athletics,
- outdoor sports,
- sport marketing firms,
- sports sponsorship industry,
- sports–governing bodies.

The authors note that, for any of these segments, there are various products and services, in order to serve the following functions of the consumer (Pitts and Stotlar, 1996, p. 2):

- participation,
- entertainment,
- equipment and apparel,
- promotional items,
- sport facilities,
- •marketing research,
- management services.

According to Meek (1997), sport industry can be divided into three major sectors (Figure

3):

- sports entertainment,
- sport products,
- sports support organisations.

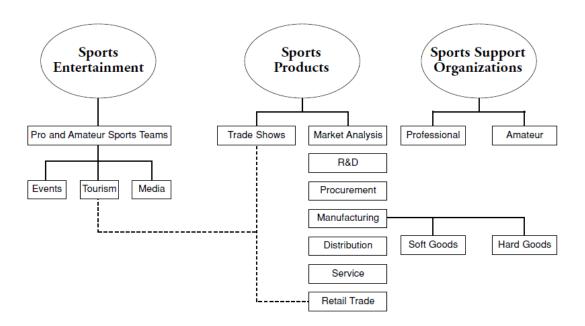


Figure 3. Sectors of the sport industry

Source: Eschenfelder and Li, 2006, p. 4

The Massachusetts Institute of Technology recognizes five segments of the sports industry (Pedersen, Miloch and Laucella, 2007, p. 7):

- sports media (marketing, broadcasting, etc.),
- sports team administration (personnel, etc.),
- sport–related engineering (facilities, sport equipment, training devices, etc.),
- sports medicine (training, orthopedics, nutrition, etc.),
- other (sport finance, legal issues, statistics, wholesale, retail, etc.).

From the above classifications, a typology can be formulated in which one can distinguish the difference between professionals in the sector – players, sports clubs, club staff, sports venues – and amateurs. This distinction is useful in this research, given that the football clubs under consideration are professional, which means that the players are professionals, the club staff are full-time paid employees, there are costs associated with the sports facilities, and each club has revenue streams from both businesses – sponsors, media, other football clubs – and individuals who attend as fans, since sports is a part of consumer culture (Horne, 2006).

According to Mason (1999), professional sports teams are selling their product to four distinct groups, namely the fans who attend games, watching the matches on TV and / or other media and buying memorabilia (i), the media companies who buy the broadcasting rights (ii), the local communities, who support the local teams, provide the land to build the clubs' stadia (iii) and finally the companies supporting leagues financially, providing sponsorships and offer advertisement.

While the European Union (2001, p. 3) defines sport as "all forms of physical activity which, through causal or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels", the fact is that sports have been commercialized and they are a part of consumer culture. The commercialization of sports has two aspects: the first is about the profit generation of companies (e.g., sponsors, broadcasters, betting companies, managers, etc.) through sports and the second is about the professionalization of non-for-profit or state sports organisations (Robinson, 2003). Horne et al., (2013) underline those modern sports have a high industrialization, professionalization, the emphasis of which is given to skills and the emergence of elite players, the standardization of rules in a national and supra-national level, by the institutionalization of the game and by the establishment of governing bodies, and the emergence of atomic sports as a form of competitive individualism.

As Severis (2016) notes, the economic impact of the sports-related industry can be measured by three types of approaches:

The first one is the sport activity related approach, taking into account the physical intensity indicator generated by purely sporting activities, such as the attendance of people in stadia, swimming pools, etc., and the activities of professional clubs.

The second one is the sport goods related approach, measuring all goods and services that are necessary to do sports, such as clothing, footwear, schools/centres (for example, dance

schools, yoga centres, karate dojos, etc.), equipment (for example, sailing equipment, golf equipment, etc.).

The third is the broad approach, including all activities that have a sport as an input, like, for example, TV broadcasts, hotels and restaurants where sport events are taking place, dietary supplements for sports, health services provided to athletes, etc.

It is in this context that the economic impact of sports can be categorized into many different categories. One category concerns the economic impact of the most immediate segment of the sports industry, namely the consumption of sporting goods (i.e., the sporting goods market). It should be noted that Lipsey (2006) makes a distinction between the individuals' sports market and the team sports market. While team sports enjoy very high visibility and are considered to be "the sporting industry: and "the sporting goods market", in reality the sales of team sports represent only 5% of the total sporting goods market (Lipsey, 2006). Regarding Europe, in 2014 the sporting goods market amounted to 28.9 million euro (Table 2), with the amounts categorize per the type of sports (ball sports, fitness, adventure, etc.). Although the share of the sector in relation to GDP is very small (as for 2014, European Union's GDP amounted to 11,873 billion euro, thus the share of the sector was 0.24%), but the sector's market activity increases, since, according to Eurostat between 2015 and 2020, the value of production of sporting goods increased by more than 5% per year and in 2019 the businesses in the sector generated over 2 billion euro (Eurostat, 2022).

Table 2. European sport goods market share per type of sport, 2014 (in million euro)

Category	2014	%
Ball sports equipment	9,979	24
Fitness equipment	5,765	20
Adventure sports	5,469	19
equipment		
Winter sports equipment	4,266	15
Golf equipment	3,769	13
Racket sports equipment	2,625	9
Total	28,873	100

Source: Gerke and Benson-Rea, 2017, p. 13

According to the analysis of Persistence Market Research (2016) the European sporting goods market is expected to be valued at 187.4 billion euro by 2024, having a CAGR<sup>3</sup> of 6.6% during the period 2016-2024. In 2005, by taking into account the narrow definition, the economic impact of sports-related activities represents that 1.13% of the total Europe's GCA<sup>4</sup> and in the broad definition represents that 1.76% of the Europe's GVA, amounted to 174 billion.

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<sup>&</sup>lt;sup>3</sup> Compound Annual Growth Rate

<sup>&</sup>lt;sup>4</sup> Gross Value Added

euro, while the direct effects of sport, combined with its multiplier effects (indirect and induced) added up to 2.98% (294 billion euro) of overall GVA in the EU (Figure 4).

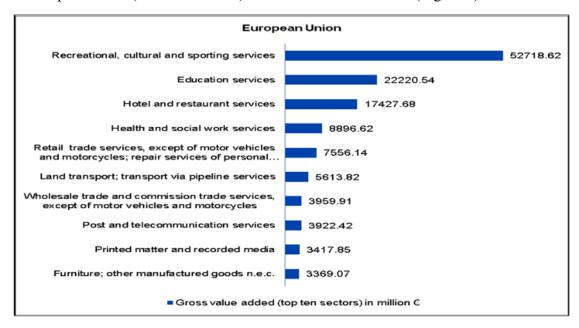


Figure 4. Gross Added Value of sports industry, broad definition in million euro.

Source: Severis, 2016, p. 9

Also, it should be noted that in European Union in 2012 sport-related employment as a percentage of total employment was 2.12% (Figure 5), that is 4.5 million employees working the sector. Hence, sports industry can be considered a labor-intensive industry, and, as such, it has an even greater importance for the economies.

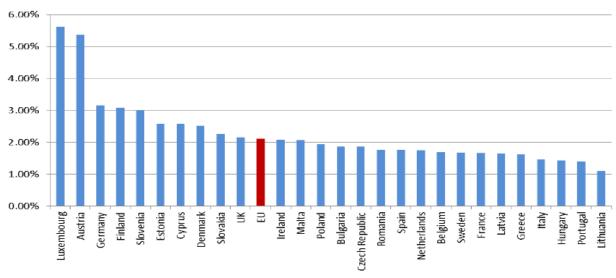


Figure 5. Sport industries share of national employment, in % of employees in 2012, European countries

Source: Severis, 2016, p. 11

From all the above a number of conclusions can be drawn. A first conclusion is that the sports industry has acquired an economic dimension, with a clear differentiation between folk games and modern sports. At the same time sports are no longer considered simply as an 'activity' limited to participation in various forms of sport or attending sport events.

Secondly sport industry is an umbrella industry, which includes the whole range of activities that are connected either directly or indirectly with sports, such as the organisation of sports and sport events, the participation, the promotion, the consumption of goods, etc.

Thirdly, sport industry in its broad sense has a considerable and tangible impact on economic development, which means that it contributes not only to social but also economic dimension of development.

Fourthly, growth of the sport industry creates large number of jobs (more than in the other capital-intensive industry sectors) and by that creates opportunity of employment in the development countries suffered from outsourcing of their manufacturing functions.

# 1.4. Business relations between actors at the sports market

It has already been said that individual athletes and associations or sports clubs are producers of sports. For their part, the individual authorities that govern or coordinate the conduct of sports activities (federations, leagues, committees, etc.) can be considered indirect producers of sports, as they provide services necessary for the planning and organisation of championships and competitions, services sometimes indispensable for relations external sports disciplines (Pepe and De Franceschi, 1998).

Sports producers need to use real channels, as well as virtual channels for the communication and distribution of their product to the public. Especially since the 1970s the production, distribution and sponsorship of sports have coordinated in various ways, such as:

- Informal coordination: for example, a publisher or a television media shares interests with an important association or sports club and preferentially communicates its events, or, in other case, an entrepreneur is a fan of a certain sport and he / she provides financial assistance to a team and / or to a sport's association.
- Contract coordination: for example, a producer of goods (manufacturing company) not only becomes the formal sponsor of a sports club that has national and international fans, but also invests its own funds as a minority shareholder of that sports club.
- Coordination through capital: this is generally the case for a multimedia company or a show business, which seeks to expand its audience by offering a very differentiated

range of events and other services, acquires the major share of a top club and creates real and digital channels dedicated to the sport in which it is most interested (this happens especially in the case of the integration between the offer of football and the offer of television broadcasts).

Sometimes one can see the entry of a company far from sport into the sports production business, which entails a more or less radical diversification of its market operations. The result is similar to the previous one, i.e., the influence or control of sports organisations by organisations that are not in the sports industry, but they decided to increase their profits through pretending to be associated with a particular sport or club. This might be a very important factor regarding the whole culture and the philosophy of the sport clubs. There have been many cases of not only teams but also sports commercialization of which caused the overall deterioration of the sport, such as BMX, where commercialization led to the establishment of a specific lifestyle, which is defined by the acquisition of specific products: like specialized clothes, deodorants, toothpastes, soft drinks, etc., related to the image that companies and advertisers want to create for those who participate in the sport, either as athletes or as spectators who share the same culture (Edwards and Corte, 2013). Also, football, which had had the character of folk sport, evolved into professional one.

Table 3 provides an overview of the points mentioned above, since the total revenues of football clubs increase with the increasing revenues of the broadcasters, in the sense that, as broadcasting companies broadcast live football matches, as the matches become more and more interesting and as the audience of the channels increases, the revenues of the channels from the advertising companies increase; at the same time, the revenues of the broadcasters increase, and the revenues of the teams increase.

Table 3. Club revenues and broadcast revenues, England, France, Germany, Italy and Spain, 1995-2014

	England		nd France Germany			Italy		Spain		
	Total Revenues	Broad- casting								
1005/06	516	(2)	277		373		452		266	72
1995/96 1996/97	516 692	62	277	95	373 444	111	452 551	199	366 524	12
1990/97	867	145 225	293 323	93 137	513	143	650	241	524 569	
1998/99	998	290	393	164	513 577	168	714	241	612	
1999/00	1,151	357	607	343	681	212	1,059	596	683	341
2000/01	1,397	537	644	326	880	399	1,151	619	676'	341
2000/01	1,688	709	643	333	1,043	414	1,127	595	776	237
2001/02	1,857	810	689	357	1,108	365	1,152	642	847	231
2003 / 04	1,976	884	655	306	1,058	291	1,153	632	953	391
2004/05	1,975	856	696	344	1,236	321	1,219	666	1,029	409
2005/06	1,994	839	910	524	1,195	325	1,277	768	1,158	406
2006/07	2,273	880	972	565	1,379	480	1,064	648	1,326	557
2007/08	2,441	1,169	989	557	1,438	476	1,421	863	1,438	579
2008/09	2,326	1,134	1,048	576	1,575	489	1,494	892	1,501	621
2009/10	2,479	1,270	1,072	607	1,664	506	1,532	905	1,644	725
2010/11	2,515	1,305	1,040	607	1,746	519	1,553	938	1,718	772
2011//12	2,917	1,469	1,138	613	1,869	546	1,587	932	1,788	789
2012/13	2,946	1,390	1,297	632	2,018	620	1,682	993	1,859	900
2013/14	3,898	2,104	1,498	605	2,275	717	1,699	1,001	1,933	949

Source: del Barrio and Pujol, 2016, p. 7

The acquisition of exclusive rights to broadcast sporting events, especially football matches, has taken on a new economic dimension in Europe in recent years. In the past, sporting events were covered by the few terrestrials, and mostly public, channels in the various countries. The development of cable and satellite broadcasting systems in the late 1980s resulted in an increase in the sources of information and entertainment and increased competition in the coverage of sporting events. The introduction of digital technology in the late 1990s has led to a further intensification of competition. The new digital pay-tv channels are seeking to acquire content that will attract large masses of subscribers. The European experience shows that sporting events and new films are the most popular programmes and the most important source of subscriptions to channels. Thus, new channels are competing with the traditional channels to see who will win the battle to capture these popular programmes. The battle seems to be lost by

the traditional public terrestrial television stations and won by the new pay-tv channels controlled by prominent businessmen.

Subscriber channels with a large financial footprint, such as the French Canal Plus, the British Sky Broadcasting (BskyB) and the German ISL/Kirch have in recent years engaged in an unholy competition and have spent huge sums of money to obtain the exclusive rights to broadcast major sporting events, mainly football matches. As a result of the intensifying competition, the value for the exclusive rights to broadcast football matches has reached unprecedented levels. In Germany, for example, the ISL/Kirch group allocated the astronomical sum of USD 22.2 billion to FIFA for the purchase of the TV rights to the two World Cups of 2002 and 2006 (Sport Business Journal, 1996). The policy of the ISL/Kirch group is to resell these rights to other channels from around the world.

Some public broadcasters retained the rights to cover some important sporting events by grouping around the European Broadcasting Union (EBU). In particular, the EBU has secured the collective rights to cover the 2004 European Football Championship in Portugal. In addition, the International Olympic Committee provided the EBU the license to cover Olympic Games until 2008. Hence, viewers can watch these events freely, without the need to have subscription to a channel. As an example, The British Football Association decided, following a competitive tender, to award the rights to broadcast live coverage of the English Premiership to BSkyB (British Satellite Broadcasting), a pay-tv satellite channel controlled by the well-known Australian-born tycoon Rupert Murdoch. Under the terms of the deal the channel could show up to 66 games each football season, provided that it does not broadcast games of selected football clubs but includes all teams. A special clause was foreseen for the broadcasting of at least three games of each team each year.

In this way, all Premiership clubs could benefit. In effect, the award of the Premiership live coverage rights to BSkyB was a renewal of the two previous contracts signed in 1992 and 1997 respectively. Previously, and until 1988, the television rights to football matches were managed exclusively by the BBC. In 1988, the commercial terrestrial channel ITV won the rights to cover the matches for four years for a payment of GBP 44 million. But in 1992, BskyB came on the scene for the first time and paid the then astronomical sum of £191.5 million for live coverage of the games for five years. In 1997, the pay-tv channel paid three and a half times as much (GBP 670.5 million) to obtain the same rights for the shorter period of four years. In June 2000, the amount paid by BskyB amounted to GBP 1.11 billion for the even shorter period of three years.

# 1.5. External environment of the sports industry

The sports industry operates and is being shaped by the factors of the external environment, i.e., the political, economic, social, technological, legal and environmental factors. The impact that these factors have to the industry can be analysed through the PESTEL analysis, in a framework described in the figure 6.

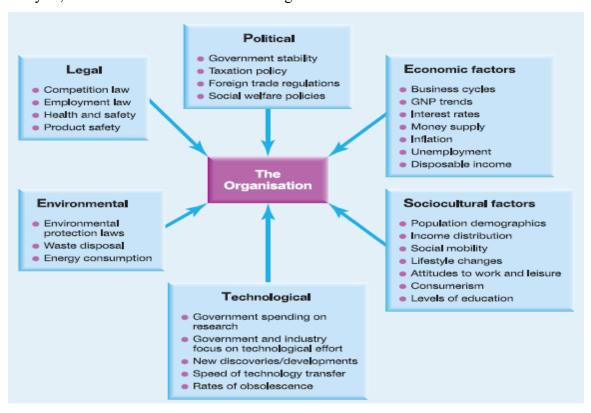


Figure 6. The PESTEL framework

Source: Johnson, Scholes and Whittington, 2005, p. 68.

Regarding the political environment, it could have an impact on sports – and especially professional football – in several manners. First of all, the level of relations between the states and the balances of power developed at the political level affect the way sports are conducted. A typical example is the 1980 Olympic Games boycott in Moscow, where the United States and almost 49 other countries other countries abstained due to the Soviet invasion of Afghanistan in 1979 (Olympic Games, 2023).

Also, at the national level, the political environment affects the sports industry, both in supply and in demand, as issues such as regulations regarding foreign trade arise, i.e., the imports of sporting goods. As presented below, there are many categories of imported sporting goods in Europe (Figure 7), as well as many categories of exporting sporting goods from Europe (Figure 8).

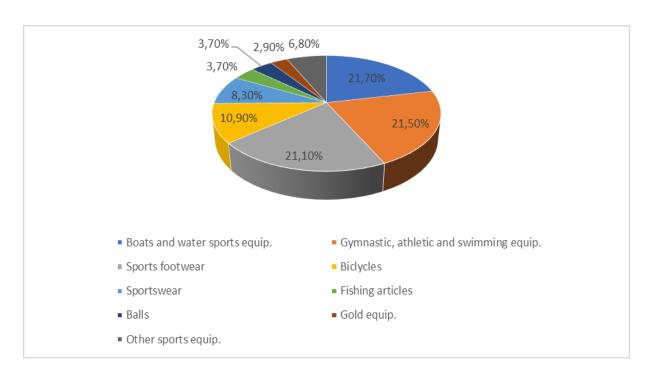


Figure 7. Sport Share of extra EU-28 imports of sporting goods (value in euro), by product, EU-28, 2014

Source: Severis, 2016, p. 14

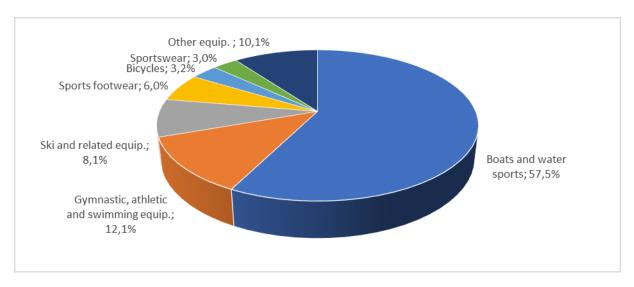


Figure 8. Sport Share of extra-EU-28 exports of sporting goods (value in euro), by product, EU-28, 2014

Source: Severis, 2016, p. 15

Hence, any political decision, either from a country or from another country regarding the trade tariffs can affect the quantity and prices of the sporting goods. Also, the taxation of the sports – for example, the participation fee of an athlete in a sports club is decisively affected

by the general level of taxation. The high taxation of players' income in the English Premier League is a reason that players would prefer to play in teams of other countries with lower tax rates (Henrick, Landais and Saez, 2010; KEA-CDES, 2013).

The economic environment also has a significant impact on the sports industry, both in terms of supply and demand. The demand for sporting goods and services is supposed to be positively correlated with the level of income, i.e., when income increases the demand increases as well. In that sense, when the economy has a recession, then the demand for sporting goods, and for goods/services of the sports industry in general, decreases, and expands when the disposable income increases. Although based on the data of the Europe's Commission the income elasticity of sports is 1.14 (Severis, 2016), i.e., when income increases by 1% then the demand for sports increases by 1.14%, on the other hand, the magnitude of the effect is not the same for all countries and does not remain constant over time.

Regarding the social environment, the way in which sports are perceived in a society affects both the degree of participation and the way of participation in sports. Issues like hooliganism affect the willingness to participate either as a player or as a spectator in a game and that is why in countries like the UK security issues are being considered as crucial (Conn, 2004).

# 1.6. Organisational structure of the market

Regarding the organisational structure of the market, there are two main models the European model and the U.S. model (Blackshaw, 2017; Halgreen, 2004; Pijetlovic, 2015).

According to the European model, the organisation of sport industry has a pyramid (Figure 9) structure (European Commission, 1998). In the lower level, the foundation of the pyramid, are the clubs, that "offer everyone the possibility of engaging in sport locally, thereby promoting the idea of "sports for all" (European Commission, 1998, p. 2). The regional federations are in the next level, these federations "are responsible for organising regional championships or coordinating sport on a regional level" (European Commission, 1998, p. 2). In the next upper level are the National sports federations. These federation have a monopolistic position and their tasks are to "regulate all general matters within their discipline, to represent their branch in the European or International Federations (and to) organize national championships and act as regulatory bodies" (European Commission, 1998, p. 3). In the upper level of the pyramid are the European Sports Federations, "which are organised along the same

lines as the national federations, (allowing) only one national federation from each country to be a member" (European Commission, 1998, p. 3).

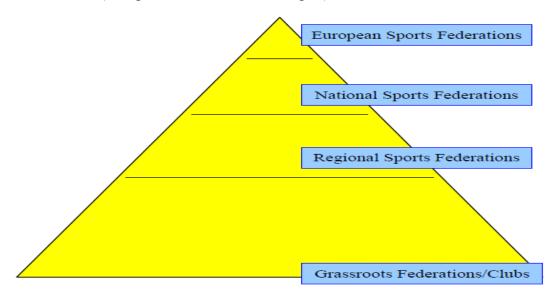


Figure 9. Pyramid model of the organisation of sport in Europe

Source: European Commission, 1998, p. 3

The other model is the US (or American) model, in which there is a clear separation between non-professional (amateur) sports and professional sports. There are four major professional leagues:

- National Basketball Association,
- Major League Baseball,
- National Hockey League,
- National Football League.

The fact that European professional clubs are being organised according to the pyramid model does not mean that all clubs have only common characteristics. In fact, there are some factors that are common among the European professional clubs, such as the ways of access to the competition, which is regulated by the European federation, the function of the championship, the system of law, etc., but on the other hand, there are divergences between the clubs from European country to country, such as the provision of budgetary controls, the allowance of teams to be listed in the stock market, etc. The factors of convergence and divergence are being presented in Table 4.

Table 4. Factors of convergence and divergence among European professional team sports

Convergences	Divergences			
Ways of access to the competition (sporting)	Club turnover			
Club aims (sporting gains)	Weight of taxation and social charges			
• Functioning of the championship (open with	Budgetary control of clubs			
relegation promotion)	Quotation on the stock market			
System of law (community competition law)	Co-ownership of clubs			
Link with amateur sport (organic)	Ownership of stadia			
Link with a territory (closed)	Ownership of broadcasting rights			
Functioning of the labour market (free market)	Sporting balance in national and European			
	competitions			

Source: Bourge, 2004, p. 8

Despite the differences between the two organisational models, sports industry, as all markets, has some common features. First of all, as in the case of other markets, the sport market is a meeting of two key participants, representing the supply and the demand side. There are multiple factors to be considered in order to identify how the supply side and the demand side are being formed. These factors differentiate, according to the special characteristics of the sport, as well as by the special characteristics of the championship and the organisation of federations.

A first factor that distinguishes the professional sport industry from that typical performance of the company in the other markets is given by the fact that the sports product is a comparison/confrontation product, that is, it always originates from a comparison between performances or from the clash of two or more teams that represent different economic entities. Precisely this confrontation comparison represents on one hand the essence of the economic phenomenon and on the other hand it as a characterizing element with respect to the common for-profit enterprise, where the primary and exclusive purpose is to tend to obtain the highest possible profit by emerging among the various competitors on the market.

This central and typical aspect of the sporting phenomenon is well understood only if the corollary of the comparison/clash concept is analysed in practice. Taking this into consideration, one can observe that the public's interest in the sports show is greater the greater is the uncertainty of the outcome of the meeting. In fact, if ones already would know who wins, before a race, then her interest in watching the game would certainly be decreasing. This allsport typicality in turn generates a principle which, to an entrepreneur, seems implausible in that it is contrary to the very aims that it pursues as an enterprise. In the sports industry, in the long term, single club (at least in collective games) has no interest in becoming a monopolist in the sector, since if this happens it would see its own reason for functioning ceasing to exist. In these economic models, the mechanisms that guarantee the uncertainty of the result works as the allocation mechanisms of the competitive market of the sports economy.

This chapter has shown that the sports industry is a market that is clearly commercial in nature, with distinct segments. Of course, this raises an important concern as to whether such high commercialization is likely to alienate part of the population from sport. Particularly with regard to football, there is an audience that has an organic connection with its team, especially when the team is local and supporting the team is a key feature of local identity. This issue will be addressed in a subsequent chapter, where the life cycle of the football product will be discussed. An important echo of this chapter is that professional sports clubs operate in a professional environment, with participants belonging to both the supply and demand side. A 'paradox' of the market is that while the owner of each team aims to maximize profit, this maximization is the result of increased competition and uncertainty about the outcome of matches. This point is extremely important for the later chapters of the thesis and will be analysed in conjunction with the other elements that will be highlighted in the thesis.

#### **CHAPTER 2**

#### FOOTBALL INDUSTRY AND FOOTBALL ECONOMICS

## 2.1 Initial stages of professional football

The professionalization and commercialization of football has a long history. In England football started from public schools and was organised according to the rules and principles of amateur sport (Meier 2008). However, the competitive spirit that characterized the first football institution of world football, the English Cup (1871), exacerbated competitions between clubs, which in some cases offered small financial incentives to footballers to play for their teams and finance their teams' viability of the proceeds of ticket sales in the races. So, despite objections from the British Federation to professionalism, the latter was introduced in 1885 to follow, three years later, the creation of the first Football League of the 12 most powerful teams in the country, and in the 1890s the institution of corporate clubs in sports (Buraimo, Simmons and Szymanski, 2006). These changes favoured the entry of shareholders and local businesses into the clubs and the establishment of a network of financial activities around the sport that involved ticket sales, football players and sports equipment costs.

Gradually, in England, football was liberated from the domination of the aristocratic circles of Oxford and moved to the industrial north and the working-class districts of the urban centres. There it took on the distinctive features of English football's dynamic and fast-paced football and established close relations with capitalist industry, as illustrated by the strong links of historic English clubs to industrial pockets of the country, such as Arsenal and West Ham Industrial (Meier, 2008). During the interwar period, the financial activities of the British unions expanded considerably. Their successful operation required proper administrative organisation, control of finances and marketing. At the same time athletes and coaches were organised at the Football Players and Trainers Union claiming financial facilities.

In France, football lacked the same appeal as in England and was played as an amateur sport. The creation of the Fédération Internationale de Football Association in Paris in 1904 helped accelerate organisational change in the sport, and in 1910 the first systematic effort to establish a cooperative and financial trade union network was established, with the founding of the Ligue de Football Association. However, the introduction of professionalism into French football has been delayed due to football players' attachment to the values of western modern sports, which emphasized playfulness and amateur sport character. The emergence of professionalism dates back to a period when the sport began to spread to the working classes of

French society (Hare, 2003). Particularly for unskilled workers, football has become an opportunity for social recognition, temporary work and social inclusion (Pickup, 1998).

In Germany, the first attempts to introduce professional sport date back to the interwar period, but the course towards professionalism was violently interrupted by the advent of Nazism, which saw professionalism as a materialistic practice opposite to German nationalism and an expression of anti-German culturalism. (Hesse, 2002). In Spain, the earliest forms of commercialization were facilitated by the unexpected conquest by the national team of the silver medal at the Antwerp Olympic Games in 1920, with the special contribution of then-goalkeeper Ricardo Zamora. His transfer from Catalonia Español to Real Madrid for a highly paid monthly salary contract has begun a new era in Spanish football, where traditional football principles have begun to change (Burns, 2012). As MacFarland points out, the games were now supposed to generate revenue for the players' pay, and the latter were allowed to move to other cities or teams for economic reasons, cancelling earlier price codes that put ethical barriers on transfers (MacFarland, 2006).

In post-war Italy, the rise of fascism has delayed the introduction of professional football, as the regime believed that professionalism and consequent commercialization would contaminate the sport's morale, boost regional competitions and undermine regional competitiveness. Despite the ideological contradictions of the status quo and the fear of derogation from the job, the desire of football officials to exploit the widespread popularity of the sport has led to the introduction of the distinction of amateur and "non-amateur" athletes. The latter were compensated for their absence from work due to training (Martin, 2004). This practice indirectly introduced professionalism, facilitating the financing and provision of a variety of facilities to gifted players and contributing to the development of know-how and discipline in the sport (De Biasi and Lenfranchi, 1997). Indeed, it can be stated that these decisions contributed to Italy's significant success in the second half of the Interwar period, winning the World Championships in 1934 and 1938 and a gold medal at the 1936 Berlin Olympics.

Brazil had its first signs of commercialization since 1917, when clubs in Rio and Sao Paulo began to use tickets to football matches. In the following decade, prominent footballers had occasional financial gain and finally in 1933 football became professional with many footballers subscribing to European teams (Alvito, 2007). In Argentina, by contrast, the resistance to the entry of commercialized relationships into football was greater. Football was associated with national identity and was a symbol of the pride of the Argentines, for which football heroes reflected on symbolic level national ideals and could not be seen as products for

sale. These objections have not prevented some Argentinean footballers from migrating to Europe for economic reasons to compete in professional leagues. Ultimately, these developments led the Argentine Football Federation to introduce professional football in the period 1930-31 (Archetti, 1995).

In Greece, the first football federation was the Association of Football Associations, which was founded in 1923 and launched the creation of the Hellenic Football Federation (EPO) in 1926, which until today is the most important governing body of Greek football. One of the first steps of the EPO was to ensure the financial viability of the clubs and to centrally manage their revenues, which came mainly from tickets sale. This effort has met considerable resistance of the three most popular clubs in the centre, Olympiacos, Panathinaikos and AEK, which saw its interventions as limiting their revenue by redistributing resources to the benefit of smaller entities. In fact, they set up a new informal pole of power, the cooperative of the three major groups, the so-called POK, by organising meetings between them. The EPO and POK opposition was expressed by the abolition of cooperative associations by the first national championship organised by the EPO in 1927, with the participation of the champions of the Athens, Piraeus and MacedoniaThrace Unions.

In the following years, the POK teams were incorporated into the EPO, and competition between them for the hegemony in Greek football gradually increased. The POK institution and the constant strife of associations, dependencies on political power and the changing alliances aimed at favouring and reaping the symbolic and/or economic benefits show that problems that still haunt Greek football have a historical track. They even explain the beginnings of a slow process of commercialization and professionalization of the sport. The management of part of the financial revenues of the unions by the governing bodies has for a long time been a field of union disputes, jeopardizing their financial viability. For the more powerful clubs, their financial strength has allowed them to increase their racing experience by transferring players from smaller clubs. These players were originally from the working classes of the cities, and the transfers, which in some cases was accompanied by small financial rewards, meant wider social recognition and expectations of future upward social upgrade.

### 2.2 The internationalization of post-war football and television broadcasting

Since the 1950s, world football experienced significant growth in the level of competition, organisation and economy. In Europe, these developments were favoured by the climate of economic cooperation and symbolic exchanges that developed between the states of Old Continent with the ultimate goal of their social and economic reconstruction and healing of the consequences of war. In this setup, the creation of European football institutions and the closer cooperation between the football federations of the various countries have been attempted, with the newly established Union of European Football Associations (UEFA) as a key forum. UEFA was founded in 1954 on the initiative of French, German and Belgian officials, and in its second year of operation adopted the European Championships Cup. The first event was held with the participation of 15 states, with the vocal absence of England, watching with caution the continent's attempts to dominate an area in which the English had a hegemonic presence over time.

The same year the International Exhibition Cup – which has evolved into a UEFA Cup since 1971 – was attended by mixed teams from major European cities (Barcelona, Milan, London, Zagreb, Copenhagen and Leipzig). As part of these events, for the first time in the history of football, the movement of football fans from country to country has been facilitated by the rapid development of public transport. Similar moves have been made in Latin America with the South American Club Championship held in Santiago, Chile in 1948 with the participation of the championship teams of seven countries. This championship did not continue in the following years but was a precursor to the Latin American Football Confederation (CONMEBOL) regulation of the Copa Santander Libertadores of the South American championship teams in 1960.

During the same period, Greek football followed, with relative delay, international developments. In 1958, the State Football Betting Organisation (OPAP) was created, and early March of the following year the first newsletter of predictive soccer matches was introduced, which was widely popular by linking football to commercialized gambling operations. In the same year, the EPO adopted a UEFA proposal to hold a national championship in accordance with European standards and created the first national championship. From the second half of the 1960s the institution of semi-professional football was introduced and from 1979-80 the Greek football became legally professional, with the Greek Football Federation taking over the responsibility of organising it. The associations were transformed into public limited companies, and businessmen and ship owners acquired the majority stake and managed them.

In the advanced countries of the West since the early 1960s the political economy of the sport has undergone significant transformations and, especially in England, has been accompanied by a process of urbanization of the sport. The period of the 1960s and 1970s was accompanied by the transformation of traditional fan culture and subcultural football consciousness in England, which until then was oriented towards traditional ties with the team's place and the working class, the active participation of the fans and a culture of masculinity (King, 1997). These values have been gradually marginalized because of the strategies of the owners of the football companies to associate the sport with a burgeoning "cultural industry" of leisure, in which, especially the most powerful clubs, could promote their products and expand their clientele by attracting fans from the middle and upper classes, forming a family atmosphere on the pitch. These changes had a significant impact on the identity of the followers, who in the past perceived themselves as organic parts of a collective with strong bonds of solidarity and commitment and with duties. It is the period in which the new model of the consumer fan appears, which has weaker links with the club and its place, less commitments and more flexibility in its football choices.

Despite the rapid changes observed in the 1960s and 1970s in world football, which have different characteristics from country to country, the commercialization of football was, in general terms, a moderate one, since in many countries football was semi-professional and even in the professional clubs the investments were limited in scope and financial transactions mainly concerned with revenue and expenditure management, football players' contracts and ticket sales. One factor that accelerated the process of commercializing the sport was television.

The television coverage of the matches has made it possible to broadcast the matches to a much larger audience than before, allowing large sports companies to advertise their products to fans. Thus, in the 1970s, partnerships between football organisations and teams with multinational sports equipment companies were strengthened. At the same time, famous footballers sign preferential contracts with multinational companies and market rationales enter the rituals of the sport. The shot during a 1970 World Cup football match, when Pele, following the instructions of his advertisers – taped his shoes in front of the television lens to show their brand signalled a new era in world football. The logic of the market, the advertising and the show had infiltrated the football organisations. So, in the mid-1970s, UEFA signed privileged partnerships with major multinationals, such as for advertising their products at major sporting events, establishing the new era of full commercialization of the sport with star football players, signing individual contracts with sponsors to advertise their products and to make football a place for highly profitable transactions.

### 2.3 The supply and demand of football

The football club, as a company, presents substantial differences compared to an ordinary enterprise. As presented in Chapter 1, the analysis of the sport market examined the issue of how the demand is being shaped, for example, the demand for sports equipment is being formed by the consumers who are willing to participate in a sport. Football clubs, on the other hand, have not one, but three revenue sources: the television/broadcasting revenues, the ticket sales and the revenues from their commercial activity (Jones, 2014) while, also, there are some revenues from unspecified sources. They sell not only their product – in this case, the game match – but also their images (Couveleare and Richelieu, 2005) and act as advertisement platforms. As presented in Figure 10, not all clubs have the same ability to generate revenues from these sources, as for example, the most recognized football clubs have a high percentage of revenues from commercial activities, while others have a higher dependence on broadcasting revenues.

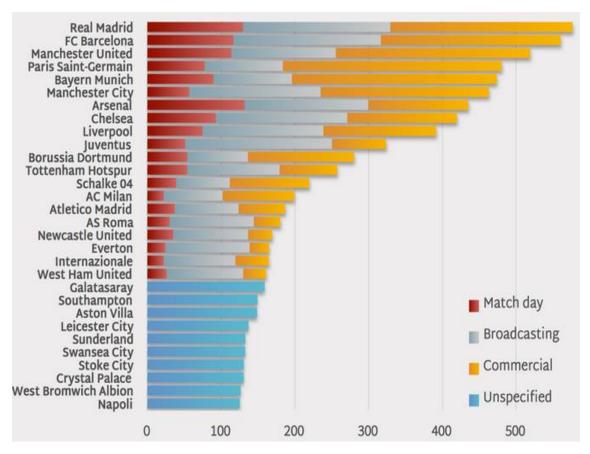


Figure 10. The World's Richest Football Clubs (2014/2015) in all European Leagues, by revenue sources

Source: Helgi Library, 2016 (n.p., website)

Also, in direct relation to the revenue, a major difference between football clubs – at least, for the ones who have the higher brand name and are a "global brand" – is that the resources used by the supply side – i.e., the teams – are attracted from all over the world. Football clubs not only sell tickets for their competitions or tournaments, but also sell merchandise or gadgets, doing merchandising (Giulianoti, 2005). This type of revenues grew especially in the 1990s, although in this part of the century they do not appear to increase as much as in the previous period. This can be explained by the fact that, as presented in Figure 11, the life cycle of the sports product increases by the covering of the national market, i.e., increases as the team gains popularity, recognition and visibility, but after the maximization of this phase the sales begin to drop, due to the internationalization of the market. In fact, after the beginning of the internationalization of the "football product", marked as S4, there is a decline, because the market is very mature, it cannot attract new fans and a number of the existing fans do not feel as connected to their team, due to the commercialisation of the club.

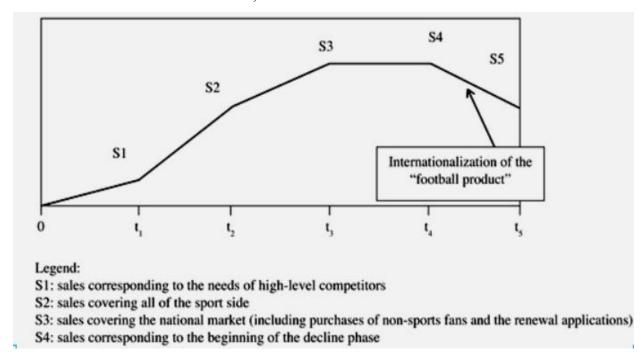


Figure 11. Sales over time of the 'football product'

Source: Chanavat and Desbordes, 2017, p. 18.

In that sense, the higher the participation of a football club in the internationalized market, by being able to be recognizable and to create revenues by its commercial activities – selling memorabilia, gadgets, etc. – the longer the time period before the decline of this stream of revenues.

There are several parameters to be examined regarding the economics of football. The first parameter is the producer of the product.

As a representative producer of a football product, it can be considered the professional football club. It should be emphasized at the outset that the concept of representativeness refers to the behaviour and not to the structural characteristics of that particular entity, in relation to the other entities that compose the supply side of the football product market. The latter are expected to differentiate between clubs participating in a particular product industry (professional league) and/or between clubs participating in different professional leagues. In addition to the possible asymmetry between professional sports clubs in terms of the cost of their basic inflow (that is, the players of each team, and, also, the pool of talents), the fundamental asymmetry concerns the number and the key characteristics of consumers of the product of each association.

Considering that the purchase of a sports product is fan-centric (Drewes, 2003), the number of fans of each club, combined with the intensity of their preferences for sports spectacle against all other goods, as well as the disposable income of these fans (Fort, 2006), compared to the fans of the other clubs participating in the same championship are the factors that determine the size of the market to which the club is attributed (Jaumme and Guerrero, 2009), as well as its strength in the market, as a local sports product monopoly. Similar determinants emerge under the "fan-centric" version of the product market.

A major parameter that defines the demand of the product by the fans, i.e., the fans attendance, is the state of the economy and the income elasticity, in the sense that a recession in the economy lowers available income and decreases demand for attending the game (Li, Hofacre and Mahony, 2001; Lisicki and Welton, 2014). According to the study of Avgerinou and Giakoumatos (2009), the income elasticity for the Greek football is 0.46, meaning that an increase of income by 1% will increase ticket sale by 0.46. This is presented at Figure 12.

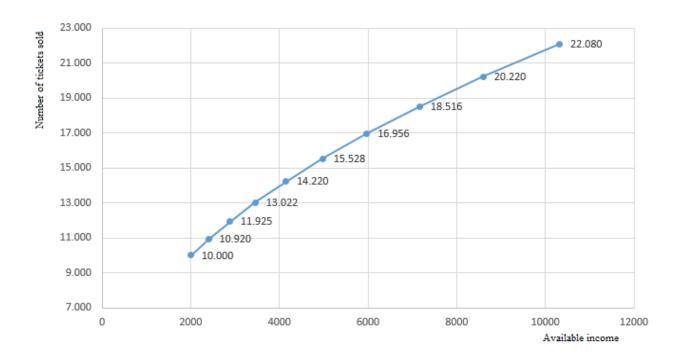


Figure 12. Ticket demand with income elasticity of 0.46

Source: Own calculation, based on data retrieved from Avgerinou and Giakoumatos, 2009

The factors explaining the aforesaid facts are many and tangible. The sports clubs of the big cities are expected to have a larger number of fans in advance and, therefore, the larger size of the local market, compared to the clubs of the smaller cities that participate in the same professional championship (Robinson and DeSchriver, 2003). Two football clubs, 1 and 2, participating in the same league might face the same production cost conditions, as recorded by the same marginal/unit cost curve for the sports product that club 1 and 2 offers, respectively, as local monopolists, to all their fans (Medoff, 1976). However, for club 1, with the largest number of (rich) fans, the market demand curve allows a higher maximum quantity demanded and a higher maximum value than the corresponding market demand curve for the (smaller in number and/or fan income) club 2.

So, assuming that the goal of the club owners is to maximize their profits, from the basic theory of the monopoly we know that the price that the team with the largest number of fans can set is higher than the ticket price of the other team (Rishe and Mondello, 2003). In fact, the market is not a pure monopoly but is rather a quasi-monopoly, since fans are not willing to buy the products of the other clubs (Neale, 1964). Although one cannot exclude the competition between clubs to win a higher share of fans, in the vast majority of cases each team has a solid 'base' of fans (Morrow, 1999). Thus, since each owner seeks for profit maximization, the club with the bigger number of fans has the ability to create more profits than the smaller clubs.

As for the consumer, the following characteristics apply:

First of all, there are some variables that are external, and they affect the number of attendees.

The representative consumer can be a hard-core supporter of a specific football club that participates in this professional championship or just be a fan. In any case, the sports product to be consumed is the (home) sports meetings (games) of the specific team. Regarding the attendance of sports meetings, by attending the stadium, for the ordinary fan the reason for this may be that this club is the only club that is based in his/hers place of residence and participates in the professional championship that interests him/her. Unlike the hard fan of this club, the ordinary fan can therefore be considered as an occasional consumer of this sports product.

Attending sports meetings is considered a normal commodity, although it should be noted that some fans prefer to watch the game in the 'executive' seats of the stadium, that can be perceived as a luxury good in comparison to the normal seats (Shapiro, DeSchriver and Rascher, 2012). Consequently, the law of demand and all subsequent provisions and properties apply. The above analysis of the behaviour of the sports fan/fan-consumer can be further specialized in order to cover the remote versions of the consumption of a sports product (via television, radio, and internet).

Another factor shaping the supply and demand of the football clubs is the local government. Professional football clubs are, at the same time, providers and receivers of the services local governments offer or purchase, as presented in Figure 13. E.g., in many cases, the area of the stadia is a public property, i.e., belonged to the local government, which offered this area for the construction of the stadium of the local football team (Abrams, 2009).

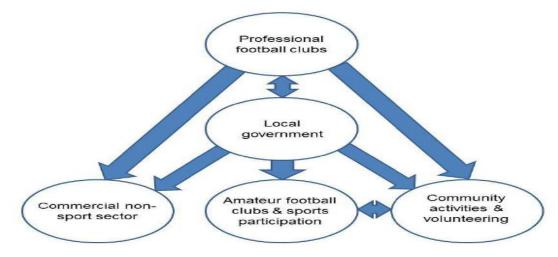


Figure 13. The football ecosystem

Source: Lewney, 2013, p. 23.

## 2.4 The concept of efficiency in professional football clubs

At the beginning, it should be mentioned that, although the study is about the professional football clubs – i.e., the associations football (soccer) – some parts of the analysis examine the efficiency of baseball and/or American football clubs, since there are similarities in both professional sports regarding the efficiency of teams. The concept of efficiency, with respect to professional football clubs, is subject to considerable variation both in terms of effectiveness and in the function of the concept. According to Rottenberg's analysis (1956), the owners of the teams (Rottenberg's analysis of the baseball teams participating in the US national championship) have as their primary objective the maximization of the economic benefit, i.e., the obtaining of as much profit as possible (profit maximization). Therefore, according to Rottenberg (1956), professional sports clubs, as a sector, operate along the same axes as any other sector of economic and business activity.

Of course, Rottenberg notes that the professional sports teams have a monopsony, as the team binds the player with a contract and, for as long as the contract lasts, can deny him to play for another team. Beyond the monopsony, the other parameter that differentiates the professional teams from other disciplines is that the teams participating in the championship should have a proportion of their potential so as to ensure the survival and development of all teams. Based on the Rottenberg model, the concept of efficiency focuses on the group's financial profitability: the higher the profits, both on a yearly basis and on the cumulative profits, the greater the efficiency of the group.

However, according to Sloane (1971, 2007, 2014) profit maximization is not the main parameter nor the main criterion of efficiency, since it is not always the main objective of professional football teams. As Sloane says, team owners set goals such as power and prestige, so efficiency is mainly about racing performance. From this perspective, owners of football clubs do not aim to maximize profit but maximize utility. According to the Sloane model, utility is described by the following function (Sloane, 2014, p. 14):

U = u (w, a, x,  $\pi$ ) under the condition that  $\pi_r > \pi_0 + \text{taxes}$ 

#### Where:

- U the utility of the owner of the team,
- U the function of utility,
- w the team's racing success, measured as the percentage of team wins,
- a the average attendance of fans, as fans produce "an atmosphere",

- x the standard deviation of the percentage of victories of the teams participating in the league, a parameter that makes the league interesting,
- $\pi$  the profit after tax, after deducting a specified amount of profit or loss that allows the groups to remain in the category, where:
  - $\pi_r$  the realized profits of the group, and
  - $\pi_0$  the minimum required earnings to stay in the category.

Based on Sloane's model, it is explained the reason why in too many cases, owners continue to fund the team for a long time despite all the damage the teams record, which cannot be explained by the Rottenberg model. Of course, there is no given behaviour by the owners of professional sports clubs as to whether they will aim at maximizing profit or utility. For example, Fort and Quirk (1995) notes that business owners in the United States have as their primary objective the maximization of profit, as has been pointed out in Vrooman (1997), while in Europe there are many groups that have financial losses, the owners continue to invest in them. However, as Andreff and Staudohar (2000) note, the European utility maximization model, which has as its focus racing efficiency, is increasingly approaching the US model of economic efficiency.

Sloane model has been expanded, in the light of the fact that the main goal of the owners of the teams is to maximize utility rather than maximize profit. For example, Madden and Robinson (2012) associates the increase in utility of the owner of the club with the increase in the benefit of the fans, which is determined by the acquisition (or renewal of contract) of talented players and the price of the ticket. As a result, the owner who aims to maximize his own utility at the same time increases the benefit of his team's fans. Of course, the attendance of fans is not only related to the players with 'name' and high fees, but also the results of the club in the previous period (McDonald and Reynolds, 1994; Morrow, 1996; Rivers and DeSchriver, 2002).

However, it should be noted that the results of the previous season and the attendance of the fans are also criteria for transfers. As shown in Tang's (2015) analysis of American football teams, players' contracts are not only differentiated in terms of earnings, but also in terms of time, and when the contracts are signed. Thus, players with higher expectation value sign higher contracts over time and earlier than players with lower expected value. As Tang (2015) notes, contracts also vary depending on the attendance of the fans.

Clubs with less turnout and a lower percentage of winners in the previous season tend to sign more contracts before the beginning of the season, and less during the season. This choice

can be explained by Rottenberg's rational model aimed at maximizing profit: in the effort to increase the fan base, the team signs a contract with players who will act as "magnets" for the fans, giving increased expectations of good performance. If mid-term results are not confirmed, team owners recognize that they can hardly expect to increase their profits and invest in extra players, awaiting the new season. Of course, signing contracts with high-value players is also explained in light of maximizing utility. As Szymanski and Smith (1997) notes on English professional football, the signing of contracts with promising players is done to achieve the main goal of the teams participating in the championship, which is to record the highest possible number of victories. Of course, it does not always match the results with the financial gain, as the player signs a contract on the basis of his expected performance rather than his actual performance.

An additional dimension to the effectiveness of the football clubs and the way it is being counted is the time interval in which a club remains in a top category, and especially in the most prominent one. Oberhofer, Philippovich and Winner (2015), analysing data from the German Premier League teams for the period 1981-2010, found that the newer clubs are systematically facing a higher risk of downgrading than the older teams, due both to the budget of the teams and to the composition of the teams.

Also, a dimension regarding the effectiveness of the teams is related to the degree of mobility of the players. With low player mobility, there is oligopsony, so there may be a wide variation in the effectiveness – measured as the team's wins – among the teams, as long as it is being accepted that there is a relative difficulty in finding new players ready to boost the team. However, as demonstrated by the analysis of Binder and Findlay (2012), the greater mobility of players due to the Bosman Act did not bring about a significant change in the relative competitiveness of the European Championship teams, but there was a relative increase in the capacity of the strongest teams of Champions League of different countries.

The question of the acquisition of higher-value players is, according to Fort and Quirk (2004), the differentiation between owners who aim to maximize utility and owners aiming at maximizing profitability, as the first prefer significant investments in talented players, with higher costs. Of course, the demand for talented players is a parameter determined by the general profitability conditions of professional football teams. The profitability of football clubs is not only guaranteed by the results of the team but is constituted by various parameters. According to Kessene (2012) the profitability of the football teams has five determinants:

- the size of the market,
- the winning rate,

- the competitive balance of the championship,
- the price of tickets,
- the absolute quality of the team.

A major problem that arises for the football clubs – at least, for those having the aim to win the championship – is the one regarding the selection and transfer of top players, in the sense that, adding a top player in the team increases the probability to win the championship. On the other hand, to transfer a top player costs a significant amount and the outcome is not certain (Forrest and Simmons, 2002). Hence, the club's efficiency can be measured by how successful managers are regarding their transfer policy and this includes many aspects (Kuper and Szymanski, 2012). First, there is the requirement of their fans to take a good position in the league, and especially for teams traditionally regarded as 'strong', there is a requirement to rise to the championship and win matches against their 'traditional rivals'. This is the case in all leagues of the world, like the rivalries of Marseille vs. Paris Saint Germaine in France, Arsenal vs. Manchester United in England and Olympiacos vs. Panathinaikos in Greece.

Secondly, winning a national championship football team means that it has more revenue from the broadcasting rights of next year's football matches, as it gains a greater share of the money distributed to the teams. Thirdly, a team that takes first place in the national championship qualifies for the UEFA Champions League, which is organised annually by UEFA and the cup is considered the most prestigious trophy that can be won by a European football team, the qualification for the event is based on the ranking of the teams in their national championships, based on a quota system according to which countries with stronger leagues send more teams. Teams from these countries also qualify for more advanced stages of the event. Entering a football team in the UEFA Champions League provides significant revenue, which increases as the team enters each subsequent phase of the competition, namely the 32, 16, 8, 4 and the final match of the competition.

In order for a football team to be able to claim the title of champion, it is necessary to have footballers who have the relevant physical and mental abilities as well as a racing experience. A general principle of professional football is that the greater the player's abilities, the higher the cost required to acquire them. So, in this light, players can be classified into categories, depending on their acquisition cost. Gaining players is one of the key issues in the football strategy of the football teams. A team – even if it was financially viable – cannot have top-class players only, since those players have very specific, distinct, roles and virtually the overall

quality of the team is judged by how well the players work together. Therefore, a football team aiming to win the title aims to gain players of both the top division and the next category.

A key aspect of the transfer strategy relates to the income the team will have from the attendance of fans who will come to the stadium as a result of the transfers. It has been observed that the acquisition of a top-class football player results in an increase in the number of fans on the pitch, and even an increase in tickets sale to the more expensive pitches, which offer a better viewing angle for spectators to see their stars. Correspondingly, the acquisition of players in the next category also increases the number of tickets, but most of those in the seats at the normal price. Therefore, a football team that aims to increase fan turnover and maximize ticket revenue should find a strategy of combining transfers between players in both the top and the next category, having a defined budget transfers and also having a given number of stadium seats, by price category.

This can be solved through linear programming, so that a club could find the best combination of costs vs. income for its transfer policy. This issue is crucial, and it has been examined in this thesis using both quantitative and qualitative research, in order to find whether the economic crisis had an impact on the quality of transfers and whether the quality of transfers had an impact on club's competitiveness in national and European championships. The finances of the Greek football clubs are being examined in the next chapter, in comparison to national economic indicators, to provide answers to the research questions.

This chapter has shown that football has finally left behind the period of romanticism, when footballers spent their careers only with one team, whose fans they were, and fans considered it their duty to come to the stadium every Sunday to support their team. Today, football is professional, and teams have different sources of income, with sponsorships, TV rights, selling merchandise bearing the team's logo. In this professional environment, football teams are no longer competing only for the result of their matches, but also to find resources: to find new sponsors, to get a larger share of TV rights, to find funds to acquire valuable players. The financial situation of teams is shaped by wider economic developments, while the profitability of each team is determined by both internal and external factors, so it is necessary to have management that can take decisions to respond to the changing circumstances and to reconfigure supply and demand.

#### **CHAPTER 3**

# FACTORS CONDITIONING THE DEVELOPMENT OF THE FOOTBALL INDUSTRY

#### 3.1 Institutional factors

The main reason for analysing the institutional environment as the very beginning of the economic analysis of football is that the issue has certain characteristics in Greece that have a decisive impact on the way in which market for goods and services is shaped and which form certain specific conditions in this regard. While in other countries the analysis could have different starting point e.g., factors shaping supply and demand, in the case of Greece, as will be seen in the course of analysis, there is a particular environment that shapes the football market, which should be analysed based on the principles of Institutional and New Institutional Economics.

In order to give a clearer explanation of the choice to use the analysis of certain institutional factors – such as conditions of trust, level of corruption, level of violence, level of application of laws, etc. – at the beginning of the analysis, one should note that the football market in Greece and revenues of the Greek football clubs depend on the rules and performance of the country's championship. The team admitted to the European Games might expect a relatively significant influx of revenue from UEFA due to participation. Therefore, the extent to which in the country's championship there are institutional parameters that will lead to a fair championship, on equal terms, is the fundamental parameter for subsequent analysis.

In order to explore the role, the institutional environment plays in football, it is necessary to make a short overview of the institutional economics.

Smith and Ricardo, with their work, set the bases for analysing the way in which commodity prices are determined. Both Smith, and especially Ricardo, as the main parameter determining the value of goods considered labour, but at the same time they took into account other parameters such as production level and technology. According to Ricardo's analysis, natural values are primarily determined by the relative amounts of labour involved and, secondly, by the changes in the distribution variables, the different capital-labour ratios and the production process. On the basis of this analysis, the foundations of classical economic theory were based on the Say's law, according to which supply creates its own demand as well as on the free operation of the market, without any state intervention in the economy. As long as the

free-market condition is met, the prices of the goods will always ensure market equilibrium so the whole economic system reaches equilibrium and steady state.

The concept of equilibrium was assembled by subsequent scholars (such as Marshall, Warlas, Jevons, Pareto) whose work constituted the so-called neoclassical school. Although these researchers worked independently and there was no close homogeneity in their analyses (for example, the work of Warlas and Pareto had as their object the general equilibrium, while Marshall's work was focused on partial equilibrium) the common point of their analysis is that their analyses, instead of being confined to the labour theory of value, is rather based on the law of supply and demand, according to which the only price of the goods is their market price, which determines interaction of buyers and sellers The foundation of the analysis of neoclassical economists is their focus on homo economicus.

While in the Smith and Ricardo analysis, particular emphasis is placed on the social classes that are the system (owners of capital, workers and landowners), and which, having conflicting interests, collide, and on the basis of these conflicts the economic and social reality evolves, neo-classics have no social class, but only individuals, who only act to maximize their benefits. Of course, the idea that the individual acts on the basis of his/her benefit, was researched by Bentham and Hobbes, but with neoclassical economics, this concept becomes one of the foundation stones of economic analysis, as paved the way for analysing how the prices of goods are determined. The influence of the neoclassical school has been catalytic in determining methods of analysing how the system operates both with regard to individuals, specific goods and the economy as a whole. Therefore, any economic analysis has as its main focus the motivation and disincentive of the individuals about their intention to take action. Since, in this context, the notion of society – and consequently of social classes – is absent, the analysis of the impact of any other constituents beyond those of individual benefit is also missing.

The assumption that economic reality derives solely from individual actions and choices, apart from eliminating the concept of conflict, at the same time removes the social dimension of these actions and limits the economy to a static construct, in which there is an unchanged and undisturbed state of equilibrium (Veblen, 1899). Contrary to this way of thinking, Veblen (father of the institutional economics) studied the way the economy evolved. Based on the principles of sociology and psychology, Veblen argued that any economic changes should be analysed based on changes in the wider social and cultural environment.

Veblen considered that instead of striving to find the equilibrium, the analysis should focus on how the economy evolves, focusing on the "causal relationship" (Sowell, 1967),

namely how a change in one – even a small – economic parameter causes a chain of changes in the economy and society as a whole, and, respectively, how a social change causes a change in economic activity. Besides, Veblen's analysis emphasizes how each person's preferences and actions are determined from each of his social environments.

By criticizing Marshall, he notes that Marshallian analysis at no point is "no research into the evolution of the cultural or institutional environment as shaped by the impact of economic necessities or the impact of the economic interests of the people" (Veblen, 1900, cited in Reisman, 2011). Based on his theory, the person does not act after calculating the benefit he/she will derive, but his/her energies derive from instincts. (The Veblenian individual is not a rational one, but acts on the basis of his/her instincts, often without considering the rationality or irrationality of his/her actions). And the way a person acts is not consolidated, but also changes in connection with the general developments of the social and economic environment.

Instincts in question include the specialization in a job (which will make the individual more efficient and productive in his /her work) and curiosity (which is the reason for the technological developments, which, when they happen, can transform the social relations and the institutional context, for example, the invention of steam engine has brought dramatic changes to all social, political and economic developments). Veblen in "The Theory of the Leisure Class" (Veblen 1899) states that, individuals, regardless of which social group they belong to, want to improve their living conditions, and gain a stronger social and economic position. Thus, through consumption, individuals are expecting to enter higher social classes, in order to strengthen their position and to have the earnings of these classes. According to this analysis, consumption is not determined by what is defined by neoclassical economic theory, but it is an average demonstration strength, power and social rise (Diggins, 1999).

Veblen's analysis of the reasons that cause the individual to consume does not focus on the individual dimension but instead focuses on the overall social characteristics, as the author considers that individual behaviour is based on the person's wider social environment or, as Veblen himself puts it "in the institutional environment" (Veblen, 1898). According to Veblen, the institutions are the product of "past features and experiences forged by traditions, conventions, material circumstances" (Veblen, 1898, as cited in Rutherford, 1996). From this point of view, social relations and the functions of society are depicted and structured as institutions, which then determine how individuals behave.

Veblen's analysis, focusing on the important role of institutions and the importance they have in shaping the behaviour of economic actors – both as consumers and as businesses – essentially cancels the neoclassical axioms of rationality and effectiveness of market. Also, if

there is social development – which is the result of either technological achievements or social conflicts – the institutions are also changing, so the way in which economic activity is exercised changes accordingly. Therefore, in Veblen's analysis, rather than looking at the long-term, undisturbed balance, a focus should be placed on the way in which change takes place, namely on how change in institutions brings about a change in the economy, and on the other hand how economic developments are pushing for institutional changes (Rutherford, 1996).

In the spirit of Veblen, is the analysis of Hamilton – in fact, as Hodgson (2000) states, the term "Institutional Economics" was introduced by Hamilton in 1918 – whose analysis was widely accepted because of the effect of his article "The Institutional Approach to Economic Theory" (Hamilton, 1919). Hamilton's study focuses on the fundamental role of institutions in all human activity, with an emphasis on the economy as economic activity is a prime example of how human behaviour is organised. Hamilton paid particular attention to the fact that the way in which economic activity is exercised stems from the institutional environment, i.e., the institutional environment determines how behaviour, type of activities and how they happen, the limit of tolerance or intolerance towards certain behaviours, people's way of thinking and the way they communicate, work together century coexist. These perceptions are now part of the cultural background, culture, customs, and community identity (e.g., a nation).

Hodgson (2000) gives the outline of Hamilton's analysis in 5 points:

- 1. Although institutional economists are willing to give their ideas a practical outline, the Institutional Economy itself is not defined based on policy proposals.
- 2. Institutional Economics uses extensive ideas and data from other disciplines, such as psychology, sociology and anthropology, to enrich the analysis of human behaviour.
- 3. Institutions are the fundamental element of any economy, so it is the task of economists to analyse institutions and developments in terms of change and innovation.
- 4. The economy is an evolving system, influenced by technological developments, and which is an integral part of wider social and political relations.
- 5. The view that the individual acts to maximize his/her benefit is considered to be inadequate or incorrect. Under institutional economics, individuals are considered to be influenced by their institutional and cultural environment. Consequently, individuals do not create (voluntary or unintentional) institutions, but institutions affect individuals in fundamental ways (Hodgson, 2000).

The last point of Hodgson's analysis is of particular importance as it is a focal point of the Institutional Economics (as well as of the New Institutional Economics). According to neoclassical economics, each person always acts rationally and with the sole purpose of maximizing her/his benefits. In this respect, an individual's external environment is considered to be a given and does not affect individual decisions. Admittedly, according to Adam Smith's analysis of the "invisible hand," one person's actions affect the situation of the other people, as individuals trade with each other.

However, the behaviour of individuals, according to classics, does not stem from somewhere, nor is it based somewhere, except in the subjective measure of benefit. Thus, individuals can change behaviours (e.g., changing consumer preferences) but the reasons for doing so cannot be analysed in the neoclassical context. Instead, in Institutional Economics, individuals' attitudes, and preferences stem from and rely on institutions. Thus, a downward causation arises, according to which the processes occurring at a level of the hierarchical structure arise from the laws and rules of the next (superior) hierarchical level, which laws and rules refer to the whole system and are the inseparable and inviolate element. In this respect, according to Institutional Economics, changing people's attitudes or preferences is the result of a change in the functioning of institutions and therefore affects all individuals of the whole.

Institutions do not stem from an undefined, external direction, but they are social constructs, i.e., they are developed by the people themselves. Therefore, as Commons notes, institutions are the cause and result of one's conviction" (Commons, 1965, as cited in Hodgson, 2000). Therefore, the person interacts with the institutions, as well as interacting with the community. Indeed, the greater the degree of interaction between the individual and the community, the greater the interaction between the individual and the institutions (Rutherford, 1996). Also, in this context of analysis, it is worth noting the following: on the basis of the principles of neoclassical economics, the question of the development of the personality of man remains unthinkable, if not unexplainable, in the sense that, while insisting that the person is already aware and by acting on this axis of knowledge, there is nothing more to learn, nothing that will lead man to conquer new knowledge, nothing that will evolve it. But knowledge takes place within the social structures and constitutes a process, derived from the need to adapt to new conditions and data. This very change in the circumstances and the need for adaptation is what drives the person to develop new skills, new attitudes, and to revise beliefs (Hodgson, 2000).

Although the Institutional Economics had an impact on the academic circles of the United States, it failed to widespread acceptance and did not become an important field of study because the evolution of neoclassical theory has brought to the fore the requirement of documenting theories with mathematical models with distinct parameters, specific methodology and measurable results, elements that the Institution did not have. Also, when the

axioms and assumptions of the neoclassical school were shaken by the 1929 Crisis, the Institutional Economics did not have the arsenal of suggesting concrete proposals and measures to be taken to tackle the recession and the attention turned to Keynes and the budgetary policy. Nonetheless, the fact that, through the Institutional Economics, there were set (as parameters of economic development) elements that were treated as irrelevant to economics, such as the institutions, formed the basis of a new vision of economic activity.

After the Institutional Economics, everything that was relevant to human behaviour could be a field of economic research: the legal framework, the political system, the social norms, the distribution of power, the working conditions, the way in which businesses operate, all began to be considered as parameters of economic activity. Also, based on the institutional analysis, not only economic science has been enriched with the findings of other sciences, but at the same time other sciences – such as law, sociology, psychology – have received valuable resources for further study and research.

The issue of institutions has ceased to concern the academic community, although it has not been extensively researched and studied. Coase's studies on business and law (1937; 1960) gave rise to the resurgence of interest in institutions. One of the most important points of study was the clarification of how institutions are created and displayed, as well as the way in which they affect the economic process. As Coase says, what differentiates the modern institutional economists is that they use classical economic theory to analyse the functioning of the institutions and to highlight their importance for the functioning of the economy (Coase, 1984).

The above clarification of Coase is important in this respect. While the economists of the Institutional Economics rejected, as we have seen, the assumptions of the neoclassical school, at the same time they also rejected its key axioms, i.e., the philosophical background of homo economicus, and the methodology of analysis (methodological individualism, reductive theory). The researchers of the New Institutional Economics, replacing the holistic methodology with methodological individualism, on the other hand, came to formulate a general theoretical framework based on the analysis of individual issues (Rutherford, 2001), and on the other hand interpreted the creation, appearance and operation of institutions as a result of individualized beliefs and behaviours. Precisely because of this holistic methodology and the view of the economy as an evolutionary system, Institutional Economics was difficult to formulate concrete proposals for economic policy implementation, to develop a structured theoretical framework for the creation and appearance of institutions and to fully map the way of the institutions in economic activity. Thus, gradually, it was accepted that the analysis of institutions and their mode of operation and their effect on the economy could be better studied

with the analysis of individual phenomena associated with the institutions as well as the effect of individuals on the institutional framework. However, certain analysts say that the adoption of methodological individualism and reductive theory by the New Institutions is totally incompatible with the framework of Institutional Economics (Toboso, 1995).

In order to explain the framework of the New Institutional Economics, it is primarily necessary to define what institutions are. According to North, institutions are limitations that form the interaction between politics, economy and society. Institutions consist of unofficial restrictions – such as code of conduct, traditions and taboos – and official rules – such as the functioning of Authorities and the making and enforcement of the Law (North, 1991). Hodgson (2006), in an extensive bibliographic review of the different views on what constitutes an "institution", gives the outline of the institutions as the systems of established and widespread social rules that structure social interactions. Therefore, language, money, law, weight and length units, behaviour in a meal, businesses (and other organisations) are institutions. Institutions give the ability for structured thinking, expectation and action, giving shape and consistency to human activities.

Institutions depend on the beliefs and actions of individuals, but they do not refer to them. Institutions at the same time restrict and allow behaviour. The fact that rules are automatically imposed implies limitations. But such a restriction gives opportunities: it makes possible choices and actions that otherwise would not exist. For example: language rules make communication possible, the road traffic code allows us to move more easily and safely, the rules of law increase the feeling of security (Hodgson, 2006). North (2006), defining institutions as "the rules of the game", distinguishes them in formal (for example, government mechanisms, businesses, educational institutions) non-formal (such as customs, customs, customs, culture) and social constructions (such as the political system, the legal system, the way the economy works).

North is making a distinction between institutions and organisations, in the sense that organisations are structured by groups of people and should not be identified in the sense of institutions. Of course, organisations interact with the institutions and, as mentioned above, in the New Institutional Economics there is the notion that the organisation can influence the whole (the institution). As North (1994) notes, what shapes the institutional environment in an economy is precisely this interaction between institutions and organisations, in the sense that the institutions represent the rules of the game, while the private organisations, i.e., the entrepreneurs and their enterprises, are the players. Organisations are created by groups of people who are linked to each other with the common goal of achieving specific goals. The

above analysis shows that both the Institutional Economics and the New Institutional Economics are important ways of analysing economic activity as well as explaining a series of issues such as the differences observed in the growth rates between countries, the reason why countries choose a specific monetary policy, the reason why some countries are more competitive than others.

Regarding football, institutional environment and institutions play a major role both in the way the game is being formed and in the way all participants of the game operate: football clubs, players, referees, fans.

All the above elements are parameters of the institutional environment, having an impact on the structure and the operations of Greek professional football clubs. In fact, as presented in Figure 14, the formal operations of a professional sports club are being shaped by the forces of the institutional environment, such as the education, the legal structure and the country's social and political environment.

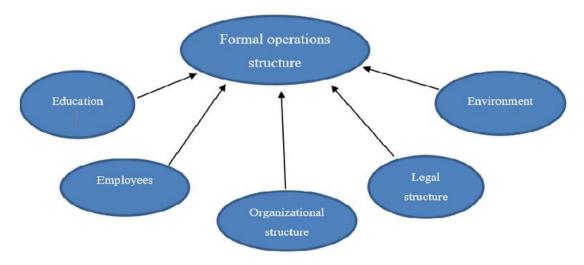


Figure 14. Formal operations structure of professional sports clubs

Source: Aytul, 2016, p. 369

Aytul (2016) provides wider analysis of two crucial factors of the impact of the institutional environment on professional sports clubs: the compliance with social norms and the transparency/accountability. Regarding the compliance with social norms, a very big issue that directly affects both the finances of football clubs and the perception of football is the issue of hooliganism. The social dimension of violence in Greek sport is reflected in the everyday life of citizens as a congenital "weakness" of the political system, which serves other purposes. Political, economic, business and professional interests shape, sustain and prolong the

presentation of the phenomenon as an identified activity of the structured sporting function (Gantz and Wenner, 1995).

Particularly in social periods with heightened individual and collective problems such as the time of crisis, the phenomenon of violence in sport can become a trigger of a wider social violence with uncontrollable consequences. The scientific study of violence in sport as a social symptom needs theoretical reference, research documentation and evaluative identification by expert and sports scientists. If one wants to analyse violence in sport as a human function of aggressive behaviour, then its evaluation should be at a collective level. The specific elements of such behaviour are the collective demands associated with experiential frustrations (Priks, 2010). Violent behaviour has a social reflection and when it finds a suitable political field it is promoted through the media, thus creating collective frames of identity and learning (Braun and Vliegenthart, 2008).

To explain crowd behaviour and collective conflicts, theoretical models were developed that refer to several independent variables that explain the spatial/temporal variation of violent incidents in sports venues such as: a) suppression by number of arrests, b) media coverage, c) level of unemployment, d) level of aggression in the game. and e) the social dimension about beliefs about 'fair' or 'unfair' world (Spaaij and Anderson 2010). The relationship of the social dimension of the current crisis with Greek sport cannot be disconnected from the more general problems created by the crisis as a socio-economic phenomenon, with any kind of individual, or collective manifestation of activities of the daily reality of the country.

Giakoumatos and Avgerinou (2011) has found that, regarding the professional football matches in Greece, the violent acts are not considered as unusual, since in many matches at least one violent incident occurs, i.e., stadium damage, or violent clashes between fans, or police intrusion and injuries, and that on the whole these types of incidents (and not the lighter ones) are correlated with the demand for tickets by fans. The authors, by incorporating the violence variable into their model, which additionally includes team position, ticket price, GDP, the effect of on- and off-field deaths due to hooliganism, and previous year's tickets, found that hooliganism negatively affects the demand for tickets, i.e., the more violence that occurs in football stadia, the less tickets are sold by clubs. Particularly in times of crisis, when clubs' revenues are affected, football clubs and football administrators also have a financial incentive to help reduce hooliganism.

### 3.2 Political/Policy uncertainty

Economic prosperity requires stability in fiscal policies and flexibility in the way financial markets operate. If these conditions are respected, then private investments can result to economic growth. However, several previous studies on private investments focused exclusively on the economic determinants of private investment (Pfeffermann and Madarassy, 1992; Serven and Solimano, 1992). A study by Le (2004) examines 25 developing countries in order to identify the economic and political factors that have an impact on private investments and suggests that socio-political uncertainty without violent protests promotes private investment, while violent uprisings, on the contrary, inhibit private investments. Moreover, while the legal (i.e., constitutional) change of government promotes private investment, unconstitutional change of government, like a military coup d'état, hampers private investment.

Pindyck (1990) stresses that most investment costs have two important characteristics: on the one hand, they are largely irreversible, and on the other hand they may be delayed, allowing the company to expect new information on prices, costs, and other conditions of the market before the resources are committed. Both of these factors have a significant impact on investment decisions as irreversible investment is particularly sensitive to risk, whether it concerns future cash flows or the final cost of the investment. Therefore, if a policy aims to stimulate investment, it should be accompanied by stability and credibility.

On the other hand, when there is even a minimal degree of reversibility, higher uncertainty reduces the impact of demand disruption on investment as it increases business choices to invest or divest. In general, the business responses to invest are significantly lower in periods of high uncertainty, such as, for example, following the severe crises of OPEC or September 11<sup>th</sup> (Bloom, Bond and van Reenen, 2007). As Kellogg (2014) notes, the response to changes in price volatility in a specific sector, namely the drilling companies, is in line with what theory states, that non-response to crisis instability is an important economic disincentive for an investment.

More generally, according to Stein and Stone (2013), there is a broad discussion on the impact of uncertainty on investment behaviour, mainly because of the difficulty both in measuring uncertainty and recognizing causality. By focusing on volatility in oil prices, the authors emphasize that airlines are negatively affected by high oil prices, while oil refineries are benefiting from them, but both sectors are sensitive to price volatility. Furthermore, it is noted that uncertainty suppresses capital investment, leasing and advertising, but encourages expenditure. Policy uncertainty has a negative effect on investment: as Gulen and Ion (20156)

show, during the period 2007-2009 corporate investments decreased by 32% and the two-thirds of this decrease can be attributed to policy uncertainty.

However, the relationship between policy uncertainty and capital investment is significantly stronger for firms with a higher degree of irreversibility of investment, as well as for companies of a sector that is no so competitive, for companies with high level of debt, while when policy uncertainty increases, companies prefer to hold more cash. Overall, the findings of the study support the notion that uncertainty reduces the growth rate and increases external borrowing costs.

A recent study on the causal consequences of the policy uncertainty on investment in US companies estimates that business investment in states facing elections is 4.9% lower than business investment in states without imminent elections. Small businesses that are politically sensitive, and companies with higher levels of asset specialization are more likely to postpone their investment by 15%. Variability is also higher for businesses in states that have elected a new governor, even one year after the elections (Jens, 2017). In a similar vein, an empirical study using evidence on changes in government leadership in 277 Chinese cities shows that political changes lead to a substantial reduction in corporate investment, especially when the new leader of the region was not a 'native', appointed by the highest echelons of government and the impact was more significant for firms considered locally important as well as for capital intensive companies (An et al., 2016).

Mei and Guo (2004) examine the impact of the policy uncertainty on financial crises using a sample of twenty-two emerging markets. With the examination of political polls, they find that eight of the nine economic crises occurred during the political and electoral times. In addition, a regression analysis identifies an important relationship between the political elections and the financial crisis after being scrutinized for differences in economic and financial conditions, and there is also increased market volatility during the year of both the political and transition periods. The findings show that political uncertainty could be an important contributing factor to the economic crisis and industry performance.

In particular, in emerging markets the finding is very important as the chances of a financial crisis tend to be much greater during the political election periods in these regions than in the developed economies. Study of the impact of government risk and government interest rate risk on emerging markets on the basis of a quantifiable public debt and political default model shows that more polarized economies face higher default rates and higher levels of spreads. Also, higher levels of political uncertainty significantly increase the default frequency as well as the level of spreads (Cuadra and Sapriza, 2008). In general, whenever a

country suffers from a domestic shock that causes it to default, the relative decline in investor wealth will reduce its tolerance to risk, which in turn reduces investment in other emerging economies, causing a crisis in countries with weak institutional frameworks. Also, even when a crisis in one country does not oblige it to default, the domestic crisis affects the overall risk of the investor's portfolio. As a result, the investor is forced to redefine its portfolio, choosing to move away from countries that are very dangerous to countries that seem more stable (Lizarazo, 2009).

Despite increasing attention to the role of social ties in emerging economies, few studies have explicitly differentiated the distinct roles of business and political ties. Study of Sheng, Zhou and Li (2011) shows that business links have a stronger positive impact on business performance, but business and political ties and their effects depend on the institutional environment and the market. Business ties are more beneficial when legal enforcement is inefficient and technology is changing rapidly while political ties lead to better performance when general government support is weak and technological turmoil is low.

Although the role of social connections in emerging markets has become more prominent, little research has clearly distinguished the different roles of business and political connections. The study by Sheng, Zhou and Li (2011) shows that business ties have a positive impact on firm performance, but the impact depend on the institutional environment. In general, developing and strengthening ties with political and institutional factors is an important element of an enterprise's overall non-commercial strategy (Sun, Mellahi and Wright, 2012). Based on the above, it could be argued that, with regard to Greece, as political instability results in the deterrence of investment in the country as a whole (Fountas, Karatasi and Tzika, 2018; Hardouvelis et al., 2018), the same applies to investment in professional football. Since Greece is politically unstable, football industry is weak and, hence, investment in football in Greece might suffer from political uncertainty.

#### 3.3 Regional / local economy (two ways relation)

Another important factor conditioning development of the FCs is the strength and quality of the local socio-economic environment in which given club operates, often called local development milieu. The relations here are of reciprocal nature. An interesting example is the one of the Leicester City. The club is the hallmark of Leicester, which has won the UK's Premier League in the 2015/2016 season. This team struggle has had a direct economic impact on the local economy, with over £140m in gross value added (Sweet, 2016). Specifically, over 2015–

2016 of the Leicester team's successful career, more than 2,500 jobs were created, 120,000 visitors travelled to the city to watch the team matches, spending more than £6.5m on accommodation, travel, shopping and dining, while the total direct and indirect spending of the fans in the local economy exceeded £7.9m in the year (Gupta, 2013).

In addition to the above, with the participation of the team in the UEFA Championship, additional revenues from the international football matches were generated, incoming tourism increased by at least 10,000 people, contributing to the local economy more than £ 8.4m in a year. In fact, it should be highlighted that Leicester is not a traditional tourist destination, so the inflow of tourists is an opportunity for a dynamic repositioning of the city by creating a new identity that will also include the tourist dimension until recently was absent from the city.

Another example of the positive economic impact of a successful football team's performance on the local economy is that of Swansea City, where, with the rise of the local team in the Premier League, £ 58.6m was created in 2012-2013, with an extra spending £ 7.9m on non-football club activity and creating 400 jobs in the local economy (Jones, 2013). It should be noted that in the local economy the hotel occupancy increased by 9% compared to the previous year, higher than the rise rate in the rest of Wales and the average for UK. Also, as noted in the Coates and Humphreys (2007), conducting football matches increases product sales, especially in smaller regional cities, in the sense that if the race is held in a small regional city, sales increased is higher in relation to the increase in sales recorded when the race is held in larger cities. All these spill overs provide the reasons for supporting FCs by the local governments, local business networks and other local organizations.

An important economic impact that exists in the local economies by the football teams concerns the stadia of the teams. The pitch of the teams brings many positive effects on the local economy. Firstly, the creation of a new stadium is a major investment, and indeed it requires a great deal of capital and labour. As is widely reported in the literature, the strengthening of professional sport is a move that brings about the immediate economic stimulation of the local economy (Baade, 1996), so local authorities make public investments to build, expand and renovate the teams' stadia. As is documented in the literature (Chapin, 1996), public investment for stadia and sports facilities is fully justified due to the fact that jobs directly created are mostly covered by local residents while a substantial part of its total procurement investment comes from local businesses, so there is a boost to local economic activity. Beyond that, it should be noted that the creation of centres for sports facilities and football grounds can be an opportunity to rejuvenate a region, especially if it suffers from urban decline (Keating, 1997). For example, the creation of new contracts for the renovation of the

Aberdeen local team's stadium in 2018 was accompanied by the creation of 150 new jobs of the Aberdeen Football Club (2018), in times where Aberdeen was in an economic and social decline. As the study of Lewney (2013) shows, gross value added associated with footballing activities in Manchester was £330m per annum in 2011, while hotel occupancy rates in the area were considerably higher than normal when the teams play (85% on match days compared to 70% on non-match days), while national studies suggest that substantial numbers of football tourists come to visit Old Trafford – around 15% of all international tourists that attend a football match during their visit to the UK do so at Old Trafford. In fact, Lewney (2013) states that professional football clubs have direct and indirect connections with the local government, the commercial non-sport sector, the amateur football clubs and the community activities and volunteering.

As presented in the Table 5, stadia help not only the football clubs to have their own "base" but have a positive impact on the overall economy, since the home prices near stadia increased to a great extend during the last 20 years.

Table 5. Change on home prices near stadia

Club	Premier Le	eague Avera	ge	Average House	20 year %	
	Status	House	Price	Price 2017 (£)	change	
	1997 (£)					
Tottenham Hotspur	Current	59,63	8	450,104	655%	
West Ham United	Current	46,44	8	330,459	611%	
Charlton Athletic	Past	68,00	2	464,208	583%	
Queens Park Rangers	Past	108,7	02	704,042	548%	
Chelsea	Current	177,5	65	1,108,649	524%	
Fulham	Current	177,565		1,108,649	524%	
Wimbledon	Past	ast 106,022		654,141	517%	
Watford	Current	rrent 59,839		365,209	510%	
Crystal palace	Current	rrent 53,651		327,074	510%	
Manchester City	Current	20,51	C	123,351	501%	
Brighton and Hove	Current	66,516		399,127	500%	
Albion						
Arsenal	Current	128,6	56	763,401	493%	
Manchester	Current	41,641		200,729	382%	
United						
Norwich City	Past	45,58	6	213,835	369%	
Reading	Past	111,6	95	474,821	325%	
Ipswich Town	Past	49,07	7	198,748	305%	
Bournemouth	Current 76,000		C	297,042	291%	
Cardiff Coity	Past	st 50,698		195,901	286%	
Nottingham Forest	Past	68,499		262,247	283%	
Portsmouth	Past	59,35	9	223,428	276%	

Source: Pure Property Finance, 2018

#### 3.4 Macroeconomic conditions (first outlook)

First of all, when the economy has a recession, i.e., the GDP is in decline, instead of increasing, then both the enterprises and the consumers decrease their expenditure due to two main factors (McEachern, 2009). Consumers have smaller disposable income, as a result of the recession. Also, the marginal propensity to save is increasing, because the households are afraid that they will have less disposable income in the future, thus they should have a higher amount of savings, in order to address their future needs. In that sense, the households prefer to cut their current expenditure and increase their savings, in order to be protected from the recession that it might continue (Williamson, 2014). Thus, the marginal propensity to save increases, and the additional amount of savings acts as insurance for the households, since the market itself cannot have an insurance instrument to protect the disposable income in cases of crises (Mishkin, 2007). As a result of the increase of the marginal propensity to save, the multiplier of the economy decreases, leading to a decrease in the GDP (Parkin, Powell and Matthews, 2008).

Except the fears of the households, the other reason is that they have lower disposable income, thus the decrease in the expenditure is due to the fact that, during the recession, the households do not have the economic means to continue the same rate of consumption as they used to before the crisis. This is because of two reasons. The first reason is the unemployment increase and the wages decrease, thus there is lower income from employment (Chamberlin and Yueh, 2006). The other reason is decrease of the value of the property and households' assets during the recession. For example, the value of stocks, bonds, real estate, drops in the recession, thus there is a decrease in the households' wealth (Mitchell, 2002).

The other factor that the analysis takes into account is the capital provided by the banks to enterprises, i.e., the amount of business loans. As it is well stated (Freeman, 1988; Quint and Tristani, 2017), there is a direct connection between the liquidity provided by the banks, the overall economy performance – i.e., the GDP– and the companies' turnover. This connection can be explained in various ways.

The first explanation for the connection between the banks' provision of liquidity and the GDP is that the higher the amount of bank loans to enterprises, the higher their investments. Investments are a part of country's GDP, thus, ceteris paribus, when the investment increases, GDP expands as well. At this point, it should be underlined that the increase of the GDP is not equal to the increase of the investments, since the latter have a multiplier effect (Williamson, 2014). For example, if the investment increases by 100 million euro and the multiplier is 5, then the GDP increases by 500 million euro. Thus, when banks decrease their amount of loans

provided to enterprises, there are lower investments, thus a lower GDP, which, in turn, affects the companies' turnover, as described above. In that sense, banks, acting as financial intermediaries, affect the condition of the overall economy and the country's growth (Levine, Loayza and Beck, 2000).

Another explanation is that banks, by providing liquidity, affect the companies' ability to increase their profits and their turnover. A company, in order to be competitive, needs to invest in technology and innovation, thus the bank loans is a necessary condition for the business expansion (Brealey and Myers, 2003). Thus, when bank loans to enterprises are not available, then the companies have a lower ability to be competitive. Also, when banks provide the liquidity needed, then consumers have the ability to spend more money, leading to a higher turnover of companies, thus, resulting in economic growth (Attanasio and Weber, 1993; Hoover, 2012).

In this regard, it is important to review the literature on the extent to which the financial difficulties of companies – and professional football clubs – are linked to the wider economic environment and the liquidity provided. In the international literature, there is an extensive reporting and research on the causes of business failure. The first major cause relates to the general economic environment in a country in a recession. According to the classical Keynesian theory (Keynes, 1936/2010), when there is a recession then a decrease in income is recorded, which results in a decrease in demand. Based on the principles of economic theory (Samuelson and Nordhaus, 2006) the main determinant of demand is disposable income. With an increase in disposable income, households increase their consumption, hence the demand curve shifts upwards and to the right (Begg, Fisher and Dornbush, 2006). Increased household demand pushes firms to produce more products, which leads to more investment. Since two of the main parameters of the aggregate demand are consumption (C) and investment (I), therefore, with an increase in these parameters there is an increase in GDP (Mankiw, 2011).

The exact opposite happens in a recession. When disposable income declines, households reduce their consumption, both because they do not have the disposable income to buy the same amount they used to buy and because they want to preserve their income to protect themselves from deterioration in their economic situation (Abel, Bernanke and Croushore, 2010). The decline in consumption results in a decrease in the turnover of firms. Thus, many firms are unable to continue their business as their profits are declining and in fact, many times their revenues are below their expenses. Therefore, in the international literature, the financial crisis is cited as a fundamental cause of business failures (Salman, Zampati and Shukur 2013). At the same time, wage rigidity (Goette, Sunde and Bauer, 2007; Hall, Sims, Solow and Gordon,

1975) burdens any intention of companies to keep the number of their staff unchanged, with the result that unemployment increases and the income of those who become unemployed is dramatically reduced<sup>5</sup>.

A second major cause of business bankruptcies in times of economic crisis is the reduction of liquidity available to firms by banks, a parameter that is cited in a number of studies as a cause of business bankruptcies (Aghion, Fally and Scarpetta, 2007; OECD 2012; Vliamos and Tzeremes, 2012). Capital is the decisive productive factor for the operation of firms. Therefore, when bank lending to firms decreases, they can no longer make new investments. The reduction in investment gradually results in firms being unable to produce new products, they lose their competitive advantage and gradually their costs increase. As pointed out in the literature, without capital available from the banking system, there can be no growth (Bernanke and Blinder, 1990; Beck, Levine and Loyaza, 2000; Bencivenga and Smith, 1991; Gertler, 1998; Hristov, Hulsewig and Wollmeurshauser, 2012), so with underutilization of capital allocation, the financial losses increase and the economy deteriorates.

The reasons why banks' provision of loan capital to firms is decreasing are various. One reason is that in times of economic crisis, depositors' savings decrease. A major reason for a decrease in deposits is that savers in a crisis period have less disposable income, so they use their savings money to be able to fulfil their consumption habits and maintain their standard of living and living standards (Samuelson and Nordhaus, 2000). Another reason is that depositors fear that there may be a bank failure and withdraw their deposits to avoid losing their capital. When there is fear for the safety of deposits, then savers turn to banks en masse to withdraw their funds, which is referred to in the literature as a "bank run" (Mishkin, 2007).

Another reason why bank lending to firms decreases during recessions is that during recessions the number of non-performing loans increases. When a firm cannot repay its obligations to the bank within 90 days, the loan is recorded as 'non-performing' and the bank will now have to initiate legal proceedings before it can receive the amount owed. However, it is not always easy to recover the amount owed, as many businesses may be placed under creditor protection, and in other cases, even if the assets of the business owing the amount are sold, such divestment may be at a lower price than the normal one (Caballero and Simsek, 2013). Thus, in times of recession, banks have an increased risk of borrower precariousness and are reluctant to grant new loans, resulting in a lack of liquidity for firms and an increase in the number of bankruptcies.

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<sup>&</sup>lt;sup>5</sup> it should be noted that there are ambiguous indications as to whether wage rigidity is indeed being recorded ((Babecky et al., 2010; Branten, Lamo and Room, 2018), but this issue is beyond the scope of this thesis.

Another aspect of the decline in bank lending to businesses is the terms of lending. In times of economic downturn and declining deposits, commercial banks often increase lending rates, which makes it difficult and costly for businesses to borrow. However, central banks, in a period of economic downturn, reduce their interest rate, which results in a reduction in the interest rates of commercial banks. Thus, commercial banks may not increase their interest rates during a recession, but they do impose higher conditions for granting loans, requiring borrowers to provide higher mortgages and larger assets as collateral in order to be approved for a loan.

### 3.5 Tickets sold by the Greek football clubs in the retrospect

To relate macro-economic conditions and other factors discussed above and the state of football industry in Greece one can try to examine changes in the number of tickets sold in time. A very widespread way to determine crisis or decline is to look at league ticket numbers over time. If tickets sale increases, one has a boom; if it decreases, there is a decline. Figure 15 gives the ticket totals from the 1992/1993 period to the 2011/2012 period. As presented, while from 2003 to 2008 there was an increase in the number of tickets, in the years of the crisis the number dropped.

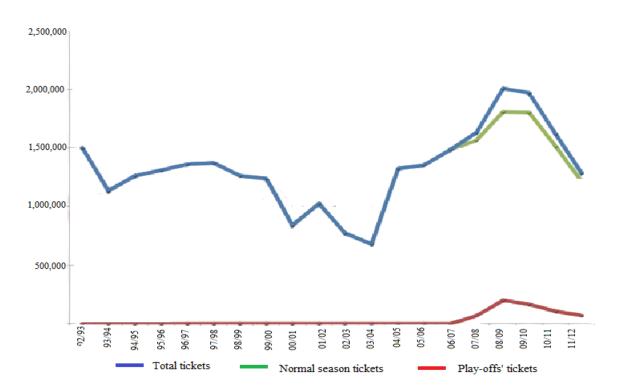


Figure 15. Number of tickets, Greek FCs, 1992-2012

Source: Sportsman, 2013 (n.p., website)

In the first two decades of the 21st century, the attendance of Greek football matches on the pitch fluctuated with an average of 1.2 million tickets. The 21st century has followed a cycle of fluctuations. From 2015 onwards, one can see a recovery phase, because there was an increase in the uncertainty of the league, resulting in the increase of the tickets. The economic effects on ticket sales are also interesting. Firstly, when an economy is generally doing well, more investment is made, this also affects football investment because more money is also invested in football either by attracting better players or by improving the stadium infrastructure.

What has been demonstrated in this chapter is that the professional football industry is shaped by many parameters, the most important of which are entirely exogenous. The state of the political climate, the institutional environment, the local governance and macroeconomic conditions directly affect football clubs and the way in which the sport of football is perceived by fans. Without the institutional guarantees that the rule of law can operate and without economic stability, an environment that promotes healthy entrepreneurship and investment cannot exist. Based on all of the above, the main scope of the study is to examine whether and to what extend the economic crisis had a negative impact on Greek professional football.

# **CHAPTER 4**

# ECONOMIC CRISIS IN GREECE

# 4.1 The role of fiscal policy

The two main instruments of a state's macroeconomic policy are fiscal policy and monetary policy (Mankiw and Taylor, 2021). Monetary policy is mainly concerned with controlling the quantity and the cost of money, aiming to maintain price stability (Mishkin, 2007). Monetary policy is conducted by the central bank, which in order to be able to perform its functions and achieve its objectives should be independent of the political leadership (Swinburne and de Castello Branco, 1991). This does not, of course, mean that the central bank governor should have a different view on the economy from that of the finance ministry: on the contrary, there should be cooperation in order to achieve common goals. This thesis will not focus on the central bank, and this is because monetary policy is conducted by the European Central Bank (ECB). However, there will be some references to the role of the ECB in fiscal reform of Greece.

Fiscal policy is the instrument through which a government adapts its expenditure levels so that it can track and affect the national economy (Hemming, 2013). The governance of fiscal policy is a strong instrument for the stabilisation of the economy, controlling the level and the structure of taxation, government expenditure and administration of debt. The management of budgetary policy influences aggregate demand, wealth distribution and the ability of the economy to produce goods and services. Both effective management of debt and fiscal policy are well established instruments to achieve macroeconomic stability, as well as the efficient and fair allocation of public resources (Eyraud et al., 2017; IMF, 2015).

Although there is a general agreement on what would represent a proper fiscal management (Campos and Pradhan, 1997), however, it is not possible to completely isolate the budget and fiscal management from political influence. This is because each government is elected on the basis of an economic programme, so the budget should be based on the implementation of the party and government's programme. However, on the other hand, it is neither rational nor sustainable to prepare a budget that jeopardises the long-term stability and resilience of the economy. Hence, the challenge is to address the link between budget and policy by creating institutional and legal framework that will ensure fiscal responsibility, while strengthening political participation (Bankowski, Christoffel and Faria, 2021; Folscher, 2006; Godbole, 2003; Kregel, 2010).

In order a fiscal governance to be form, a government should have the ability and power to implement measures that would help the sustainability of public finances. In this sense, it is institutions that would act as the guardians of a responsible and solid fiscal governance (Hagemann, 2010; Hemming, 2013; Hemming and Kell, 2001).

First, an introductory paragraph on the functioning of the economy should be made. The economy of a country is captured by the Gross Domestic Product (GDP), which represents the market value of the total output of the country (of course, it can also be measured in terms of the total value of final consumption, as well as the total income generated). The GDP of a country is measured using the following equation (Hashmi et al., 2021; Mayer, 2013):

$$Y = C + I + G + (N - X),$$

Where:

Y: GDP

C: household consumption

I: private investment (gross capital formation)

G: Government expenditure

N: Exports

X: Imports

The above equation shows that governments influence economic activity (GDP) by directly controlling government spending and directly affecting consumption, investment and net exports (N–X) through changes in taxes, transfers duties and government outlays, at least in line with the mainstream economics' paradigm. Expansionary fiscal policy is the one that increases aggregate demand by government spending. Conversely, restrictive fiscal policy is the one that reduces government expenditure and increases taxation (Caselli et al., 2022). The first point that should therefore be emphasized regarding fiscal policy is that the government can intervene in the economy by implementing fiscal policy either through government spending, or through taxation, or both, as is the case in all countries. However, such intervention might influence real variables (GDP, unemployment rate) only in a short run.

Finally, a second aspect should be noted, which concerns the policy objectives. Broadly speaking, the general objectives for any economy are to have price stability, to achieve a reasonable growth rate and to have a healthy debt situation for the country (Baldacci, Gupta and Mulas-Granados, 2010). However, while every government has these long-term goals, the objectives of each fiscal policy might vary, depending on the circumstances that each country faces. For example, if a country is reeling from high demand inflation, then governments may

focus on macroeconomic stabilization by reducing government spending and increasing taxation.

Conversely, if a country needs a boost to growth, then fiscal policy will implement a significant reduction in taxation and an increase in government spending. Also, if a country is poor, with a population without knowledge and skills and lacking infrastructure, then fiscal policy should turn to investment programs in education and infrastructure (with the help of organisations such as the World Bank and / or the United Nations). Therefore, the second point that should be emphasized with regard to fiscal policy is that it can have different objectives each time.

The third point that should be mentioned concerns the size of the budgetary intervention. In an economy, the larger the public sector, the more resources it requires, so expanding the private sector is difficult and comes at a cost. However, according to Keynesian analysis (Keynes, 2010), when the economy is in recession and the private sector is not undertaking business activity, then the government should increase spending so that government spending will push up aggregate demand (Dutt, 2013; Tavani and Zamparelli, 2015).

A question that can be asked is about the sources of the government spending. These funds come from tax revenues, but governments have the ability to borrow by issuing bonds. Bonds have an interest rate and must be repaid on a certain date. Thus, a state borrows an amount and over a given period repays that amount, and each year until the repayment date pays the interest rate (Porcellacchia, 2020).

The rationale behind the borrowing is this: the country will put the capital it has borrowed into publicly financed investments. The investments, in turn, will create new demand, which will mean the production of new goods, thus creating additional income, and so on. They can also attract foreign direct investments. Therefore, having invested the amount of the loan, the country will see an increase in income and thus will be able to repay the loan. However, in practice, this design may not work: indeed, there is a possibility, as has happened many times in the past in many countries, that the country's borrowing will create several problems, as will be discussed below.

The fourth point that should be stressed regarding fiscal policy is that there must be some limits to the decisions of governments regarding debt and deficit levels, otherwise the country risks going off the rails, even bankruptcy.

A fifth element should be added to the above: if a country belongs to an economic and monetary union, as in the case of the Eurozone member countries, then there is a risk that the derailment of one country will cause a chain of problems in all its countries (Franch, Nocciola

and Vouldis, 2022; Fukker et al., 2022). Thus, it has been decided that each country has the freedom to exercise its fiscal policy autonomously, but it should adhere to two specific rules (Schuknecht, 2004)<sup>6</sup>:

- The government's debt should not exceed 60% of the country's GDP,
- The country's primary budget deficit (i.e., revenue minus expenditure, excluding the cost of paying interest on borrowing) must not exceed 3%.

Based on all of the above, the following section will describe the evolution of Greece's fiscal performance that led to the crisis, the 'memorandum of understanding' and the fiscal reform.

# 4.2 Overview of the Greek economy before the crisis

During the World War II, Greece suffered great losses, both in human resources and in terms of overall economy and infrastructure. In 1941, national income, at 1939 prices, reached only 1/3 of the corresponding size of 1939 (Lazaretou, 2003). From April 1941 to October 18, 1944 (when the occupation was overwhelmed and the Greek government returned), the price level had risen by about two billion times (Anderson, Bomberger and Makinen, 1988). Until the end of 1945, almost a year after the end of the war, income in Greece was below 60% of the pre-war level (Makinen, 1986).

After World War II, Greece got funds from the Marshall Plan. These funds led to what is described as "the economic miracle". In the period from 1950 to 1961, the GDP growth rate has reached an average of 6.15% (Geronimakis, 1965), while for the years from 1950 to 1973 the GDP per capita (calculated in US dollars, with 1990 as the base year) increased from 1,915 to 8,627 dollars (Maddison, 1995). This is due to the fact that, during these years, the Greek economy has developed heavy manufacturing industry, infrastructure, facilities, national road networks. Changes in the structure of the production of rural sector, accompanied by the progress of the education system (Geronimakis, 2006) can also be seen as reasons. Greece's GDP increased by 4.9 per cent per annum between 1974 and 1979, compared with 3.2 per cent for the OECD countries and 2.5 per cent for the EU-15 over the same period. Budget deficits during this time were within the OECD average and around 1 % below the EU-15 average. Between 1980 and 1994, Greece faced several problems: GDP grew at an average rate of 0.8%, while, as shown in Figure 16, GDP was consistently below USD 150 million until 1987. (Figure

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<sup>&</sup>lt;sup>6</sup> It should be highlighted that many countries have not followed these rules, including Germany (Deutsche Wele, 2003).

16). It should be noted that in 1983 the government decided to devalue the national currency (drachma) by 15.5%, while in 1985 there was a further devaluation of 15%, and only after 1988 did the economy begin to regain stability.

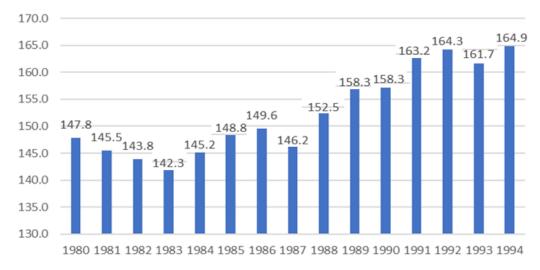


Figure 16. Greece, 1980-1994, GDP in 2015 US\$ 2015 constant prices

Source: data from World Bank, 2022.

At the same time, the consumer price index averaged 18.3% per year, while the current account deficit (as a percentage of GDP) was well above the corresponding average of the fifteen countries of the European Union and of the OECD. By 1994, the debt-to-GDP ratio reached almost 108% of GDP (Bryant, Garganas and Tavlas, 2001). The reform programme of 1994 was aimed to stabilise the economy, focusing mainly on reducing inflation. Lower inflation was translated into lower interest rates, which resulted in higher gains on fixed capital and improved fiscal performance, as the government deficit averaged 4.5% per annum for the years 1994-2000, compared to an average deficit of 10.3% for the period 1980-1994. However, while the reform programme was successful in stabilising the economy, the government continued to face increasing borrowing needs and relied on more and more bond issues to cover both the primary fiscal deficit and the interest repayment of outstanding bond debt. Table 6 presents Greece's fiscal performance for the periods 1974-1979, 1980-1994 and 1995-2000 and compares it with the macroeconomic situation of other countries.

Table 6. Comparison of Greek economy performance over different time periods composed with selected other countries

Economic Indicators	1974-1979	1980-1994	1995-2000	2001
Annual growth of GDP				
Greece	4.9	0.8	3.2	3.9
Ireland	4.9	3.5	9.9	5.6
Portugal	2.9	2.8	3.3	1.9
Spain	23	14	3.6	2.7
Total EU-15	2.5	. 0	2.6	1.7
OECD	3.2	2.7	3.2	1.0
Annual growth of productivity				
Greece	4.2	-0.1	2.6	3.6
Ireland	3.4	3.2	4.1	3.7
Portugal	0.5	1.6	2.0	1.0
Spain	2.6	2.6	0.8	0.8
Total EU-15	2.2	1.8	1.4	0.7
OECD	1.6	1.7	1.7	0.8
Annual growth of fixed investment				
Greece	6.8	-2.2	7.3	8.5
Ireland	5.3	0.3	14	2.5
Portugal	-0.4	2.9	6.8	2.2
Spain	-1.2	2.8	65	3.3
Total EU-15	0.2	1.7	4.2	0.7
OECD	2.7	2-8	5.5	-1.1
Annual consumer price inflation rate		-		
Greece	16.2	18.3	5.5	33
Ireland	14.9	7.0	2.5	43
Portugal	23.5	14.6	19	4.3
Spain	18.2	8.6	3.0	3.7
Total EU-15	11.9	6.4	2.2	2.4
OECD	10.3	7.5	4.2	2.0
Annual increase of unit labour cost	10.5	7.5	2	2.0
Greece	21.2	17.4	4.6	1.3
Ireland	• • •	1.7	• • •	35
Portugal	19	11.1	1.7	4
Spain	203	68	2.3	3.1
Total EU-15	6.2	3.1	0.7	2.8
OECD	10.1	5.8	2.8	4.1
Annual unemployment rate	10.1	5.0	2.0	7.1
Greece	2.0	7.3	10.5	11.2
Ireland	7.9	14.2	8.6	4.3
Portugal	6.2	6.9	5.8	4.3
Portugai Spain	5.3	18.0	3.8 19.1	13.3
Total EU-15	4.2	9	9.2	7.8
OECD	4.8	9 7	6.9	6.5
	4.0	/	0.7	0.5
General government deficit (% GDP) Greece	2.2	10.2	1.5	0.2
	-2.3	-10.3	4.5	0.2
Ireland	-8.4	-7.2 5.2	1.3	3.2
Portugal	-4.9	-5.3	-2.8	-1.7
Spain	-0.8	-4.4	-3.1	0.0
Total EU-15	-3.3	-4.6	-13	.0.7
OECD ource: Bryant, Garganas and Tavlas,	-2.6	-17	-13	-0.7

As illustrated in Figure 17, the country's GDP displayed a general growth trend after 1974 till 2007. The problem is that this overall picture does not focus on the effects of the 'destabilisation' period of 1980 to 1989.

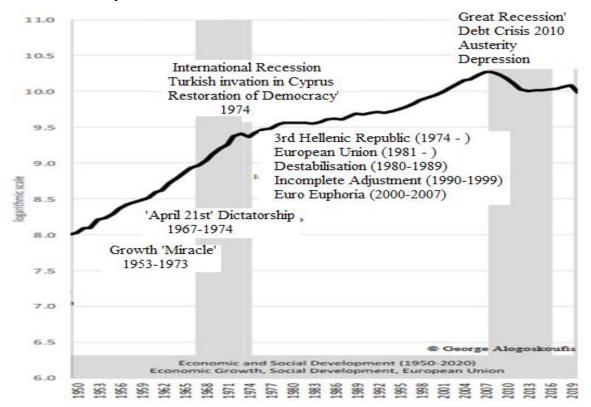


Figure 17. Historical Cycles and the Evolution of Greece's Real GDP per capita, 1950-2019 Source: Alogoskoufis, 2021 (n.p., website)

Over this time, several structural problems have arisen, including labour market problems, with an enormous workforce in government, public enterprises and public utilities. In 1976, their salaries represented 64.8 per cent of total public spending; in 1990, 83 per cent. There were two reasons for this increase: the number of public employees and the level of their salary. From 1976 to 1997, general government employment grew by 2.3 % per annum, compared with 0.55 % per annum for private enterprise. (Hall and Zonzilos, 2001). This was accompanied by a rapid rise in real wages in the public sector, with average wage growth for the lowest wage earners in the public sector reaching, in 1982, more than 100%. The wages of public servants in 1982 increased by 33.4% and kept rising until 1994 (Hall and Zonzilos, 2001). One of the major factors behind the increases was the introduction of automatic wage indexing, requiring employers to pay a wage that covers the full amount of inflation. In addition, pensions and other social security benefits have increased, covering the inflation.

Here, it should be emphasized that employees in public enterprises were not counted in the number of civil servants, so the figures quoted are significantly lower than the actual figures. It should also be noted that the average wage of these enterprises was much higher than the wages paid to workers in the central government, and much higher than wages in the private sector. During 1989-1998, a large number of employees in public enterprises received special privileges and back-earnings due to court decisions. For example, during the 1990s, about 200 billion drachmas (almost 100 mil. USD, in the exchange rate of the time) were paid to judges, as a retrospective payment (Hall and Zonzilos, 2001). In many cases, the Greek government gave employees Greek bonds as part of the total earnings. Finally, for certain categories of civil servants (e.g., customs officers), special payments accounted for about 50 percent of their monthly wage and these amounts were not recorded in the official budget, with the result that there is a continuous documentation of reduced costs in relation to the actual figures, until 1997, when the documentation started (Hall and Zonzilos, 2001).

This growth in wages led to a significant turbulence in the whole labour market. As salaries in the public sector increased, the reservation wage was high in the labour market as a whole. As the public sector faced increased employment opportunities and high wages, this resulted in an increase in the wage reserve and therefore increased wages in the private sector. Nevertheless, since this wage increase was not followed by a respective increase in the production volume, total costs in the Greek economy and unit labour costs increased.

This resulted in a major socio-economic feature of Greece: a significant part of the young people wishes and seek to enter the public sector. Besides the salary gap, there are three additional factors which can explain this effect: Firstly, the public sector did not have any evaluation of the performance, ability, productivity or any other performance characteristic of employees. Even at the time of writing this thesis, evaluation in the public sector is only seen as a matter of necessity in the future. Secondly, state employees had jobs that were secured; therefore, they were not concerned about the unemployment. And third, there were programs for early retirement that gave employees the opportunity to take 80% or 90% of their complete pension, even if they were 50 years old or even younger.

All the above facts and figures lead to a conclusion: that the global economic crisis has found Greece with major structural problems. Therefore, the fact that Greece should resort to the search for a salvation program was inevitable.

# 4.3 Causes of debt, debt crisis and International Monetary Fund support

Up to the first half of the 1990s, the Greek economy experienced a period of progressive adjustments. It was at that time that entering the Eurozone had become the top national priority for the government and the people of Greece. The stabilisation of the currency and the fiscal adjustment had become the prime targets of the Ministry of Finance as well as of the Bank of Greece. The Eurozone norms, as articulated in the Maastricht Agreement, were rigid, thus the Greek economy had to take major steps and undertake fundamental changes. At the time, the banking system was composed of a limited number of banks, most of which were state-owned, making privatisation of banking the most significant reform regarding the operation and funding of the Greek economic activity. The opening up of the money market and bank credit permitted an inflow of capital and contributed to economic expansion, which attracted investors to the country's stock exchange. Furthermore, with Greece having undertaken the Olympic Games of 2004, Greece was a prospective market.

The stabilisation programme met a number of goals: firstly, the tight monetary policy resulted in a decrease of the inflation rate. Also, Greek economy achieved a growth rate higher than the EU-average. Thirdly, budget deficit was reduced. Therefore, there was an optimism of a repetition of the 1950s economic miracle. Greek economy concentrated on the sectors that could demonstrate a competitive advantage, such as tourism, financial services, shipping, and telecommunications. About tourism, for example, in 2005 some 15 million tourists visited Greece, whereas in 1980 they amounted to less than 4 million. Regarding financial services, the breakdown of the socialist system and the efforts to bring the Eastern European and Balkan countries closer to the EU gave the opportunity to Greek banks to expand, by establishing subsidiaries in Bulgaria, Romania and Albania.

Although the structural model of the economy was not substantially different from the former pattern of production, where the economy was largely based on a mixture of services and some activity in the manufacturing sector, there were now two pillars that strengthened the prospects for the Greek economy beyond the borders: entering the Eurozone and the opening up of the markets. Having the euro as its currency, Greece was able to have an internationalised movement of capital. This strengthened the entire financial system, while it enabled the shipping industry to relocate towards Piraeus. Yet this reorientation had an adverse impact on productive sectors such as the primary sector and the manufacturing industry. As a consequence, exports have remained unchanged, whereas imports have increased, reaching 45% of the

country's GDP, while the deficit of the balance of payments was financed by bonds' issuance and the subsidies of the European Union.

Greek enterprises were undergoing a transformation process, from small family-owned businesses to bigger ones. Self-employment, while remaining considerably above the EU-average, decreased. The public sector continued to be an attractive employment destination, even when the government was taking measures to decrease the size of the public sector. Here, we should highlight the paradox that in many cases privatised companies did not change their dependence on the state, which remained their principal, if not sole, customer. Moreover, the legal framework of privatisations entailed additional provisions, including additional wages and transferring the staff of privatised companies to other public organisations, which resulted in even more public expenditure.

Fiscal balance was not achieved despite the radical changes in the economy. In the absence of a major tax reform and the continuation of government borrowing, public debt remained a burden and no reduction in the overall budget deficit took place. As a result, the government budget was always in deficit. The numerous stabilisation programmes from 1985 to 2005, although they had the aim to decrease the primary deficit, in fact they increased public debt and this was because there was a lack of the willingness to make radical institutional changes.

For all the countries of the Eurozone, Maastricht criteria were rigorous: any country with consistent violations of the target of three percent had to pay certain fines and penalties, that could be up to 0.5% of the country's GDP and it was Eurostat the authority to verify the figures that each country stated. To that, Greek governments, instead of trying to resolve the very causes of the exceed deficit, they provided questionable data about the level of the deficit. Hence, while Greece stated that the deficit of 2008 was 5%, in October 2009 restated it to 7.7%, revisiting the forecast of 2009 to 12.5% (European Commission, 2010 b, c, d) (Table 7).

Table 7. Convergence criteria and actual figures

	Deficit
Convergence criteria	3%
Greece 2008	5%
Greece 2009 (revised)	12.5%

Source: data from European Commission, 2010 b,c,d.

The European Commission notes that the country provided falsified data 11 times before 2004 and 5 times between 2005 and 2009. This series of falsifications has a clear explanation: the Greek governments tried to hide the fact that the state is increasing instead of reduces

spending and loan funds were not used in productive sectors, in research and development, in restructuring the production structure, but were directed to consumption and indeed to a consumption of imported goods. Thus, the Greek governments considered it a success that in the period 2001-2008 the GDP of the country grew at a higher rate than the average of the Eurozone (annual growth rate of 4.3% against 3.1%), but without taking into account that this growth was not substantial and sustainable, since government spending increased by 80%, reaching 50% of GDP in 2009, while the deficit was 13% of GDP (Nelson, Belkin and Mix, 2010) and the deficit in the Balance of Current Transactions was at 9%, at a time when in the Eurozone it was 1% (Eurostat, 2009). As, therefore, Greece continuously recorded primary deficits and increased the consumption of imported goods, it had to continuously issue new debt, until in 2009 the external debt of the country reached 115%. At the same time, it must be emphasized that the country was plagued by a shadow economy that had taken on inherent characteristics, permeating all sectors, all economic activities, ranging between 25% and 30% of GDP (OECD, 2009).

The global economic crisis, which started in 2007 in the USA, was transferred to Europe and, as expected, to Greece, whose economy had shaky foundations, which were hidden: continuous public spending, trade deficit, current account deficit, increasing primary deficits, increasing level of debt. In 2009 the crisis began to become apparent in Greece and in 2010, with the change of government, the country announced to Eurostat the revised figures: a deficit of 13.6%, which was then revised again to 15.4%. The country exited the markets, as the country's bankruptcy became visible. With a complete inability to access the capital markets, on April 23, 2010 the country officially requested the assistance of the International Monetary Fund and the European Commission, on the basis of which the Memorandum of Economic and Financial Policies was formulated.

# 4.4 Fiscal reforms: measures and results

The agreements with the lenders can indeed be seen as fiscal reform, and this is because the central philosophy of the programmes was that the country should have as a central focus of fiscal policy the absence of primary deficits. Of course, this philosophy has certain axioms on which it operates: limiting the role of the state in the economy, reducing the size of the public sector, accountability, responsibility, and planning. The fact is that the organisations, which had extensively analysed the Greek economy, had noted the chronic lack of competitiveness, the

lack of extroversion, the dependence of citizens and businesses on the state, which they described at length in their reports (IMF, 2008; Porter and Schwab, 2008)

The measures of fiscal reform taken already since the First Memorandum were as follows (European Commission, 2010; IMF, 2010a):

#### BUDGETARY CUTS

- Before disbursing any money under the bailout program, the government had to approve a budget with a provision of decreasing public expenditure of 1.5% of GDP in 2010, or €3.3 billion.
- The above amount would be realised by decreasing health expenditure by 1.1 billion euro, public investment would be decreased by 400 million euro, defence expenditure would be reduced by 300 million euro, also pensions' expenditure would be reduced by 300 million euro and also further cuts on central government's expenditure by 300 million euro
- Furthermore 100 million further cuts in the defence sector, combined with a further €90 million from accelerating public sector pay cuts, while Ministry of Health, Ministry of Internal Affairs and Ministry of Labour would have a further budget reduction by 135 million euro.

#### BANK RECAPITALISATIONS

All banks had to have a core capital ratio (Tier 1 Capital) of 9% by the third quarter of 2012 either by raising equity capital or by getting bail-out funds, or by a combination of the above.

#### **PRIVATISATIONS**

The revenues of privatisations would have to amount 4.5 billion euro by June 2011, reaching 12.2 billion euro by December 2014 and 15 billion euro until December 2015

The Authority of the Privatisation Organisation was decided to have full decision authority to sell assets and liquidate them in separate pieces if they could not be sold as a single entity.

The energy sector was decided to be privatised, with the privatisation of Hellenic Petroleum (oil refinery) and natural gas company and network operator.

#### LABOUR REFORM

Greece had to pass legislation to reduce the monthly minimum wage (then standing at 750 euro) by 22%. For people under 25, there was a 32% cut of wages, combined with the

abolition of automatic pay rises based on length of service and 5% cut in social security contributions.

Around 15,000 state employees were put in a 'reserve status', that is, would receive 60% of their salary and then, after 12 months, they would be dismissed.

The '1 to 5' rule applied, i.e., for each person that would be hired in the public sector, five persons would have to be retired.

#### STRUCTURAL REFORMS

Opening of closed professions was the first step in structural reforms.

With regard to "closed professions", the memoranda noted that the government would propose legislation to remove restrictions on them, including:

- the legal profession, allowing them to be advertised, to set their fee without restrictions and to allow them to operate in all regions of the county,
- the pharmaceutical profession, removing the barriers on the number of pharmacy stores and their gross profit margin.
- the notarial profession, concerning the minimum remuneration, limitation of notaries, geographical restrictions and the prohibition of advertising,
- architects, engineers and chartered accountants, concerning their minimum fees.

#### FISCAL TARGETS

For 2010, the primary deficit of general government would be up to 2 billion euro and would be the last year to record deficit. For 2013, the surplus was projected no less that 3.6 billion euros and for 2014 no less than 9.5 billion euros.

In the period 2012-2014, the general government deficit was set to decrease by 7 percentage points from the 2011 level.

#### DEBT AGREEMENT - FISCAL COMPACT

Regarding the debt agreements and fiscal compact, measures included the increase of VAT as well as of the taxes on fuel, tobacco and alcohol, while the government decided the reduction of wages of the public servants, by cancelling two salaries. Also, there was a reduction of pensions and the mass retirement of public sector workers without replacing them. Therefore, the public sector had a reduction of 26% in terms of size and 39% in terms of salaries' expenditure, allowing the country to be near the Eurozone average.

Also, there was a number of measures regarding public administration, including adjustments to the single payroll and the special payroll, a human resources system based on organisational charts and job descriptions, annual performance evaluations and the empowerment of Independent Bodies, namely the Commission on Competition, the Regulatory Authority on Energy, and the Hellenic Statistical Authority.

All the above measures have produced a number of results.

The first result was that the country's GDP decreased significantly. In total, from 2010 to 2015 the country's GDP decreased by 25%, which is an extremely high percentage and higher than all the forecasts made in the institutions' analyses (European Commission, 2011, 2012a, 2012b, 2014; IMF 2010, 2013, 2014).

The fact is that under the Memoranda, the GDP decline was much smaller, a fact that was later attributed to miscalculations, but also to Greece's delays in structural changes (European Commission, 2011, 2012a, 2012b, 2014; IMF, 2010b, 2013, 2014). However, significant positive effects were also recorded. The most important positive effect was that Greece has achieved primary surpluses instead of deficits. This means that a culture has been formed not allowing similar slippages in the future.

A second very important element is that the borrowing rate has been drastically reduced (Figure 18) and the country regained access to international financial markets.

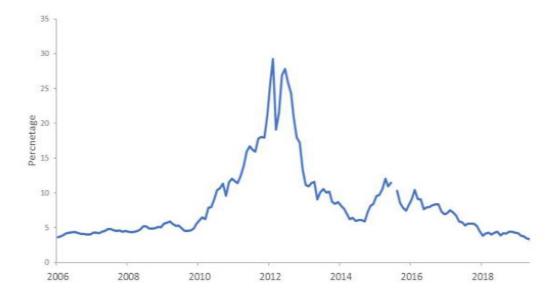


Figure 18. Borrowing rate of Greek government bonds

Source: European Commission, 2020, p 17.

The third major positive effect is that the public sector has been reduced, privatisation has increased, business procedures have been simplified and barriers to trade and investment have been removed (Figure 19).

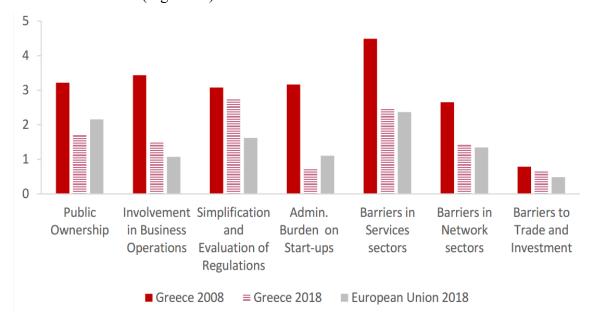


Figure 19. Structural performance and institutional changes

Source: European Commission, 2020, p. 17.

# 4.5 Impact of the crisis on the society

The effects of the crisis are multidimensional; therefore, it is necessary to include the social aspect in the analysis, in line with the suggestions of the institutional economics. One of the most important aspects of this analysis involves looking at the welfare state and how the crisis has brought about changes in social welfare, with the result that indicators relating to social exclusion and poverty have been affected.

Esping-Andersen (1989) developed a typology, where the criterion considered is the extent to which the coverage of social needs is derived from an individual's earned income. Esping-Andersen distinguishes three models:

- the liberal model in this model, commercialisation prevails and dominates, as benefits are provided through the market,
- the conservative corporatist model, where provision is made on the basis of the individual's occupational and social status,
- the social mode in this model there is complete or almost complete decentralisation, with universal coverage of the population.

To these three models should be added the model that Ferrrera (1996) has documented as the Southern European model. In this model, there is a combination of a system of universal health coverage and occupational coverage in terms of insurance. In this model, there is considerable inequality in social benefits, social protection is incomplete, and there is also considerable interdependence between the state and the family.

Greece is a typical example of the southern European model. In particular, Greece had a fragmented social security system, which reinforced inequalities between insured persons. The protection provided against unemployment is inadequate and no protection is provided for those who are not integrated into the formal labour market, who constitute a significant part of the labour force. Finally, there is a costly and inadequate health care system, which offers free health care only on paper, since in practice many patients are forced to pay for their care. It is no coincidence that while the cost of the welfare state in Greece just before the crisis was close to that of the Eurozone countries, it had the worst results in terms of poverty reduction. Specifically, in 2009 in Greece, social benefits contributed to a 3% reduction in the risk of poverty, while in the EU-27 the corresponding reduction was 8.8%. The overall risk of poverty after transfers increased from 19.7 in 2009 to 23.1 in 2012, and this was despite the fact that in 2012 the social transfers given to reduce poverty had been increased to 3.7%, which proves the inadequacy of the social protection system to cope with the problems occurred during the crisis (Hellenic Statistical Authority, 2014).

The inefficiency of the social protection system and its small contribution to the redistribution of income to lower strata is also evident from the large social inequalities that exist in Greece. Inequality in Greece, although always among the highest in Europe, has further increased. The inequality index has risen from 33.1 in 2009 to 34.3 in 2012, while the risk of poverty and social exclusion during the crisis was the highest in the EU-27, reaching 34.6 in 2012 (Hellenic Statistical Authority, 2014). Given that average incomes had fallen significantly, and these indicators refer to relative poverty, it follows that real deprivation has increased much more. Indicative of this is that, based on OECD data, in 2012 17% of Greeks faced difficulties in securing adequate food (OECD, 2014).

As pointed out by many authors the long-lasting socio-economic crisis in Greece negatively influenced the Greek society as a whole. For instance, Stylianidis and Souliotis (2019) have listed the following negative socio-economic consequences that Greek society had to cope with rising unemployment, unregistered employees without social insurance, increasing income inequality, financial hardship and income loss, increasing percentage of population with unmet health needs, increasing prevalence of suicides and depression. Unemployment rate

which, in Greece, was in 2007 relatively moderate (7.8% – close to the EU average) soared to 27.4 % in 2013 and remains still among the highest in EU – at the level of 12.9% in March 2022 (more than twice exceeding the EU average) (Figure 20).

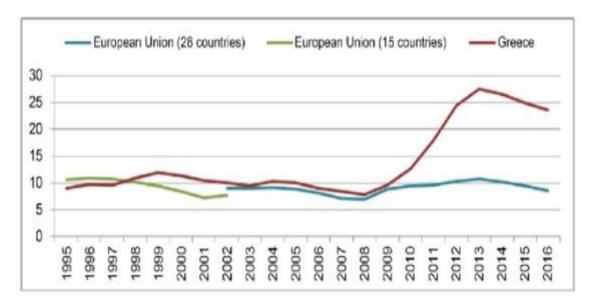


Figure 20. Unemployment rate in Greece (%) and the EU, ages 15-74, all sexes and educational attainments (%), 1995-2016.

Source: Based on Eurostat data: retrieved from Pseiridis, Lianos and Agiomirgianakis, 2018.

The crisis has highlighted in the most tragic way the lack of protection against unemployment. In Greece, unemployment benefits are paid to those who have completed 160 days in the last two years, of which 125 in the last 14 months. Unemployment benefit lasts for up to one year and the amount is the same for all insured persons. A benefit of 200 euro per month – for up to one year – is also given to long-term unemployed (over 12 months) who are registered with the Hellenic Manpower Employment Organisation (Greek abbreviation: OAED) and have a low income (the income criterion has been increased from 5,000 to 12,000 euro per year).

The criteria for granting unemployment benefits exclude a large number of unemployed people: those who are not integrated into the formal labour market, young workers and the long-term unemployed. Given that uninsured work in Greece before the crisis according to some estimates was as high as 25%, it is obvious that this means a significant number, covering a two or even three-tiered workforce, with the uninsured being the most vulnerable social group (European Commission, 2007). The same is certainly true for those who want to join the labour market for the first time, a category that even before the crisis has a high unemployment rate.

Finally, the problem of the long-term unemployed became particularly acute after 2010, leaving many families without income.

The unemployment fund has never covered all the unemployed but during the crisis it was much more painful than in the past, both because the problem is much more acute for new entrants to the labour market and because long-term unemployment was increasing, as well as unemployment among the uninsured and the self-employed. The issue of long-term unemployment is particularly critical if we consider that according to Hellenic Statistical Authority's (2014) (data on the 3rd quarter of 2013), the long-term unemployed numbered almost one million, which corresponds to 21% of the labour force.

Prior to the crisis, the family was largely able to absorb many of the problems caused by unemployment, particularly youth unemployment, which was always higher than that of other age groups. The same applies in part to women, who also had higher unemployment than men. But the crisis has brought a huge increase in unemployment, exceeding 27%, which, combined with a lack of social protection, leads to impoverishment. Unemployment during crisis affected young people and women the hardest, but it also hit male workers aged 45 to 55 years-old, who traditionally had low unemployment and bore the greater burden of supporting the family. While in October 2008 unemployment for the cohort of people 10 to 24-year-old was around 22% it rose to close to 58% in the same month of 2013. During the same period unemployment for the cohort of people 45 to 55 years old jumped from 4.5% to 20.3% (Hellenic Statistical Authority, 2014)

As shown in Table 8, while the number of unemployed persons from December 2010 to December 2013 increased by 696 thousand people, the number of subsidized unemployed persons decreased by 58 thousand. This resulted to a massive reduction of unemployed people receiving subsidies falling to 9% from 26.5%. Although on the basis of these figures it can be concluded that the unemployment benefit system has always been inadequate, but during the crisis was entirely unable to meet the needs of the beneficiaries.

Table 8. Total unemployed, unemployed registered with Hellenic Manpower Employment Organisation (OAED) and subsidised unemployed / beneficiaries.

		Unemployed registered with OAED **		Subsidised unemployed %.
December 2010	691.562	609.249	183.161	26,5%
December 2013	1.387.520	851.600	125.306	9%

Sources: \* Hellenic Statistical Authority 2010, 2013

The crisis has not brought about any major changes in the unemployment protection system, what has mainly changed is the size and characteristics of unemployment. However, there were some regulations that worsened the problems of the unemployed. First of all, the reduction in minimum wages led to a reduction in unemployment benefit to 360 euro per month. Also, while unemployment benefit was still given for 12 months to insured persons with 80 stamps (days of national insurance payments), in 2013 an additional restriction was introduced whereby no one could receive unemployment benefit for more than 450 days in four years. About the long-term unemployed allowance, this was maintained at 200 euro for a maximum period of 12 months. Until the end of 2013, this benefit was given to unemployed persons aged 45-65 with an income of up to 12,000 euro per year who applied within two months of the end of payment of the regular unemployment benefit. These criteria very much limited the number of beneficiaries as shown in Table 8, resulting in only few persons receiving this benefit.

To sum up, it should be noted that the insufficient coverage of the unemployed is the result of two interrelated factors. One concerns the way the unemployment benefit system is structured, based on membership in an insurance fund. Beneficiaries of unemployment benefits are employees who are integrated into the formal labour market, while they are provided with coverage for only one year. The other factor relates to the employment structure. In Greece on the one hand exists a very high level of self-employment – over 30% – and on the other hand very high rates of undeclared work, around 25%. Finally, there is a great difficulty in integrating young people into the labour market. The combination of the way unemployment benefit is paid, and the structure of the labour market inevitably has resulted to insufficient coverage of the unemployed.

Granting unemployment benefit only to insured persons and only for one year cannot de facto cover all the unemployed, let alone under the crisis conditions of booming long-term

<sup>\*\*</sup> Hellenic Manpower Employment Organisation, 2010, 2013

unemployment. Although some of the recent interventions, such as the payment of unemployment benefit to the self-employed, might be seen as a positive measure that potentially expands the beneficiaries of unemployment benefit, on the basis of the data recorded so far this has not happened which is attributed to the criteria that had to be applied for the payment of the benefit. The same applies to the long-term unemployment benefit, which in the end was paid to a small number of beneficiaries.

The social pressure due to the strict austerity measures was severe. In 2012, around 13% of Greek youth lived in the jobless households, and this problem has dramatically increased since 2007 (Figure 21).

According to the UN expert on debt and human rights, Cephas Lumina, the Greek homeless population have been growing by 25% since 2009. As pointed out by Stylianidis and Souliotis (2019) the surveys conducted by Hellenic Confederation of Professionals, Craftsmen and Merchants in 2015 has revealed that 93.7% of Greek households experienced substantial income loss since the beginning of the crisis. The country suffered from increasing income inequality that favoured the richest segment of the Greek population. The suicide rate in Greece has also skyrocketed reaching 477 cases in 2011. This was noticeable in particular among women.

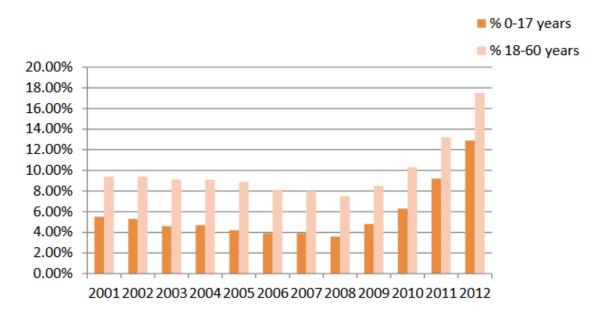


Figure 21. Percentage of the population living in jobless households (except households of students between 18 and 24 years old who do not work), 2001-2012.

Source: Oxfam (2013)

The need to reduce costs, combined with the inability of governments to push through institutional reforms quickly, has led to across-the-board reductions in the health sector and the passing on of some of the costs to patients. The horizontal cuts have resulted in hospital shortages at a time when more and more people started to turn to public hospitals because they were unable to afford the costs of private care. On the other hand, patients' contributions to medicines have increased, while outpatient visits were subject to the payment of 5 euro. Finally, many diagnostic tests have not been reimbursed by the insurance authority. As a consequence of these changes, the share of private expenditure increased by almost three percentage points between 2009 and 2011, despite the fact that disposable income fell dramatically (OECD, 2013b).

However, the biggest problem arose from the fact that more and more people were without health insurance coverage either because they were unemployed, or working uninsured, or unable to pay their contributions. The total number of people insured with the government insurance bodies has fallen by a third since the crisis (Matsaganis, 2013). The result is that many people have no access to health care, a fact confirmed by the large numbers of people who resort to volunteer doctors.

This is also evidenced by related studies showing that the proportion of people who did not go to the doctor or a medical centre despite believing they should have gone, increased between 2006 and 2011 (Karanikolos et al., 2013). Around 33% of Greeks had no access to public medical insurance during the crisis period. Unmet health needs in Greece were, over time, at a much higher level than the average for both the EU and Eurozone countries. Specifically, in all years, from 2008 to 2018, the population with unmet health needs in Greece was much higher than both the EU and Eurozone averages (Figure 22). What is of particular importance is that Greece recorded a surge in unmet needs in the period 2011 to 2016, i.e., the period when Greece faced a major economic recession. It should be noted that in the period from 2010 onwards, significant cuts in general public spending and especially in health spending were decided.

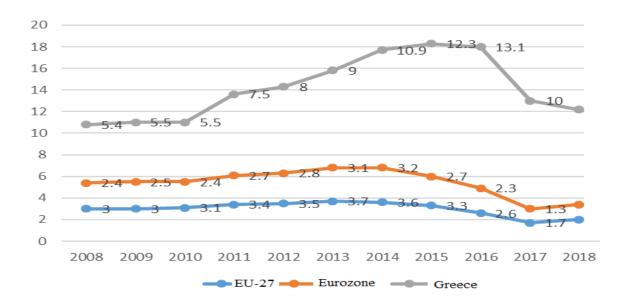


Figure 22. Unmet health needs, Greece and Eurozone, 2008-2018

Source: own collaboration, data from Eurostat, 2020

Extremely important about unmet health needs in Europe is who is the most affected. As illustrated in Figure 23, while the percentage of those with unmet health needs who belong to the highest income category has been below unity for a number of years and in 2015 was at 2.8%, in contrast for the poorest strata the percentage has been steadily increasing and in 2015 it reached 17.4%. Corresponding data for Greece are missing but it seems that it might be even worse.

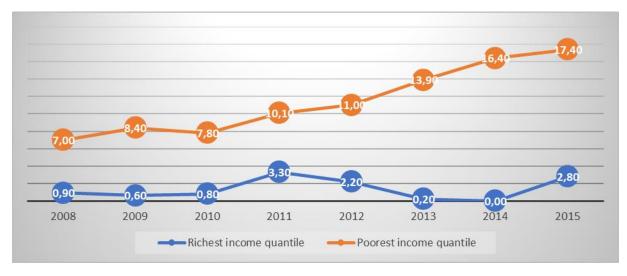


Figure 23. Percentage of population with unmet health needs in European Union, with higher and lower incomes, from 2008 to 2015

Source: own elaboration, data from European Commission, 2017, p. 1

The economic crisis in Greece has resulted in an increase in the number of businesses that have closed down, a surge in unemployment and a significant reduction in workers' wages. These events increased the number of workers seeking and finding jobs in foreign countries, a phenomenon referred to in the literature as brain drain (Theodoropoulos et al., 2014). Brain drain is one of the most important negative consequences of the economic crisis in Greece. According to the Bank of Greece (2015), in the period 2008-2013, the number of young people aged 25-39 years old who left Greece in search of work in foreign countries amounted to approximately 223,000. The first point to note is that the bulk of Greeks who migrate to other countries to find work were people of high scientific level, many with postgraduate degrees, or even PhDs, and highly qualified in their field of work.

Commander, Kangasniemi and Winters (2004), worn that a country, through full labour mobility, can lose its most valuable human resources through a brain drain of the most skilled people who go to another country, depriving their country of origin of its future potential. This has happened and is being witnessed in Greece, which has a brain drain of highly skilled human resources, in the training of which it has invested considerable resources, but because of the recession and the fact that structural problems accelerated by adoption of the common European currency, it has been very difficult to employ them domestically. Absolutely indicative is the data with regard to one of the most specialised sectors, that of doctors. As documented by Fillippidis (2015) research, in the period 2008-2013 there was a 113% increase in the number of Greek doctors qualified in the UK, while the number of Greek doctors in Germany increased from 1,708 in 2008 to 3,011 in 2014.

Lambrianidis and Pratsinakis (2016) underlined the increased willingness of Greek people to emigrate and leave their country during the period of crisis (Figure 24).

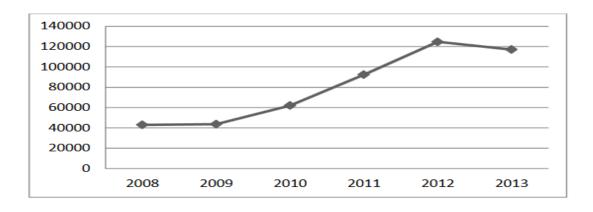


Figure 24. The emigration outflow from Greece in the period of crisis, 2008-2013.

Source: Lambrianidis and Pratsinakis (2016,8) based on Eurostat data

Backes at al. (2018) summarises the negative impact of the crisis on the Greek society in particular on citizens of the rural peripheral and the most deprived areas, mentioning that in 2017 38.9% of people living in rural areas were at risk of poverty, the percentage of households that could not afford to have every two days a meal with animal protein (or the equivalent of plant protein) climbed to 14% in 2016, while it was 8% in 2008, and the households having food insecurity in 2016 reached 20,7%.

The austerity measures described in the previous chapters were perceived by the Greek society as one of the key reasons of the growing financial hardship. As indicated in the Oxfam report (2013) the austerity measures envisaged among others reduction of the pension payments by more than ¼, accompanied with setting the retirement age both for men and women to 67 years. There was also increase of the VAT level by 10 percentage points launched across all categories of goods and services. For instance, VAT tax on agricultural product skyrocketed from 4% between 1993 and 2010 to 15.4% in 2016. This increase mainly penalized low-income groups. In 2010, a massive lifting of the income tax rates was also enforced. The tax rate increased from 5% to 40%. for one person enterprises with turnover exceeding €40,000 at the yearly basis. The tax rate was put up by 5 percentage points from 40% to 45% also for the households having an annual income above €100,000.

The problem was that the situation of the state budget has not allowed for real compensation of this hardship. The Greek government launched several social programmes in order to protect the most vulnerable segments of the Greek society against the fallout from austerity. For instance, a special law was passed to allow social support for low-income households. After that Social Solidarity Scheme was introduced under which government offered a monthly allowance to these households. But this support was limited up to €200 per household per month and the eligibility criteria were very tough so, the help was limited to the most severe cases. Many households being in real need of external supports were therefore excluded. This gap was filled in by the private NGOs and other representatives of the civic society including also religious charities, which offer immediate support by providing clothing, food and personal hygiene products. However, also more sophisticated aid programmes have been launched in parallel, including free school meals financed in line with the principles of financial engineering (combing financial transfers from local budgets, central budget and civic society funds), as well as establishment of food banks, 'social grocery' stores and soup kitchens for the poorest. Also, solidarity economy has grown rapidly during the crisis period. According to Backes et al. (2018) "372 social enterprises were registered in 2013 while in the years 2014,

2015 and 2016 these rose to 585, 714 and 907 respectively". This should be seen as an evidence of Greek society for self-organisation during the hardship years.

The austerity measures have also changed the Greek political landscape, with civic unrest and the rise of anti-establishment, radical parties. This process of erosion of the existing political landscapes was crowned in 2015 with a victory in national election of the left-wing, anti-austerity Syriza party (Coalition of the Radical Left – Progressive Alliance). This meant real end of more than forty years of two-party rule in Greece. The victory was propelled by the Syriza's election programme promising renegotiation of bailout terms, debt cancellation, and renewed public sector spending. However, despite all election promises Syriza, when elected, had to accept the third memorandum and austerity measures related to it. Nowadays Syriza remains the second most important party in the Greek Parliament.

The reaction of the Greek society and its disappointment with the austerity measures was not only limited to the dismissal or taking out of power of the political forces that were blamed to be responsible for the depth and severity of the crisis in Greece. The anti-austerity spontaneous movement was formed as the reaction to the increasing hardship. Several demonstrations and general strikes were organised across the country. The triggering signal was the public wide disappointment related to cutting public spending and raising taxes announced by the government in 2010. The big demonstration was organised in Athens on 5 May 2010, during which three people were killed by the police. As the follow-up, Indignant Citizens Movement (anti-austerity movement launched by the Direct Democracy Now!) organised second wave of demonstrations in 2011 in all larger cities in Greece. Although these demonstrations meant to be peaceful, some of them turned violent, in particular in Athens. The demonstrations in May 2011 were organised using social media so the May 2011 were nicknamed "May of Facebook". They lasted till August 2011. The reaction of police in many cases were very brutal (Dalakoglou 2011). But willingness of the Greek society to continue them and even acceleration of public riots should be seen as an evidence of big disappointment of the Greek society with the socio-economic situation in the country and long-lasting hardship.

The analysis provided above reveal several channels regarding how the crisis affected the country's economy. They are related to deterioration of the disposable income of the society (diminished purchasing power), reduction of the government opportunities to alleviate the crisis by stimulating aggregate demand, outflow of foreign investors, changes in political landscape (increase of populism) and increased number of the acts of violence. Having in mind what was said on the football industry in the previous chapters of the thesis some of them seem of

particular importance with regard to the sport entities and football clubs in particular. One can find several patterns that might reduce clubs' profitability in the period of crisis that would require further examination (Figure 25). The first channel is related to the decrease of disposable income of the Greek society due to the rise of unemployment rate, increase of taxation level and cut in pension schemes and in the welfare benefits. All these might result in reduction of frequency of attending football events by the spectators and drop in the tickets sale. This reduction of revenues could be compensated by higher income from the sponsors or from the media broadcasting the football events, but it seems not very realistic to assume that these additional incomes might offset the lost ones. In contrary monopsony can even try use the "crisis" arguments for diminishing its financial supply to the clubs after expiring of the precrisis contracts. The bargaining power of clubs might be weak during the crisis period. The second channel is related to the social factors such as increased violence, level of disappointment and social unrest. This in turn might increase the frequency of the hooligan type of behaviour during the football events. Such increase means additional costs for clubs (tighter security measures) but also can discourage low- and high-income customers for purchasing tickets to the matches. The third channel is related to the external factors describes in chapter 1.5 (PESTEL analysis) not related to the purchase decisions of the football spectators. Crisis might change environment in which football clubs operate. For instance, crisis has resulted in political instability in Greece, changes in employment law, changes of relative prices of energy, availability of foreign employees, changes of interest rates and taxation policy etc. Some of these factors e.g. (increased tax rates, unwillingness of good players to stay in the country suffered from crisis, tougher fiscal controls) might create additional costs to the clubs. But also, revenue side might be affected. For instance, weakening of the economic power of the central governments, lower tax basis of the local governments, increase of the populist sentiments led to the inability of the public sector to offer to the sport industry meaningful stability or aid programmes similar to the ones proposed to the other segments of the Greek economy. This has negatively influenced a competitive position of the Greek sport in relation to the rest of the Greek economy.

One should also keep in mind the existence of the important feedback-loops. Lower revenues of the clubs might limit their ability to purchase famous players and investing in stadia (Szymanski, 2010). This in turn might diminish attractiveness of the football industry and discourage spectators to attend the matches and to purchase the gadgets of the football clubs. Lower lever of the football performance might also discourage the number of people paying

subscription for watching football matches in TV (Plumley and Wilson, 2023). Also, the lower revenues of a club lead to lower brand value and this will result to a lower franchise value (Humphreys and Lee, 2010; Humphreys and Mondello, 2008; Miller, 2007).

Out of the three channels the two ones will be investigated more in depth in the next chapter of the thesis. The main reason is the focus of the thesis on the revenue from the ticket sale, namely direct economic relation between clubs and spectators. The third factor seems to be very complex, thus more difficult for quantitative economic examinations. However, it will be tackled indirectly in the empirical chapter of the thesis. The in-depth interviews performed with the experts partially highlights the aforesaid complexity. The problem is that the impact of the changes of the broad external environment on the financial situation of the Greek clubs is mitigated by many factors that can be only properly revealed in multi-discipline studies combing knowledge of economics, sociology, political and legal science. Its proper application would require use of the expert knowledge that was not available to the author of the thesis during its compilation.

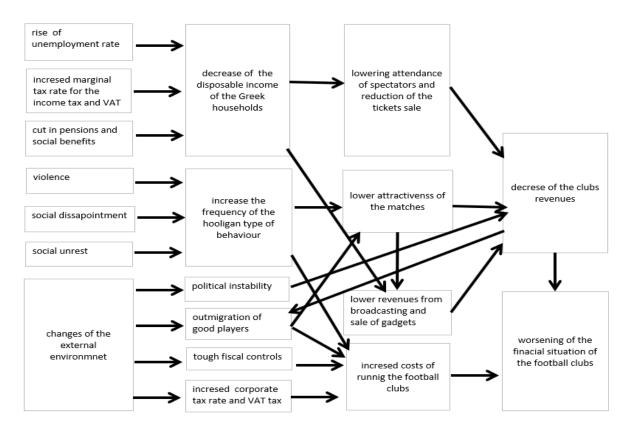


Figure 25. The channels of the influence of the crisis on the Greek football clubs' financial situation

Source: own elaboration

# **CHAPTER 5**

# MECHANISMS INFLUENCING FOOTBALL INDUSTRY ECONOMIC PERFORMANCE DURING THE CRISIS

# 5.1 Research hypothesis and research strategy

As it was stated in the introduction the main research hypothesis concerns negative impact of the 2008 crisis on the Greek professional football clubs. This chapter is devoted to verification of this hypothesis as well as secondary hypothesis listed in the introduction.

The main hypothesis of the research is that the economic crisis had a negative impact in Greek professional football clubs' revenues. This hypothesis is being substantiated by the following secondary hypotheses:

- H1: The stadium attendance number of attendees decreased during the period of the economic crisis.
- H2. The competitive performance of football clubs during the crisis diminished, and among the reasons is lower quality of transfers.
- H3. The attractiveness and competitiveness of the game as perceived by the people decreased during the crisis.
  - H4. Factors conditioning attendance have changed during the crisis.
- H5. The impact of crisis on the decision of supporters to attend the games was insignificant.

The study does not examine other sources of revenues, such as the ones mentioned in the previous chapters, including rights from broadcasting and sales of memorabilia, due to the lack of available data. Regarding costs, also most football clubs do not publish their financial statements – which is another sign of the deficiencies of the institutional environment.

In economics literature, two main types of research are recorded: quantitative and qualitative ones (Robson, 2010). Both have been applied in this thesis. The reason is that thanks to that more general information obtained through quantitative research could be substantiated with the knowledge of football experts. Quantitative research is based on the assumption that there is an objective reality that exists independently of the perceptions of individuals. Therefore, the central philosophy of quantitative research is that the researcher can investigate the objective reality by statistically analysing the respondents' answers. The quantitative research was based on information obtained from a closed-ended Likert-type questionnaire, and

data obtained from official statistical sources and club reports and secondary analysis. These data were subject to the panel data regression approach.

Qualitative research makes it possible to identify attitudes and aspects of the participant's personality, as well as to ascertain the knowledge and information possessed by the participant (Mialaret, 1997). Although the results obtained cannot be generalized towards bigger population in combination with quantitative methods, they allow to better understand mechanisms and syndromes behind different decisions of the market agents. The communication and interaction between persons, guided by the researcher in order to elicit information relevant to the subject of the research is the interview, the main tool of the qualitative method (Cohen and Manion, 1992). The interview enables the experiences, opinions, knowledge, expectations and feelings of the respondents to be collected. The direct and personal communication between the researcher and the respondent allows for greater flexibility in the way questions are structured and presented. It cannot be overlooked that the interview does not provide objective information, but rather the respondents' idea of reality and the way they interpret it.

The qualitative analysis served as a starting point in this thesis. They were used for formatting a questionnaire. The method of analysis chosen in this research is Thematic Analysis, which is a basic analytical tool in qualitative research. Thematic analysis consists of systematically identifying, organising and understanding recurring patterns of meaning within a dataset (Braun and Clarke, 2012). Its purpose is to highlight thematic patterns or themes within the data. A thematic pattern is a category that emerges from within the data, through the coding of written or transcribed texts, relates to the research questions of the study and results in a theoretical understanding of the phenomenon under study (Bryman, 2017).

The analysis focuses on meaning in a dataset and allows the researcher to understand the meanings and experiences of a set of individuals and identify commonalities in the way an issue is discussed (Braun and Clarke, 2012). The research questions are the drivers of the analysis, as the texts to be analysed are selected on the basis of whether and how they answer the research questions. Thematic analysis focused on analysing meaning across the data, examine a particular dimension in depth, highlight only the obvious or surface meanings of the data, or delve into beliefs and meanings behind them (Braun and Clarke, 2012).

This approach is guided by the research questions, takes into account the concepts, theories and schemas that have emerged during the literature review and includes at its beginning a first step of analysis that precedes, according to the author, the first step of getting familiar with the data (Braun and Clarke, 2012).

Also, the qualitative research served as a starting point for preparation of the survey it was also very useful for interpretation of the results obtained from the survey.

# 5.2 Research tools and researched group

The researched population is defined as the set of units who have common characteristics that are relevant to the subject of the study. The population in this study is made up of those who have an interest in soccer and professional soccer clubs. The researched group (the non-random sample) was those who were willing to answer the questionnaire (Dawson, 2009).

The qualitative study was conducted by interviewing three sports journalists, specialized in covering professional football events. The reason to concentrate on journalist is that they are experts in the football nuances and still willing to share their knowledge. The club managers and the athletes are too deeply involved in the internal affairs of their clubs. Therefore, usually reveal only some facts and hide the others. Initially more journalist was invited but they did not reply to researcher's request to participate in the research and these three are the sample of convenience.

The type of interview chosen is the semi-structured interview with specific thematic questions around the researched topic. The semi-structured interview offers a great deal of freedom for the interviewee to express themselves and enhances their spontaneity, reducing the intrusiveness of the interviewer who adopts a more supportive attitude (Kothari, 2004). Semi-structured interviewing uses techniques from both structured and focused interviewing. It is characterized by a set of predetermined questions but shows more flexibility and follows the interviewee. Generally, there is a core set of questions related to the topic being explored, but depending on the respondent's answers, the researcher may change the course of the questions or ask additional clarifying questions.

The aim is to follow the respondent's thoughts and to analyse any additional issues that may arise, feeling free to talk to someone they trust. However, this freedom in the way of responding also brings to the fore an additional difficulty. The researcher has to be very careful both in coding and analysing the information and data extracted from the respondent's answers. Particular care was taken to ensure that the questions are within the scope of the study and that they structure the response to the research questions and that the researcher is neutral – she has no influence on the results obtained.

In the course of the analysis, the codes were merged according to their meaning into broader and more general conceptual constructs, the thematic patterns. When searching for thematic patterns, repetitions of themes, metaphors and analogies in discourse, transitions from theme to theme, similarities and differences in response modes, linguistic links and causal relationships, missing data and material related to relevant literature were sought, as suggested by Ryan and Bernard (2003, in Bryman, 2017). A thematic map was eventually formed that highlighted the key themes, their properties, and the relationships between themes and their properties. Final stage is devoted to presenting and discussing the themes that emerged from the analysis as answers to the research questions by providing relevant quotes, as it was previously stated.

The quantitative analysis was done with the use of the questionnaire prepared and piloted by the author of the thesis. Regarding the quantitative analysis, statistical significance was calculated using the Kruskal-Wallis test, which is a nonparametric test which does not require the groups to be normally distributed. Thus, first it has been examined whether the distribution in the answers follows the normal distribution or not. In order to do that, the Kolmogorov-Smirnov test has been applied. The p-values lower than 0.050 requires rejection of the hypothesis that the answers to the questions follow the normal distribution.

The number of participants of the research is composed of 123 individuals who participated in the survey by completing the questionnaire. It was not possible for the researcher to make a probability sampling, as there is no practical possibility to have the list of all Greeks attending football games. For that reason, random sampling was excluded. The other option would be to continue with a systematic sampling, but the deeper demographic analysis of the Greek persons attending football matches (sex, age, education, occupation) during the crisis have not been available to the author of the thesis. For that reason, the opportunity sampling was applied. Therefore, as it will be further stated in the limitations of the study, the results of the analysis cannot be generalized on the entire population of Greek citizens.

The survey was conducted from January to March 2020.

Regarding age, 28.5% of the researched group was in the age group 18 to 29, 25.2% in the age group 30 to 39, 26% in the group 40-49, and 20.3% are over 50 years old (Figure 26).

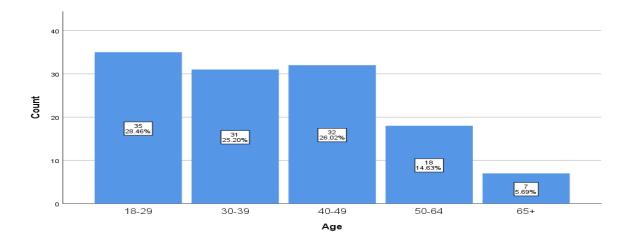


Figure 26. Age structure, researched group

Source: own elaboration based on survey results

As shown in Figure 27, there are differences in the age structure between the population researched in the study and the Greek population, since according to the census data, the percentage of the population between 20 and 29 years old was 12.5%, while in the research, the percentage of the participants between 18 to 29 is 28.5% (hence, a part of the difference is due to the different age structure). For the ages 30-39 the country's census results are 15.1% and for the research is 25.2%, for 40 to 49 years old the country's census indicates 14.6% and for the research is 26%, and for 50 years old and older the country's census is number 38.2% and for the research is 20.3%. So, it seems that the population researched is younger in comparison to the entire Greek population. That makes sense since probably the football enthusiasts are younger indeed in comparison to the national averages.

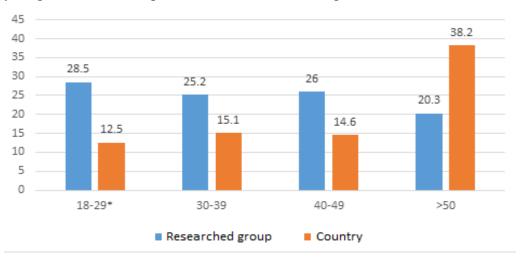


Figure 27. Age structure, researched group and country census

Source: own elaboration based on survey results and official census data of 2011.

<sup>\*</sup> For country's census, 20 to 29, for research 18 to 29

Regarding level of income as perceived by the participants themselves, i.e., their own perception as having zero income, low income, medium or higher, 13% of respondent declared that they have zero income, 13% considered themselves as having low income, 19.5% state that they have low to medium income, 48.8% considered that they have medium income and 5.69% stated that they have medium to high income (Figure 28).

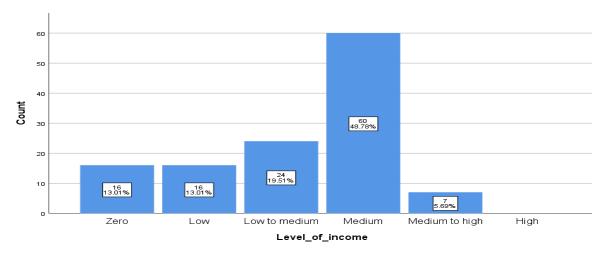


Figure 28. Level of income, researched group

Source: own elaboration based on survey results

Regarding the occupation, 6.5% are students, 13% are part-part employees, 57.7% are full-time employees, 9.8% are self-employed, 7.3% are unemployed and 5.7% are retirees (Figure 29). It should be noted that the percentage of the participants who are unemployed is much lower than the official unemployment rate, which in the time the research has been conducted, was at 15.8%.

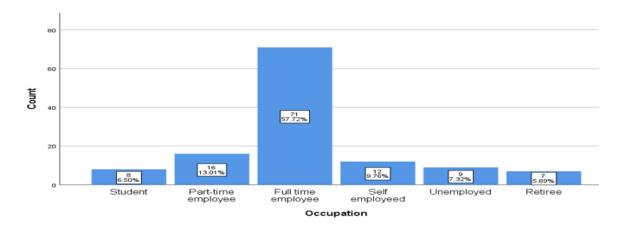


Figure 29. Occupation, researched group

Source: own elaboration based on survey results

Regarding the city size the 57 respondents were from big city, ('big' is considered a city with a population over 500,000), 39 from 'smaller' city (is the one of 100,000 to 500,000) and 27 from 'small' town (is a city or town with a population less than 100,000). Thus 46.3% of respondents came from big city, 31.7% from a smaller city and 22% from a small city (Figure 30).

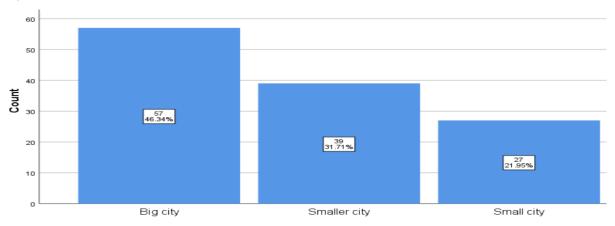


Figure 30. Size of city, researched group

Source: own elaboration based on survey results

As for the level of education, 30.9% of respondents has a technical post-secondary degree, 31.7% had university degree and 37.4% had a Master of Science and/or Ph.D. degree (Figure 31). The absence of secondary school graduates shows that all families are concerned that their children should have an educational qualification above high school, whether it is a technical vocational qualification or a university degree.

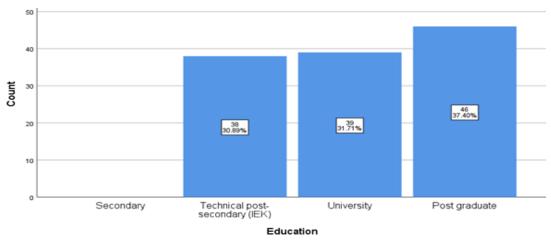


Figure 31. Level of education, researched group

Source: own elaboration based on survey results

Regarding whether the participants had experienced a decline of their income during the crisis, 32.5% of respondents replied that their income significantly decreased, 52.8% decreased and 14.6% that it remained unchanged (Figure 32).

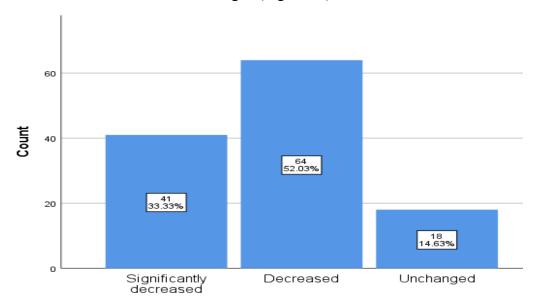


Figure 32. Change of income, researched group

Source: own elaboration based on survey results

As for the change of employment during the crisis, although 45.5% of the participants haven't experienced a change in their employment status, 7.3% got unemployed, 31.7% remained at the same company but with less wage, and 8.1% moved to worse job, while none of the participants moved to a better job, nor got promoted (Figure 33).

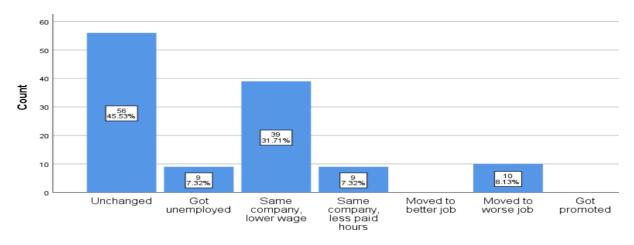


Figure 33. Change of employment status, researched group

Source: own elaboration based on survey results

On the question whether they support a football club that is in the local area of where they currently live, 82.1% do support a club and 17.9% do not (Figure 34).

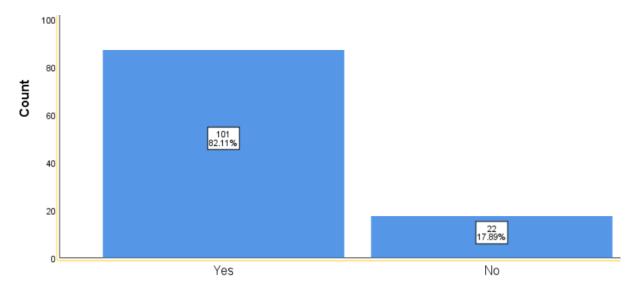


Figure 34. Support of a professional FC, researched group

Source: own elaboration based on survey results

As for the distance from the stadium, 39% of the respondents lived in a distance 0 to 3 km., while 22,8% of them lived in a distance from 3 to 5 Km., and 38,2% lived in a longer distance, more than 5 km. (Figure 35).



Figure 35. Distance to stadium, researched group

Source: own elaboration based on survey results.

The first issue to be examined as a starting point for the quantitative analysis is correlation between the independent variables of the study, i.e.:

- age
- city
- level of income
- level of education
- occupation
- change of employment status during crisis
- change of income during crisis
- support of a professional football club
- distance to stadium

For detecting the correlation between the variables, the Cramer's V coefficient has been used, which indicates how strongly two categorical variables are associated. 0 indicates a very weak association between the two variables and 1 indicates a perfect association between the two variables. A value lower than 0.29 indicates a weak relationship, from 0.30 to 0.49 indicates moderate relationship and from 0.50 to 1 indicates a strong relationship between the variables.

The analysis shows a very weak correlation, between age and city having a value of V=0.133 (Table 9). This helps the analysis, since the differences that might be found in the answers between cities are not due to the age group of the participants.

Table 9. Correlation between age and city (Cramer's V) in the researched group

		Value	Approximate Significance
NT	Phi	0.188	0.825
Nominal by Nominal	Cramer's V	0.133	0.825
N of Valid Cases		123	

Source: own elaboration based on survey results

The value of 0.401 (Table 10) indicates a moderate relationship between age and the level of income, although it would be expected the correlation to be rather strong, due to the 'age effect', i.e., that in normal periods it is expected that in younger ages persons would have lower income and will grow in the life cycle, falling again in the retirement age, having an inverted U-shape slope (Karonen and Niemelä, 2020; van Ours and Stoeldraijen, 2010).

Table 10. Correlation between age and level of income (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.803	0.000
	Cramer's V	0.401	0.000
N of Valid Cases		123	

The analysis shows that there is a rather strong and significant (V=0.663, p=0.000<0.05) relationship between age and occupation (Table 11). This can be explained due to the fact that all unemployed participants are below 30 years old, and all retirees are over 65 years old. Therefore, these two variables should not be used together in the explanatory econometric models.

Table 11. Correlation between age and occupation (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	1.326	0.000
	Cramer's V	0.663	0.000
N of Valid Cases		123	

Source: own elaboration based on survey results

The analysis shows a very weak correlation of V=0.202 between the age and education (Table 12), so education is not differentiated between the age cohorts of the participants.

Table 12. Correlation between age and education (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.286	0.262
	Cramer's V	0.202	0.262
N of Valid Cases		123	

Source: own elaboration based on survey results

The analysis shows a very weak correlation between the age and the change of income during the crisis, i.e. correlation having a value of V=0.202 (Table 13). This is evidence that the crisis has affected all age cohorts. As documented in the literature, in periods of economic crisis, all age cohorts are being affected: people are out of work due to redundancies, or have their wages reduced, while many self-employed people are left without an income because they choose to close their business due to the crisis, and this holds true not only for younger people, but for middle-aged as well (Matsaganis, 2013; Mendenhall et al., 2008).

Table 13. Correlation between age and change of income during the crisis (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.187	0.831
	Cramer's V	0.132	0.831
N of Valid Cases		123	

There has been a rather weak correlation between the age and the employment during the crisis, as presented in Table 14 (V=0.336), supporting the above statement that all age cohorts have been affected by the crisis.

Table 14. Correlation between age and change of employment status during the crisis (Cramer's V) in the researched group

		Value	Approximate Significance
N ' 11 N ' 1	Phi	0.672	0.000
Nominal by Nominal	Cramer's V	0.336	0.000
N of Valid Cases		123	

Source: own elaboration based on survey results

, There has been very weak relationship between the age and the support of a professional football club, since Cramer's V is 0.091 (Table 15), while for the age and the distance to the stadium, there is very weak relationship as well –Cramer's V = 0.10 (Table 16).

Table 15. Correlation between age and support of a professional football club (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.091	0.908
	Cramer's V	0.091	0.908
N of Valid Cases		123	

Source: own elaboration based on survey results

Table 16. Correlation between age and distance to the stadium (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.14	0.96
·	Cramer's V	0.10	0.96
N of Valid Cases		123	

Source: own elaboration based on survey results

Regarding whether the size of the city is a factor that differentiates the level of the income, the analysis shows that the level of income has had a very weak correlation with the size of the city (V=-0.253) (Table 17). The issue of the link between the city size and the economic growth, and the level of income has been explored, with the results showing that in the developed countries the level of income varies according to the size of the city but the impact is not strong and it decreases over time (Castells-Quintana, Royuela, and Veneri, 2020; Frick and Rodríguez-Pose, 2018).

Table 17. Correlation between size of the city and level of income (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.358	0.046
	Cramer's V	0.253	0.046
N of Valid Cases		123	

Source: own elaboration based on survey results

Also, the analysis shows that the size of the city has hardly been correlated with the change of the level of income during the crisis (V=0.148) (Table 18). Although the analysis of Psycharis et al. (2014) stated that in Greece the most-urbanized regions have been most affected by the crisis, other studies show that the least-developed cities, that have less population than the 'big' cities, have been most affected (Petrakos and Psycharis, 2016; Palaskas et al., 2015).

Table 18. Correlation between size of the city and change of income during the crisis (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.209	0.253
	Cramer's V	0.148	0.253
N of Valid Cases		123	

Source: own elaboration based on survey results

Also, the city size (as for the number of the population) has not been correlated with the category of the occupation (V=0.10) (Table 19).

Table 19. Correlation between size of the city and occupation (Cramer's V) in the researched group

			Value	Approximate Significance
Nominal	by	Phi	0.14	0.65
Nominal	-	Cramer's V	0.10	0.65
N of Valid C	Cases		123	

Source: own elaboration based on survey results

The size of the city has not been correlated with education (V=0.10) (Table20) hence the participants' level of education does not differ among cities.

Table 20. Correlation between size of the city and education (Cramer's V) in the researched group.

		Value	Approximate Significance
Nominal by Nominal	Phi	0.14	0.65
	Cramer's V	0.10	0.65
N of Valid Cases		123	

Source: own elaboration based on survey results

Table 21 shows that there was a very weak relationship between the size of the city and the tendency of participants to support a football club.

Table 21. Correlation between size of the city and support of football club (Cramer's V) in the researched group.

		Value	Approximate Significance
Nominal by Nominal	Phi	0.09	0.57
	Cramer's V	0.09	0.57
N of Valid Cases		123	

Source: own elaboration based on survey results

Also, there was very weak correlation between the size of the city and the distance to the stadium, having a coefficient of 0.14 (Table 22).

Table 22. Correlation between size of the city and distance to the stadium (Cramer's V) in the researched group.

		Value	Approximate Significance
Nominal by Nominal	Phi	0.20	0.27
	Cramer's V	0.14	0.28
N of Valid Cases		123	

Source: own elaboration based on survey results

As for the correlation between education and the level of income, while it would be expected that, as the literature states, there would be a positive correlation (Stryzhak, 2020; Patrinos and Psacharopoulos, 2018; Wolla and Sullivan, 2017), the two variables have hardly been correlated in the researched group (V=0.104) (Table 23). This can be explained by the fact that the income decreased in a similar way among all educational levels, hence many of the participants had the same low level of income even though some of them had a higher university degree.

Table 23. Correlation between education and level of income (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.147	0.955
	Cramer's V	0.104	0.955
N of Valid Cases		123	

Also, education has not been correlated with the change of employment status during the crisis (V=0,196) (Table 24), since those who report worse employment status (got unemployed, had lower salary, less paid hours and/or move to worse job) are of all educational levels, without any differentiation. Also, education has hardly been correlated with occupation (Table 25), nor with the change of income during the crisis (Table 26).

Table 24. Correlation between education and change in employment status (Cramer's V.) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.277	0.308
	Cramer's V	0.196	0.308
N of Valid Cases		123	

Source: own elaboration based on survey results

Table 25. Correlation between education and occupation (Cramer's V.) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.23	0.74
	Cramer's V	0.16	0.74
N of Valid Cases		123	

Source: own elaboration based on survey results

Table 26. Correlation between education and change of income during crisis (Cramer's V.) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.17	0.42
	Cramer's V	0.12	0.42
N of Valid Cases		123	

Source: own elaboration based on survey results

There has been almost no relationship between differences among educational levels and the support of a football club (Table 27).

Table 27. Correlation between education and support of a football club during crisis (Cramer's V.) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi Cramer's V	0.14 0.14	0.29 0.29
N of Valid Cases		123	

Also, there has been almost no relationship between education and distance to the stadium (V=0.13) (Table 28).

Table 28. Correlation between education and distance to the stadium (Cramer's V.) in the research group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.19	0.37
	Cramer's V	0.13	0.37
N of Valid Cases		123	

Source: own elaboration based on survey results

What should be highlighted is the correlation between the change of income and the change of employment status. As presented in Table 29, the change of employment status has had a rather strong and statistically significant (V=0,532, p=0.00<0.05) correlation with the change of income. Thus, these two variables should not be used together in the explanatory econometric models.

Table 29. Correlation between income and change of employment status (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	1.063	0.000
	Cramer's V	0.532	0.000
N of Valid Cases		123	

Source: own elaboration based on survey results

The change of employment status had almost no relationship with the tendency of the participants to support a football club (Table 30).

Table 30. Correlation between change of employment status and support of a professional football club (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.19	0.31
	Cramer's V	0.19	0.31
N of Valid Cases		123	

Also, the change of employment status has had almost no relationship with the distance to the stadium (Table 31).

Table 31. Correlation between change of employment status and distance to the stadium (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.21	0.71
	Cramer's V	0.15	0.71
N of Valid Cases		123	

Source: own elaboration based on survey results

As for the occupation, there is a strong and significant relationship between occupation and the employment status (V=0.67, p=0.00<0.05) (Table 32), which is due to the fact that those who got unemployed are still looking for a job, while there is a rather weak correlation between occupation and change of income during the crisis (V=0.36, p=0.01<0.05) (Table 33).

Table 32. Correlation between occupation and change of employment status (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	1.34	0.00
	Cramer's V	0.67	0.00
N of Valid Cases		123	

Source: own elaboration based on survey results

Table 33. Correlation between occupation and change of income during crisis (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.50	0.01
	Cramer's V	0.36	0.01
N of Valid Cases		123	

Source: own elaboration based on survey results

Occupation has had almost no relationship with the tendency to support a professional football club (Table 34), neither with the distance to the stadium (Table 35).

Table 34. Correlation between occupation and support of a professional football club (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.23	0.28
	Cramer's V	0.23	0.28
N of Valid Cases		123	

Source: own elaboration based on survey results

Table 35. Correlation between occupation and distance to the stadium (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	019	0.93
	Cramer's V	0.13	0.93
N of Valid Cases		123	

Source: own elaboration based on survey results

The change of income during the crisis has had almost no correlation with the tendency to support a football club (Table 36), neither with the distance to the stadium (Table 37).

Table 36. Correlation between change of income during the crisis and support of a professional football club (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.11	0.49
	Cramer's V	0.11	0.49
N of Valid Cases		123	

Source: own elaboration based on survey results

Table 37. Correlation between occupation and distance to the stadium (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.25	0.10
	Cramer's V	0.18	0.10
N of Valid Cases		123	

Source: own elaboration based on survey results

Lastly, as presented in Table 38, the tendency to support a football club has had almost no relationship with the distance to the stadium.

Table 38. Correlation between support of a professional football club and distance to the stadium (Cramer's V) in the researched group

		Value	Approximate Significance
Nominal by Nominal	Phi	0.25	0.10
	Cramer's V	0.18	0.10
N of Valid Cases		123	

The aggregate results of the correlations between the variables are presented in Table 39. Hence, the only strong relationship is between age and occupation, as well as between the change of employment status and occupation. The fact that all the participants who got unemployed were 18 to 29 years old is the evidence that the crisis affected in the most negative way the younger ages, that is, the most dynamic part of society, especially when one considers that all these young people have post-secondary and academic degrees.

Table 39. Aggregate results of Cramer's V correlations between variables

	Age	City	Level of income	Education	Occupation	Change of employment status	Change of income during crisis	Support of a FC	Distance
Age	-								
City	Very weak	-							
Level of income	Moderate	Very weak	-						
Education	Very weak	Very weak	Very weak	-					
Occupation Change of	Strong	Very weak	Very weak		-				
employment status Change of	Rather weak	Very weak	Very weak	Very weak	Strong	-			
income during crisis	Very weak	Very weak	Very weak	Very weak	Moderate	Rather strong	-		
Support of a FC	Very weak	Very weak	Very weak	Very weak	Very weak	Very weak	Very weak	-	
Distance	Very weak	Very weak	Very weak	Very weak	Very weak	Very weak	Very weak	Very weak	

Source: own elaboration based on survey results

### 5.3 Greek clubs' performance during the crisis (macroeconomic outlook)

The model presented in this subchapter examines whether the economic crisis has an impact on Greek professional football clubs. Two models were run: the first one with GDP as a single explanatory variable and the second one with more variables. In this research GDP rather than GDP per capita has been used because the population in Greece changed during the years of crisis and we want to check impact of all available resources rather the prosperity level only. The second model has employed more variables in line with the research logic presented in Figure 25.

The independent variable in the first model is the natural logarithm of GDP, while the dependent variable is the natural logarithm of the clubs' revenues divided by the fixed assets as the best approximation of the club efficiency. The data includes 11 football clubs for four years. This exact number of clubs is justified by the fact that these are the clubs that played in Champions League in these four years. The number of years represents the period of the economic crisis. It should be noted that the analysed regularity applies only to the time of crisis. We cannot say anything about this regularity in a period without a crisis, since there was no access to relevant statistical data for that period.

As presented in Table 40, the mean value of the dependent variable – the logarithm of the revenues divided by fixed assets – is  $0.596~(\pm 0.0882)$ , having a negative value as the minimum one, which is a solid indication that some of the clubs had negative economic performance during the examined period. It could be argued that this negative performance would be expected, given the economic crisis; but, on the other hand, what is being proven is that there are differences between the club's economic performance, as shown by the comparison of the minimum and the maximum values. Thus, the economic crisis itself could be a main reason of that. The very aim of the analysis in hand is to examine this impact but the crisis did not have common impact among the clubs.

As for the GDP (logarithm), the mean value is at 9.992, with a standard deviation of 0.061. The logarithm of the employment rate has an average value of 1.058, while it should be highlighted the wide difference between the minimum value (0.892) and the maximum value, which, in fact, shows the rapid expansion of the unemployment in these four years. Regarding the rest of the independent variables, the average value of the total assets is, as expected, higher than the liabilities (16.114 to 15.968), although it should be mentioned that the standard deviation of the latter is higher than the value of the former ( $\pm 1.234$  for the total assets to  $\pm 1.416$ 

for total liabilities), showing that the crisis led banks and other lenders to decrease their lending facilities.

Table 40. Description of the key variables

Variable	Full description	Observations	Mean	S.D.	Min	Max	Data source
lRevtoFA	Logarithm of revenues divided by fixed assets	44	0.259	0.39	-0.42	1.82	FCs' financial statements
lGDP	Logarithm of country's GDP	44	4.31	0.03	4.27	4.34	Hellenic Statistical Authority
lTA	Logarithm of total assets	44	16.1	1.26	13.9	18.5	FCs' financial statements
lTL	Logarithm of total liabilities	44	15.968	1.43	12.67	18.75	FCs' financial statements
lHD	Logarithm of households' debt to GDP	44	1.78	0.019	1.76	1.81	CEIC, Bank of Greece
lRoL	Logarithm of country's score on rule of law	44	-0.309	0.053	-0.39	-0.24	The Global Economy website
lUnemp	Logarithm of country's unemployment rate	44	1.058	0.14	0.90	1.25	Hellenic Statistical Authority
City	Ordinal value	44	1.455	0.50	1.0	2.0	Hellenic Statistical Authority

Source: own calculations

As presented in Table 41, GDP and unemployment rate have a correlation of -0.99 and this was the reason of the exclusion of the unemployment rate from the model. The size of the city has a significant negative correlation to the total assets and the total liabilities, proving that the clubs of the two bigger cities in Greece have the higher economic ability, while the ones of the small cities struggle to survive. Although the correlation coefficient between these variables is very high, the analysis includes the size of the city because there is no correlation between this variable and the logarithm of revenues to fixed assets and the logarithm of GDP. Also, total

assets have a very high correlation of 0.98 with total liabilities, which is the reason to remove the total liabilities from the model.

Table 41. Spearman Correlation matrix between variables

	lRevtoFA	lGDP	lTA	lTL	lHD	lRoL	lUnemp	City
lRevtoFA	1,00							
lGDP	0,27	1,00						
lTA	-0,55	-0,04	1,00					
lTL	-0,60	-0,08	0,98	1,00				
lHD	-0,36	-0,91	0,08	0,13	1,00			
lRoL	0,30	0,99	-0,05	-0,10	-0,96	1,00		
lUnemp	-0,31	-0,99	0,06	0,10	0,97	-1,00	1,00	
City	0,33	0,00	-0,66	-0,72	0,00	0,00	0,00	1,00

Source: own calculations

Having excluded these variables, the correlation analysis now includes the variable of the logarithm of the households' debt as percentage too GDP and the logarithm of the rule of law. The level of the household debt as a percentage of the GDP is included in the sense that consumption is affected by the level of the household debt; in fact, debt acts as a complement of income regarding direct consumption. As for the rule of law, the whole chapter regarding the institutional economics as well as the interviews of the primary research prove that the willingness to attend the matches in the stadia and the attractiveness and competitiveness of the championship are being affected by the rule of law, the integrity of the game and the overall perception of how corrupted the whole system is.

As presented in Table 42, the correlation between the households' debt and the rule of law is very high, having a value of -0.96, while the rule of law has a very high correlation of 0.99 to GDP. Also, the household debt has a very significant negative correlation to GDP, with a value of -0.92. Since the GDP is one of the key parameters of the study, the very high correlations between the variables leads to their exclusion from the final model. Size of city is also strongly correlated with total assets and liabilities of the clubs.

Table 42. Spearman Correlation matrix between final variables.

	lRev.toFA	lGDP	lTA
lRev.toFA	1.00		
1GDP	0.27	1.00	
lTA	-0.55	-0.04	1.00

Source: own calculations

Based on all the above, the analysis starts with examining the impact of the GDP on the clubs' economic performance.

The model is called Fixed Effect Model (FEM) as although the constant may vary from unit to unit however the value of the constant  $\alpha_i$  assigned to each stratified unit is assumed to remain unchanged over time. One of the drawbacks of the FEM model is that in case of introducing several dummy variables, several degrees of freedom are lost, thus the reliability of the model is weakened, and the overall econometric inference is questioned. One drawback in the presented panel analysis is the number of observations, but this is due to the limited time period considered. A second drawback is that in order to be estimated by the OLS method, residuals must follow a normal distribution with a zero mean and constant variance. But due to the specificity of the panel data there may be heteroscedasticity and the OLS method may not be applicable. In the case of the present analysis, heteroscedasticity does not apply.

The sub-indicator i in the coefficient  $\alpha_i$  indicates that each of the entities may have a different constant. The empirical panel data model for football clubs' economic performance took the form:

$$y_{it} = \alpha_i + \beta_1 x 1_{it} + \varepsilon_{it}$$

where:

t – the time periods in which the sample is studied t = 1,2,3,4,

i – the football club's number, i = 1, 2, ..., 11,

 $y_{it}$  – the economic performance, measured by the logarithm of the revenues divided by fixed assets,

 $x1_{it}$  – logarithm of the GDP,

 $\alpha_i$  – the individual effect specific for each club – a constant term different for each club,

 $\varepsilon_{it}$  – the error term of the regression for unit *i* in period *t*.

This analysis shows that the economic decline has a direct impact on the revenues to fixed assets of the football clubs, since when GDP drops by 1%, the revenues decrease by 3.83% (Table 43) and the result is statistically significant (p=0.045<0.05) (Appendix C, Table 67), although the R squared is only 16%, i.e., the model explains only a small proportion of the variation in the dependent variable. This can be explained by others factors that are hard to be quantified, such as the quality of management, as well as th quality of players which, as described in 2.4 play a significant role in the team's efficiency.

Table 43. Results of the regression of lRev.toFA with one explanatory variable – fixed effects model

	Coefficient	Std. Error	t-ratio	p-value
Constant	-16.267	7.209	-2.256	0.0477
lGDP	3.833	1.672	2.292	0.0448

Source: own calculations

The next step of the analysis includes more variables that would be examined as explanatory factors of the clubs' economic performance. Of the variables stated in Table 41, have been excluded those that have high correlation between them, in order to avoid autocorrelation.

The empirical panel data model for football clubs' economic performance took the form:

$$y_{it} = \alpha_i + \beta_1 x 1_{it} + \beta_2 x 2_{it} + \varepsilon_{it}$$

where:

 $y_{it}$  – the economic performance, measured by the logarithm of the revenues divided by fixed assets,

 $x1_{it}$  – logarithm of the GDP,

 $x2_{it}$  – logarithm of total assets,

other elements are defined as above.

It has been expected that GDP will have a direct impact with positive GDP elasticity on the revenues, because the lower GDP results to lower available income, which, in turn, leads to a lower consumption of goods (at least, the normal and the luxury ones). Regarding the total assets, it has been expected that they will have a direct impact with positive elasticity, in the sense that the higher the club's assets, the bigger its ability to have valuable players and to be competitive in the championship.

The model of the following regression is the one of fixed-effects, using 44 observations, including 11 cross-sectional units, with a time-series length of 4, having as the dependent variable the lRev.toFA, while the other variables were omitted due to exact collinearity. The results show that the GDP has a direct impact of 2.670, indicating that when GDP drops by 1%, the revenues decrease by 2.67% (Table 44), although it should be highlighted that the result is not statistically significant (p=0.06>0.05) (Appendix C, Table 68). Coefficient for total assets is negative that indicates that higher assets result in lowering efficiency of the club. The results show that total assets have a direct impact of -0.65, indicating that when they increase by 1%,

the revenues by fixed assets decrease by -0.65%, and this with statistical significance (p=0.007<0.05). This issue would require further investigations, some possible explanations are provided at the end of this subchapter, but one can conclude that the assets has not been used as a vehicle for improvement of the financial efficiency of the FCs in Greece in the crisis period. This is the shortcoming that has been addressed in the concluding part.

Table 44. Results of the multiple regression of lRev.toFA, two explanatory variables, fixed effects model

	Coefficient	Std. Error	t-ratio	p-value
Constant	-0.835	5.372	-0.156	0.880
lGDP	2.670	1.257	2.124	0.060
1TA	-0.647	0.190	-3.409	0.007

Source: own calculations

The difference between the two regressions is that, although both showed that the economic crisis, presented as a decrease of GDP, has a negative impact on the clubs' economic performance, in the three-variables regression the result is not statistically significant while in the single-variable regression the result is statistically significant, hence it could be used as an explanatory factor. This difference is an indication that GDP has an impact on clubs' financial performance, but, as stated above, the impact differs between the clubs.

A critical issue that arises concerns the influence of the institutional environment, as both the literature and the experts' reports during the primary research indicate that the rule of law, the level of perceived corruption, the functioning of the judiciary, the tolerance of violence and other parameters of the institutional environment have a major impact on the way the league is constituted, the operation of the teams, the financial management, the perception of football by fans and their intention to attend football matches. The problem, however, is that the rule of law parameter has a correlation coefficient of 0.99 with GDP. Therefore, the inclusion of both variables would lead to collinearity, thus affecting the reliability of the analysis.

However, even though the rule of law parameter was excluded, such a high correlation between the rule of law and GDP confirms all that has been mentioned in relation to the institutional environment and its impact on the economy. Thus, it cannot be considered a coincidence that the economic crisis was recorded in a country such as Greece that scored low on the rule of law and where the lack of an institutional environment is quite evident in the field of football. In the chapter on proposals and conclusions, specific reference will be made to this issue, but it should also be mentioned here that, even today, when the economic crisis has significantly affected football clubs, instead of forming a strong institutional environment, they

continue to operate under fluid conditions, without clear regulations that are universally applicable and without accountability. This is why, in the primary research, both experts and respondents alike consider these issues as a deterrent to attending the stadium.

For possibility of model extension, some important observations can be made. The first observation concerns the impact of a central element of football, which is the quality of the players. Unfortunately, this quality cannot be measured using the officially available data; the fact is that if the team wants to have a good presence on the pitch, just to be competitive, to offer a good show and to win, good players are needed. These players cost significant amounts, but they offer wins, spectators and revenues. Therefore, it is to be expected that there will be a positive impact on the financial efficiency of the clubs.

But there is a problem: not all FCs have the financial capacity to attract good players, nor do they have the ability to retain good players whose contracts are expiring by making a high monetary offer. In fact, only 2 to 3 teams in Greece have such an ability. Thus, a vicious circle is created: rich teams have the ability to buy good players, they win, they compete, they get more revenues and with that they can acquire new good players, and so on. In contrast, poor clubs cannot acquire good players and struggle to survive, never becoming competitive. In fact, even in the case that they have football academies and a good player is created from them, they sell him to the bigger clubs in order to gain liquidity and be able to pay off liabilities.

This parameter is therefore significant because the regression shows a statistically significant negative effect of total assets on financial results, which can be interpreted that even large teams, in the crisis period, do not have the necessary capital for expensive – and therefore quality – transfers increasing adequately their revenues. This, however, leads to the situation that the league as a whole will not be competitive, there will be no interest and teams – even the champions – will not have a distinction in a higher level of competition (e.g., in pan-European championships) since they will not have acquired a mentality of constant competition.

The second problem concerns fixed assets, which are part of total assets. Although Ioannou and Bakirtzoglou (2016) and also the reports of experts and respondents in the primary research state that the condition of stadia is important in terms of the intention (or, more precisely, the lack of intention) to attend matches, the regression showed that there is a negative relation between revenues to fixed assets and the amount of total assets. Hence, although a team might invest in its stadium and in its physical infrastructure, the ratio of revenues to fixed assets does not increase.

The combination of the above shows that the result of the regression is very important with regard to the clubs' finances. According to the regression, the state of the economy plays

an important role in the development of the clubs' financial situation. However, the magnitude of the effect is not the same between teams: therefore, each football team will have to find ways to overcome the negative effects that exist in a recession. It was found that it is important for a club to have a positive change in its assets. Thus, FCs that do not have the ability to make high-cost transfers should find other solutions for strengthening, as will be formulated in the chapter on suggestions and conclusions.

The issues mentioned above will be also researched more in depth using the data obtained from survey and interviews with the experts.

#### 5.4 The stadium attendance

In this subchapter, the H1 is verified as the first thematic issue of the thematic analysis. As pointed out by the literature (Morrow, 2003; Szymanski and Kuypers, 1999), a major issue of the financial condition of the football clubs is the income they have from the attendees and the club's ability to have loyal fans (Tap, 2004). Hence, it should be examined whether the financial crisis had a negative impact on the number of spectators. The data obtained from official sources support H1, since as described at figure 16 the sale of tickets diminished during the crisis. This observation was supported both in terms of qualitative and quantitative (survey based) analysis. In this issue, all of three journalists agree that the financial crisis affected negatively the number of spectators at the stadia. Argyris mentions a number of reasons:

- The average expenditure to watch a football match in the stadium includes not only the ticket but the transportation to and from the stadium and the water/soft drinks and snacks. This expenditure could be a relatively large percentage of the one's wage.
- The significant decrease of the salaries of the main three categories of attendees, which, according to him are:
- The young fans, who are 17 to 24-25 years old that had been hit by unemployment. So, this segment decreased significantly.
- Middle-aged people, who usually sit on podiums with a more expensive ticket, and they also sometimes come with their family and especially with their young children, as they want to make them fans of the team. Hence, with the reduction of income, it is difficult for them to have the same degree of stadium attendance.
- People of older age, mostly retirees who have a special and long-term connection with their team, who, due to the reduction of pensions, don't have the same ability to watch the game.

The next question considered other reasons, apart from the economic crisis mentioned earlier, for the reduction of the number of spectators in the stadia.

Alexander mentioned that a reason for the reduction of the number of spectators is the lack of gate controls, in the sense that the actual number of attendees is higher than the number of tickets. According to Alexander, this is a part of institutional factors affecting football in Greece, since, as he states, the counting of tickets also includes the number of those who have season tickets and went to the stadium and their value is added to the proceeds of the match even if it is not new revenue of the team. The counting is done roughly by employees of the FCs and the stadium, and this is another reason that the number of tickets is significantly smaller than the fans on the podium. If there were turnstiles, there would be no deviation.

On this, Argyris mentions as a key parameter the live broadcasting of the matches. As he notes, the number of subscribers to football channels broadcasting football matches has increased, and fans no longer have a reason to go to the stadium. At the same time, almost all cafes in Greece have pay-tv, hence anyone can go to a cafe and watch the match and if he/she is with friends, then the atmosphere is almost similar to that of the stadia.

Experts identified also some more institutional factors. Alexander is of the opinion that hooliganism plays a major role on someone's decision to attend a match. He says:

"For years, the movement of fans in their team's away games has been banned. This means that at each stage the tickets belong to the fans of the stadium-based team. This significantly reduces the number of tickets and makes it impossible to compare the statistics for the numbers of spectators that exist today and those that were recorded before the travel ban." (Alexander, p. 2: 24-28)

Argyris, too, mentions the parameter of hooliganism; he says:

"Violence on the pitch has clearly decreased compared to what existed in previous years, but it has not been eliminated and we can say that it is still a major disadvantage of Greek football. Especially the heads of families and the somewhat older people are reluctant to go to the stadium, for fear of incidents" (Argyris, p. 2: 41-45).

The survey findings indicate that the frequency during the crisis diminished: 23.6% of respondents stopped going, 29.3% were going less often, 27.6% were going only in derbies and 19.5% were going as often as they did before the crisis (Table 45). This is the indication that the participants were going less often during the crisis than before the crisis.

Table 45. Frequency during crisis

	Frequency	Percent	
Stopped going	29	23.6	
Less often	36	29.3	
Only in derbies	34	27.6	
Unchanged	24	19.5	
Total	123	100	

As presented in Table 46, the participants' answers differ among the groups, according to their age (H=11.09, p=0.01<0.05), the employment status during the crisis (H=49.78, p = 0.00<0.05), their level of income (H=12.41, p=0.01<0.05 and the change of income during the crisis (H==24.40, p=00). The reasoning for this finding is that the participants who became unemployed belong to the younger ages (18 to 29 years old): therefore, as the analysis shows, those who decreased their frequency were participants who became unemployed, and their income reduced. This can be interpreted as an impact of the crisis on the decision to attend.

Table 46. Kruskal-Wallis test, grouping variable: frequency during crisis

	Age	City	Level of incom e	Education	Occupation	Employme nt status during crisis	Chang e of incom e during crisis	Suppor t of FC	Distance from stadium
Kruskal –Wallis H	11.0 9	2.11	12.41	2.87	5.35	49.78	24.40	4.64	2.42
df Asymp. Sig.	3 0.01	3 0.55	3 0.01	3 0.41	3 0.15	3 0.00	3 0.00	3 0.20	3 0.49

Source: own elaboration based on survey results

When asked about lower attendance in general due to the crisis, 45.5% of the participants replied that according to their observations the attendance decreased very much, 47.2% much and 7.3% to a degree, while no one has perceived the same frequency of attendance (Table 47). What can be seen is that, although the overall number of people going to the stadium decreased, some fans did not reduce their visits (Table 45).

Table 47. Lower attendance

	Frequency	Percent
To a degree	9	7.3
Yes, much	58	47.2
Yes, very much	56	45.5
Total	123	100

Source: own elaboration based on survey results

The analysis shows that the answers are different between the groups, having as factors of differentiation the age (sig=0.01<0,05), the level of income (sig=0.01<0.05), the employment during the crisis (sig=0.00<0.5) and the change of income during the crisis. Therefore, those who were 18 to 29 years old, with lower income and became unemployed are the ones who noticed lower attendance (Table 48).

Table 48. Kruskal-Wallis test among variables for attendance during crisis

	Age	City	Level of income	Education	Occupation	Change of employment status	Change of income during crisis	Support of FC	Distance from stadium
Kruskal– Wallis H	11.09	2.11	12.41	2.87	5.35	49.78	24.40	4.64	2.42
df	3	3	3	3	3	3	3	3	3
Asymp. Sig.	0.01	0.55	0.01	0.41	0.15	0.00	0.00	0.20	0.49

Source: own elaboration based on survey results

Regarding on whether the economic crisis is the main reason for the lower frequency, from 1 (no effect) to 5 (very significant effect) 11.4% replied that economic crisis had a minor effect, 26.8% a moderate effect, while 27.6% replied that economic crisis had a significant effect and 34.1% a very significant effect Table 49).

Table 49. Crisis as the main reason

	Frequency	Percent
1 (no effect)	0	0
2 (minor effect)	14	11.4
3 (moderate effect)	33	26.8
4 (significant effect)	34	27.6
5 (very significant effect)	42	34.1
Total	123	100.0

Source: own elaboration based on survey results

The age (sig=0.00), the level of income (sig=0.04<0.05) and the occupation (sig=0.02<0.5) with those who were 18 to 29 years old, with lower income and were unemployed were the ones who agreed to a higher degree that the economic crisis was the main reason for the lower attendance (Table 50).

Table 50. Kruskal-Wallis test among variables for frequency during crisis

	Age	City	Level of income	Education	Occupation	Employment status during crisis	Change of income during crisis	Support of FC	Distance from stadium
Kruskal– Wallis H	25.68	0.46	8.26	2.14	9.72	3.85	7.40	4.28	0.89
df	3	3	3	3	3	3	3	3	3
Asymp. Sig.	0.00	0.93	0.04	.54	0.02	0.28	0.06	0.23	0.83

Regarding the price of tickets, 18.7% said that the prices decreased significantly, 26% that the price decreased, while 27.6% replied that the prices remained unchanged and 27.6% that the prices increased (table 51). Thus, the rise of the nominal prices of the tickets should not be seen as the main variable explaining the lower attendance. Rather real prices might matter (Table 51).

Table 51. Price of tickets

	Frequency	Percent
Significantly decreased	23	18.7
Decreased	32	26.0
Unchanged	34	27.6
Increased	34	27.6
Total	123	100.0

Source: own elaboration based on survey results

Occupation plays a role in whether the person thinks that the price of the tickets increased or decreased, since the higher percentage of those who believed that price increased were unemployed (Table 52).

Table 52. Occupation and price of tickets cross tabulation

		Count	2	4	2	0	8
	Student	% within Occupation	25.00%	50.00%	25.00%	0.00%	100,00%
	Part-time	Count	3	6	4	3	16
	employee	% within Occupation	18.80%	37.50%	25.00%	18.80%	100,00%
	Full time	Count	15	15	21	20	71
Occumation	employee	% within Occupation	21.10%	21.10%	29.6%	28.20%	100,00%
Occupation		Count	1	3	4	4	12
	Self employed	% within Occupation	8.30%	25.00%	33.30%	33.30%	100,00%
		Count	1	2	1	5	9
	Unemployed	% within Occupation	11.10%	22.20%	11.10%	55.60%	100,00%
		Count	1	2	2	2	7
	Retiree	% within Occupation	14.30%	28.60%	28.60%	28.60%	100,00%
		Count	23	32	34	34	123
Total		% within Occupation	18,70%	26.00%	27.60%	27.60%	100.00%

It should be examined whether differences in the level of income itself plays role in the decision of attendance or, instead, the change of the income plays the most crucial role. For example, Buraimo et al. (2021) and Reade and van Ours (2021) state that unemployment alone can explain the football attendance, since as unemployment increases the number of attendees decrease. In fact, as Reade and van Ours (2021) note, the relationship is stronger for the class in lower leagues. Hence, while in the econometric part the analysis examines unemployment as a determinant of the football clubs' revenues from tickets, this analysis will examine whether the decrease of the income and not the level of the income is an explanatory factor of the change in the frequency of attending the matches. The argument is that, the level of income per se does not have as much impact to attend the match as the change in the income level, in the sense that, a person with a lower income would go frequently to the stadium, having seat of lower price, but when her/his income decreases, then she/he will go fewer times.

As presented in Table 53, the percentage of those who continued to attend the matches with the same frequency decreased according to how severe was the reduction of the income: for those who suffered a significant decrease the percentage was 14.6%, while for those having the same income the percentage was 27.8%. Also, while 43.9% of those who suffered a

significant decrease of their income stopped going to the games, none of those who had their income unchanged stopped attending the games.

Table 53. Change of income during crisis in relation to frequency during crisis (Cross tabulation)

			Frequency	during cris	sis		
			Stopped going	Less often	Only in derbies	Unchanged	Total
		Count	18	14	3	6	41
	Significantly decreased	% within change of income during crisis	43.9%	34.10%	7.30%	14.60%	100,00%
		Count	11	18	22	13	64
Change of income during crisis	Rather decreased	% within change of income during crisis	17.20%	28.10%	34.40%	20.30%	100,00%
		Count	0	4	9	5	18
	Unchanged	% within change of income during crisis	0.00%	22.20%	50.00%	27.80%	100,00%
		Count	29	36	34	24	123
Total		% within change of income during crisis	23.60%	29.30%	27.60%	19.50%	100.00%

Source: own elaboration based on survey results

Chi-squared test shows that the relation between the variables is significant (p=0.00<0.05), which is an indication that income change had an impact on the frequency of the game attendance in the stadium (Table 54). This proves that game attendance can be considered as a normal good, in the sense that the quantity demanded (tickets to attend the game in the stadium) is affected by the changes in the level of income. This is a major evidence of proving the hypothesis of the thesis, that crisis had a direct impact on stadium attendance.

Table 54. Chi-Square Test, income change during crisis and frequency during crisis

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	24.787 <sup>a</sup>	6	0.00
Likelihood Ratio	29.515	6	0.00
Linear-by-Linear Association	16.680	1	0.00
N of Valid Cases	123		

Source: own elaboration based on survey results

Summing up one can conclude that the Hypothesis H1 has been positively verified for the researched group.

### 5.5 The competitive performance of football clubs during the crisis

In this subchapter, the Hypothesis H2 is verified as the second thematic issue of the thematic analysis. Most respondents were of the opinion that the competitive performance of their team decreased and significantly decreased, while 5.7% said that it has increased and 3.3% that significantly increased (Table 55).

Table 55. FCs competitive performance

	Frequency	Percent
Significantly decreased	33	26.8
Rather decreased	39	31.7
Remained unchanged	40	32.5
Rather increased	7	5.7
Significantly increased	4	3.3
Total	123	100.0

Source: own elaboration based on survey results

The Kruskal-Wallis test shows that only the city is the statistically significant explanatory related variable, with those living in smaller cities replying that their teams' competitive performance significantly decreased (Table 56). In order to explain this, one should take into account that the champion of the Super League is a team that is usually located in a big city and has been more competitive in order to gain the trophy.

Table 56. Kruskal-Wallis, grouping variable: FC competitive advantage

	Age	City	Education	Occupatio n	Employm ent status during crisis	Income during crisis	Support of FC	Distance from stadium
Kruskal-								
Wallis H	7.17	16.79	7.41	4.55	6.14	2.01	4.84	8.09
df	4	4	4	4	4	4	4	4
Asymp.								
Sig.	0.12	0	0.12	0.34	0.19	0.73	0.3	0.09

Source: own elaboration based on survey results

As for the quality of transfers, 25.2% absolutely disagreed that their team made quality transfers and 34.1% disagreed, while on the contrary 4.1% agreed and 6.5% strongly agreed (Table 57).

Table 57. Quality transfers

	Frequency	Percent
Absolutely disagree	31	25.2
Disagree	42	34.1
Not agree, nor disagree	37	30.1
Agree	5	4.1
Strongly agree	8	6.5
Total	123	100.0

As the Kruskal-Wallis test shows, the city (p=0.022<0.05) is the only significant explanatory variable, with those living in smaller cities replying that their teams' quality transfers significantly decreased (Table 58). In order to explain this, one should take into account that the football clubs of smaller cities do not have the funds to make quality transfers, since they cannot afford to make these transfers, in particular during crisis. The low number of answers on ability of clubs to make quality transfers shows that even clubs with higher assets might have a problem with that as discussed in subchapter 5.3.

Table 58. Kruskal-Wallis, grouping variable: quality transfers

	Age	City	Education	Occupation	Employment status during crisis	Income during crisis	Support of FC	Distance from stadium
Kruskal– Wallis H	9.23	11.43	7.91	4.67	8.67	0.83	7.67	4.76
df Asymp.	4	4	4	4	4	4	4	4
Sig.	0.05	0.02	0.09	0.32	0.07	0.93	0.1	0.31

Source: own elaboration based on survey results

The experts supported the findings of the quantitative analysis, but they turn attention to some other factors that can influence the performance of the football teams in Greece. Regarding the competitiveness of the FCs during the crisis, Argyris argued that the level of competitiveness and the change in the level is not common among the clubs. According to Argyris, the smaller teams, of the regional cities, very often do not know whether they will remain in the Super League next year or whether they will be transferred to a lower division. Therefore, the owners of these teams do not invest and do not have strategy of increasing the competitiveness of their teams.

Marios adds that teams in the middle of the Super League rank do not have a significant incentive to increase competitiveness, as they consider it certain that they cannot rise to the top three positions in the ranks, which would allow them to compete at European level, and they also consider it highly unlikely that they will lose to the weaker teams and be relegated to a

lower division. Alexander points that during the crisis it would normally be expected that the competitiveness of smaller teams would increase, and they would have to turn to young players from within their academies, that is, without having to buy players from outside.

However, on the contrary, this did not happen, with the result that small teams were further weakened, and the overall competitiveness of football was reduced. In this regard, Argyris adds that increased competitiveness is a matter of culture and overall mentality: in Greece, neither the state, nor the sponsors, nor the advertisers, nor the big teams have redistributed money to support the smaller teams. On the contrary, what is happening is that there are three or four teams competing each other for the title of champion and a place in European games, with a very large gap between them and the other teams.

Marios notes that during the crisis the level of competition became worse for another reason: that the country's image took a big hit. So, even if a club had the money and the ability to make some quality transfers of players and coaches, the image of the country was negative and no quality players would want to come to Greece, as they would think that the club might have financial problems and would leave them unpaid. In this regard, Argyris states that during the crisis there were three clubs that made quality signings to a certain extent, but it could have been even greater if the crisis had not existed and this is because when the club is faced with an increased uncertainty, it seems that it has to manage its investments more carefully.

Finally, Alexander notes that a big hit to transfers was due to capital controls as clubs were unable to make payments abroad, resulting in a complete collapse in transfers.

Summing up one can note that the Hypothesis H2 that the competitive performance of football clubs during the crisis diminished, due to the lower quality of transfers was positively verified. It seems that the drastic reduction of completive performance of clubs was observed mainly in small cities. This confirms the finding from the main model on the importance of specific factors.

### 5.6 The attractiveness and and competitiveness of the game

This subchapter is devoted to presentation of the verification of the Hypothesis H3 as the third thematic issue of the thematic analysis.

One main issue regarding overall attractiveness and competitiveness of the football as a game – in fact, Super League as a competition – is the institutional environment. Regarding the institutional environment, Argyris provides a number of insights. According to him "there is a commodification process which takes place throughout sports, and not just in football. But

football has an important peculiarity: due to the fact that there are fanatical fans of the teams, the fans act as a lever of pressure to serve the interests of the owners of the football teams. Thus, there is an entanglement of professional football with the media groups, with large business and political circles of the country. In such a climate, the state tries to manage the relations of conflicting interests, which is also co-responsible for the development of things, failing to reposition the relations of amateur sports with the bodies of professional sports and the relations between professional sports and the state ".

In this line of thought, Marios adds:

"In Greece, a model was developed with continuous state subsidies to football teams with no full transparency, which served not the development of football but the party control of federations, through clubs and associations". "There is nothing worse for selfless people – workers of Greek football than being forced to paint the windows of their clubs according to the colour of the party that won the election, in order to ensure a financial respite for the maintenance of their teams."

#### Marios continues:

"The football crisis is not just a result of the economic conditions of the crisis. It is the result of a very bad institutional environment."

Alexandros states that the chronic weaknesses and shortcomings of Greek football are due to a malfunction of the institutions. He states that "Football suffers from a tragic lack of adequate playing fields and infrastructure, a lack of financial resources, which is an indication and result of the squandering of money given to football teams for so many years by state subsidies, by non-existent scientific assistance to clubs, medical care engaged in the sport, from a total problem of credibility, of its bodies and institutions (federation, arbitration, sports justice, etc.), and lack of planning of its development".

Argyris mentions the issue of reliability. The problem is general and pervades all football not only in terms of professional, but also in terms of amateur part. It concerns teams, players, agents, referees. Good management is considered the one that can "protect" the team, the one who can "take care" of losing the opponent. There are people who "serve" exclusively this goal in the field of football; there are even cases of coaches who are hired citing precisely these "qualifications". Perhaps the biggest problem is that all these attitudes towards the microcosm of clubs of all categories (and we are talking about thousands of people involved) are not only tolerable, but legitimate and desirable.

To point out how often victory is considered a dominant event regardless of the means used to achieve it. Whether it is a "setting up" of a match, or the use of banned substances, or

the intimidation of rival football players. "All these phenomena create a moral problem for today's football and drive people away from the stadia."

One issue that is noted is whether the institutional environment has evolved negatively or positively during the crisis. Marios mentions that the crisis has affected the finances of the teams, both due to the lower number of those who are able and willing to spend time and money on football, as well as due to the lower expenditure on advertising as the advertisers were also affected by the crisis. What Marios notes is that the owners of the clubs made no commitment to improve the quality of the league, hence he states that the institutional level has not improved. Argyris concludes the same, stating that the economic crisis could serve as a great opportunity to clear the landscape, to improve the institutional environment, to finally have criteria, applicable laws, and transparency, but none of this happened.

The quantitative analysis confirmed decrease of the overall competitiveness and the attractiveness of the Greek football during the crisis, as perceived by respondents. 45.5% of them believed that this competitiveness significantly decreased and 52% that it decreased, while 2.4% think that it is unchanged (Table 58), while the Kruskal-Wallis test shows that there are no differences on the answers among the groups (Table 60).

Table 59. Competitiveness of Greek football

	Frequency	Percent
Significantly decreased	56	45.5
Decreased	64	52.0
Unchanged	3	2.4
Total	123	100.0

Source: own elaboration based on survey results

Table 60. Kruskal-Wallis test among variables for competitiveness during crisis

			Level			Employment	Income		Distance
			of			status during	during	Support	from
	Age	City	income	Education	Occupation	crisis	crisis	of FC	stadium
Kruskal	2.75	2.80	1.87	2.30	1.98	0.04	1.70	0.50	1.97
_									
Wallis									
H									
df	2	2	2	2	2	2	2	2	2
Asymp.	0.25	0.24	0.39	0.31	0.37	0.97	0.42	0.77	0.37
Sig.									

Source: own elaboration based on survey results

In fact, football is considered as less attractive, since the 48% said that the attractiveness significantly decreased during crisis and 52% that it decreased, and this impression does not differ among the groups (age, income, employment, etc.) (Table 61).

Table 61. Attractiveness of football during crisis

	Frequency	Percent
Significantly decreased	59	48.0
Decreased	64	52.0
Total	123	100.0

Summing one can claim that the Hypothesis H3 that the attractiveness and competitiveness of the game – as perceived by the people – decreased during the crisis was positively verified. However, many reasons are only indirectly related to the crisis itself and are of structural nature and it seems that the crisis augmented these long lasting existing structural problems.

## 5.7. Factors conditioning attendance during the crisis

In this subchapter, the Hypothesis H4 is verified as the fourth thematic issue of the thematic analysis. To identify the changes conditioning attendance one should firstly, examine attendance before the crisis. Asked how usually they were going on a monthly basis to the stadium to watch the game before the crisis, 31.7% of respondents said 1 time. 27.6% 2 to 3 times, 15.4% every time their team had a match and 25.2% in derbies (Table 62).

Table 62. Frequency before crisis

	Frequency	Percent
1 time	39	31.7
2-3 times	34	27.6
Every time my team plays	19	15.4
In derbies	31	25.2
Total	123	100.0

Source: own elaboration based on survey results

Now, it should be examined whether the frequency before the crisis is different among the groups, according to their characteristics. Since the question is about the frequency before the crisis, the current level of income should be excluded as an independent variable.

As presented in Table 63, only two factors have a statistically significant impact on the frequency before the crisis: whether the participant actively supports a football club (being a fan) and the distance of his/her home to the stadium.

Table 63. Kruskal-Wallis test, grouping variable: frequency before crisis

	Age	City	Educatio n	Occupati on	Support of FC	Distance from stadium
Kruskal–Wallis H	3.1	4.03	1.21	1.28	21.5	19.12
df	3	3	3	3	3	3
Asymp. Sig.	0.37	0.25	0.74	0.73	0	0

As for the frequency during the crisis, three factors are statistically significant: the employment during the crisis, with those who were unemployed and part-time employment to have the highest decrease in attendance, the change of income during the crisis, with those with the higher decrease in income to report lower attendance and the level of income, with those with low level to have the lower frequency (Table 64).

Table 64. Kruskal-Wallis test, grouping variable: frequency during crisis

	Age	City	Education	Occupation	Support FC	Distance offrom stadium
Kruskal–Wallis H	11.09	2.10	2.87	5.35	4.64	2.41
df	3	3	3	3	3	3
Asymp. Sig.	0.01	0.551	0.41	0.14	0.20	0.49

Source: own elaboration based on survey results

In addition to the factors revealed in the survey one can also expect some others that could result in reduction of the stadium attendance. Since these factors could not be revealed in the survey, they have been discussed with the experts during in depth interviews Among them are characteristics of the teams that recorded the largest decrease in spectators on the stadia during the crisis (e.g., those with the lowest score, provincial teams, teams with the lowest/cheapest transfers). It might be the case that crisis has eroded motivation of supporters of such clubs to attend the matches. But they are difficult for quantification. For instance, a city, like Athens, have 5 football clubs, but only two are "big' teams, and Thessaloniki has four football clubs, but only one has the ability to win the championship so the variable describing type of city or distance from the stadium is unable to properly discriminate between aforesaid clubs.

Marios notes that a major characteristic is the separation of whether the club is a "big" one, expected to have a good position in the championship, or is a "secondary" club, fighting for its survival. For small clubs, the number of the matches that are a derby is 3 or 4 in the season, and especially if the club is in the last places of the Super League the derbies are the

last matches, that the results will determine whether the club will stay in the Super League. Hence, if in the middle of the season the club does not have the ability to stay in the Super League, then the fans don't have any particular interest to watch the match, with the exception of the "hardcore fans".

On this, Argyris says that a "small" team has a much smaller number of spectators that a big one, hence even a small reduction in the number of fans counts a lot. He says that a parameter of great importance has to do with whether the club has made transfers. As he notes, by making a transfer, team brings people to the stadia, and this holds both for big and small groups. The thing is that in order to increase the number of spectators, the player should have a well-known name, but these players cost a lot of money, which most Greek teams do not have. Also, even if a Greek team has this money to bring a footballer of recognized value, it is almost impossible for this player to prefer to come to Greece, due to the depression, the social unrest and the overall economic and social conditions.

As the last parameter of the reduction of the number of match attendees Argyris mentions the condition of the stadia. As he characteristically says:

"One last parameter that negatively affects the condition of the pitches. In several provincial stadia, the condition of the stands is bad and has not improved over the years. Problems with the condition of the seats where they exist, overcrowding, poor hygiene, all play a role for the fan's decision not to go to the stadium to see his favourite team" (Argyris, 2:46-49). And during the crisis clubs had no money to improve these conditions.

So, overall Hypothesis H4 is stating that factors conditioning attendance have changed during the crisis have been positively verified. In addition to that qualitative analysis revealed some patterns behind these changes.

# 5.8 The impact of crisis on the decision of fans and supporters to attend the games

This subchapter is devoted to presentation of the verification of the Hypothesis H5 as the fifth thematic issue of the thematic analysis. Although several studies have been conducted on fans and supporters, particular attention should be paid to the way these concepts are conceptualised. The concern lies in the fact that fans may not necessarily be supporters, while researchers use the terms interchangeably, which may lead to more confusion. Hence, a research examining fans or supporters should define what a fan is and what a supporter is, to avoid any ambiguity and confusion. Furthermore, participation in sport can be seen as revolving around

the concept of the perceived interest and the personal importance of sport (Shank and Beasley, 1998).

Jones (1997) argues that supporters are the ones who are attached to the club, devoting a part of their day-to-day life to the club or to the sport as such. A fan has also been defined as the person who has a relationship with the club, the one who has the emotional connection, who has the passion to be involved with the team (Hirt et al., 1992). In the thesis, FC supporters —sometimes named hard core fans — are those who consider themselves to be fully committed to their team, who see 'their' FC as part of their identity and who actively support the team. In fact, there is a question asking the participants: "Do you support a football club that is in the local area of where you currently live?" and those who give a positive answer might be counted as "supporters". But to verify the choice one might also wish to examine frequency of attending matches by them.

For a better understanding of the supporters and their identity, it is necessary to separate them into two theoretical levels: the interpersonal and the symbolic. The former includes the influences of 'significant others', such as family and friends on identity, while also, this level includes community influences, in the sense that locality tends to 'push' people towards local groups. The latter includes the factors of a team that on a personal level will attract the fan such as the name, logo, colours and anthem.

Among the assumed determinants of the formation and maintenance of identity is the meaning of socialisation. People become supporters through socialisation, primarily through family and friends. Other factors of socialisation that are important contributors to sport socialisation include the community, the games, the peers and role models (Wilde, 2004). Dietz-Uhler et al. (2000) noted that females were more probable to be supporters because they attended games with friends and family, influenced by males who were supporters of a sport. Therefore, women's identity may be at least partly influenced by their network of friends and family.

FC supporters may perceive experience and treat football not as a mere spectacle, and for this reason they do not like the way they are treated in the modern world of football, which is dominated by commercialization. It is now considered a sacred obligation rather than a mere excursion to accompany their team to matches, with matching scarves and colours being the link in an ethnic society. Anderson's (1983) description presents supporters as an imagined community with its own code of values, protagonists and its own tradition and identity. The set of followers call their like-minded people 'brothers'. Indeed, within the petals of organised supporters, or even on their commuter buses, the behaviours observed are considered rare for

the rest of the community. All the above, then, are reasons to expect that, while the attendance at stadia has declined, yet supporters have not reduced their presence at their team's stadium.

One can claim that not the level of income, nor the change of the income is a factor with a constant impact among supporters, since for some of them to attend the match is an integral part of their identity, i.e., they would prefer to attend the game even if they would need to cut any other expenses, in a manner that to attend the game is a necessity, while for others income could be a significant factor on their decision to attend the match. In order to examine this, the Mann-Whitney test is being conducted in order to examine if there are statistically significant differences in the change on the attendance during the crisis among those who actively support a team and those who are not supporters.

The Mann-Whitney test regarding the frequency during crisis and support of FC shows that there are not statistically significance differences among the two groups (i.e., those who support a club and those who do not), with p having value of 0.71>0.05 (Table 65).

Table 65. Mann-Whitney test, frequency during crisis and support of FC

	Frequency during crisis
Mann-Whitney U	1056
Wilcoxon W	1309
Z	-0.376
Asymp. Sig. (2-tailed)	0.707

a. Grouping Variable: Support\_of\_FC

Source: own elaboration based on survey results

If one considers a self-identification criterion as insufficient the frequency of attending matches can be added as a controlling variable. This is based on an assumption that the 'real' supporters of a football club are the ones who provide their financial support, by attending frequently the games of their team in the stadium. In this sense, it can be assumed that 'real supporters' (or 'financial supporters') of the team are the ones who had very frequent attendance at their team's stadium (namely, 2 - 3 times per month and those who attend every time their team played) before the crisis (i.e., before their income was affected and they had an objective difficulty to go to the stadium) and who at the same time answered positively to the question: "Do you support a professional football club". Hence, it should be examined whether the frequency of attending the games during the crisis differs between those who are the 'financial/real' supporters and all other participants.

The Mann-Whitney test regarding the frequency during crisis and the 'financial supporters' shows that there are not statistically significance differences among the two groups

(i.e., those who can be considered as 'real / financial' supporters and those who are not), with p=0.16>0.05 (Table 66).

Table 66. Mann-Whitney test, frequency during crisis and 'financial supporters'

	Frequency_during_crisis
Mann-Whitney U	1592.000
Wilcoxon W	3023.000
Z	-1.390
Asymp. Sig. (2-tailed)	0.164

a. Grouping Variable: Financial supporter before crisis Source: own elaboration based on survey results

To these factors, Marios adds another one: the attendees, according to him, can be categorized in three major segments. The first segment is those who buy tickets on the stands with lower prices, which are mostly the "hard-core" fans, i.e., supporters. The price of the tickets of these seats has not decreased during the crisis, while the income of this group decreased. This had a diverse effect: some supporters could not afford to watch all the in-home matches, but most of them cut all other of their personal spending but the spending of watching their beloved team. So, from their side, there was a reduction in the number of persons attending matches, but not a very significant one.

The other segment is those who buy the tickets on the 'regular' stands. The price of the tickets of these seats decreased a little, but not as much as the decrease of the average income. These people are usually fans of the team, but not "hard-core" fans, i.e., they would examine if they can afford to buy a ticket on a situation that they would buy anything else more useful for their family. Hence, the number of these attendees decreased significantly. The third segment is referred to those who watch the match from the premium/VIP seats. These are fans of the team, with the ability to buy the expensive tickets. According to Marios, most of the people on this segment have been affected by the crisis, but only a part of them decreased their stadium attendance, since it's a luxury that they can afford and to attend a match from the VIP seats is a signal of social recognition and a way of social interaction. So, what really happened is that the teams lost their middle-class fans, those who are not "hard-core" fans and those who are, in fact, the majority of the fans' basis. But perhaps some of them positioned themselves in the survey also as the FC supporters.

Alexander, along with the decrease on the fans' income, mentions another dimension of the stadia attendance: the season tickets. According to Alexander, the price of the season tickets for the "normal" seats had slightly decreased during the economic crisis, while it had been a higher decrease for the VIP seats. This influenced to a large decrease of the casual fans, leading to the major overall decrease of the number of fans. So, hypothesis H5 is stating that the impact of crisis on the decision of hard-core fans to attend the games was negligible cannot be positively verified. All fans lowered their frequency of visiting stadia during the crisis, although according to experts, hard-core fans might be less affected.

# **CONCLUSIONS**

The findings of the study demonstrate that the 2008 economic crisis had a significant negative impact on the revenues of professional football associations and the attendance of fans at the stadia. As found, the number of attendees decreased during the period of the economic crisis, while the regression showed that a 1% decrease in GDP leads – ceteris paribus – to a 3.8% decrease in the revenues of the football clubs in relation to fixed assets. This finding is combined with similar findings in the literature, where it is recorded that a decrease in disposable income leads to a decrease in consumption and an increase in the marginal propensity to save (Mishkin, 2007; Parkin, Powell and Matthews, 2021). Based on this finding, two issues arise. The first issue concerns what are the general conditions that influence negatively the intention to attend stadia by fans, while the second issue concerns what football clubs should do in order to be able to cope with the consequences of the economic crisis.

Regarding the issue of general conditions, the paper found that during the crisis the competitive performance of football clubs, as well as the attractiveness and the competitiveness of the game, diminished. The study recorded a decrease in the competitiveness of the clubs and, according to the analysis, this has been directly linked to the decrease in the overall quality of the league, the decrease in the ability of Greek FCs to attract quality transfers and the decrease in the interest of the fans in the football as a such. The literature review identified that uncertainty about the outcome of the league is an important determinant of fan attendance (Forrest and Simmons, 2004; Peel and Thomas, 1992). Therefore, in addition to a reduction in disposable income, a further explanation for the decline in the number of fans is a reduction in competitiveness and attractiveness of football. As will be discussed in the next part of the thesis, in order to address the issue of competitiveness, a completely different philosophy from the existing one is required, both at the level of the Super League and at the level of individual football clubs.

A question that should be raised is whether football clubs actually have the ability to react, as the study found that independent macroeconomic variables such as changes in income and unemployment have an impact on the number of spectators attending matches at the stadium. The fact is that these effects have already been pointed out in the literature, so the FCs should have known that the occurrence of the economic crisis in Greece would result in a decrease in spectators, and therefore a decrease in their revenues and profits would be recorded. In this light, bearing in mind that a decrease in fan ticket revenues was expected due to the

economic crisis, the main suggestion of the thesis is focused on the FCs possibility to take necessary adaptive measures to reduce the negative impact of an economic slowdown on their revenues.

The concluding part is based on the concept of vulnerability of economic agents to the adverse macroeconomic shocks. The economic crisis of 2008 is a typical example of such a shock. According to the economic literature the vulnerability (Figure 36) is a function of three components: exposure, sensitivity and adaptive capacity (OIR 2011).

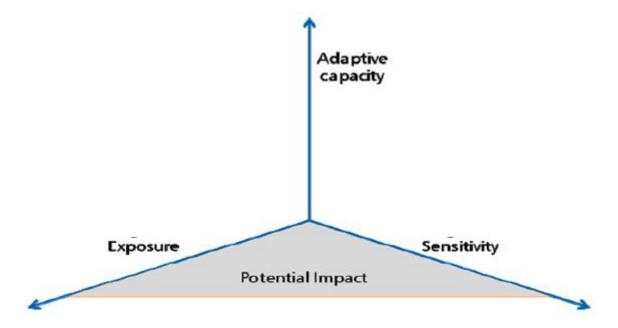


Figure 36. The concept of vulnerability – describes a function of exposure, sensitivity and adaptive capacity

Source: Beiglböck et al., 2010, p. 10.

As it was examined in the thesis the football industry in Greece was intensively exposed to the adverse economic shocks. The economic crisis of 2008 was in particular acute and painful in Greece, resulting in decrease of Greek GDP, increase of the debt ratio to GDP and unemployment rate as well as reduction of the consumers' income (for details see chapter 4 of the thesis). Sensitivity of the Greek football industry to such type of adverse shocks appeared relatively high (see also Figure 6 on PESTEL in the chapter 1.5). As it was explained in the thesis the number of tickets sold decreased and the lower attendance was typical both among the football supporters and the other types of spectators. Therefore, even phenomenon of existence of the football supporters did not immune clubs against negative repercussions of the crisis. For that reason, the negative impact of the economic slowdown of 2008 was noticeable for the Greek football industry. For that reason, the only solution that might be feasible in such

circumstances is strengthening of adaptive capacity of the Greek football clubs. The recommendations proposed in the concluding part go into this direction. They are based on the literature review conducted in the initial chapters of the thesis and the outcomes of the analysis presented in the fifth chapter. A key aim of the recommendations is to increase resilience (Davoudi 2012) of Greek football clubs by applying solutions proposed in the economic literature. The proposed measures are catered to the specificity of the crisis times, that is, to the diminished financial resources of the clubs. Therefore, the capital-intensive ones have been consciously omitted, e.g., those related to investments in stadia or robotics (see chapter 1.5 of the thesis) that might be considered after improvement of the financial standing of the clubs.

The proposed recommendations focus mainly on investment in human capital, relational capital and organisational innovations with only limited requirements for additional resources. They should at least partially offset the restricted by the crisis ability of Greek clubs to attract new famous players, which is a key factor conditioning clubs' power and prestige (see chapter 2.4 of the thesis on efficiency of professional football clubs).

On the basis of the research conducted in the thesis the recommendations proposed below are grouped into three pillars: increasing competitiveness, transformation to professionalism and pricing policy/participation.

#### **Pillar 1: Increasing competitiveness**

1A. As found in the study, there is a decrease in the competitiveness of the professional football clubs. However, the degree of the decline in competitiveness is not the same between teams: some teams - mainly those based in the two largest cities in Greece - are the ones that are challenging for the championship title, while most teams are trying to cope with organisational and financial problems on a permanent basis. As a result, there is no real uncertainty about the outcome of the championship, as the main competitors are 2 to 3 teams. This brings about a number of effects, which have been highlighted in the paper: firstly, since the teams do not produce a good spectacle, the attractiveness of the matches is reduced, and the fans have no real incentive to go to the stadium. However, there are some fans who go to the stadium regardless of the quality of the match. Thus, there is a phenomenon whereby club managements of the "weaker" team" are more interested in retaining these fans by providing them with cheap ticket seats without having a long term plan for the development of their club, while the owners of the "stronger" teams are interested in winning another championship that will provide them with some extra revenue by getting the team into European competitions even if this participation is limited to the first stage of the competition only, with no hope of further qualification. In order to address the above, a new philosophy is needed where football is truly competitive, where the management of the teams operate as true professionals running businesses and not "armies of fans". However, the real dimension of the issue is not only about the clubs, but also about the government (public administration). Thus, a framework is needed to allow for a differentiated distribution of revenues between clubs in order to increase the competitiveness and attractiveness of the entire league. This could be realized if the "richer" clubs would give a percentage of their income – for example, of the broadcast rights – to the weaker clubs. However, such a solution might require active participation of public authorities guaranteeing transparency of entire undertaking and preventing rent-seeking aggressive behaviour. Public authorities should help to reduce transaction costs of the proposed arrangements.

1B. The thesis (chapter 2.3) has pointed out that football clubs operate with the aim of maximising profit, therefore in a first dimension it seems completely irrational for a strong club to share its revenues with other clubs of lesser capacity. However, as found in the literature, strengthening all teams increases the overall competition and the attractiveness of matches. This results in the rise of football (as a sports product) to a higher point on the life cycle curve, as presented in Figure 11). Also, by increasing competitiveness and attractiveness, football teams can attract greater sponsorship and higher TV rights. In fact, as Pinnuck and Potter (2006) note, the in-field success leads to a better off-field financial performance. Thus, a "fairer" distribution of revenues will increase the revenues and profits of the stronger teams as well. However, despite proclamations by the owners of powerful clubs to ensure the viability and healthy competition of clubs and to create competitive leagues that will maintain the commercial value and popularity of football, in practice they refuse to allocate even a small share of their revenues to weaker clubs, hindering any attempts of financial rebalancing. The system thus operates under conditions of unequal competition, which reinforces the form of the two-tier system in football, weakening small and medium-sized clubs that are unable to cope with economic competition. In addition, the strong clubs had greater influence in decision-making centres, and by exploiting their popularity and the 'football armies' of their organised fans they often secured favourable decisions in administrative disputes, further widening their distance from the other clubs.

As a result, football in Greece became less and less competitive, and combined with the constant cases of corruption and disrepute, this led to a devaluation of the sport by the public. According to Vrooman (2009) the perfect game is the one of competitive balance in monopoly sports leagues. This is the exact opposite to the competitive imbalance (Avgerinou, Kalaitzis and Famisis, 2005), which is a permanent characteristic of the Greek football. The solution here

would be introduction of permanent monitoring of competitiveness and attractiveness of the Greek football done on permanent basis by external reviewers.

1C. One of the key elements which differentiates the football industry from the other types of business activities is an importance of uncertainty as a part of each game (see chapter 1.6 of the thesis). However, the crisis rather diminished the uncertainty level since the larger clubs were in a more privileged situation in coping with its negative impacts. On the other hand, one should keep in mind that the entire group of the national football clubs share similar problems. Their key aim is to attract spectators rather than to "defeat" the competitors taking them out of the market. For that reason, the recommendation based on the theory of cooperative games is to enhance formation of coalitions among the clubs for strengthening the uncertainty level. The collective payoffs from such an action should be positive for all clubs. However, due to high transaction costs a very probable free riding behaviour might appear as a result of, Formation of such coalition would require both external support and trust building efforts prior to its formation. The enhancement of uncertainty must be done in line with the existing legal framework. An example could be informal agreement to more frequent usage of young talented athletes that might be tested during the real events. Another possibility is introduction of discussion between coaches at the beginning of each match on the applied tactics, so spectators can follow to what extent the proposed solutions would work. Such a debate can be broadcasted at the stadia screens.

### Pillar 2. Transformation to professionalism/quality of institutional environment

2A. Precisely on the basis of the above findings, what is proposed is to have a real transformation, where the managements of the clubs will transform football on a truly professional basis. An important element that was demonstrated in the paper is the commercialisation process of football. As noted in chapter 1.4, in sports there are the pure producers of sports – athletes and clubs – but there are also the intermediaries that are necessary in order for the product – in our case, the sports match – to reach the final recipient, which, in the case of football is the public. As documented in the paper, the high popularity of football has attracted the interest of business groups who saw in the popular sport a potential space for advertising, product promotion and the development of new forms of investment and buying and selling of sports products and services. In modern football, the resulting commercialisation has led to a situation in which services and goods associated with the sport have acquired a significant exchange value. Today, companies, local and national governments and other social formations, exploiting the mechanism of identification with the football team in question, are

trying to gain the sport's clientele, because the people involved in football form a huge profitable market. The process of commercialisation of football was combined with the attempt by European governments to modernise and sanitise the sport, implementing preventive and restrictive measures to combat hooliganism since the mid-1980s.

Thus, in the major European competitions, ticket prices were increased, VIP seats were created, and campaigns were launched to attract families to the stadia and spectators from the middle and upper classes. These actions led to the indirect exclusion of traditional fans who occupied the 'cheap' standing-room-only seats on the stadium pitches. Thus, in order to be able to reduce the negative impact of the crisis, FCs need to redefine their "product", aiming for an extroversion, greater competitiveness and a different connection with their local audience and fan base. Football clubs' interventions in the marketplace are intended to extend the sphere of their communication activity to wider areas of social life, enhancing the expressive and symbolic capital of the club. Unlike a sports goods company, a club does not manufacture commercial products (for example, team shirts, flags, badges, other memorabilia) for the sole purpose of commercial profit, but rather grants the company the possibility of using its brand, adding value to the product. The changes in the political economy of modern professional football have also had a significant impact on the relationship between fans and their clubs, since, for example, a club could be listed in a stock exchange and the focus shifts from the fans to investors (Morrow, 2000; 2003). Thus, the owners of clubs operating on a truly professional basis are challenged to find a new balance in which the club-business addresses the emotional investment of the fan in order to turn it into financial capital. It is in this context of professionalism that, in order to cope with the negative effects of the crisis, clubs could differentiate the product from 'something' aimed at a limited group of fans to 'something else' aimed at the general public.

In fact, what is proposed is football clubs to create a new relationship with their fans: fans are part of the commercialized organisation of contemporary football, as they embody and circulate relations and patterns of exchange and market. The financial, emotional, symbolic and intellectual investment of fans in sport constitutes in itself a material contribution to the sporting product. At the same time, fans imbue their social practices with ideology, emotion and symbolic creativity, claim recognition as authentic expressions of the identity, history and idea of the teams, and attempt to de-fecundate sport as a commodity. They claim the right to be custodians of the club's tradition and invest their practices with a sense of 'authenticity', which is at the opposite end of the spectrum from commercialised logic. It is no coincidence that organised supporters often seek to influence the administrative decisions of clubs and in some

cases control their managements, adopting a practice of defending the club's popular capital as an antidote to the risks of falsifying its identity. Greek FCs, by not changing the relations with these 'supporters', in fact what they actually do is to maintain hordes of fanatics operating by organised violence, alienating the fan base who wish to support their team without becoming a fan army

2B. What was recorded in the paper is that the overall 'product' of football was suffering before the crisis and this 'product' deteriorated significantly during the crisis. The question that arises is whether football clubs will evolve into businesses and be run professionally, a decision that will clearly have an impact on the definition of the target audience, the sources of revenue and pricing policy. As the paper has suggested, the decision to attend the stadium by a fan is not a decision based solely on income, but also on utility. As documented in the literature review and demonstrated in the qualitative research, there is a different evaluation of the utility of watching a football match between the fanatical supporters of the team and the ordinary fans or spectators who do not support a team. Also, another differentiation is that a very low-income fan makes a completely different evaluation of the usefulness of a football match compared to a more affluent one. Focusing on the number of fans and the average income of a team's fans in the first place, we can define as a measure of the size of the local monopoly market enjoyed by a professional sports club the expected number of spectators in its home games, at any ticket price. In technical terms, the demand curve for the club's sports product with the most and/or richest fans is located along its entire length to the right of the corresponding demand curve faced by the club with the fewest and/or poorest fans. Focusing on the intensity of the preferences for a sporting spectacle, on the other hand, the club's demand curve with the most "fanatical" fans is more inelastic (vertical) along its entire length than the club's corresponding demand curve with the less enthusiastic supporters. In this sense, although the football match is a normal good, in many cases the pricing is inelastic rather than elastic (Fort, 2004). So, the solution should be segmentation of the market and creation of different relations with various segments. So, the clubs' strategies must be nuanced.

2C. One of the themes extensively discussed in the thesis (chapters 1.5 and 3.1) is an issues of football related hooliganism. This is a serious problem in many countries and is the reason why they try to pay additional attention to providing security during the football matches. As it was shown in the thesis the violence incidents have even accelerated in Greece during the crisis and the Greek football industry was not an exception to that. Therefore, it seems that one of the key tasks for the Greek clubs is launching some long-term measures and programmes combating stadium and outside stadium violence. This can be done in different

way starting from some educational measures. But even more effective seem the efforts to influence behaviour of the spectators in line with the marketing theory. For instance, football celebrates (key players) might prompt fans for a decent behaviour and propose other forms of club patriotism than only fights or stadium violence. Perhaps there is also a need for an internal Greek ranking of the clubs in terms of fair play and proper conduct. In the most severe cases the clubs can be punished for the hooligan incidents, however such types of measures seem to offer only limited validity.

2D. Transparency and accountability are among key institutional factors conditioning development of the football industry (see chapter 3.1 of the thesis). This might be seen both as a challenge and opportunity for the Greek clubs. The threat is that the clubs under the pressure of the crisis might decrease the level of transparency in order to secure some short-term benefits. An example can be hidden reduction of spending on the security or replacement of the experienced staff with a cheaper but less knowledgably persons. This should be seen as a shortsighted policy that might bring more losses than benefits in the long run. Instead, the recommendation is to share the problems and dilemmas with the broader set of stakeholders, to set them public and to propose their solutions in an open dialogue with the local society, fans and other stakeholder groups in order to make them aware of the risks and take into consideration their opinions. This would increase ownership of the solution adopted, increase willingness of the stakeholders of voluntary compliance with them and will build trust and social capital so important in the period of economic slowdown. The economic theory can help in such a dialogue with the stakeholders. For instance, in the fund-raising campaigns the anchoring effect can be used as proposed by the behavioural economics. The desired level of voluntary contribution can be indicated in order to prompt people to higher generosity. Also, Thaler's nudge concept (with focus on positive reinforcement and indirect suggestions as ways to influence the behaviour of stakeholders) can be of some value. Indirect suggestions might take form of automatic subscription of club news by all people who purchased an e-ticket to the sport event in a given stadium with an option to unsubscribe if the person wish to do so. This would widen and facilitate communication between the club and its potential customers.

## **Pillar 3 Participation and pricing policy**

3A. As it was noted in the chapter 1.3 of the thesis sport industry in its broad sense has a considerable and tangible impact on economic development, which means that it contributes not only to social but also its economic dimension. Growth of the sport industry creates more jobs than in the other more capital-intensive industry sectors and by that creates opportunity of

employment in the development countries suffered from outsourcing of their manufacturing functions. As described in the chapter 3.3. stadia have had positive impact on the local economy, i.e., by increasing home prices in their vicinity. As pointed out by some researchers "emotions exhibited in and around stadia have facilitated a "love of place" creating a strong link with identity" (Sayer, 2015). Therefore, the next recommendation is related to closer co-operation of the football clubs and local authorities responsible for local development. Football industry should become an eminent part of local and regional development strategies. It should be treated as an important element of the local territorial capital (Bradley and Zaucha 2017) or so-called local development milieu. Key question is how to make the best use of the presence of the club for a local development. Aforesaid "love of place" can be among important development gains out of this co-operation. Clubs and their stadia should strengthen the local territorial capital that play important role in the period of economic slowdown. In line with the findings of new economic geography territorial capital creates various centripetal forces that might strengthen agglomeration externalities and facilitate local development. Such co-operation between local authorities and football clubs can be conceptualised in different forms. It can be limited to mere financial support of the football industry from the local budget, but it can be more nuanced by considering club as an important local landmark that should be promoted or coaching and supporting clubs in application for the public money for various aforesaid social projects and diversification of their activities. Clubs might offer in turn their knowledge on local social processes that might be important for constraining or facilitating local development. They can also become more transparent as this is the problem for many Greek football clubs as it was described in the chapter of the thesis on institutional factors conditioning football development in Greece.

3B. As it was discussed in the chapter 1.2 of the thesis sports play important functions besides a key one related to provision of an entertainment. These functions are related to education, public health, culture and even promotion of international cooperation and peace. In economic terms these functions take a form of typical externalities since they are delivered for free to all persons engaged in sport events not only those who bought a ticket for a sport event. In the period of economic crisis some of these functions gain particular social importance. An example can be an educational function or integrative function. The essence of the first one is in active participation in sport that leads to balanced personal development. The second one is related to bringing together people of different social status, demographic background and educational level. Such functions are very important during external adverse macroeconomic shocks that depress people and increase social tensions. In line with economic theory such

externalities offered by football clubs can be extra paid by the society if delivering important social services. Thus, the recommendation for the Greek football clubs is to identify what important externalities they provide to the society and communicate this to the managers of various public funds (including EU ones). The second step can be in a conscious investing in development of such functions. One can imagine meeting of key players with e.g., unemployed people affected by the crisis, support to the local businesses in general in a form of tweets or information in social media (local players can be treated as celebrities or influencers), organising free time of young people to diminish their level of frustration, etc. In line with the institutional economics extensively described in the thesis the market and public mechanisms can be complemented with the partner ones. Clubs can work in this direction as a local integration nucleus. Such services can be covered from different public funds in a form of various public projects. This will diversify the club budgets. But even more important is that they can also work as the vehicle for corporate social responsibility that in turn can increase attendance of the spectators which was one of the key channels of transferring negative repercussions of the crisis to the Greek football industry. This can even increase the range of the fans of a given club.

3C. Demand for the sport services can be divided into two broad segments. As it has already been examined in the thesis (first chapter) the first one is composed of mass customers and the second one of corporate customers. The football clubs must position themselves in a way to avoid dependency on one of them. The problem is that during the crisis the demand from mass customers has diminished as it was proved in this thesis. Therefore, many clubs became more dependent on corporate customers mainly those broadcasting matches or those providing assistance, funds and other forms of aid for sports, i.e., sponsors. So, it seems that in line with the general economic theory in the period of crisis the Greek football clubs should pay even more attention to diversification of their portfolio of activities. The aforesaid services for the local communities can serve as an example. But it seems that the clubs possess even more important assets then only important reputation and the social capital. Their key economic assets are composed of their facilities and stadia in particular. Football arenas can be used for different functions diversifying the income sources of the clubs. Typical additional functions can be conference or meeting centres, but also outdoor cinemas or places for observing laser shows etc. "In Poland, you can jump from the facade of Wrocław Stadium or take a zip-line diagonally across the PGE Narodowy. On the other hand, in Perth, Australia, there will be an observation deck that will allow to stand "hands free" on the edge of the roof, several dozen meters above the pitch [to have] a good selfie. The complete set includes karting tracks in parking lots, escape rooms, paintball or even city games in the atmosphere of a zombie apocalypse – these are ideas that work well because they meet the demand and allow you to earn on surfaces that the stadium does not need on a daily basis". There is also a very popular poker tournaments called the Stadium Series. It is played in hospitality part of the football arenas, but its audience is mainly gathered online. Also, dancing schools or fitness centres referred in the chapter 1.3 of the thesis can complement typical stadium activities. As it was indicated in the initial part of the thesis the Greek football clubs might consider extending their mission from offering sport entertainment to selling also places, or/and ideas. As it has already been underlined in the thesis sports are no longer considered simply as an 'activity' limited to participation in various forms of sport or attending sport events. Such diversification and intention to sell places and ideas will require more attention of the clubs paid to the sport promotion segment, that was referred in the chapter 1.3 of the thesis. Promotion in the period of the crisis should not be seen as a costly activity. It should be done in a "lighter" form i.e., by more extensive use of the social media in particular, the local ones. Such promotion can focus on presentation of additional offers from the football clubs but also their role in the aforesaid social integration, education and building community coherence. Nowadays national news portals frequently make use of information from social media available from free. Thus, conscious tweeting and using of an Instagram might result in even further promotion of the clubs at regional or national level. This can be seen of the part of the already referred in the thesis professionalization of the sports organisations. It might result in adding an important element related to professional communication in addition to the discussed in the literature emphasis on skills elite players and the standardization of rules as components of the professionalization process.

3D. Football industry is closely tightened to the place where performance is offered. One can even analyse it as a kind of territorial monopoly or oligopoly (Euchner, 1993; Szymanski, 2010) as described in the chapter 2.3 of the thesis. The foreign exchange in the football industry is limited to transfer of the players and participation in the continental leagues such as UEFA Champions League. However, the latter ones are reserved only to few top clubs in each country. In such a case the most popular theories of foreign exchange such as theory of an intra industry trade or Product Life Cycle Theory can hardly help in advising Greek football clubs for strengthening their resilience. But the Ricardian idea of the profits from division of

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<sup>&</sup>lt;sup>7</sup> Stadiony.net; autor: michał available at <a href="http://stadiony.net/aktualnosci/2021/09/niekonwencjonalne wykorzystanie stadionow dzis juz nie istnieje">http://stadiony.net/aktualnosci/2021/09/niekonwencjonalne wykorzystanie stadionow dzis juz nie istnieje</a> [1st of July 2022]

labour in the global economy might offer some valuable hints to this end. According to this idea the producers should specialize in delivery of goods and services in which they possess comparative advantage. i.e., this means possibility to "produce a good or service at a lower opportunity cost than" the competitors (CFI Team 2022). Although the Greek football clubs do not belong to the richest ones (see Figure 10 in the thesis) but they might possess comparative advantage in training and mastering young talented players (Agona 2018). Transfers of the talents might offer an important additional income for the clubs. And such a training should be welcomed by the local society in particular, in the period of crisis in which many youngsters might see their future connected to the football. Such training would require additional skills in addition to the coaching of the main players of the given team but can be profitable in terms of the aforesaid game uncertainty and diversification of the portfolio of activities. With increased engagement in this activity Greek clubs might even acquire additional know-how, increase their comparative advantage and become important partners (feeder clubs) for the top European "stars".

In connection with the above proposal, the study found a negative picture of the state of the pitches and a lack of football academies. In a first dimension, this can be documented as a consequence of the crisis, under the rationale that FCs have less income, therefore they do not have the possibility to make investments. However, this is a superficial explanation, which is rooted in the prevailing philosophy of club owners regarding the football 'product', as noted above. The establishment and operation of football academies can even be self-financing, by drawing on funds from national and Community development programmes, while the capital of the academies will be continuously enhanced, since part of the value of the transfers of players from the academies should be directed to the academy itself and not to the clubs. However, for this to happen, the ownership should treat the football club as a long-term investment, with only football and financial objectives, not the fulfilment of personal ambitions.

The final conclusion is directly related to the adaptive capacity mentioned at the beginning of this chapter. If Greek football clubs wish to follow the proposed recommendations related to e.g. diversification of portfolio of their activities, paying attention to externalities provided by them, formation of coalitions among the clubs for strengthening the uncertainty level of the games, changing communication channels with the stakeholders, participating in elaboration of local development strategies and programmes, improving the culture of corporate governance in the clubs etc. they have to acquire new skills and know-how beyond organisation of the football events. This means a need for building additional capacities and integrating them with the existing ones. Such a work can be promoted and facilitated by the

existing umbrella structures occupying upper part of the pyramid described in chapter 1.6 (Figure 9). This is a novel idea for the entire football industry therefore co-operation between clubs and external facilitation would be of a great importance. A key aim of such a work is first to increase awareness of the managers of the football clubs concerning the complexity of socioeconomic external environment the clubs operate in. The PESTEL analysis presented in chapter 1.5 of the thesis (Figure 6) can serve as one of the vehicles for doing that. Better understanding of flows, links feedback loops between clubs and their socio-economic environment will help in identification of the existing gaps in terms of the conscious mazement of all these relations. On this basis capacity building can be designed, run and evaluated.

One should also note that there are some other important issues that should be changed in the Greek football industry or in its surrounding. They are related to unacceptable functioning of football governing bodies, reinforcement of fanaticism by media, absence of sports education (see chapter 3.5 of the thesis) but those problems cannot be solved by the clubs themselves. There is a need for a broader coalition composed of public authorities, sport industry, representatives of the civic society and academia in order to find the feasible and effective solutions. Clubs might initiate such a triple helix co-operation, but they must count on a good will of other partners. The starting point for such a co-operation could be a bi or tri-annual report on the state of the Greek football industry, financed by the clubs and broadly discussed. Such a report can indicate both positive and negative developments that need attention of a broader audience. Such a report can act as a boundary spanning objects and trigger discussions on the problems of the Greek football industry and facilitate involvement of wide spectrum of stakeholders in it. However, as noted by Collien (2021, p. 443) the initiators of boundary spanning should possess an adequate power bases "to drive innovation and empower others to maintain cross-cultural collaboration". Unfortunately, it seems that such a power base of Greek football clubs is very limited.

There is also a task for the research community. i.e. for academia. In the aforesaid discussion between football clubs and public authorities some more tangible facts on contribution of football industry to the well-being of local societies and strengthening of the local development milieu would be desirable. In particular, one might encourage economic research on monetary value of externalities (Morel et al. 2018) provided by the football industry in terms of enhancing public health, culture and promotion of international cooperation and peace. Such research is not available yet for the Greek football industry. For that purpose, two economic methods can be applied:

- a) Willingness to Pay (WTP) the maximum amount that an individual would prefer to pay for a good rather than give it up and remain at the initial utility level.
- b) Willingness to Accept (WTA) the amount that must be paid to an individual for the resignation from a given good. The amount must be high enough for the individual to maintain the same level of utility as if he would enjoy consumption of a given good while not receiving the money (minimum compensation).

Both of them possess some important drawbacks in terms of accuracy of estimation (main problem is related to hypothetical nature of the decisions which is a typical challenge for the stated preference methods), but they might provide a useful starting point for the discussions between football industry and the public sector. Some other methods might be useful for estimating contribution of the football industry to the local development. In this filed the research is more developed, however not in Greece. An example can be hedonic pricing method that can be used for estimating of the added value of the football industry for the value of the real estate in the vicinity of the stadia. Summing up it seems that the economic research has some important tasks ahead as a trigger (provider of information) of important debates on the functioning of the Greek football industry in the broader socio-economic context.

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## **APPENDICES**

## Appendix A. Interviews transcript.

#### **Interview 1. Argyris**

- -To what extent did the financial crisis affect the number of spectators at the stadia?
- The financial crisis has had a significant impact on the number of spectators on stadia. Watching a football match on the pitch has significant costs for the average spectator. You should consider the following costs: there is the cost of buying a ticket, the cost of transportation to and from the stadium, the cost of buying water or chips, as we should not forget that the match lasts 90 minutes, but overall, the spectator will stay on the stadium for about two hours, if you calculate the time of the halftime break and the time of entry and exit from the gates, so it is a time when the average spectator will want to consume water, or a soft drink, or a snack. So, if we add all the above, then there is a cost that was important for the average worker, even before the financial crisis.

With the financial crisis, incomes fell significantly. Many people lost their jobs, and those who worked lost their wages. We should also mention that there has been a drastic reduction in pensions. So, a large number of people who came to the stadium could no longer afford it. You should keep in mind that there are three main age groups for those who come to watch a football match on the pitch: young fans, who are 17 to 24-25 years old, middle-aged fans and older people. Young people have the very big problem of unemployment, because for the most part unemployment has hit young people. So, this segment of the spectators decreased significantly. Middle-aged people usually sit on podiums with a higher ticket, as they want more comfort, better views and greater security. They also sometimes come with their family and especially with their young children, especially the little boys, as they want to make them fans of the team. As income decreases, you realize that it is now very difficult for these people to pay for an expensive ticket when they could afford it at home, now that they have a reduced income. So, this part of the audience was limited as well. The third part of the spectators are the older people, mostly retirees who have a special and long-term connection with their team. However, due to the reduction of pensions, it is found that these fans have also been reduced. So, the answer is that the crisis has significantly reduced the number of fans on the stadia.

- What are the other reasons, apart from the economic crisis mentioned earlier, for the reduction of spectators in the stadia?
- An important reason is that subscription channels broadcast almost all football matches, at least those that attract a high interest of the fans. Two issues should be noted here. First, the number of subscribers to football channels broadcasting football matches has increased. So, as McEvoy and Morse (2007) note, the fans no longer have a reason to go to the stadium when they can watch the match from their home.

The second is that almost all cafes in Greece - both in large cities and in the countryside, even in small villages - have pay-tv. So, even if one does not want, or does not have the financial means, to get a subscription, then one can go to a cafe and watch the match. In fact, he can watch the match with his friends and other fans, so the atmosphere is almost similar to that of the stadia.

Aside from pay-tv, another reason that can prevent someone from going to the stadium is violence. Violence on the pitch has clearly decreased compared to what existed in previous years, but it has not been eliminated and we can say that it is still a major disadvantage of Greek football. Especially the heads of families and the somewhat older people are reluctant to go to the stadium, for fear of incidents.

One last parameter that negatively affects the condition of the pitches. In several provincial stadia, the condition of the stands is bad and has not improved over the years. Problems with the condition of the seats where they exist, overcrowding, poor hygiene, all play a role for the fan's decision not to go to the stadium to see his favourite team.

- -What are the characteristics of the teams that recorded the largest decrease in spectators on the stadia during the crisis (e.g., those with the lowest score, provincial teams, teams with the lowest / cheapest transfers)?
- All teams recorded a decrease in the number of tickets, but the decrease was not to the same degree. Clearly, a small provincial team cannot have the same number of spectators as a large team in Athens or Thessaloniki. Thus, if the number of spectators is reduced by 200 tickets, for a large team it does not mean anything special, since on average it can exceed 10,000 tickets per match. But for a small team, which averages 1,500 and 1,700 tickets in fact, it has a much smaller number of tickets, the average simply goes up due to the increased fan base when a small team competes at home with one of the 3-4 big teams having a reduction of 200 tickets is a big blow, both financially and in general for the psychology of the team.

Making a transfer team is definitely a factor that brings people to the stadia. This applies to both large and small groups. Two issues should, of course, be emphasized. In order to increase the number of spectators on the pitch in a big team due to a transfer, the player who comes should have a well-known name, the fans should have the desire to see him play, he should act as a "magnet". But these players cost a lot of money, which most Greek teams do not have. Secondly, even if a Greek team has this money to bring a footballer of recognized value, when the country is going through conditions of economic crisis, when all the channels internationally broadcast negative images about Greece, that we are going bankrupt, that people are hungry, that there are riots, that there is a general upheaval, that Greek companies close and foreign companies leave, it is almost impossible for him to prefer to come to Greece since he can go with the money he asks for in another country. So, it is difficult for a team to rely on one or two good transfers to increase the number of spectators on the field. However, we must say that when a good foreign player comes as a transfer, then especially in the first period, the fans have the desire to go to the stadium to see him. In order for this to continue, however, the team must bring good results and the player must show his worth on the field.

What I should highlight and underline with emphasis is the issue of the economic situation of the teams and the huge difference between the clubs. In some FCs, the financial situation is considered relatively good, in the sense that they have a high share capital, have settled their debts, have signed television rights contracts, and so on. These are the largest and most recognizable teams in Greece. However, in other FCs the financial situation is very difficult. These are small teams in the region, without the possibility of investment, who often do not have organised academies, with a problematic condition of the stadia, a small number of fans, and so on.

But I would like to make a note. The existence of differences - and in fact huge - in the financial figures of football teams does not happen only in Greece, but internationally. In one of the best leagues in the world, the English Premier League, there are teams like Manchester United and Liverpool that have a market value of more than 1 billion euro and there are also teams that have a market value of 200 million euro or less. Respectively, in Spain Barcelona has a market value of 800 million euro while the smaller teams are under 50 million euro. That is why Real Madrid has a cap on spending on player transfers of around EUR 500 million, while Levante, for example, has EUR 37 million. Therefore, the phenomenon of differences in economic potential is not only Greek.

Also, the phenomenon of financial difficulties is not only Greek. According to recent sports reports, in a survey of English Premier League teams, almost 50% of the FCs' chief

financial officers are concerned about their economic situation, stating that their finances need attention.

But to return to the question, the financial situation of FCs, as a general picture, cannot be described as good. This is due to the fact that the financial crisis has significantly affected Greek football, but also to the fact that many FCs do not have a long-term economic plan. Many FCs do not have the necessary financial planning, while even their financial statements are not in order. For years now, television rights have been the main source of funding for football teams worldwide, with separate contracts for domestic and international competitions. An important reference should be made to the fact that in leagues such as English or Spanish, where big clubs raise billions of euro due to the global impact of these leagues, with television broadcasts in all countries of the world, even the smallest groups receive percentages to ensure sustainability and competition. Revenue distribution may not be on an equal footing, but it ensures the viability of the teams and ensures the competitiveness of the leagues, thus guaranteeing the continuation of their impact on the world market and their future revenue.

But in Greece, this is not the case. Especially with the conditions of empty stadia, mentioned above, the main way out for a team to have revenue is television and this potentially creates dependency relationships and power games. Depending on how much and to whom the money is given, the channel that pays can alter the conditions of competition. The favoured ones gain a strong advantage over their opponents, but this policy will harm them in the long run as well, as it directly affects the "product".

In Greece, there is mainly a subscription channel, which signs contracts with PAE. However, in this way, contradictions are created, as some groups receive the lion's share, and the smaller groups are left with no substantial revenue stream. There are also reactions from protagonist groups, who believe that they should receive a bigger contract. So, what is being recorded today is that some teams are creating their own independent television platform, which broadcasts their home games and works with subscribers. But not all teams, especially the smaller ones, can do that. It is not economically viable.

- What is your opinion about the institutional environment of the Greek professional football championship?
- The institutional environment can be described in one word: dysfunctional. There is no transparency, groups often change ownership at will, financial data are not published, the supervisory authority is in constant conflict with the groups, every powerful group tries to control the supervisory authority.

In addition to all the above, there is a commodification process which takes place throughout sports, and not just in football. But football has an important peculiarity: due to the fact that there are fanatical fans of the teams, the fans act as a lever of pressure to serve the interests of the owners of the football teams. Thus, there is an entanglement of professional football with the media groups, with large business and political circles of the country. In such a climate, the state tries to manage the relations of conflicting interests, which is also co-responsible for the development of things, failing to reposition the relations of amateur sports with the bodies of professional sports and the relations between professional sports and the state.

#### **Interview 2. Marios**

- To what extent did the financial crisis affect the number of spectators at the stadia?
- One category is those who come to the gates of fanatical fans. In these gates, the ticket price is low, and this is for two reasons: firstly, because the team needs these hard-core fans, it needs them, because they give strength to the team, but they also give strength to the owner of the team, who can use them as his personal army of fans. The second reason is that these fans are, for the most part, from low-income backgrounds, so they could not pay a higher ticket price, the issue now that the crisis has come about is that the income of the fans has decreased significantly, but the ticket price has not decreased by the same percentage. This has led to a reduction in the ticket price, but this reduction has not been as great as one would expect. This is because these fans are, as we have seen, hard core, they consider it their duty to attend matches, it is part of their identity, they recognise each other as members of a collective, of a higher idea. Thus, many of them have reduced their own personal spending so as not to reduce their attendance at the stadia.

A second category is the ordinary fans, ear to ear, who go to watch the game and support their team but are not fanatics. They go to the regular stands. As I said, these people are fans of the team, but they are not "diehard" fans, so they don't prioritize the team. They put their personal needs and the needs of their family first. So, fans of that team are considering whether they can afford to buy a ticket. The income of these people has decreased, just as the income of all of us has decreased. But, in this case, the cost of the ticket hasn't gone down either. So, that's what got people out of the stadium. That's where the biggest loss of team tickets occurs. They've lost the people who want to go to the stadium to have a good time, not to be fanatic.

There is a third category of fans, those who go to the premium gates, the VIPs. These are fans of high status, who can afford to buy the expensive tickets. The crisis has of course affected them too, but not so much that it has caused them to reduce their attendance at the stadium. After all, these stadium seats are operated with a season ticket, so the price has been paid in a single payment. Now you will ask me why they buy the ticket, which is also expensive, since there is a crisis, these fans are not hooligans and will not commit violence, but their presence sends out a signal: I am here, I am a hooligan, I am having a good time and I support my team.

So, in conclusion, what actually happened is that the teams lost the middle-class fans, who are the ones who make up the vast majority of fans.

- What are the other reasons, apart from the economic crisis mentioned earlier, for the reduction of spectators in the stadia?
- There are many reasons, and they are different, but they all come down to certain elements. One reason is television. Another says to you, why should I run to the stadium when I can watch my team from my neighbourhood cafe, my friends will come, who all support the same team, we'll have an atmosphere like the one in the stands, without the risk of a stone coming at our heads. So, it's not just the TV, it's that the ordinary fan is sick of hooliganism and violence and prefers to watch the game on TV.

Another reason is that there are now many intramural matches at the same time. If someone is not a fan of his team and the team is playing a match that is not crucial, against a lesser team, the fan says to you, why should I watch the match that is not intrinsically interesting and that I know we will win, I would rather watch Real Madrid, Inter, Liverpool. Here you see it's a question of interest. If the match is not interesting, only the fanatics will go to see it, the ones who go to the wild stands.

The last reason is the general conditions: the stadium conditions are from mediocre to shabby, except for one or two stadia where the promoters have put some money in.

- What are the characteristics of the teams that recorded the largest decrease in spectators on the stadia during the crisis? (e.g., those with the lowest score, provincial teams, teams with the lowest / cheapest transfers)
- For small clubs, the number of the matches that are a derby is 3 or 4 in the season, and especially if the club is in the last places of the Super League the derbies are the last matches, that the results will determine whether the club will stay in the super league. Hence, if in the middle of the season the club does not have the possibility to stay in the Super League, then the fans don't have any particular interest to watch the match, with the exception of the "hard-core fans".
- What is your opinion about the institutional environment of the Greek professional football championship?
- In Greece, a model was developed with continuous state subsidies to football teams with full transparency, which served not the development of football but the party control of federations, through clubs and associations. "There is nothing worse for selfless people workers of Greek football than being forced to paint the windows of their clubs according to the colour of the party that won the election, in order to ensure a financial respite for the maintenance of their

teams. The football crisis is not just a result of the economic conditions of the crisis. It is the result of a very bad institutional environment.

The crisis has severely affected the finances of the teams, as the number of people who will spend time and money on football has decreased. Also, the advertising pie became smaller, as the advertisers were also affected by the crisis, so the presidents of the groups put as much pressure as they could on the state to receive money, through television contracts from the state television. However, there was no commitment to improve the quality of the league, no control that the level of the teams both on and off the field, will improve. So, the answer is no, the institutional level has not improved.

#### **Interview 3. Alexander**

- To what extent did the financial crisis affect the number of spectators at the stadia?
- -The crisis has certainly reduced the attendance of fans at the stadia. Unemployment has shot up, the psychology is extremely negative, everyone has been very badly affected by the crisis. This has led to massive spending cuts and going to the stadium requires money: it's not just the ticket. It's the transport, if you drive there, you need petrol, you need parking money, if you don't want to find your car broken down. If you take public transport, you need two hours, it's tired, and people have a Sunday to rest. So, yes, the economic crisis has had a huge impact on the origins of the fans. However, we should also address another major cause: the price of season tickets. One would expect that season ticket prices would decrease in the same proportion for everyone. But what has happened is that the prices of season tickets in the regular series have not decreased proportionally as much as the prices of tickets in the VIP seats have decreased. This further decrease people away from the stadia.

Another factor is that the counting of tickets also includes the number of those who have season tickets and went to the stadium. Their value is added to the proceeds of the match even if it is not new revenue of the team. This means that in fact the receipts are much less than the amount stated in the clearing at the end of the game. Normally, season ticket holders who go to the stadium are obliged to exchange by receiving a separate ticket from the ticket office, but because their attendance is usually massive just before the start, they only check by showing their card. The counting is done roughly by employees of the FCs and the stadium, and this is another reason that the number of tickets is significantly smaller than the fans on the podium. If there were turnstiles, there would be no deviation.

- What are the other reasons, apart from the economic crisis mentioned earlier, for the reduction of spectators in the stadia?
- A major factor that has led to this decline is the poor show that Greek football provides. Many teams resort to second and third tier players, advertising them as good. During the season, such players do not deliver the desired result for the team, further disappointing the fans, as their expectations were tailored to advertise the quality of the player in question. Furthermore, there are players with poor physical condition, who get injured in the middle of the season or even at the beginning of the season, remaining on the bench. Of course, the quality of a team's players is intertwined with the quality of the coach and the other players on the team. Many teams choose to hire a coach of dubious quality as a cheap 'solution'.

Another important factor contributing to the poor quality of spectatorship in Greek football is the state of the sports facilities. At a time when in European provincial cities investments are being made in stadia, here less and less care is being taken, except for 2 or 3 big teams, the stadium corridors are full of litter, the seats are broken and scarce and the toilets are dirty. There is an atmosphere of decadence in many stadia that drives away the family man. How can you take your child to the stadium when they are cursing and throwing objects? Beyond the above, we should mention that the reduction of the tickets is also due to te travel ban. For years, the movement of fans in their team's away games has been banned. This means that at each stage the tickets belong to the fans of the stadium-based team. This significantly reduces the number of tickets and makes it impossible to compare the statistics for the numbers of spectators that exist today and those that were recorded before the travel ban.

- -What are the characteristics of the teams that recorded the largest decrease in spectators on the stadia during the crisis? (e.g., those with the lowest score, provincial teams, teams with the lowest / cheapest transfers)
- What differentiates the picture is the uncertainty about the outcome of each match and the outcome of the league as a whole. If the outcome is known in advance, then why would a fan go to the stadium? If in the middle of the season we know who the champion will be, why would there be a turnout at the stadium? The fanatics will go, the ones who have other issues to deal with, fanwise. Of course, the smaller teams have that to a greater degree. A small team will only get fans in the stadium when they are playing a big team to enjoy the spectacle. But what kind of spectacle can you see in such stadia and with such players?
- What is your opinion about the institutional environment of the Greek professional football championship?
- Football suffers from a tragic lack of adequate playing fields and infrastructure, from a lack of financial resources, which is an indication and result of the squandering of money given to football teams for so many years by state subsidies, by non-existent scientific assistance to clubs, medical care and medical care. engaged in the sport, from a total problem of credibility, of its bodies and institutions (federation, arbitration, sports justice, etc.), and from lack of planning of its development.

The problem is holistic and pervades all football not only in terms of professional, but also in terms of amateur part. It concerns teams, players, agents, referees. Good management is considered the one who can "protect" the team, the one who can "take care" of losing the

opponent. There are people who "serve" exclusively this goal in the field of football, there are even cases of coaches who are hired citing precisely these "qualifications". Perhaps the biggest problem is that all these attitudes towards the microcosm of clubs of all categories (and we are talking about thousands of people involved) are not only tolerable, but legitimate and desirable. To point out how often victory is considered a dominant event regardless of the means used to achieve it. Whether it is a "setting up" of a match, or the use of banned substances, or the intimidation of rival football players. All these phenomena create a moral problem for today's football and drive people away from the stadia.

## Appendix B. Questionnaire

Greek Football – Attendees questionnaire

The data that will be collected will be used strictly for academic reasons and will not, under any circumstances, be known, nor provided, to any third party. The questionnaire is absolutely anonymous, and the collection of data is confidential. The questionnaire does not include any question of sensitive personal data. The use of data will not be used for commercial reasons, not from the researcher, nor from the academic institution. The questionnaire will require 5 minutes of your precious time to complete. Your answers will valuable insights regarding the attendees of Greek football Thank you in advance for taking the time to assist me in my academic research.

#### Questionnaire

1. Age \*

18-29

30-39

40-49

50-59

60 +

- 2. In which city you live? \*
- 3. Employment status \*

Employed full-time

Employed part-time

Self-employed

Unemployed, looking for work

Unemployed, not looking for work

Retired

Student

4. You could describe your income level as: \*

Zero

Very low

Lower than average

Average

Rather higher than average

High

5. During the period of the economic crisis 2009-2016, your income: \* Ceased to exist Significantly decreased Rather decreased Remained unchanged Rather increased Significantly increased Prefer not to say 6. During the period of the economic crisis 2009-2016, your employment status \* Remained unchanged I got unemployed Worked with lower wage in the same company Worked less paid hours in the same company Moved to a better job Moved to a worse job I got promoted Prefer not to say 7. Do you support a football club that is in the local area of where you currently live? Yes No 8. How far do you live from the stadium of the football club that you support? 0-3 Km 3-5 Km >5 Km 9. To the stadium of the football club you support, you go: On my own With family / friends With other fans of the club 10. Before the economic crisis, how often did you used to attend football matches on average, on a monthly basis? \* Once a week or more (2—3 times) Every time my team plays Once a month (1 time) In derbies and major events

Never

11. During the financial crisis how your frequency of attending matches changed? \*

I stopped going

I go less often than before

I go only in derbies now

Remained unchanged

12 Would you say that from 1 (no effect) to 5 (very significant effect) whether the financial crisis affected your decision to go to the stadium \*

13. Do you think the financial crisis has affected the number of spectators going to the stadia?

\*

Yes, the number slightly decreased

Yes, the number significantly decreased

No, the number is almost the same

14. During the crisis, the competitive performance of your team \*

Significantly decreased

Decreased

Remained unchanged

Increased

Significantly increased

15. During the crisis, your team strengthened by quality transfers \*

I absolutely disagree

I disagree

I don't agree, nor disagree

I agree

I strongly agree

16. During the crisis, the competitiveness of Greek football: \*

Significantly decreased

Decreased

Remained unchanged

Increased

Significantly increased

17. During the crisis, the attractiveness of Greek football: \*

Significantly decreased

Decreased

Remained unchanged

Increased

Significantly increased

18. In your opinion, during the crisis, the financial situation of Greek football: \*

Significantly decreased

Decreased

Remained unchanged

Increased

Significantly increased

19. During the financial crisis, the price of tickets

Significantly decreased

Decreased

Unchanged

Increased

## Appendix C. Gretl print screens

Table 67. Regression, lRev.toFA with one explanatory variable – fixed effects model

```
Model 1: Fixed-effects, using 44 observations
Included 11 cross-sectional units
Time-series length = 4
Dependent variable: 1RevtoFA
Robust (HAC) standard errors
             coefficient std. error t-ratio p-value
  _____
  const -16.2671 7.20920 -2.256 0.0477 **
1GDP 3.83263 1.67191 2.292 0.0448 **
Mean dependent var 0.259019 S.D. dependent var 0.387545
Sum squared resid 2.398755 S.E. of regression 0.273790 LSDV R-squared 0.628573 Within R-squared 0.159522 Log-likelihood 1.569983 Akaike criterion 20.86003
Log-likelihood 1.569983 Akaike criterion
Schwarz criterion 42.27031 Hannan-Quinn
                                                         28.80000
                     -0.197290 Durbin-Watson
                                                         1.591256
Joint test on named regressors -
 Test statistic: F(1, 10) = 5.25496
  with p-value = P(F(1, 10) > 5.25496) = 0.0448326
Robust test for differing group intercepts -
 Null hypothesis: The groups have a common intercept
 Test statistic: Welch F(10, 12.9) = 4.62541
 with p-value = P(F(10, 12.9) > 4.62541) = 0.00608851
```

Table 68. Multiple regression of lRev.toFA, two explanatory variables, fixed effects model

```
🌉 gretl: model 2
                                                      Х
                                                             P
File Edit Tests Save Graphs Analysis LaTeX
Model 2: Fixed-effects, using 44 observations
Included 11 cross-sectional units
Time-series length = 4
Dependent variable: 1RevtoFA
Robust (HAC) standard errors
           coefficient std. error t-ratio p-value
            -0.835105 5.37205 -0.1555 0.8796
 const
                         1.25728 2.124 0.0596 *
0.189652 -3.409 0.0067 ***
            2.67014
 1GDP
            -0.646609 0.189652 -3.409
 1TA
Mean dependent var 0.259019 S.D. dependent var 0.387545
Sum squared resid 1.378310 S.E. of regression 0.210859
LSDV R-squared 0.786580 Within R-squared
                                                 0.517066
Log-likelihood
                  13.75999 Akaike criterion -1.519984
                  21.67448 Hannan-Quinn
Schwarz criterion
                                                 7.081642
                  -0.366484 Durbin-Watson
                                                 1.843426
Joint test on named regressors -
 Test statistic: F(2, 10) = 6.48588
 with p-value = P(F(2, 10) > 6.48588) = 0.0156325
Robust test for differing group intercepts -
 Null hypothesis: The groups have a common intercept
 Test statistic: Welch F(10, 13.0) = 3.85508
 with p-value = P(F(10, 13.0) > 3.85508) = 0.0128819
```

# Appendix D. Raw data collected by the author

# Figures in euros

	id	year	Fixed assets	TOTAL ASSETS	Shareholder s equity	Total Liabilities	Operating revenue (Turnover)
Olym	iu	усаі	Tixeu assets	ASSETS	3 Equity	Liabilities	(Turnover)
piaco							
S	1	2011	80788793	111622827	3299418	108323410	37332981
	1	2010	65938381	103178912	-7232881	110411794	65189869
	1	2009	68510730	112859229	-26056220	138915449	45093887
	1	2008	56983783	96980679	-2314558	99295237	64075236
SKO DA XANT							
HI	2	2011	5877093	7667199	3204151	4463049	6415070
	2	2010	7937900	9580229	3341785	6238445	6970382
	2	2009	7203621	9400306	4078828	5321481	6877392
	2	2008	9149987	11093806	4019334	7074472	6344678
AEK	3	2011	13875156	33414748	-18479602	51894349	20274678
	3	2010	23197339	51273869	-11652685	62926555	22542122
	3	2009	28594629	60587355	-3206214	63793569	25188132
	3	2008	17088839	48458414	493417	47964998	27129492
ARIS	4	2011	10783234	17208384	2543271	14665113	15028335
	4	2010	8841599	17632902	986043	16646859	12794946
	4	2009	6367147	16027708	3985847	12041861	12447731
	4	2008	4600733	12633341	3515534	9117809	9762655
ASTE RAS TRIP							
OLIS	5	2011	2477247	3803658	62062	3741594	3881863
	5	2010	2861923	4599627	833668	3765961	4096192
	5	2009	2059919	4063696	1574031	2489664	4348164
	5	2008	1611162	2867081	1230630	1636451	3097872
ERG OTEL							
IS	6	2011	2627857	4836965	-86480	4923445	3957432
	6	2010	4956516	7807184	981769	6825414	4142856
	6	2009	1224413	4938580	689351	4249229	4433818
	6	2008	1722716	3675842	141765	3534076	3385166
PAO	7	2044	165 40306	45440534	150644	45300000	22004627
K	7	2011	16548396	45449521	159641	45289880	22881637
	7 7	2010 2009	20764982 11829031	46974378 37032120	895720	46078660 36398339	20203697 18574752
	7		2607217		633780		
	/	2008	2007217	27874627	112420	27762207	13997014

PANT							
HRA							
KIKO	0	2011	005570	2406202	1245652	1150720	2620726
S	8	2011	985570	2496382	1345652	1150729	2630726
	8	2010	1164175	3061736	1413868	1647870	4837402
	8	2009	940046	2293647	1055153	1238495	3540196
	8	2008	12667	1064544	746784	317758	840957
PANI ONIO							
S	9	2011	3371784	4964754	-1704416	6669170	6358100
	9	2010	3163693	8720033	2271893	6448140	7391920
	9	2009	3422712	10937287	1853656	9083630	6658819
	9	2008	1994550	6147604	1770520	4377085	8173211
PANS							
ERAI	1						
KOS	0	2011	1982779	3432554	561069	2871487	3531630
	1						
	0	2010	463068	3653920	564998	3088922	1669664
	1						
	0	2009	584663	3350963	422498	2928467	3786464
	1						
	0	2008	69661	1921907	275945	1645963	1054123
ATR							
OMI	1						
TOS	1	2011	2636934	4081941	-1729775	5811716	4759720
	1						
	1	2010	4653854	5815161	-2640688	8455849	4122660
	1						
	1	2009	2949372	3224438	-2183746	5408183	1124420
	1	2000	2202422	2525215	667457	2254424	1660701
	1	2008	2302129	2696946	-667487	3364431	4660704