On the Determinants of Social Capital in Greece Compared to Countries of the European Union

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Summary

Social capital refers to the stock of social relations, based on norms and networks of cooperation and trust that spill over to the market and state to enhance collective action between actors and achieve improved social efficiency and economic growth. The aim of the present paper is to discuss the implications of contemporary literature and empirical findings on social capital for the growth prospects of Greece, compared to the member-states of the European Union. In order to examine the potential of social capital to enhance growth, we must look into the factors that determine the nature and context of trust, norms and networks that have emerged in our multinational, multiethnic and multicultural Europe.

The contribution of this paper is to offer insight on the determinants of social capital in Greece, compared to the European Union (EU - former 15 member-states). For this purpose, we regress an index of individual group membership, derived from the European Community Household Panel (ECHP), on a set of individual as well as aggregate factors of social capital. Regression results provide evidence of the impact of both individual and institutional characteristics on group membership. Differences on the extent of group membership between countries might be indicative of the historical and cultural differences that have affected the evolution of social capital across Europe. Particularly in Greece, the relatively low level of group membership compared to the other EU countries might provide further evidence of its low levels of civicness. Historically, its weak civil society has been a result of a prior civic tradition of clientelism under arbitrary rule, the interference of special-interest groups and the lack of credibility and impartiality from the part of the state. And these factors might be responsible for the slow pace in reform and growth observed compared to the rest of the EU. Nevertheless, the findings on the determinants of social capital may direct us to possible means of rebuilding patterns of participatory and cooperative behavior, especially in countries with low levels of trust and civicness, such as Greece.

Keywords: Determinants, Social capital in Greece, European union, Diversity

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I. Introduction

Much research has been dedicated to exploring the determinants of economic growth between countries and regions. The standard economic literature points to such factors as the relative stock of physical and human capital, the technological capacity of the economy, the capability to produce and diffuse knowledge and innovation, the management skills of leadership in business and state, as well as the degree of liberalization of domestic and international markets. Nevertheless, economic analysis has offered less attention to the context of social regulation in which development and reform is promoted. The present analysis examines the role of features of social organization, which include trust, norms and networks, and fall under the concept of social capital.

Social capital contributes to economic growth by highlighting the importance of cooperation and trust within the firm, the market and the state. The interdependence between decisions of individual agents and the emergence of externalities and common goods makes cooperation imperative to maximizing social welfare. The superiority of social cooperation has long been documented in economic and social thought. But social capital, as social norms and networks, sustains cooperation by emphasizing its intrinsic value and its pursuit as an end in itself. It is a mixed-motive cooperation, in which individual behavior takes account of its effects on the welfare of others, alongside its own. In this manner, it operates as an internal commitment mechanism to resolving the social dilemma or collective action problems from free-riding and narrow-interested calculation.

Empirical work on social capital, which covers a wide spectrum of social science disciplines, attribute differences between regions and countries in the level and rate of economic and social development to differences in the available stock of social capital. Regions or countries with relatively higher stocks of social capital, in terms of generalized trust and widespread civic engagement, seem to achieve higher levels of growth, compared to societies with low trust and low civicness (e.g. Brown and Ashman, 1996; Heller, 1996; Knack and Keefer, 1997; Krishna and Uphoff, 1999; Ostrom, 2000; Rose, 2000). According to these studies, social capital contributes to efficiency and growth by facilitating collaboration between individual conflicting interests towards the achievement of increased output and equitable distribution.

Additionally, recent literature has focused on the determinants of social capital. This constitutes the first step towards developing a consistent and integrated framework concerning the nature of social capital and its relationship to socioeconomic performance. A number of studies have empirically tested the impact of individual- and aggregate-level factors on the components of social capital, that is, on social trust and group membership (e.g. Helliwell, 1996; Brehm and Rahn, 1997; Krishna and Uphoff, 1999; Glaeser et al., 2000; Costa and Kahn, 2001; Rothstein and Stolle, 2001). Some of these tend to emphasize the role of individual factors in determining the incentive of individuals to invest in social capital, such as personal income and education, family and social status; others offer greater weight to the effect of more institutional or systemic factors, such as income inequality, confidence in government, impartiality of policy-making bodies, and prior patterns of cooperation and association amongst individuals in a group.

The contribution of this paper is to offer insight on the determinants of social capital in Greece, compared to the European Union (EU). We begin our analysis by defining social capital in Section II. We adopt a rather multi-disciplinary approach and introduce views that originate from research in social science disciplines other than economics. In Section III, we briefly examine the implications of the literature on the potential of social capital in Greece to support reform and growth. Thus, we provide a short overview of references on the evolution of Greek civil society and the extent of social participation in policy-making for reform and development. We discover here that a prior civic tradition of clientelism under arbitrary rule, the interference of special-interest groups and the lack of credibility and impartiality from the part of the state created distrust and uncertainty, at the expense of reform and growth. We continue in Section IV to examine the determinants of social capital in Greece and the EU. For this purpose, we regress and index of individual group membership, derived from the European Community Household Panel (ECHP), on a set of individual as well as aggregate factors of social capital. Our empirical findings provide evidence on the impact of both individual and institutional characteristics on group membership. Furthermore, they direct us to possible means of rebuilding patterns of participatory and cooperative behavior, especially in countries with low levels of trust and civicness, such as Greece. We discuss the issue of social capital reconstruction in Section V, where we draw some concluding remarks.

II. Defining social capital

In brief, social capital is a broad term encompassing the social norms and networks facilitating collective action for mutual benefit. But what type of norms and networks constitute social capital? What are their specific features and functions in resolving the collective action problem and producing mutual benefit? To answer these questions we shall present the main approaches adopted in the literature. Some of these views originate from research in social science disciplines other than economics.

An approach that remains central to social capital research is expressed by the political scientist R. D. Putnam. In his seminal work, *Making Democracy Work* (1993), Putnam conducts a comparative study of Italian regions and attributes the divergence in institutional and economic performance between the North and the South to differences in their relative endowment of what he calls social capital. According to Putnam (1993), social capital includes "the features of social organization, such as trust, social norms and networks, that can improve the efficiency of society by facilitating coordinated action" (p. 167). Cooperation is often required between workers and managers, among political parties, between the government and private groups, between firms and voluntary organizations. Social norms and networks "provide defined rules and sanctions for individual participation in organizations" (p. 166), and promote reciprocity and cooperation "founded on a lively sense of mutual value to the participants of such cooperation, not a general ethic of the unity of all men or an organic view of society" (p. 168). On the whole, norms and networks provide for an internal mutual commitment mechanism such that "rational individuals will transcend collective dilemmas" (p. 167).

However, it is important to distinguish the type of cooperation produced by social capital from that predicted by standard game theory. Putnam states, "game theory underestimates the ability of cooperative human behavior, and actually underpredicts voluntary cooperation" (1993, p. 166). Game theorists speak of cooperation attained in conditions of perfect information, third party enforcement, tit-for-tat strategies, indefinitely repeated games (Folk Theorem), and face-to-face interaction amongst a limited number of players. But "success in overcoming social dilemmas of collective action", Putnam contends, "depends on the broader social context in which the game is played. ... Voluntary cooperation is easier in a community that has inherited a substantial stock of social capital, in the form of norms of reciprocity and networks of civic engagement" (p. 166). He speaks of a type of cooperation that "articulates the use of pre-existing social connections between individuals to help circumvent problems of imperfect information and enforceability" (p. 169).

Pre-existing social connections between individuals range from kinship ties to networks of civic engagement that encompass broader segments of society and support collaboration at community an regional level, such as professional groups, sports clubs, cooperatives, mutual aid groups, rotating credit associations, cultural associations and voluntary unions. The essence of social norms and networks is that they are built up for reasons other than their economic value to participants. Putnam's claim was that membership in associations strengthens political and economic efficiency even though the associations themselves play no role in either the polity or the economy. As the economist K. Arrow describes the concept: "Much of the reward for social interactions is intrinsic, i.e. the interaction is the reward, or at least the motives for interaction are not economic. People may get jobs through networks of friendship or acquaintance, but they do not, in many cases join the networks for that purpose ... This is not to deny that networks and other social inks may also form for economic reasons. One line of reasoning is that the social networks guard against market failure that is caused by asymmetric information; they are supplementary activities that exploit monitoring devices not other wise available" (2000, p. 3).

In this light, Putnam uses indices of civil society and political participation to measure the stock of social capital. These are indices of participatory behavior and express the extent to which individuals fulfill obligations as citizens (voter turn-out referenda) and members of social groups (number of professional, cultural and leisure associations). Most of the empirical literature on social capital continues to use indices of civicness and group membership, along with indices of generalized interpersonal trust, to measure social capital.

But not all types of social connections and organizations have a positive effect on social efficiency and economic performance. As J. Coleman, from the sociological perspective, puts it, although "a group within which there is extensive trustworthiness and extensive trust is able to accomplish much more than a comparable group without that trustworthiness and trust" (1988, p. S101), "a given form of social capital that is valuable in facilitating certain actions may be useless or harmful to others" (p. S98). M. Olson (1971), from the economics perspective, sets it bluntly when he refers to the activity of special-interest groups. Special-interest organizations for collective action represent a narrow segment of an economy's income-earning capacity and yet manage to redistribute more of society's income to themselves through lobbying and monopolistic competition. These distributional coalitions, as Olson calls them, make the economy less productive and socially efficient.

Putnam recognizes this, and makes an attempt to separate groups with positive and negative social effects by distinguishing between vertical and horizontal networks. Vertical networks, highly characteristic of hierarchical, paternalistic and clientelistic social relations, are based on cooperation achieved by coercive action and force, exercised by the privileged to exploit the rest of the population. Examples referred to in his case study are nepotism (or what has been termed 'amoral familism'), the Mafia or the institutional Catholic Church prevalent in the South of Italy. On the other hand, horizontal networks in the form of multiple professional and leisure associations, such as those dominant in the North of Italy or in the business networks of the Mezzogiorno, are assumed to be positively associated to good government and improved economic performance, as "they bring collaboration in broader communities by respecting individuality and defining social obligations" (Putnam, 1993, p. 175).

Another question that arises is how norms and networks evolve. The point to note from Putnam's work is the public good nature of norms and networks, which "increase with use and diminish with disuse" (1993, p. 170). Social relationships die out if not maintained and norms depend on regular communication and interaction between individuals and groups. Trust between individuals, also mentioned as a component of social capital in numerous studies, "lubricates cooperation. The greater the level of trust within a community the greater the likelihood of cooperation. And cooperation itself breeds trust" (p. 171). Thus, the creation and destruction of social capital is marked by virtuous and vicious cycles. However, such a view does not suffice to explain the emergence or destruction of norms and networks; it ignores the role of factors other than a feedback or path dependency process that affect social capital accumulation. Critics such as the political scientist M. Levi (1996) point to the role of governments: trust in government is key to generating generalized interpersonal trust and minimizing the adverse effects of narrow-interested organizations. This is achieved through rules and institutions that ensure transparency, fairness and credibility for government actors. Rothstein and Stolle (2001), political scientists as well, offer empirical evidence in favor of the positive and statistically significant impact of the institutional impartiality of government officials on generalized trust.

Others, for instance the economist E. Glaeser, stress the role of individual characteristics, such as income and education, in determining the stock of social capital in which individuals invest in to obtain influence, social status and access to networks. The empirical literature confirms the impact of individual characteristics on group membership (e.g. Glaeser et al., 2000; Costa and Kahn, 2001). For instance, higher levels of income and education coincide with a strong probability for group membership and interpersonal trust from the part of the individual. This may lead to the idea that not all individuals may enjoy access to the stock of social capital available in a society, on account of low income or other characteristics that lead to social exclusion and hinder their incentive to cooperate. One of the most important factors viewed in this light is income distribution and poverty; relatively high income inequality and high poverty rates, appear to weaken individual incentives to cooperate and act collectively (Knack, 1999). Our view is that such circumstances have a negative impact on social capital, not only because of absolute poverty, with its adverse effects on the physical ability of individuals to respond to their role as social actors in groups; also because of relative poverty, which creates sentiments of discrimination and injustice, thus leading to distrust towards people, collective action and society as a whole.

Apparently, distrust towards government and social groups, especially in authoritarian regimes and sectarian societies, may hinder incentives for collective action and the development of social capital. However, according to J. Fox (1996), a political scientist, the growth of the building-block organizations of an autonomous civil society in an authoritarian and sectarian environment requires the synergy of state and society or what he terms the political construction of social capital. As the author argues, to rely on the state or society alone, according to most state- or society-oriented approaches to collective action and civil society-building, does not explain the origins of institutions and thus cannot resolve the reconstruction of social capital, especially in societies with low levels of trust and civicness. Society-oriented approaches tend to adopt an 'historical determinist' explanation to social capital formation or stress social structure, which take political strategies, ideologies, values and cultures as givens; state-oriented approaches emphasize the centrality of rules and incentives that induce societal responses, treating the social arena as a residual 'black box' (1996, p. 1090). His long-term regional case studies in rural Mexico show that the development of social capital can be co-produced by the state and local societal actors, such as grassroots and regional organizations. On the one hand, state reformists create political opportunities, following pressure from local groups for securing political, civil and social rights. On the other hand, local groups produce social energy, shared values and common goals, following support from external groups (international development or religious and human rights groups) and inspired leaders, who are willing to pay the 'irrational' start-up costs of mobilization.

A notable point to be made concerns the ability of state-society synergy to promote social capital accumulation and equitable growth even in an environment of extreme social divergence and conflict. B. Fine (2001), an economist and critic of the concept of social capital, states that it cannot be addressed outside of a context of conflict and power relations. But he becomes skeptical of whether social capital, as it appears in the literature in terms of widespread trust and civic engagement, could overcome conditions of conflict and power and resist the pervasive forces of parochial groups. A response to this sort of skepticism may come from P. Heller (1996), a sociologist, who observes that the synergy between state and society creates the institutional forms and political processes required for negotiating the group compromises through which redistribution and growth can be reconciled. By exploring the civics movement and local government restructuring in Kerala, India, he arrives to the conclusion that “[its] high level of social development and successful redistributive reforms [beyond those achieved in any other Indian state] are a direct result of mutually reinforcing interactions between a programmatic labor movement and a democratic state” (1996, p. 1055). Of course, Heller recognizes that in the region “not all collective action is conducive to developmentally useful forms of state intervention” (p. 1057). He points to the politics of cast and communal groups, which do not readily lend themselves to positive-sum accommodations, geared as they are to securing particularistic interests and giving rise to patronage politics. But what makes this region exceptional is that “the cacophony of fragmented societal demands has taken a back seat to demands of a more programmatic and encompassing character ... conducive to the tranformative projects broadly associated with development, particularly those of redistributive character” (p. 1057).

On the whole, the state and society managed to overcome the adverse effects of social fragmentation and promote a more encompassing and universalistic development and redistribution program. There may exist a multiplicity of motives, conditions and social outcomes in the activity of groups. Norms and networks may reflect different perceptions of individual groups on issues of development and redistribution, efficiency and fairness. Some of these perceptions represent the narrow interest of smaller groups, at the expense of the common good and social aims. Still it may depend on a set of generalized norms and networks of collaboration and synergy between segments of the rest of society to confront, isolate and overthrow practices exercised by special-interest groups. Ultimately, the expansion of social capital depends on the willingness and ability of individuals to pursue collaboration that substitutes group-specific and narrow-interested norms and networks with generalized norms and institutions of shared values (Levi, 1996; Anderson, 2000). In other words, the common goal of growth and equity in any economy may be better served through collective action which aims at preserving generalized social norms and networks of justice and equality. We speak of a kind of collective action that does not merely provide the social means for individuals to secure personal economic gain, but serves as an end in itself, ensuring social cohesion and solidarity for the benefit of social welfare.

III. Social capital in Greece: An overview of the relevant literature

With regards to the stock of social capital in Greece, almost no data is available on the standard trust and civic engagement indicators used throughout the literature.[1] At the national level, only the European Community Household Panel (ECHP), which consists of a sample of households and individuals for each of the EU member-states, includes a question that proxies civic engagement indicators. In the section on social relations, the ECHP questionnaire includes a question which asks individual respondents to declare whether or not they are a member of any club or organization, such as a sport or entertainment club, a local neighborhood group, a party, etc.

In TABLE 1 of the Appendix, we depict the proportion of the respondents in each country that claim to be a member of a group. Data has been derived from Wave 6 (1999) of the ECHP. Evidently, levels of group membership vary widely between countries in the EU-15, ranging from 65.1% in Denmark, to a low of 8.9% in Greece. Thus, Greece has the lowest level of group membership compared to other EU member-states. This is in line with the argument developed in studies we turn to later on in this section, that Greek civil society is

[1] One of the most traditional datasets used in the empirical social capital literature, the World Values Survey, includes data for nearly 90 countries around the globe, but not Greece. Moreover, the European Social Survey, as an analogous to the General Social Survey conducted in the US and used widely in the analysis of social capital, was launched in the late 1990’s for a set of major European countries, in which Greece has only recently participated.

weak and implies a low stock of social capital and trust. It is also evident from TABLE 1 that countries with lower levels of group membership tend to coincide with countries with lower levels of per capita GDP.

Following these results, we might roughly say that there is an association between social capital, in the form of group membership, and socioeconomic performance. Of course, further research is necessary to determine the causal link between group membership and socioeconomic indicators. For instance, aggregate levels of group membership may independently affect economic growth rates between countries and regions. However, at the individual level, per capita GDP, as an index of social welfare in the region of residence of an individual, may determine his/her incentive for group membership. Barro (1998), in his work on the determinants of economic growth, offers empirical support to the Lipset hypothesis, according to which increases in the in the various measures of the standard of living would generate a gradual increase in civic engagement and democratic institutions. Putnam (1993), on the other hand, argues that it is civicness that determines socioeconomic growth. His regression results reveal the stronger explanatory power of the 19th century civic society measures in determining contemporary civicness and socioeconomic development between Italian regions.[2] Whatever the case, at this point we may only assert that there exists an interrelationship between social capital and socioeconomic performance. Regions with higher stocks of social capital are often the regions with higher levels of economic and social development.

If our assumption of the positive relationship between social capital and GDP holds true, then the low stock of social capital in Greece may explain conditions of slow reform and economic backwardness. The development of social capital in Greece has been hampered by two factors. The first refers to the economic and political instability, which characterizes most of the country's modern history, and is marked by foreign conquest and intervention, waves of refugees and immigrants, and periods of civil war and dictatorship. The second involves the development of civil society in the economy and polity. It was affected by norms and networks based on patron-client relations, nepotism and corruption which were unable to play a constructive role in promoting economic development and social reform in the country.

Our reference to Greece's modern history for an evaluation of social capital draws from the significance of traditional civic norms and networks and the sustained impact of events of authoritarian rule, social divisions and political conflict on social capital. Our historical account begins with events as distant as the Ottoman Empire, which was present for four centuries until the mid-1800s in most of the eastern and central part of Greece, while the islands of the Ionian and Aegean Sea remained under Venetian rule, which interchanged with periods of French, British and Russian rule until the turn of the 20th century. The 1900s began with the Balkan Wars and the War in Asia-Minor, which brought an influx of refugees and the exchange of populations. Until the middle of the century, Greece also faced two World Wars, the Italian-German occupation, and a civil war, which induced the intervention of British troops. Even at times of peace, the country endured the arbitrary governance of monarchs and dictators, under the auspices of the foreign Great Powers, until the establishment of the Colonels' dictatorship, which fell in 1974. In an environment of economic and political instability, conditions for the development of civil society could only worsen at the advent of international economic shocks, from the Great Depression in 1929, to the oil-crises of the 1970s and the effects of regional integration and market globalization towards the end of the century.

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[2] That the quality of public life and the performance of social institutions are powerfully influenced by civic norms and networks is not a new concept. When Alexis de Tocqueville visited the United States in the 19th century, it was the American's propensity for civic association that most impressed him as key to their unprecedented ability to make democracy work (Putnam, 1995). In an assessment of the economic performance of contemporary US, Lodge (1997) asserts that it was 19th century communitarianism that promoted a policy towards building the public infrastructure necessary for economic development and popular welfare.

Under these circumstances, Greek civic society was severely weakened, and this allowed for the emergence of social norms and networks, based on informal kinship ties or corrupt and narrow-interested social groups. According to Lyberaki and Tsakalotos (2000): "... One of the results, which we would argue has been particularly important for the economy, is a particular expression of short-termism. Arbitrary and changing rules of the state, the clientelistic ties that are 'here today and gone tomorrow' put a premium on extracting the maximum gain from any situation as quickly as possible and make cooperation with others in horizontal relationships very risky" (p. 10). This partly explains why the Greek economy has been more successful, since at least later Ottoman times, in such areas as commerce, banking, shipping and tourism, and the continuing prevalence of very small-scale family-based firms. These economic activities could be nurtured within smaller groups of family and kin, which in a low-trust society offer defense against uncertainty and opportunistic behavior. But these activities and small-scale family establishments were extremely vulnerable to regional and global competition after EEC accession and the liberalization of domestic markets. Thus, they extended to patron-client relations in dealings with the state to gain preferential protection and privileged access to public services, which further inhibited reform and growth.

This brings us to our second factor behind the backwardness of civil society, which identifies with the persistence of clientelistic and paternalistic relations in both the private and public sector in Greece. Despite the restitution of democracy in 1974 and the steps taken towards social, political and economic reform, through the expansion of constitutional rights and legal protection, and the promotion of medium- and long-term economic programs, the development of civil society has been a very slow process. In the post-1974 era, according to Mouzelis and Pagoulatos (2002), new systemic / institutional imbalances were created that undermined what strength civil society was gaining. The authors observe that partitocratic and ploutocratic elements were intensified as political parties and economically powerful individuals continued to compete for the control of organized groups, trade-unions and non-governmental organizations. Partitocracy, in the form of favoritism (rousfeti), and plutocracy, in the form of intermeshed interests (diaplekoma sumferonta), permeated Greek civil society, and this had adverse effects on economic reform and growth.

To explore this argument Lyberaki and Tsakalotos (2000) present a case study of two reform initiatives in Greece: the first was promoted by the Greek socialist party, PASOK in the 1980s, the second by the conservative New Democracy in the early 1990s, Despite differences, both initiatives shared the common goal of combating the inefficiency of public bureaucracy, the prevalence of state intervention and the mediation through clientelistic relations. However, mechanisms of economic planning and policy proved more difficult to implement, because the Greek social formation was particularly underdeveloped in social capital. As Lyberaki and Tsakalotos note, PASOK's policies were crucially undermined by the role of clientelistic practices in the appointment of personnel and in the use of the new institutions to consolidate its social and electoral base, thus reproducing the favoritist practices of the existing public administration. On the other hand, the New Democracy's privatization reform strategy was hardly any more effective, as it failed to gain support, not only from the public sector employees (segments of which might be considered extensions of the prior 'protectionist' regime), but also from the Federation of Greek industries, which although could have been regarded as a natural ally to pro-market reform, it never became a major pro-privatization lobby. Powerful economic interests against reform included public sector suppliers and smaller private companies that feared competition.

Within such a context, state officials and sectional interest groups create such distortion and uncertainty with regards to the allocation of the costs and benefits of a certain reform policy, that a majority can oppose it even if it will benefit all. In other words, reform initiatives suffered from the absence of state-society synergy relations described in our previous section. State-society synergy relations are crucial to the effective management of reform policy because they secure the collaboration of stakeholders in determining common developmental goals. In Greece, implementation was impaired because social partners who had something to gain or lose from a particular set of measures had not been part of the decision-making process. This is further confirmed by a case study conducted by Papoulias and Tsoukas (1998), who assess a set of development reform policies promoted during the post-dictatorial period from 1974 to 1992. One of their criteria involves the participation of social stakeholders in the process of planning and implementing specific reform policies considered of wider social significance, i.e. with an economic and social impact on a wider segment of the population. The authors discover only that out of 41 reform programs, only 17 take account of the views and reactions of social stakeholders. Of these 17 programs, only 4 were of greater and moderate importance. These findings point to the difficulty of the state to collaborate with wider social groups to plan and implement socially oriented reform projects.

But even in the face of regional and global market integration, which appeared to reduce state intervention, the synergy between social partners to build social capital at a local level was crucial to economic reform and growth. Paraskevopoulos (2001) explores this argument by explicitly measuring the stock of social capital in Greece - between the North and South Aegean - and comparing levels of socioeconomic reform and development at the regional level. Based on results of social network analyses, the author observes that both the Dodecanese and the Cyclades prefectures in the Southern Aegean demonstrate a general exchange network between local social actors that is dense and horizontally structured, providing alternative leadership roles and public-private synergies. On the contrary, the prefectures of the Northern Aegean islands (Lesbos, Chios and Samos) are characterized by a weaker local institutional structure due to the less dense a highly centralized relations around the Regional Secretariat, that is around the local administrative body of the state. The loose connections between public and private actors and the central role of the state within the general exchange network in this region indicate the operation of vertical structures and thus the low level of collective action for regional development. The weaker institutional capacity of the Northern Aegean compared to the South is also confirmed by qualitative analysis that points to the relatively lower level of voluntary participation in organizations, which also draws from the weak civic traditions inherited from Ottoman times. The author uses this information to explain the divergences observed between the North and South Aegean, and the relative ineffectiveness of local actors in the North to exploit the European Structural Funds and promote development.

The overall conclusion drawn from our analysis is that one of the reasons why post-1974 reform and development were very slow in Greece was the low stock of social capital. A prior civic tradition of clientelism under arbitrary rule, the interference of special-interest groups and the lack of credibility and impartiality from the part of contemporary political institutions impaired the strength of Greek civil society. These were factors that excluded the civil society from the national reform process, and inspired its members with a sense of suspicion and distrust, which permeated all aspects of economic, social and political interaction (Schmitter, 1995). Nevertheless, more research needs to be undertaken to measure the individual and aggregate determinants of social capital in Greece and the impact of dominant norms and networks on socioeconomic development. It is the former of these issues we turn to in the following section.

IV. Determinants of social capital: A comparative study between Greece and the EU

A. *Methodology*

Our present task is to determine the set of individual and aggregate factors that influence social capital in Greece, compared to the EU. For this purpose, we conduct a series of regression analyses over a sample of individuals from Greece and the EU (the former 15 member-states, except Luxembourg). The dependent variable representing social capital is measured by the group membership index derived from the European Community Household Panel (ECHP). The variable is dichotomous and takes a value of 1 when the individual declares that he/she is a member of a group, and a value of 0 when he/she is not. Questions on group membership, along with questions on the number of associations per individual or per locality / region, express participatory behavior as proxies to social capital (Spellerberg, 2001).

There is skepticism in the literature of whether group membership, as an indicator of participatory behavior, is an appropriate measure of social capital. These measures were initially used in the social capital literature to empirically examine the nature and impact of social capital in the society and economy (Putnam 1993; Helliwell, 1996). However, other empirical attempts examining the impact of group membership and association on economic aggregates, do not confirm statistically significant results (Knack and Keefer, 1997). The argument is that group membership cannot be used as an indicator of social capital, because it encompasses interactions between individuals and social groups that function under different and conflicting motives, conditions and social outcomes. Social capital thus defined becomes a vacuum, and includes members of all types of organized groups and associations, from charity foundations, labor and employers' unions, and football teams and choirs, to small special-interest groups that might promote social discrimination, nepotism and corruption. In practice, group membership may overestimate the stock of social capital as it captures passive forms of group membership along with participation in groups with less socially benign goals. For instance, individuals may become members of groups such as trade unions and professional associations, as a mandatory requirement to secure employment and insurance, without actively taking part in union meetings or even paying membership fees. But even when participation is more active and directed to achieving certain goals, it may be at the expense of the wider social benefit, as is the case with special-interest groups.

In this light, more recent studies on social capital have turned to attitudinal survey data, based on individual respondents' opinion on trust, cooperation and collective action, and network analyses, based on the types of horizontal or vertical associations developed amongst individuals and groups. However, there are no standard measures of the core components of social capital, namely norms and networks, due to the ambiguity involved in choosing which norms and networks relative to others could be termed social capital. For instance, should activities of special-interest groups, as a form of collective action which operates on certain common norms and goals amongst their members, be included when measuring the stock of social capital of a locality, even though they function at the expense of the wider social interest? Either way, how do we distinguish whether a particular group or organization functions as a 'special-interest group'? Unable to precisely determine the motives for collective action behind the norms and networks of social groups, the researcher tends to rely on observing the positive and negative social effects of a certain group. A standard approach in the social capital literature had been to distinguish between 'Putnamian' groups - those with a horizontal network structure and cooperative spirit, which have a positive social impact - and 'Olsonian' groups - those with a more or less vertical organizational structure serving special interests at the expense of the common good. But this approach may be misleading in determining the 'social' incentives of a group. Knack and Keefer (1997), who employ this distinction to explain annual growth in a cross-country study, do not produce statistically significant results for either group. One could perhaps speculate that the reason for this finding is that social groups are not purely either 'Putnamian' or 'Olsonian': groups might operate on a set of mixed motives, which are more or less socially oriented for different segments of one group or class of groups at different point in time.

Furthermore, although groups representing and producing perceptions, attitudes and outcomes at the expense of the common good may exist, they may very well trigger the collaboration and synergy between segments of the rest of society to promote generalized norms and networks of reciprocity, equity and fairness and isolate practices exercised by special-interest groups. In the words of sociologist L. Paterson (2001): "If we ask ... how and when social capital is created, perhaps the answer lies in moments of sharp social conflict, where power relations are shifting, and where the outcome is not determined in advance because there is a myriad of possible new networks to be formed. Each segment of civil society is forced to chooses allies ... and thereby to create new bonds of social capital" (p. 54). Thus, group membership may still be regarded as a measure of social capital when viewed as an indicator of social identity and debate as prerequisites towards establishing generalized norms and networks across different groups. The multiplicity and indeterminacy of perceptions are there not to complicate, but merely to confirm the dynamic nature of society in seeking its sense and means for improvement.

In order to assess the determinants of group membership as our proxy to social capital, we regress the membership variable upon a set of independent variables across the EU members-states. Because of the dichotomous nature of the group membership variable, we estimate the following logistic regression model:

$$P_i\ (y_i = 1 \mid x_i) = e^{\,xi\,\beta} / (1 + e^{\,xi\,\beta}) \Rightarrow L_i = \ln P_i / 1\text{-}P_i = x_i\ \beta$$

Thus, we predict the probability of an individual being a member of a group, conditional on the set of independent variables, $P_i\ (y_i = 1 \mid x_i)$.[3] The independent variables to be included in the present analysis refer to characteristics of the individual, as well as aggregate features of the locality - region or country - in which the individual resides, in order to capture institutional or systemic determinants of group membership. The set of individual factors include personal income education, working status, age gender, and marital status, in accordance to the relevant literature on the determinants of social capital. The set of aggregate factors include regional or country dummies, or certain socioeconomic variables, as per capita GDP, unemployment and income inequality. Details on the description of variables and datasets can be found in TABLE 2 in the Appendix, along with some descriptive statistics in TABLE 3.

B. *Regression results*

We turn to our regression results, presented in TABLE 4a, b and c of the Appendix. TABLE 4a records results for Greece and the EU, in which the set of aggregate independent variables are given by regional dummy variables. TABLE 4b includes results for the EU where the aggregate impact on group membership is captured by dummy variables at the country level. TABLE 4c repeats estimation for the same individual independent variables for Greece and the EU, but replaces aggregate regional / country dummy variables with socioeconomic indicators that appear in the literature to be associated with social capital. These indicators have been calculated at regional level for Greece and at country level for the EU member-states.

[3] To simplify estimation procedures, a logit transformation of the logistic regression model is applied. That is, the dependent variable is expressed as the natural log of the odds ratio ($L_i = \ln P_i / 1\text{-}P_i$), which is a linear function of the regression coefficients $\boldsymbol{\beta}$.

The first point worth noting from the total of our regression results is that amongst all variables included in the analysis, education, and particularly the acquisition of a tertiary education degree, has one of the highest coefficients and is statistically significant at the 1% level for all equations estimated in the present analysis. In Greece, obtaining a tertiary level degree increases the odds in favor of being a group member by 4.3 compared to having less than secondary level education degree, and by 1.8 compared to a secondary level degree. In the EU, the impact is more moderate, since obtaining a tertiary education degree compared to having less than secondary level education increases the odds of being a group member by around 2.5. The significance of education in enhancing individual incentives to group membership and contributing to the expansion of social capital has been confirmed in the literature by empirical work based on regression analyses, such as that of Helliwell (1996), Brehm and Rahn (1997), Glaeser et al. (2000), Costa and Kahn (2001), and Rothstein and Stolle (2001). Overall, education is viewed as the factor developing opportunities for collective action, either through offering access to social networks and personal acquaintances, or through cultivating values and morals leading to a sense of citizenship and solidarity. In some cases, education is interpreted as a means for attaining social status, which is complementary to human capital in generating higher income. This interpretation pertains a more individualistic and instrumental approach to group membership. Also education is seen as a means for moral development and social awareness, which in a society of widespread cooperation produces benefits in the form of higher income as a medium-run by-product, rather than as an end in itself. It is this latter outcome that is closer to the view of social capital adopted in the present paper. But at this point it is extremely difficult to separate the two outcomes and assess their impact on group membership independently.

Following education, age is another variable that appears in most empirical work on social capital. The studies mentioned above provide evidence of the significance of age as a determinant of social capital. Particularly, Glaeser et al. (2000), who examine a sample of individuals from the US, predict and inverted U-shaped profile of social capital over the lifecycle, so that group membership is higher when a person is in his/her 30s or 40s, i.e. during the working period of one's lifecycle. Similar conclusions may be drawn for our Greek sample: coefficients are highest for the group from 36 to 45 years and are equivalent to an increase in the odds of being a member by 4.2 compared to the eldest group used as a baseline, and an increase in the odds by 1.6 when compared to the youngest age group. However, results produced by the EU sample do not offer support to the lifecycle hypothesis in social capital accumulation at the individual level. One observes higher coefficients for the age group from 56 to 65, i.e. the age group around retirement, followed by the youngest age group of 16 to 25, who are still at school or investing in human capital. Moreover, the coefficient for the age group from 26 to 35, in which individuals enter the labor market and/or further their training and education, has the smallest coefficient amongst all variables and is statistically significant in most cases. Also in the EU regressions the coefficients are much smaller for all age groups so that the increase in the odds of being a member from the baseline does not exceed a figure of 1.5 for any age group. This provides evidence that patterns of behavior vary from country to country, so that within the EU as a whole, the impact of age and lifecycle hypotheses are much less of an issue in determining the probability of an individual to be a member of a group. A possible explanation for behavioral patterns observed in the EU compared to Greece is that youth and retirees are encouraged to take part in social groups or organizations, as established norms regard them as active and productive members of society.

Another variable belonging to the spectrum of individual factors tested in the empirical literature is income. The relationship between income (here personal, net of taxes) and group membership is positive and statistically significant at the 1% level. Hence, it may be argued that the more affluent will have a higher probability to participate: individuals with higher levels of income are more likely to purchase group membership as leisure or a luxury consumption good. This is partly contradictory to our assumption that social capital is mainly a resource for the well-being of either the individual or the group or society as a whole. However, there might be evidence that group membership is unlike leisure. If group membership were equivalent to leisure, as defined in standard labor supply theory, then it would have fallen with the increase of employment (or paid work). But our regressions offer weak evidence of an inverse relationship between membership and employment. Specifically, the employment variable which corresponds to a dummy variable equal to one when the individual works more than 15 hours a week, and to zero when the individual declares either unemployed or inactive, has a coefficient that is statistically insignificant, although it has the expected negative sign in Greece, whereas in the EU it is positive but of negligible magnitude. Thus, as Glaeser et al. (2000) point out, membership in groups is not driven exclusively by the opportunity cost of time. A number of empirical studies based on time allocation analyses outside of the social capital realm observe that volunteers with high opportunity costs of time - either in terms of actual earned wages or the self-perceived (monetary) value of services provided by volunteer activities - make a higher contribution to charities than volunteers with low opportunity costs of time (Justor and Stafford, 1991; Freeman, 1997). These studies point to the importance of social benefits (meeting new people) and moral benefits (helping someone or society in general) in individuals' decisions to undertake volunteer or unpaid work. Freeman (1997) states that people appear to respond to requests to volunteer because they value charitable activity, and introduces the concept of a 'conscience good' to account for the tendency of people to volunteer when requested to do so. This is also quite far from an interpretation of such activities as merely a consumption of luxury goods in the form of social status and publicity.

Unlike employment, unemployment seems to be more important in determining the individual's incentive to be a member of a group. Being unemployed creates a stronger disincentive for group membership. Although the magnitude and sign of coefficients appear to be similar between Greece and the EU, their statistical significance varies, as they are statistically significant at the 1% level only in the EU regressions. In any case, moving from the situation of being inactive to that of being unemployed reduces the odds of being a member of a group by around 0.6. It might be argued that the unemployed lack income to afford group membership or they spend their plentiful leisure job-seeking and securing a source of minimum income, rather than participating in groups. Additional factors affecting the individual's incentive to participate when facing unemployment might lie in sentiments of distrust he/she develops towards other social groups and society as a whole, which are considered to have deprived him/her of opportunities for employment and self-development. Brehm and Rahn (1997) confirm the negative impact of being unemployed on individual's sentiments of interpersonal trust. Aggregate unemployment variables in our sample appear to offer a similar picture, as the coefficients are negative and statistically significant for both Greece and the EU.

Finally, gender and marital status are also determinants of social capital. Being male as opposed to being female appears to increase the probability of group membership. Coefficients for Greece and the EU are statistically significant at the 1% level. Specifically, being male increases the odds in favor of being member of a group by a bit over 30% in Greece and over 50% in the EU. It is perhaps the case that our results are not capturing the social capital produced within the home and family, or even within family businesses, quite often in the hands of female co-heads of the household, since our group membership variable includes forms of social capital outside the home. Furthermore, even if women participate in the labor force, and are thus exposed to a series of at least work-related social organizations, group membership may not increase, as a result of carrying most household and family obligations. Cost and Kahn (2001) observe that in the US, where labor participation and group membership of women in formal organizations has increased during recent decades, social capital produced within the home, in the form of visiting friends and entertaining at home, has fallen amongst women. Evidence of differences between men and women with regards to group membership might also be provided here from our variable of marriage.

Marriage, of males and females regardless, appears to have no effect in Greece, contrary to results obtained in the EU, where the impact on the probability of the individual being a member of a group is positive and statistically significant. By restricting the sample to men and then to women in the EU, the marriage coefficient is positive and twice as high for men (0.185) than women (0.096) and remains statistically significant at the 1% level. Thus, family obligations do not hamper incentives for group membership, but evidently there is a discrepancy between men and women.

However, it appears from our results that it is not only the set of individual variables that affects the probability for group membership in our sample. Regression results support he argument that characteristics of the region or country in which the individual resides have a significant impact on his/her incentive to participate in social groups. In TABLE 4a, regional dummies in Greece and country dummies within the EU are statistically significant at the 1% level. In Greece, individuals are more likely to be members of groups if they live in any other region outside that of Attiki, i.e. outside of the capital Athens and its wider suburban area. Being a resident of Central Greece, which includes the prefectures of Ipiros, the Peloponese, the Ionian Islands and Sterea Ellada, creates a stronger incentive to be a member of a group: the odds increase by 2.2 compared to being a resident of Attiki, which is used as the baseline region. Then follows the North of Greece, which includes the prefectures of Thraki, Macedonia and Thessaly, and not further behind, the South of Greece that encompasses the Aegean Islands and Crete. Being a resident of these regions corresponds to an increase in the odds in favor of being a member of a group by around 1.5, compared to being a resident of Attiki.

One might argue that the region with more favorable socioeconomic conditions will also portray higher levels of group membership. However, the statement is not supported by the data, as Central Greece has the lowest per capita GDP and the highest income inequality amongst all regions. Another explanation might be that the supply of social groups and organizations is greater in Central Greece, thus the greater the opportunity or incentive for individuals to join. But, according to available data and research on the voluntary sector in Greece (see VOLMED, 1997; Panagiotidou, 2000), the bulk of organizations tend to concentrate in Attiki, compared to which all other regions portray a larger impact on the probability of individual group membership. It is possible thus that regional differences in the stock of social capital may have their roots in Greece's modern history. As Paraskevopoulos (2001) notes in his comparative study of Greek regions, the relatively higher stock of social capital observed in the Ionian Islands or the South Aegean Islands may be partly due to the fact that these regions had been for a longer period of time under Venetian or British rule, thus avoiding the authoritarian and arbitrary rule of the Ottoman Empire, which spread distrust and weakened Greek civil society, as we discussed in Section III.

In Europe it is evident from our results in TABLE 4a that individuals residing in all European countries other than the Mediterranean region - Greece, Italy, Spain and Portugal - are more likely to be members of groups. This is in line with arguments that social capital and civil society in countries of the South of Europe are underdeveloped. Particularly, according to TABLE 4b, where dummy variables represent individual European countries rather than larger regional conglomerates, individuals residing in any other EU country apart from Greece are more likely to be members of groups. The regression coefficients imply an increase in the odds by 4.95, compared to the Mediterranean South. Indeed, compared to Greece, Sweden has the largest coefficient, implying an increase in the odds of being a group member by 16.957, followed by Denmark with a coefficient implying an increase of 14.712. This is also in agreement with features of social regulation in Nordic countries, which is based on the operation of corporatist institutions (see Henley and Tsakalotos, 1993)). With regards to France, the weaker incentive for participation, reflected in the smaller coefficient, which places France in a ranking just above Italy and the remainder of the Mediterranean countries (see TABLE 4b), coincides with observations that France, with its highly centralized government, has low levels of trust and social capital (see, for instance, Fukuyama, 1995).

The interesting point to note from our findings here is that Germany, despite its social economy (Sozialmarktwirtschaft), which has widely been documented in the literature (see, Streeck, 1997), has one of the smallest coefficients. Indeed, in TABLE 4b of the individual country dummy variables, Germany ranks just above Portugal, the country with the smallest coefficient. The increase in the odds of being a member of a group as a result of living in Germany, compared to living in Greece, is 3.051 (whereas for Portugal the corresponding increase amounts to 2.556). This might be in accordance with studies on cross-country voluntarism and civic behavior in Europe, which also observe low levels of voluntary participation in Germany compared to other European countries (see Gaskin and Smith, 1994). The explanation offered in these studies is that German civil society may have developed distaste towards voluntarism and participation on account of its compulsory nature in Nazi Germany during the World Wars. This does not mean that social capital is low in Germany; it might mean that norms and networks of cooperation that appear to be the basis of German Sozialmarktwirtschaft, obtained a more institutional or structural form, not captured by our group membership variable.

Finally, the Agglosaxon countries - UK and Ireland - portray strong incentives for group membership. According to TABLE 4a, these countries have the highest coefficient following the Nordic countries. Being a resident of these countries corresponds to an increase in the odds of being a member of a group to 3.5, compared to the Mediterranean countries. Particularly, being a resident of the UK has a strong impact on the probability of being a member of a group: the increase in the odds is 10.0, compared to being a resident of Greece. In fact, the UK falls just a bit behind Denmark (where the increase in the odds is 14.712) and above Finland (where the odds increase by 9.561). This result is observed despite the country's market liberalism. Apparently, social groups and organizations of the economy's voluntary sector work to supplement state welfare services, which create an environment termed mixed economy welfare or welfare pluralism. However, there is evidence that lack of cooperation between firms in Britain renders entrepreneurial activity less effective, compared to Germany and Japan (Burchell and Wilkinson, 1997). More importantly, government tactics to allocate the provision of social services to voluntary organizations might provoke competition, which might compel them to compromise their social aims and substitute them with commercial strategies in order to secure their own survival, as well as the needs of the target groups who cannot afford to obtain these services through the market or state welfare (Salamon, 1993).

The next step was to investigate what socioeconomic characteristics of regions and countries affect the incentive of individuals to participate and become members of groups (TABLE 4c). Therefore, we replace regional- and country-specific dummies with aggregate socioeconomic indicators, namely per capita GDP, the total unemployment rate and an income distribution index (defined in TABLE 2 of the Appendix). For Greece, these indicators were calculated at the regional level for 4 regions, and for the case of the EU they were calculated for 14 countries, amongst which the former 15 EU member-states, except Luxembourg. In the EU, we observe that per capita GDP, as an index of individual welfare, has a strong positive impact on the individual's probability to become a member of a group. The coefficient implies that an increase in the odds of 4.3 - the highest amongst all coefficients - for a unit increase in the natural log of the share of per capita GDP. This result is not far from evidence provided in empirical work, such as that of Knack and Keefer (1997) who detect a positive impact of per capita GDP on trust and civic cooperation within a cross-country analysis. Another aggregate socioeconomic factor widely mentioned in the literature is that of income inequality. Costa and Kahn (2001) find evidence of the impact of income inequality, controlling for several other indices of social fragmentation, such as ethnicity. In our sample, we observe that for the EU an increase in income inequality has a strong negative effect on individual group membership. It may be the case that as relative income changes to become less equal within the population, individuals may build a sense of isolation and distrust towards society, and thus abstain from group participation. This may also be the case for aggregate unemployment, although to a lesser degree, since the coefficient for unemployment is negative, but smaller, corresponding to a reduction in the odds of being a member of 5.6% for a unit increase in the unemployment rate. Thus, the impact of the unemployment rate on individual incentives for participation is rather limited compared to other explanatory variables.

Although coefficients for the EU are statistically significant at the 1% level, for Greece only the unemployment rate is statistically significant at the 5% level. This may be due to the fact that comparing for only 4 regions in the same country may result in a relatively high correlation between variables, producing collinearity, which affects the statistical significance of coefficients. Thus, a more disaggregated regional distinction within Greece may be required to have wider variation in values of aggregate indices and detect their effects on individual group membership. At this point, we can only comment on the unemployment rate variable, which has a coefficient twice as high than in the EU and appears to have a negative impact on group membership.

A final remark worth mentioning is that in Greece lower per capita GDP shares, coupled with a more unequal distribution within regions, increase the probability to be a member of a group. On the contrary, in Europe, a lower per capita GDP share and a more unequal distribution within countries reduce the probability to be a member of a group. Since the stock of social capital appears to be higher in other EU countries, one would have expected that individual participation and social forces would be more responsive to situations of lower GDP and higher inequality. But it might be the case that in Europe the very existence of institutionalized private and public bodies for social protection, upon which individuals can rely, partly substitutes for collective action in the form of group membership of individuals. It might be a sign of a more developed, institutional structural form of social capital, replacing individual or local initiatives, often isolated or fragmentary across regions and time, in confronting social problems. However, it might alternatively indicate that in Europe lower GDP and higher inequality create a disincentive for social participation, especially for individuals who face the consequences of belonging to the lower tale of the distribution of income. But further research needs to be done in order to determine individual group membership by controlling for the impact of the welfare system and social exclusion from poverty.

V. Conclusions

In this paper the discussion focused on the role of social capital in Greece compared to the European Union. We can recall from Section II that social capital refers to the stock of social relations, based on norms and networks of cooperation and trust, that spill over to the market and state to enhance collective action between formal actors and achieve improved social efficiency and growth. In this sense, social capital emphasizes the capacity of the social, institutional and cultural context to become a productive resource for the economy. We examined these hypotheses by focusing on features of social organization in Greece and their effect on economic reform and growth in Section III. The main conclusion was that a tradition of low civicness hampered reform and development as policy-makers failed to take under consideration the role and reaction of wider social groups and promoted projects in which the distribution of costs and benefits created uncertainty and thus social resistance.

To shed further light on the impact of social capital on socioeconomic reform and development, we turn in Section IV to the main aim of this paper, which is the investigation of the determinants of social capital in Greece, compared to the EU. For this purpose, we regress an index of social capital, related to the incentive of an individual to become a member of a group, on a set of individual, as well as aggregate variables. An important conclusion from our empirical analysis is that both individual- and aggregate-level factors determine the individual's participatory behavior. However, the impact of these variables on group membership varies across countries. This is indicative of the fact that features of social regulation interact with the socioeconomic conditions and institutional influences that are specific to a country's history and culture. It is crucial to gaining an understanding of social capital and its links to socioeconomic performance and growth in any particular region or country. Furthermore, if our assumption on the positive relationship between social capital and economic growth holds true, then the cross-country analysis of determinants of social capital might also shed light on the means to rebuilding norms and networks of trust and cooperation for social well-being.

This brings us to one of the most difficult issues yet to be resolved in the literature: how can a region with low levels of trust and civicness rebuild its stock of social capital, and replace the activities of special-interest groups with generalized norms and networks of reciprocity, trust and cooperation? The practical importance of this issue is evident especially for Greece, where narrow-interested groups and patron-client relations appear to have permeated the public and private sector and inhibited social reform and economic growth.

Based on regression results recorded in Section IV, we observe that in most countries of the EU factors like education and unemployment have a strong impact on the probability of an individual to be a member of a group. On the one hand, the education system, one of the prime agents of socialization, can grant individuals access to social networks and transmit values of reciprocity and cooperation. On the other, the individual facing unemployment has a strong disincentive to participate in social groups, partly on account of the distrust he/she tends to develop towards society. Thus, expanding education and employment opportunities would apparently increase the incentive to participate in groups and enhance the stock of social capital. Additionally, gender, marital status and age are variables of equal importance. Although marriage increases the likelihood of being a member of a group for men and women, the increase in the odds to being a member is for women half that of men, even after women have entered the labor market and are exposed to a series of social and professional organizations. This is probably because a rise in women's group membership is at the expense of familial obligations within the household, traditionally held by women. But it is not only women who confront obstacles to participating in social groups on account of traditional perceptions of their social role. In Greece, the working age group appears to be more likely to participate in groups, as opposed to the rest of Europe where younger or elder non-working groups are most likely to be members. Therefore, for group membership to increase amongst women, youth and elders, norms and networks propagating the significance of their participation and service to society must be established.

However, apart from individual factors, aggregate variables at the regional or country level seem to affect group membership. Although we must be cautious with interpreting results for Greece, given the rather small number of regions, we observed that lower per capita GDP and higher income inequality reduced the probability of group membership in EU, as opposed to Greece. One explanation was that in the EU lower GDP and higher inequality create a disincentive for social participation, especially from the part of individuals facing lower income and poverty, as a result of social exclusion. Alternatively, it may be the case that in the EU other forms of social protection may be available to cushion instances of worsened socioeconomic conditions, substituting widespread individual participation. These forms of social protection might include state welfare systems, but might also direct to a more developed, institutional or structural form of social capital, which replaces individual or local incentives of participatory behavior, often isolated and fragmentary across regions and time, with an organized private voluntary sector that activates a flow of services and funds to segments of the population in response to the social problems faced by these groups. But further research is required in order to establish the relationship of social capital with the welfare state, as well as with the third sphere - voluntary sector - of the economy. It would be interesting to explore how social capital, as norms and networks, supports the development of formal institutions of social protection and welfare, and how it supplements or substitutes them when institutional or structural provisions have not as yet been undertaken and promoted to such a degree as to confront the pressing social issues that emerge in an ever-changing economic and social environment.

At all events, it is evident from our results that there are institutional factors affecting social capital and that these factors have a different impact on group membership across countries. Indeed, in Greece the probability of group membership was higher in the Central region, compared to other regions in the country, whereas in the EU it was the Nordic countries that had a higher probability compared to the Mediterranean South. As we discussed in the paper, these findings are quite in line with case studies and historical references of indigenous civil societies and civic traditions. Nevertheless, observations with regards to Germany and the UK, for instance, required further analysis into the history and institutional structure of patterns of participatory behavior. Thus, in Germany, even if the probability of group membership is lower, it may be the case that other forms of social capital, not captured by our variable, in the organization of the market and networking relations between firms may be at the essence of its social economy and domestic social capital. Similarly, in the UK, the higher probability for group membership may be a response to the lack of cooperative networks and social regulation in the sphere of market and corporate relations, which tend to be based on a more liberal stance. Overall, this means that a comparative study across countries should not overlook the importance of systemic, country-specific factors in determining the incentive of an individual to be a member of a group. Quantitative approaches such as the regressions analyses implemented here should be accompanied by qualitative assessments of the nature and effect of variables on group membership and social capital in general.

On the whole, individual and aggregate factors play a role in determining group membership and social capital. They imply that the reconstruction of social capital depends on the expansion of opportunities for social participation and cooperation to wider segments of the society and on changes in the tradition of countries of low trust and weak civil societies. But to expand opportunities for participation and cooperation might call for changes in the civic tradition of countries: practices of special-interest groups and clientelistic relations, supported through time by authoritarian regimes, should be replaced by generalized norms and networks. According to case studies that appear in the social capital literature (e.g. Heller, 1996; Fox, 1996; Petro, 2001), changes in tradition were possible when social stakeholders in the reform process took part in mechanisms of political exchange and debate, and promoted state-society synergy. On the one hand, reformists in state administration contributed to social capital by securing the right to association and building confidence in public institutions, through impartial, transparent and credible mechanisms of administration. For instance, only recently has the Greek government passed a law for non-governmental organizations, which offered recognition, as well as financial support, and boosted the activities and cooperation of the voluntary sector. On the other hand, local grassroots associations can build social capital from below by representing collective interest and legitimizing market and state practices in terms of social aims and common values. This depends not only on the strengthening of bonds within groups, but also on the bridging of bonds across groups, to create generalized norms and networks and promote the activities of more encompassing groups (Woolcock, 1998). For Greece, the weakness of civic society is not located in the lack of mutual bonds within groups as much as in the absence of bridging across local and regional groups.

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APPENDIX

TABLE 1: GROUP MEMBERSHIP IN THE EUROPEAN UNION

(former EU-15, except Luxembourg)

Countries	*Valid sample size*	*Proportion of Group $^{\alpha}$ membership*	*Per capita GDP $^{\beta}$ (PPS)*
DENMARK	3983	65.1	25026
UNITED KINGDOM	8662	56.0	21598
FINLAND	7107	55.2	21442
AUSTRIA	6235	47.7	23484
IRELAND	5441	46.2	24133
NETHERLANDS	8916	44.8	23838
SWEDEN	5732	40.9	21620
BELGIUM	4989	37.3	23446
GERMANY	11204	28.9	22712
FRANCE	10680	27.4	20861
SPAIN	13020	24.5	17319
ITALY	15151	23.8	21158
PORTUGAL	11183	18.0	16065
GREECE	9324	8.9	14198
TOTAL ECHP sample	***121627***	***32.4***	*21131*
			r = 0,784 (p = 0,001)

$^{\alpha}$ *Source :* European Community Household Panel, Wave 6, 1999 (European Commission).

$^{\beta}$ *Source :* Eurostat (2001), *Eurostat Yearbook: The Statistical Guide to Europe, Data 1989-1999*, General Statistics, Theme 1 (European Commission). Data from year 1999.

TABLE 2: DESCRIPTION AND DATA SOURCE OF VARIABLES

SET OF VARIABLES	DESCRIPTION AND DATA SOURCE
	Individual- level variables
Group membership	Dichotomous variable with values $y_i = 1$, if the individual is a member of a group, and $y_i = 0$, if he/she is not member of group. Corresponds to ECHP data, Wave 6, 1999.
Natural log of personal net income	Interval variable of personal income of individuals, net of taxes. To assure comparability across European countries values in national currency were transformed in terms of purchasing power standards (PPS). In regressions, income was entered as natural log. Data from ECHP data, Wave 6, 1999.
Highest level of education completed	Set of dummy variables for completing less than secondary level - used as the baseline, for secondary level, and tertiary level education. Data derived from ECHP data, Wave 6, 1999, where it appears as an ordinal variable.
Working status	Set of dummy variables for being employed, for being unemployed, and being inactive, which was used as the baseline. Data from ECHP data, Wave 6, 1999, where it appears as an ordinal variable.
Age	Set of dummy variables for following age groups: 16-25, 26-35, 36-45, 46-55, 56-65, 66-75, 76-85. The latter age group was chosen as the baseline. Appears as an interval variable in the ECHP data, Wave 6, 1999.
Gender	Dichotomous variable with values $y_i = 1$ for male, and $y_i = 0$ for female. Data from ECHP data, Wave 6, 1999.
Marital status	Dichotomous variable with values $y_i = 1$, if married, and $y_i = 0$, if otherwise. Appears as ordinal variable in original from ECHP data, Wave 6, 1999.
	Aggregate -level variables
Greek Regions	Set of dummy variables for 4 regions, according to NUTS I level of regional classification: North (GR1), Central Greece (GR2), South (GR4), and Attiki (GR3). Data in ECHP data, Wave 6, 1999. North includes Thraki, Macedonia, and Thessaly; Central is Ipiros, Peloponese, Ionian Islands, Sterea Ellada, excluding Attiki; South is Crete and Aegean Islands; and Attiki is the prefecture of the capital city Athens.
European Countries	Set of dummy variables for member-states of former EU-15, with the sole exception of Luxembourg: Nordic countries (Denmark, Sweden, Finland); Agglosaxon countries (UK, Ireland); Benelux (Belgium, Netherlands); France; Austria; Germany; Mediterranean countries (Italy, Greece, Spain, Portugal). Data in ECHP data, Wave 6, 1999.
Natural log of per capita GDP	Gross domestic product at market prices. Current series in purchasing power standards (PPS) per head. Expressed as share of EU-15. In regressions, entered as natural log. For cross-European regressions, data from Eurostat (2001), *Eurostat Yearbook: The Statistical Guide to Europe, Data 1989-1999*, General Statistics, Theme 1, European Commission. For cross-regional regressions within Greece, data from Eurostat (2001), *Regions statistical yearbook, 2001*, European Commission.
Unemployment Rate	Total unemployment rate of men and women. Data for 1999. For cross-European regressions, data from Eurostat (2001), *Eurostat Yearbook: The Statistical Guide to Europe, Data 1989-1999*, General Statistics, Theme 1, European Commission. For cross-regional regressions within Greece, data from Eurostat (2001), *Regions statistical yearbook, 2001*, European Commission.
Income distribution	The ratio of the total income received by the 20% of the country's population with the highest income - top quintile, to that received by the 20% of the countries lowest income - lowest quintile; income should be understood in terms of equivalized household income. Data for 1999 from Eurostat (2002), *General Statistics: Structural Indicators*, European Commission, http://europa.eu.int/comm/eurostat .

TABLE 3: DESCRIPTIVE STATISTICS OF VARIABLES

SET OF VARIABLES	GREECE			EU-15		
	Mean	**Std. Deviation**	**N**	**Mean**	**Std. Deviation**	**N**
Group membership (y_i = 1, if member of group) (y_i = 0, if not member of group)	0.0909	0.2876	9324	0.3496	0.4768	121627
Natural log of personal net income	8.6816	1.0629	7174	9.0310	1.1439	110210
Highest level of education completed Set of dummy variables for:						
Less than secondary level	baseline	baseline	baseline	baseline	baseline	baseline
Secondary level	0.2978	0.4573	9570	0.2931	0.4552	130240
Tertiary level	0.1189	0.3237	9570	0.1851	0.3884	130240
Working status Set of dummy variables for:						
Employed	0.4312	0.4953	9574	0.5224	0.4995	130803
Unemployed	0.0510	0.2200	9574	0.0526	0.2231	130803
Inactive	-	-	-	-	-	-
Age Set of dummy variables for:						
16-25	0.1614	0.3679	9413	0.1576	0.3643	129819
26-35	0.1664	0.3724	9413	0.1925	0.3942	129819
36-45	0.1646	0.3708	9413	0.1868	0.3898	129819
46-55	0.1558	0.3627	9413	0.1675	0.37343	129819
56-65	0.1143	0.3514	9413	0.1330	0.3396	129819
66-75	0.1461	0.3532	9413	0.1097	0.3125	129819
76-85	-	-	-	-	-	-
Gender (y_i = 1, if male) (y_i = 0, if female)	0.4781	0.4995	9574	0.4812	0.4997	131386
Marital status (y_i = 1, if married) (y_i = 0, if otherwise)	0.6490	0.4773	9574	0.5901	0.4918	127694
Greek Regions Set of dummy variables for:						
North	0.3581	0.47946	9423			
Central	0.2738	0.44493	9423			
South	0.1317	0.3382	9423			
Attiki	-	-	-			
European Countries Set of dummy variables for:						
Nordic countries				0.1553	0.3622	131386
Agglosaxon countries				0.1080	0.3104	131386
Benelux				0.1465	0.3536	131386
France				0.0813	0.2733	131386
Austria				0.0475	0.2128	131386
Germany				0.0859	0.2802	131386
Mediterranean countries				-	-	-
Region of birthplace and residence	0.7504	0.4328	9222	0.7596	0.4273	93290
Natural log of per capita GDP	4.1242	0.1496	9423	4.5944	0.2018	131386
Unemployment Rate	11.4477	1.5163	9423	8.4979	3.8289	131386
Income distribution	5.9533	0.5461	9423	4.6117	1.0524	131386

TABLE 4a: REGRESSION RESULTS FOR GREECE AND THE EU

Dependent variable y_i: Group membership	**GREECE**		**EU-15**	
Independent variables x_i	$\beta = \partial[\ln P_i/1-P_i] / \partial x_i$	$e^{\beta} = [P_i/1-P_i]_1 / [P_i/1-P_i]_0$	$\beta = \partial[\ln P_i/1-P_i] / \partial x_i$	$e^{\beta} = [P_i/1-P_i]_1 / [P_i/1-P_i]_0$
Constant	-7.215*** (0.562)	0.001	-2.855*** (0.074)	0.058
Natural log of personal net income	0.319*** (0.059)	1.376	0.093*** (0.008)	1.097
Education: less than secondary level	-	-	-	-
completed secondary level	0.900*** (0.112)	2.459	0.399*** (0.018)	1.491
completed tertiary level	1.471*** (0.123)	4.355	0.723*** (0.019)	2.060
Working status: employed	-0.212 (0.139)	0.809	0.020 (0.021)	1.020
unemployed	-0.534* (0.291)	0.586	-0.439*** (0.038)	0.645
inactive	-	-	-	-
Age: 16-25	0.942*** (0.356)	2.565	0.271*** (0.041)	1.312
26-35	1.193*** (0.325)	3.297	0.090* (0.039)	1.094
36-45	1.449*** (0.322)	4.259	0.296*** (0.039)	1.344
46-55	1.325*** (0.318)	3.764	0.296*** (0.039)	1.344
56-65	1.235*** (0.310)	3.438	0.326*** (0.037)	1.385
66-75	0.813** (0.310)	2.254	0.220*** (0.037)	1.246
76-85	-	-	-	-
Male	0.277*** (0.095)	1.320	0.491*** (0.014)	1.546
Married	-0.001 (0.107)	0.999	0.135*** (0.016)	1.161
Region: North	0.432*** (0.114)	1.540		
Central	0.789*** (0.118)	2.201		
South	0.431*** (0.149)	1.539		
Attiki	-	-		
Region: Nordic countries (Denmark)			1.598*** (0.022)	4.945
Agglosaxon countries (UK, Ireland)			1.257*** (0.023)	3.514
Benelux (Belgium, Netherlands)			0.975*** (0.023)	2.651
France			0.294*** (0.027)	1.341
Austria			1.160*** (0.031)	3.190
Germany			0.181*** (0.027)	1.199
Mediterranean countries (Italy, Greece, Spain, Portugal)			-	-
N	6796		103884	
Pseudo R^2 (Cox-Snell index)	0.066		0.143	

TABLE 4b: REGRESSION RESULTS FOR THE EU

Constant	-3.752*** (0.084)	0.023
Natural log of personal net income	0.082*** (0.008)	1.086
Education: less than secondary level	-	-
completed secondary level	0.460*** (0.018)	1.584
completed tertiary level	0.780*** (0.020)	2.182
Working status: employed	0.022 (0.021)	1.022
unemployed	-0.429*** (0.039)	0.651
inactive	-	-
Age: 16-25	0.257*** (0.041)	1.292
26-35	0.059 (0.039)	1.061
36-45	0.287*** (0.039)	1.332
46-55	0.290*** (0.039)	1.336
56-65	0.327*** (0.037)	1.387
66-75	0.233*** (0.037)	1.262
76-85	-	-
Male	0.446*** (0.015)	1.562
Married	0.171*** (0.016)	1.187
Region: Denmark	2.689*** (0.053)	14.712
Netherlands	2.165*** (0.046)	8.717
Belgium	1.518*** (0.051)	4.561
France	1.253*** (0.046)	3.502
Ireland	2.032*** (0.049)	7.627
Italy	1.215*** (0.045)	3.370
Spain	1.155*** (0.046)	3.173
Portugal	0.939*** (0.048)	2.556
Austria	2.099*** (0.049)	8.162
Finland	2.258*** (0.047)	9.561
Sweden	2.809*** (0.049)	16.597
Germany	1.115*** (0.046)	3.051
UK	2.309*** (0.046)	10.006
Greece	-	
N	103884	
Pseudo R^2 (Cox-Snell index)	0.143	

TABLE 4c: REGRESSION RESULTS FOR GREECE AND THE EU

Dependent variable y_i: Group membership, binary	GREECE		EU-15	
Independent variables x_i	$\beta = \partial[\ln P_i/1-P_i] / \partial x_i$	$e^{\beta} = [P_i/1-P_i]_1 / [P_i/1-P_i]_0$	$\beta = \partial[\ln P_i/1-P_i] / \partial x_i$	$e^{\beta} = [P_i/1-P_i]_1 / [P_i/1-P_i]_0$
Constant	-4.803 (4.151)	0.008	-7.222*** (0.446)	0.001
Natural log of personal net income	0.319*** (0.059)	1.376	0.071*** (0.008)	1.073
Education: less than secondary level	-	-	-	-
completed secondary level	0.900*** (0.112)	2.459	0.417*** (0.017)	1.517
completed tertiary level	1.471*** (0.123)	4.355	0.928*** (0.019)	2.529
Working status: employed	-0.212 (0.139)	0.809	0.007 (0.007)	1.007
unemployed	-0.534* (0.291)	0.586	-0.444*** (0.038)	0.642
inactive	-	-	-	-
Age: 16-25	0.943*** (0.356)	2.567	0.256*** (0.040)	1.292
26-35	1.194*** (0.325)	3.300	0.005 (0.038)	1.005
36-45	1.450*** (0.322)	4.262	0.241*** (0.038)	1.273
46-55	1.326*** (0.319)	3.767	0.283*** (0.038)	1.327
56-65	1.236*** (0.310)	3.441	0.284*** (0.036)	1.328
66-75	0.814*** (0.311)	2.256	0.195*** (0.036)	1.215
76-85	-	-	-	-
Male	0.277*** (0.095)	1.320	0.426*** (0.014)	1.531
Married	-0.001 (0.107)	0.999	0.100*** (0.016)	1.105
Natural log of regional per capita GDP share (EU base, PPS, 1999)	-0.701 (0.764)	0.496	1.459*** (0.086)	4.302
Unemployment (1999)	-0.080** (0.039)	0.923	-0.058*** (0.002)	0.944
Income distribution (SQ5/SQ1)	0.306 (0.217)	1.358	-0.206*** (0.012)	0.814
N	6796		103884	
Pseudo R^2 (Cox-Snell index)	0.066		0.107	

Statistical significance at 1% level ***, 5 % level **, 10% level *.
Standard errors in parentheses.

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(lxvi) This paper has been presented at the 4th BioEcon Workshop on “Economic Analysis of Policies for Biodiversity Conservation” organised on behalf of the BIOECON Network by Fondazione Eni Enrico Mattei, Venice International University (VIU) and University College London (UCL) , Venice, August 28-29, 2003
(lxvii) This paper has been presented at the international conference on “Tourism and Sustainable Economic Development – Macro and Micro Economic Issues” jointly organised by CRENoS (Università di Cagliari e Sassari, Italy) and Fondazione Eni Enrico Mattei, and supported by the World Bank, Sardinia, September 19-20, 2003
(lxviii) This paper was presented at the ENGIME Workshop on “Governance and Policies in Multicultural Cities”, Rome, June 5-6, 2003
(lxix) This paper was presented at the Fourth EEP Plenary Workshop and EEP Conference “The Future of Climate Policy”, Cagliari, Italy, 27-28 March 2003
(lxx) This paper was presented at the 9th Coalition Theory Workshop on "Collective Decisions and Institutional Design" organised by the Universitat Autònoma de Barcelona and held in Barcelona, Spain, January 30-31, 2004
(lxxi) This paper was presented at the EuroConference on “Auctions and Market Design: Theory, Evidence and Applications”, organised by Fondazione Eni Enrico Mattei and Consip and sponsored by the EU, Rome, September 23-25, 2004
(lxxii) This paper was presented at the 10th Coalition Theory Network Workshop held in Paris, France on 28-29 January 2005 and organised by EUREQua.
(lxxiii) This paper was presented at the 2nd Workshop on "Inclusive Wealth and Accounting Prices" held in Trieste, Italy on 13-15 April 2005 and organised by the Ecological and Environmental Economics - EEE Programme, a joint three-year programme of ICTP - The Abdus Salam International Centre for Theoretical Physics, FEEM - Fondazione Eni Enrico Mattei, and The Beijer International Institute of Ecological Economics.
(lxxiv) This paper was presented at the ENGIME Workshop on “Trust and social capital in multicultural cities” Athens, January 19-20, 2004

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