

E C O N O M I C S B U L L E T I N

The Olson - Putnam Controversy: Some Empirical Evidence

José Atilano Pena López
University of A Coruña

José Manuel Sánchez Santos
University of A Coruña

Abstract

This paper explores the causal link between associationism and general trust. First we study the principal components that constitute social capital. Then we contrast a structural model identifying the relations between the relevant variables in the so-called Olson-Putnam aporia. The results of the empirical test on the determinants of social capital allow us to conclude that the extension of horizontal networks maintains a direct relation with this form of capital, but not those of vertical type.

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1.- Introduction.

Despite lacking a solid definition, the emergent notion of social capital is a central element in the debate on development. In fact, the basis of this concept is strikingly ambiguous. For instance, it can be the generalization of moral norms and at the same time, the extension of associative networks and it has even been identified tautologically with trust (Paldam, 2000, Sobel, 2002).

Different research on the topic has an important point in common: the idea that trust and internalization of norms of cooperative and prosocial behaviours become essential pillars of the economy and society. The role played by trust on economic development is not under debate (Zack and Knack, 2001). It is evident that in an integrated community, transaction costs (costs of information, monitoring contracts, conflicts...) are considerably reduced due to the extension of trust networks, intra and extra-firm. Those societies that display high levels of trust will be able to overcome agency problems more easily. In particular, as North writes: "the incapacity of societies to develop an effective reinforcement of contracts is the most important source of stagnation and underdevelopment of the Third World" (North, 1990: p.54)

However, the role played by social networks on the generation of trust is not evident. In spite of the apparent identity that most studies on social capital adopt as a departure point, the role played by the associative activity is as ambiguous as the social capital definition because associationism can create or destroy trust.

Considering the existing theoretical positions, we can propose two possible interpretations. On the one hand, Putnam (1993) attributes the greatest success of regions and countries in terms of economic growth to the existence of a strong associative frame. These networks develop habits of cooperation, solidarity and interest in *res-publica*, basic attitudes for the resolution of collective and agency problems. This author identifies social capital with trust, norms and networks (Putnam, 2001), without putting to the test the internal causality of these links (Bjornskov, 2006). On the other hand, Olson (1965, 1982) provides an apparently opposite interpretation and argues that the social organizations, acting as specialized groups of interest (lobbies), can limit the growth possibilities. If the interests of some of these organized groups come into conflict with those of disorganized social groups in general, the joint effect on trust and consequently on economic activity, would be negative. In that situation, the economy and society in general could be captured by the conflicts between organized groups.

In this paper we have dealt with the relation between associationism and social trust, testing the hypothesis that maintains the existence of a direct link between the extension of sympathy networks, associationism and social trust¹. In this respect we have tried to find a way out of what can be called the Olson-Putnam "aporia". Secondly, we have developed an empirical model in order to identify the main determinants of social capital testing our hypothesis. Finally, some concluding remarks have been summarized.

¹ Unlike the studies raised at communitarian level (Alesina and Laferrara, 2000; Glaeser et al. 1999), this present work adopts a macrosocial and transcultural point of view. This approach implies a loss of detail in the analysis but it allows a more general vision on the causality.

2.-Social Capital and its *aporias*

Although preoccupation for this concrete subject goes back to the nineteen twenties, it is not until R. Putnam's studies on the Italian regions in the eighties and nineties when it is considered an essential aspect of economic and social development. The results of his investigation showed that the cause of the sensitive growth differential between the south and the north of Italy stemmed from what Maquiavelo denominated "virtu civile " (civil virtue) (Putnam, 2000, p. 19). This can be translated as a tendency to generate horizontal associations, which constituted a base for economic and social development. As Putnam expressed "the good government in Italy is a by-product of the choral societies and the soccer clubs" (Putnam, 1993) and civil virtue expresses and constructs relations of cooperation and trust among the citizenship. From this perspective, associations create a sense of shared responsibility and develop habits of cooperation and solidarity, fostering economic growth (1993, 89-90).

In short, the existence of strong social networks can improve social and economic functioning in comparison with non structured societies or groups with no unifying link. Nevertheless, the way in which social networks affect economic activity is not evident.

On the contrary, Olson (1968) remarked that the conflicts between groups of interest (lobbies) can limit the growth possibilities because these groups that lobby for preferential policies can impose disproportionate costs on the rest of society. Taking into account the problems of collective action, organizations representing the interests of smaller groups will often succeed in its rent seeking activities while organizations representing interests of large groups will not emerge. These "distributional coalitions" will accumulate over time with adverse consequences on economic performance. The especial interest laws and regulations derived from their behavior reduce and distort the allocation of investment, labor and other resources and slow down rates of innovation, in short, limiting growth (Keefer and Knack, 1997; Knack, 2003)

However, this resume of Putnam's and Olson's social analysis is overly simplified. Both perspectives on the same social fact can be compatible, if we distinguish sets of groups on the basis of their functioning and objectives. In this respect, Putnam also admitted (2000) correcting naïve readers of his work that some social networks facilitating cooperation among their members can have detrimental effects on the wider community. Then, as he acknowledges in his latter work (2001), social capital is not guaranteed to produce positive externalities on society. This has led some researchers to distinguish between several types regarding this kind of capital; particularly, bonding and bridging social capital. The former is associated with closed networks (organizations that encompass people with the same background and with a particularistic interest), while the latter entails overlapping networks (organizations that bring citizens into contact with people from a cross-section of society) (Paxton, 2002). At the same time, Olson took into account that ample groups that are sufficiently encompassing with society, as bridging social capital, are not expected to lobby. Thus, only a special kind of groups, closed and vertical, act as non encompassing rent seekers for this author. Both specifications open a choice of integration that should be put to the test, clarifying the causality of social capitalization or the generation of social trust.

In sum, we hypothesize that social capital as social networks has an ambiguous relation with trust. Whilst bridging social capital is directly linked with general trust, bonding social capital is inversely related.

3.- Empirical evidence

One of the most used proxies of social capital is the variable "general trust" or trust in the population as a whole. In order to get a quantitative measure of trust to be applied in our empirical test we have used the *World Values Survey*² (WVS) as data source (Inglehart, 2000); in particular, the percentage of people interviewed who in each country adhere to the statement, "*most of the population is object of trust*". By adopting this definition we study the concept of generalized trust, as opposed to the specific or narrow one, linked to repeated interactions or to relations of proximity.³ Although the question is ambiguous, the introduction of the generic concept of "population" explores the perception on the level of trust beyond the close family field.

In terms of the Theory of Games, this variable is twofold: (i) the attitude towards cooperation with anonymous subjects in analogous situations to the Prisoner's Dilemma, (ii) the existence of a cooperative approach not limited to certain social groups. Therefore, this view also expresses the expectation that other individuals do not act opportunistically.⁴

Our attention focuses on the study of its causality. However, the determinants of trust can be very diverse in nature. On the one hand, trust in others can be the result of moral and cultural activity. In this case, trust would be seen strongly influenced by individual characteristics and by the level and type of education received, religious beliefs, etc. Regarding sympathy relations, one can place more trust in those with whom he has a similarity in formation or who belongs to a same social or religious group. Accordingly, a society characterised by strong diversity in its composition will show low levels of trust and will be based fundamentally on the familiar relations. On the other hand, a community with consolidated institutions in the pursuit of deviated behaviours and, at the same time, a society made up of ample associations that encompass general interest will feel more trustworthy because of its protection and its channels of involvement.

In summary, considering this multiplicity of sources, it is necessary to analyze the effects derived from associative activity, the inequality of income levels, ethnic polarization, formal institutions for the protection of individual rights, the income *per capita* and the educational levels.

The results of the *World Values Survey*⁵ offer abundant evidence on the interrelation between social values, structures and social trust. In order to identify the determining factors of general trust, after studying the correlation between variables, we have used exploratory techniques of data reduction, in particular, the Principal

² The WVS constitutes the survey with the most extensive basis on a world-wide scale. It is formulated on a set of 61 countries (82500 interviews).

³ These answers have been tested with alternative measures of trust and a correlation close to the identity was observed. For example, they bear one narrow relation to the percentage of return of lost objects, levels of corruption, etc. (see Keefer and Knack, 1997). They also include the evidence expressed in the studies of Putnam (1993).

⁴ The world-wide average of the set of answers, 35.8%, covers up the existence of a strong variability that goes from 5% in Peru to a 65% in Norway.

⁵ The WVS, constitutes the survey with the most extensive basis on a world-wide scale. It is formulated on a set of 61 countries and significant samples in all of them. Globally one is the result of 82500 interviews in which all types valuable perceptions are questioned mainly, social bonds etc.

Components Analysis (the PCA). We also applied a *latent root regression* analysis to the PCA results with the aim of clarifying the causal link between the orthogonal components and general trust. Finally a confirmatory factor analysis is developed putting the hypothesis to the test.

a. - Results of Principal Components Analysis

Table 1 reports the correlations of trust levels with expressive variables of certain social values, active participation in diverse forms of associationism, institutional trust and some socioeconomic characteristics.

Table 1.- Correlations: Social Capital vs social variables

Family value	-0,247*	Political Associationism	-0,057
Friendship value	0,274**	Economic Associationism	-0,101
Policy value	-0,135	Profesional Associationism	0,102
Religion value	-0,593**	Asistencial Associationism	0,006
Determination value	0,423**	Trust in Church	-0,441**
Concurrence value	-0,317**	Trust in the Army	0,091
Religious faith	-0,449**	Trust in legal system	0,306**
Religious practice	-0,248*	Trust in press	-0,259*
Low rent	-0,333**	Trust in unions	0,242*
Sport Associationism	0,446**	Trust in Politics	0,506**
Religious Associationism	-0,175	Trust in government	-0,029
Cultural Associationism	0,286**	Trust in enterprises	-0,013
Labour Associationism	0,38**		

*indicates statistically significant at 5% level; ** at 1%

At first glance, there is a highly significant correlation between the general trust and trust in the open social institutions (legal and political system), but not with particular closed institutions (i.e. church and army). Similarly, a direct relation between general trust and civic associationism with a horizontal organization (cultural, sports, unions, etc.) is verified, but not with the traditional verticalist groups (religious and political associations). Moreover, traditional values such as political and religious commitment or the importance of the family (bonding social capital) are inversely related to general trust, in contrast to values closely bound with the extension of sympathy bonds beyond closed circles. In this sense, the most relevant variables are related to bridging social capital, confirming Granovetter's perspective (1973) on the importance of weak ties for the formation of communities.

These results must be completed with the multivariant analysis. The application of the exploratory analysis with varimax rotation groups the variables in four explanatory components that account for 75% of the total variance. The description of the extracted factors is entirely consistent with the logic presented in the most recent studies on the constitution and the effects of social capital (Bjornskov, 2006). In particular, the component with a larger explanatory power in the total variance has to do with associationism or active participation in organizations, diverse in nature (political, religious, professional, etc.). This takes up 30% of the variance and gathers all the linked variables with positive loads (see tables 2 and 3).

Table 2.- Total explained variance by component

Component	Sum of squared saturations of extraction			Sum of squared saturations of rotation		
	Total	% of variance	% cumulated	Total	% of variance	% cumulated
1	5.689	29.942	29.942	4.909	25.839	25.839
2	4381	23.057	52.998	4.416	23.242	49.08
3	3.028	15.939	68.937	3.124	16.441	65.521
4	1.143	6.014	74.951	1.792	9.431	74.951

Method: Principal Component Analysis

Table 3: Principal Component Analysis

	Components			
	Associationism	Trust in institutions	Development indicators	Associations and traditional values
Cultural associationism	0.917			
Economic associationism	0.878			
Professional associationism	0.873			0.325
Religious associationism	0.798			0.343
Leisure associationism	0.787		0.432	
Unions	0.621			
Trust in parliament		0.896		
Trust in parties		0.879		
Trust in legal system		0.853		
Trust in government		0.826		
Trust in unions		0.767		
Trust in enterprises	0.396	0.633		
Human Development index			0.870	
PIB pc	0.350		0.848	
Trust in political system		0.433	0.781	
Religious practice			-0.645	0.361
Family values				0.749
Charitable associationism	0.508			0.584
Political associationism	0.507			0.561

Extraction method: Principal Component Analysis. Rotation Method: Normalization Varimax with Kaiser. Rotation has converged in 5 iterations. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.728, while Bartlett's Test of Sphericity is significant at $p < 0.0001$. Loads below a 0.3 have been suppressed

The second factor accounts for 25% of the total variance and includes variables that reflect the levels of trust in diverse social and political institutions. We will refer to this factor as institutional trust. Once again, all the variables load positively on this factor.

The third factor, including the indicators of development and income, accounts for 16% of the variance. Two special features related to this factor are worthy of mention as they have theoretical support (Putnam, 1993; North, 1990). On the one hand, we find political trust, directly tied to the level of economic and human development. Logically, economic growth is related to the solidity of the political framework. Along

with this, on the other hand, the variable that reflects the presence of religious attitudes bears a negative load. This fact seems coherent with the denominated Hypothesis of Secularization, which points out the relevance of the religious behaviors would tend to decline when the levels of income, education and urbanization rose.

Finally, a fourth factor accounts for 6% of the variance, and we can denominate it as the relevance of traditional values; that is, the importance of the family and membership of welfare or charitable institutions.

b.- Results of latent root regression.

We have run a regression with the principal components (*latent root regression*) in order to verify the existence of a relationship between the principal components and general trust mentioned (Table 4).⁶

In general, all the explanatory variables are significant, particularly those related to socio-economic development. The levels of associationism and institutional trust also show a positive influence. In contrast, the presence of traditional values shows a negative coefficient.

Table 4: Regression on principal components

Dependent Variable: trust		
Method: Least Squares		
Sample(adjusted): 1 61		
Included observations: 61 after adjusting endpoints		
Variable	Coefficient	Prob.
Fac. Asociationism	2.364944	0.0498
Fac. Trust in institutions	2.394438	0.0471
Fac. development indicators	7.576554	0.0000
Fac. traditional values	-4.481868	0.0004
C	26.40796	0.0000
R-squared	0.532764	
Adjusted R-squared	0.499389	
Durbin-Watson stat	1.832767	
F-statistic	15.96341	
Prob(F-statistic)	0.000000	

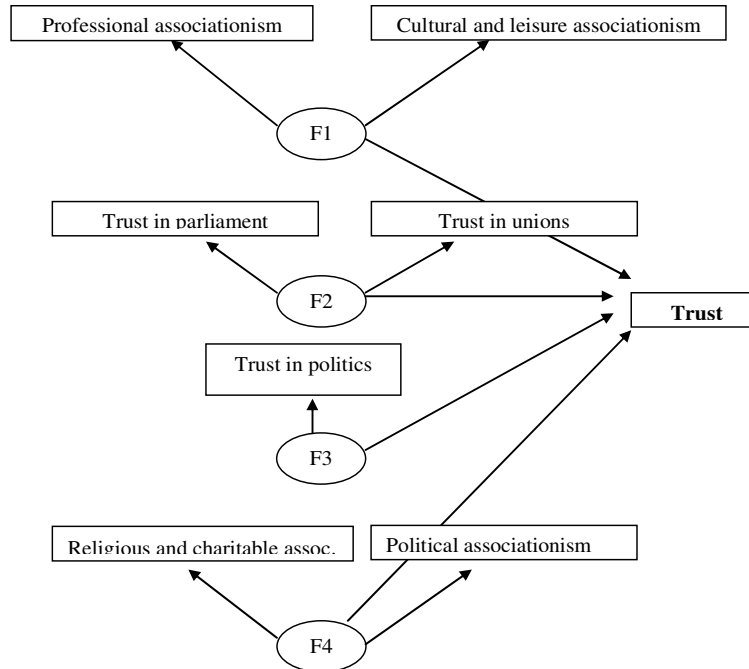
These findings suggest that there are positive and significant links between the levels of general trust and the existence of a solid and active associative framework, as well as with economic and human development. However, there is not a direct relation between trust and respect for traditional values and it is not evident that all kind of associations are included within this causal link. In fact, the importance of the family, religious and even some political institutions seems to be associated with a lack of general trust because these kinds of institutions can strengthen some expressions of amoral familism and bonding social capital at the same time.

c.- Results of models of structural equations.

⁶ Of course, given the orthogonal method of rotation, multicollineality problems do not exist.

Given the complexity of the variables included in the previous analysis and the existence of feed back links, a more detailed study of the causality requires the use of the models of structural equations (*path analysis*). In order to do so, we have constructed a structural model and have tested it using the W.V.S. extracted data (see scheme 1)

Scheme 1: Structural causality model of general trust



Chi-squared = 8.514
 Degrees of freedom = 9
 Level of Probability = 0.483

This model allows us to improve the theory by eliminating the non significant variables. In the results the causal structure is consistent with the observed data, confirming our hypothesis (see table 5). The variables that maintain a strong direct connection with general trust have to do with the existence of a solid associative network, particularly horizontal associations (i.e. cultural and professional). On the contrary, the variables reflecting the existence of institutional trust (trust in political parties, unions, government, etc.) show a weaker link and can even be excluded without losses in the explicability of the model.

Table 5.- Standardized coefficients

Variables		Coefficients
Trust in parliament	F2	0,745**
Trust in unions	F2	0,655*
Trust in politics	F3	1,000*

Charitable Associationism	F4	0,702*
Political Associationism	F4	0,809*
Trust	F2	0.254
Trust	F3	0,436*
Trust	Cultural and Professional Assoc.	0,827*
Trust	F4	-0,883*

(*) Significativity: 0,1; (**) Significativity: 0,05

In contrast, the traditional religious and political associationism (organizations predominantly verticalist and enclosed) maintains an inverse relation with trust levels.

4. Concluding remarks

The ambiguous definition of social capital incorporates three elements (trust, norms and networks) that reflect three distinct phenomena whose internal relations should be clarified. One of the main points in common among works about the subject is the idea that trust and internalization of behavioural norms lead to cooperative and prosocial behaviours and this constitutes one of the essential pillars in the working of the economy and society in general. The conclusions of our paper refer to a previous stage, analysing the determinants of trust and questioning the notion of social capital, since the relationship between that form of capital and the existence of a dense social framework is not immediately obvious.

This paper has investigated the nature of the relationship between associationism and general trust. Empirically, the lack of *bridging social capital*, specially related to the display of a structure of overlapping networks, has a considerable effect on trust levels. In contrast, we did not find any link with norms and social homogeneity, nor with the solidity of the traditional social institutions (i.e. family and religion). In addition, bonding social capital (closed networks) can even be counter-productive, giving rise to what we could denominate amoral familism. Simultaneously, the empirical evidence suggests that trust in the institutional frameworks also plays a differentiated role.

The results derived from empirical evidence seem to confirm Putnam's thesis, but does not refute Olson's thesis on the logic of collective action. In this sense, it is necessary to consider that Olson refers to a particular type of vertical associationism (unions, political parties etc.). Therefore, it is plausible to argue that the promotion of associative networks, by way of its effect on trust, can generate a favourable influence on economic activity. Nevertheless, it is not clear that this promotion must be associated with public support.

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