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Social Sustainability in Europe. Pre- and Post-Pandemic Crisis

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Abstract. This paper aims to clarify the meaning and related dimensions of the concept of social sustainability, with reference to the Western European context. Social sustainability refers to the capacity to ensure fairness and equality, guaranteeing collective conditions of widespread well-being over time. Its outcomes being equity, empowerment, accessibility to public services, participation, sharing, cultural identity, and institutional stability. Changes of this magnitude are expected to have a significant impact on the social cohesion of each territory but also the potential attractiveness of the area. Given these premises, the work will use different (statistical) models of Bayesian networks built on European Social Survey data, distinguishing relationships between the selected indicators and describing the associated dynamics and processes. The goal is also showing importance of the context, considering the efficiency of European Social Model (ESM). Compare the pre- and post-pandemic Bayesian models is also one of the aims, so to detect conditions and political choices that might have shown resilience when facing a challenge such as a global emergency.

Keywords: social sustainability, European Social Models, social cohesion, bayesian network.

1. INTRODUCTION

The concept of sustainable development was originally proposed by the so-called *Brundtland Report*, published in 1987 by the World Commission on Environment and Development (WCED), which defined it as a kind of development that meets the needs of the present without compromising those of future generations. Since the beginning, the issue was declined along three lines: environment, economy, and society, soon producing what are today referred to as the three pillars of sustainability. Social sustainability, hence, refers to the need for development that guarantees equity, accessibility, participation, cultural identity and institutional stability (European Commission 2001).

The key points of social sustainability can be traced back to the realization of conditions for social progress, the improvement of collective well-being and living conditions, the strengthening or creation of social cohesion as well as the production of a competitive social market economy. The realization of the European Social Model is originally based on these premises, but it encounters several limitations due to cultural legacies, contextual con-

ditions, and nationally defined political priorities (Cavalli and Martinelli 2015). The proposal of a single social model of reference for the European Union has certainly initiated a process of institutional isomorphism, avoiding in some contexts the worst in terms of social risks and socio-economic inequities. Nevertheless, it is difficult to define, at present, a Single Social Model (Sapir 2006; Moro 2017).

All things considered, social sustainability remains at the same time both desirable and a difficult political objective to achieve. Its complexity is mainly due to the hope to apply it in different sociocultural contexts, sometimes polarized. It is this contextual relativity which has a direct impact on its feasibility. Hence, no single course of action and direction can be assumed. The concrete implementation of the same social policies may prove to be appropriate, desirable, inappropriate or even counter-productive, depending on the contexts. Furthermore, the principle that the three pillars of social, economic, and environmental should be integrated into a single development model, although politically desirable, is not supported by empirical findings that, on the contrary, have led to a distinction between indices and related indicators rather than proposing a single synthetic sustainability measure. Kaivo-Oja et al. (2014), in examining the interrelationships between the different dimensions of sustainability as measured by the Sustainable Society Index, show the existence of a strong negative correlation between human and environmental wellbeing, while the relationship between economic and ecological wellbeing is reduced. Thus, a balance is sought that remains fragile and requires an evaluation of priorities and a normative approach. Following this perspective, the focus here is on the social meaning of sustainability.

Based on these considerations, the literature on social sustainability makes the selection of indicators relative and contextual. This is due both to the concept of social sustainability itself being presented as flexible and the need to balance the various demands (social, economic, and environmental) to meet the needs of each specific context. The idea refers, in any case, to the realization of social practices, collective choices, and cultural dimensions that produce a sense of community, social well-being, and commonality. Seeing these conditions as materialized can take different ways and turn into something very close to social cohesion only in the case of developed countries.

While within these contexts social problems mainly derive from the lack of social cohesion, the marginalization of certain vulnerable groups, and the existence of socio-economic inequalities. Hence, social sustainability

indicators and dynamics are closer to the social cohesion ones. In developing areas, instead, social needs are closely linked to basic needs and cannot be separated from them: unless access to resources and the satisfaction of basic needs is guaranteed for the entire population, it is difficult for higher needs to emerge¹ (Maslow 1954; Tullio-Altan 1974; Inglehart 1983, Vallance *et al.* 2011).

2. COHESION AND SUSTAINABILITY

Social cohesion is considered one of the most important outcomes of policies oriented towards social sustainability. While the attainment of cohesion does not explicitly emerge as a goal of the 2030 Agenda, several conditions are necessary for its establishment.

The achievement of social sustainability refers, in fact, to the materialization and improvement of collective well-being in the long term and in different contexts. This implies economic and social security, health protection, human relations, equality, and equal opportunities. Referring specifically to the goals of the 2030 Agenda (SDGs), policies against poverty, in support of health and collective well-being, promoters of quality education, equity, gender equality, and strength of institutions are related to social sustainability. Briefly, socially sustainable contexts are characterized by equity, inclusion, equal opportunities, individual initiative, and responsibility. These elements ensure at the same time a socially cohesive context. The crisis of cohesion thus implies conditions of social malaise that are often detrimental to the parameters of social sustainability. At the same time, the realization of social policies oriented to guarantee fair conditions and social welfare favours the emergence of social sustainability in its various forms.

The attainment of social sustainability postpones the realization and improvement of collective well-being in the long term and in different contexts. This implies guarantees of economic and social security, health protection, personal relationships, equality, and equal opportunities. Referring specifically to the 2030 Agenda Goals (SDGs), anti-poverty policies, promoters of quality education, equity, gender equality, and efficiency of institutions are traced back to social sustainability. In a nutshell, socially sustainable contexts are characterized by equity, inclusion, equal opportunity, initiative, and individual responsibility. These elements, at the same time, promote a cohesive context.

¹ Maslow defines five levels of needs as a hierarchy. The basic needs like food, water, and safety must be collectively satisfied because of the emergence of the higher needs, as love/belonging, self-esteem, and self-actualization.

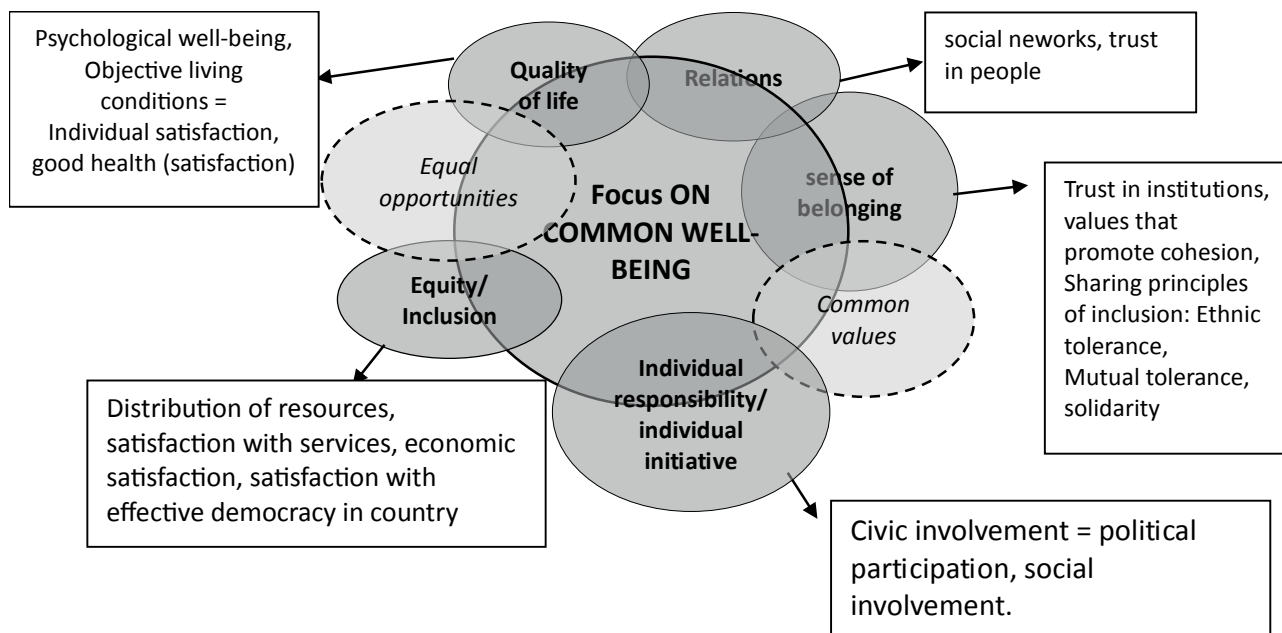


Figure 1. Social Cohesion and Social Sustainability. *Source:* Own reworking on Schiefer and van der Noll (2017) and McGuinn *et al.* (2020).

The crisis of cohesion underlies conditions of social malaise that are often detrimental to the parameters of social sustainability. In fact, social cohesion has certain conditions that are strongly linked to those necessary for ensuring social sustainability:

- it is the outcome of spreading equity and equal opportunities.
- promotes conditions of well-being in the long term.
- it is a precondition for advocating minority rights, equality, and equal treatment (Schiefer and van der Noll 2017).

This emerges most clearly when the concept of social cohesion is operationally defined. Despite the term has been used in different contexts and meanings, i.e. both with respect to the pragmatic goal of guiding social policy programming and in academic analyses, there are common traits in both. At a policy level, primary referents are Canada (Beauvais and Jenson 2002; Bernard 1999; Jackson *et al.* 2000; Jeannotte *et al.* 2002; Jenson 1998, 2010; Stanley 2003; Toye 2007), the European Commission (Berger-Schmitt 2000; European Commission 1996, 2001, 2007), and the Council of Europe (Council of Europe 1998, 2005; European Committee for Social Cohesion 2004), but important interventions have also been made in Australia (Jupp *et al.* 2007) and the United Kingdom (Home Office Community Cohesion Unit 2003). Here we focus on a specification of the referents and analytical definition of social cohesion.

Following Schiefer and van der Noll's (2017) own considerations, there are six distinguishable domains attributable to the social cohesion debate that commonly appear in publications: social relations, identification, orientation toward the common good, shared values, quality of life, and (in)equality. Some of these dimensions, however, overlap. Looking at the reconstruction of the analysed literature (Fig. 1), most of these domains or concepts can in turn be distinguished into more concrete and empirically assessable components².

Social relations, sense of belonging and solidarity are here considered constitutive dimensions of social cohesion. Besides, tolerance and multicultural orientation play an important role too when studying aggregating dynamics in the context of democratic Europe. Here being open to diversity – differently to what happens in small contexts, where this is perceived as dangerous – is necessarily associated with social sustainability. Another important element is the ethical one (Fig. 1): values of identification with a community can contrast with those of tolerance and solidarity and turn into a negative trait. Thus, in reconstructing the semantics of social cohesion, the sense of belonging and values such as tolerance (in particular towards immigrants) and solidarity can become two conditions that respond to aggregating

² This is the approach also followed in this work, which, however, proposes indices referring to the domains defined by extracting some components through factorial analysis, while Schiefer and van der Noll identify semantic dimensions through content analysis of texts.

logics of a different nature. The topic will be discussed again by referring to the weight of the contextual plane and thus to European Social Models.

If social cohesion is the aim, a context is as much tolerant as the concept of reciprocity is spread, especially in multi-ethnic contexts (Sartori 2000). This can impede micro-attachments – bonding social capital – oriented to emphasize the in-group/out-group differences (Friedkin 2004). The spread of bridging social capital, on the other hand, produces inclusion and propensity to acceptance of differences, leading in turn to integration or acceptance of migrants – here defined as ethnic tolerance.

Still considering the aim being more bridging, it must be specified that here shared values are considered more as a common and generic pro-social ethical dimension in the specific meaning of ethnic tolerance, solidarity and trust toward others - reciprocity based on democratic values than sharing the same culture.

Based on the same logic, the sense of belonging is here considered as a broad belonging (nation, democratic context) and not to micro-belongings, localisms or separatist logics that end up producing exclusion or isolation.

The other dimensions characterizing social cohesion are more consequences of it than constitutive elements of cohesion itself, like general well-being or satisfaction with the quality of institutions and services.

3. EUROPEAN SOCIAL MODELS

It will be clear at this point that the strength of social sustainability, partially depending on social cohesion, can be generated through multiple paths. Many inter- or trans-disciplinary studies end up distinguishing, describing, and analysing regimes of social cohesion (Green and Jannmaat 2011).

The intention here is to analyse the structure of social sustainability in Europe with specific reference to the European Union area (including England). This choice depends on the fact that the contexts are democratic and similar in many respects but with different orientations in public policy management. Social cohesion is considered here as one of the most important outcomes of policies oriented toward social sustainability. While the achievement of cohesion is not a goal of the 2030 Agenda, the discussion and specificity of dimensions become crucial here.

Once the indicators and related indices have been defined, strengths and weaknesses of social sustainability will be reconstructed, both comparatively in different contexts and considering the effects of the pandemic cri-

sis (thus longitudinally). The conditions of each area will be distinguished to assess differences and commonalities, resilience, and limits of social sustainability.

The theme of sustainability has highlighted two conditions – usually overlooked – within social cohesion:

- a) a longitudinal plan, i.e. the political need to provide conditions that can be resilient and, thus, socially sustainable in the long run.
- b) a contextual plane, i.e. the need to take into consideration local differences and specificities, fostering a path – or more paths – to social sustainability that might also be contextually dependent and not generalizable.

Following these assumptions, the intention here is to reconstruct what are the strengths and weaknesses of social sustainability. The need that emerges is to consider the contextual plan as a key element in defining possible interventions and evaluating their outcomes. The debate on social sustainability has highlighted the need to consider contextual plans as key elements for defining interventions and evaluating long-term outcomes. Following this thesis, third-world areas and developed areas are not comparable in these terms as social sustainability indicators will be different between the two (Vallance 2011), as also stressed by the literature related to the topic which has, as a peculiarity, the use of a relativistic perspective centred on the idea of contextual dependence. This paper is focused on democratic and developed Western Europe only, which justifies the usage of the same indicators to evaluate the presence, diffusion, and strength of social sustainability. However, even within similar contexts, strengths and weaknesses might slightly differ.

The policy plan becomes of particular importance, due to different priorities and needs. One problem precisely concerns the conceptualization of social cohesion derived from the policy discourse, which is often driven by pragmatic and/or contingent concerns.

The World Bank, for example, addresses social cohesion in the EU by focusing on economic development and poverty reduction (Ritzen 2001; Easterly *et al.* 2006), while the United Kingdom and Canada focus on cultural diversity (Cheong *et al.* 2007). In national policy debates, actors with different political ideologies use the term “social cohesion” for or against cultural diversity, promoting homogeneity of values, acceptance of diversity, or a return to traditional values or nationalism (Boucher and Samad 2013; Cheong *et al.* 2007). How about the indicators and dimensions of social cohesion? There are several analyses of this concept, and they all show a contextually dependent definition. The social democratic context focuses on equality and solidarity as essential elements for

social cohesion, while Eastern Europe centres on shared history and the sense of belonging with a limited propensity for ethnic tolerance. Here national history and traditional values would produce, according to our hypothesis, a structure of social sustainability with social cohesion which takes the form of national identity, satisfaction in institutions, and exclusive social capital. Liberal views, in turn, emphasize the importance of equality in terms of individual opportunities (Green *et al.* 2009; Green and Janmaat 2011). The continental area of Europe corresponds to Esping-Andersen's (1990) corporative welfare and differs from the liberal regime for the importance given to shared values and participation in national political life (Green *et al.* 2009). The Mediterranean model (Ferrera 1996a; Bonoli 1997) has a welfare system that is deficient in many ways (Ferrera 1996b; Naldini 2007). Specifically, the fact that the protection of individual welfare depends mostly on the primary network brings about great inequalities, dependence on the financial support of the family and the social status of the individual, reproducing inequalities of gender, ethnicity, social class, etc. This can certainly produce strong trust and solidarity, but mostly within each social class or family. Without structural support and policies focused on "de-familisation", mainly a strong exclusive social capital emerges (with a strong dependence on the family, low level of inclusion, low social participation, no ties between citizens and so on).

These considerations intersect with others related to the traditions of welfare financing (Esping-Andersen 1990, 1999) and, more recently, to the debate on whether the European Social Models (ESMs) should be diversified. Sapir (2006) shows the internal differences of the ESMs distinguishing among models that he named as: Nordic, Continental, Anglo-Saxon and Mediterranean. Thus, Esping-Andersen's division persists (Esping-Andersen 1999).

To understand what emerges from the data analysis, we consider the structural and socio-cultural balance achieved in the different areas deriving from the peculiar declinations of the European Social Models (ESMs) as proposed by Sapir (2006), adding the context of Eastern Europe. This is here defined as a further, specific, ESM. Currently, there is a huge debate about this question. An interesting work is that of Pöder and Kerem (2011). The authors' considerations are connected to a more general orientation of convergence towards a Single European Social Model, which has modified the policy in a liberal sense generating changes not only for Eastern European areas. The authors specify that the Eastern European commodification process cannot be compared to the Nordic one because it only indicates workforce flexibility, but also has a negative effect on

social contributions. The commodification of Eastern Europe combines workforce flexibility with low incomes and employment security.

Each of the ESMs will produce structural balances or imbalances, due to choices in the distribution of resources, opportunities, risks, and needs. These choices derive, in turn, from a certain widespread cultural climate and from orientations sedimented over time.

A context of greater equality and fairness produces a major propensity to relate to others and a climate of greater trust, necessary for bringing and strengthening social cohesion, solidarity, and tolerance. The possibility of being in a relationship and living shared experiences depends on these conditions as it is more likely between subjects who are in similar socio-economic conditions and who perceive each other as equal (which entails the absence of prejudice and discrimination). Instead, the concentration of resources in the hands of a few subjects and the relative increase in inequalities will produce an increase in mistrust towards others and towards institutions, and a decrease in participation in social and political life, as well as the division into exclusive groups.

4. DATA AND METHOD

The European Social Survey (ESS) databases were used for the analysis, considering round 9 and round 10. Specifically, round 9 covers a period from 30/08/2018 to 27/01/2020 while round 10 surveys started on 18/09/2020 and ended on 03/09/2022. Within the two datasets (ESS 9 and ESS 10), areas attributable to the ESMs described above were selected. Some nations present in dataset ESS9, however, are not present (n.p.) in dataset ESS 10 or vice versa. This resulted in a downsizing of the sample in round 10, which has 5222 fewer cases than in round 9. Table 1 shows the frequency distribution of respondents by nationality and welfare model.

The continental model features Belgium, France, Austria and Germany. The last two, however, are not present in round 10, which, therefore, features only Belgium and France. Similarly, as far as the Mediterranean model is concerned, Spain is present only in round 9 and Greece only in round 10. The Nordic model in round 10 does not include Denmark and Sweden. The Eastern countries³ model is more homogeneous, adding

³ The decision to add these States, even though they are not always provided for in the best-known existing classifications, is linked to the idea that the politically similar pasts of these may offer new insights. The debate on whether there should be a unitary ESM in these areas is wide-ranging and there are multiple positions (see Pöder K. and Kerem 2011; Katarzyna and Gavin 2018).

Table 1. Distribution of interviewers for States and ESMs.

States	ESS 9	ESS 10
<i>European Social Model: Continental</i>		
Austria	2499	n.p.
Belgium	1767	1341
Germany	2358	n.p.
France	2010	1977
Total	8634	3318
<i>European Social Model: Mediterranean</i>		
Spain	1668	n.p.
Italy	2745	2640
Portugal	1055	1838
Greece	n.p.	2799
Total	5468	7277
<i>European Social Model: Nordic</i>		
Denmark	1572	n.p.
Finland	1755	1577
Norway	1406	1411
Sweden	1539	n.p.
Total	6272	4458
<i>European Social Model: Anglo-Saxon</i>		
United Kingdom	2204	1149
Ireland	2216	1770
Total	4420	2919
<i>European Social Model: East Europe</i>		
Bulgaria	2198	2718
Czechia	2398	2476
Estonia	1904	1542
Hungary	1661	1849
Lithuania	1835	1659
Slovenia	1318	1252
Slovakia	n.p.	1418
Total	11314	12914
TOTAL	36108	30886

Source: Authors' elaboration.

only Slovakia in round 10 while no change in the Anglo-Saxon model, which includes the United Kingdom and Ireland in both surveys.

Thirty-five items were considered and summarized into 10 indices. Principal Component Analysis for categorical data (CatPCA) was used for synthesis. This technique transforms ordinal-scale (hence monotonic) variables into interval-scale (latent) variables by maximizing the variance explained by the selected principal components (Gifi 1990). The most methodologically relevant aspect of CatPCA is its being free from assuming either linearity of relationships between variables or multivariate normal distribution of the data (Michailidis and

Table 2. Dimension of social cohesion.

	ESS 9	ESS 10
<i>Social Trust</i>		
Mostly looking out for themselves - Most of the time people helpful		
You can't be too careful - Most people can be trusted		
Most people try to take advantage of you - or try to be fair		
<i>Cronbach's Alpha</i>	0,79	0,814
<i>Variance explained (%)</i>	70,4	72,8
<i>Relations</i>		
Important to have good time		
How many people with whom you can discuss intimate and personal matters		
How often socially meet with friends, relatives, or colleagues		
Take part in social activities compared to others of same age		
<i>Cronbach's Alpha</i>	0,59	0,59
<i>Variance explained (%)</i>	59,7	59,8

Source: Authors' elaboration.

de Leeuw 1998). It transforms variables' categories into numerical values by implementing optimal quantification (Linting *et al.* 2007).

Based on the above considerations and resuming the previous paragraph, we proceeded to identify the dimensions related to social sustainability. The first dimension refers to the conditions of social cohesion and specifically consists of two indices that we have named as *Social Trust*⁴ and *Relations* (Table 2)⁵.

A second dimension is institutional support. It includes trust in institutions and satisfaction both towards institutions and government. This dimension also underlies the perception of a national system in which democratic principles function and are also respected concretely, through the effectiveness of government actions.

With respect to the civic involvement dimension, three indices were chosen. From a methodological point of view, political participation (Tab. 4) synthesizes the values of 4 dichotomous variables (yes/no) and one variable measured on a Likert scale that, after the recoding

⁴ The direction of all items was preliminarily homogenized where necessary, to arrive at scales that all went in the same direction (e.g., from distrust to trust).

⁵ The value of Cronbach's alpha in our work does not always reach the threshold of 0.7 used in the literature as the threshold for acceptance of internal consistency between items. This certainly represents a limitation; however, given the main objective of the analysis we chose to proceed even in the absence of reaching this threshold.

Table 3. Dimension of institutional support.

	ESS 9	ESS 10
<i>Institutional Trust</i>		
Trust in Country's parliament		
Trust in the legal system		
Trust in the police		
Trust in the European Parliament		
Trust in political parties		
Cronbach's Alpha	0,86	0,86
Variance explained (%)	64,5	64,3
<i>Satisfaction for Institutions</i>		
How satisfied with the way democracy works in country		
How satisfied with the national government		
Cronbach's Alpha	0,77	0,8
Variance explained (%)	81,6	83,5

Source: Authors' elaboration.

intervention operated, ranges from 0 (not at all interested) to 4 (very interested). Similarly, the social involvement index consists of 3 items measured on a Likert scale with 4 levels. Also, within the civic involvement dimension, it appeared useful to observe the component related to ethnic tolerance, which basically refers to the level of acceptance of migrants (Tab. 4).

A further domain related to social sustainability refers to the quality of life, that includes both equity and inclusion. Here, we identify a dimension related to perceived quality. The items of the individual satisfaction index attempt to detect elements of personal satisfaction that pertain to a psychophysical dimension, while the items of economic satisfaction point to economic elements, functional to the quality of life (Table 5). Another feature is that one of satisfaction in public services, distinguishing satisfaction with the education system and with the state of medical-welfare services.

Considering the average score of each index, calculated by aggregating the nationalities of respondents by welfare model, the main longitudinal changes can be reconstructed. What is, then, the overall effect of the pandemic crisis? The largest increase in social trust occurs in the Anglo-Saxon model, with a value more than doubled. This also happens in Eastern countries, despite remaining negative. In the same countries, there is some increase in the average score on the relations index too. The largest increase on this index is observed in the Continental model, which witnesses the largest decrease in the institutional trust index too (taking negative values in the second survey too). In contrast, the largest increase in the institutional trust index is

Table 4. Dimension of civism (civic involvement).

	ESS 9	ESS 10
<i>Political Participation</i>		
Worn or displayed campaign badge/sticker last 12 months		
Signed petition last 12 months		
Taken part in lawful public demonstration last 12 months		
Boycotted certain products last 12 months		
How interested in politics		
Cronbach's Alpha	0,87	0,59
Variance explained (%)	47,2	38
<i>Social Involvement</i>		
Important to care for nature and environment		
Important to help people and care for others well-being		
Important to understand different people		
Cronbach's Alpha	0,87	0,67
Variance explained (%)	79,3	60
<i>Ethnic Tolerance</i>		
Immigration bad or good for country's economy		
Country's cultural life undermined or enriched by immigrants		
Immigrants make country worse or better place to live		
Allow many/few immigrants of same race/ethnic group as majority		
Allow many/few immigrants of different race/ethnic group from majority		
Allow many/few immigrants from poorer countries outside Europe		
Cronbach's Alpha	0,89	88,5
Variance explained (%)	64	63,5

Source: Authors' elaboration.

observed in the Nordic model. Except for the Eastern and Mediterranean countries⁶, political participation declines in all analysed models, with the States in the Nordic model going from a score of 0.517 to a score of -0.487. However, the Nordic model shows a reduction in political participation that is not matched by a reduction in social participation (which instead is the case for the Anglo-Saxon and corporative models). The Continental and Anglo-Saxon models also present the highest increase in the average score of the ethnic tolerance index. We also notice a significant decrease in the value of this index on the Mediterranean model. It seems interesting to note how precisely the Mediterranean model is the only one that shows a significant decrease

⁶ However, these areas have usually low values of political participation.

Table 5. Dimension of quality of life (equity, inclusion).

	ESS 9 ESS 10	
<i>Individual Satisfaction</i>		
How happy are you		
Subjective general health		
How satisfied with life as a whole		
Cronbach's Alpha	0,74	0,72
Variance explained (%)	65,5	64
<i>Economic Satisfaction</i>		
How satisfied with present state of economy in country		
Feeling about household's income nowadays		
Cronbach's Alpha	0,53	0,5
Variance explained (%)	68	66,7
<i>Satisfaction for Services</i>		
State of education in country nowadays		
State of health services in country nowadays		
Cronbach's Alpha	0,66	0,74
Variance explained (%)	70,8	53

Source: Authors' elaboration.

in the individual satisfaction index (from -0.071 in round 9 to -0.145 in round 10), and it is also the only one that shows a decrease in the value of both the economic satisfaction index and the service satisfaction index. In this context, therefore, there are particularly difficult conditions for ensuring sustainability and social cohesion.

Having identified 10 synthetic dimensions, we want to understand what kind of interaction occurs between them. We use Bayesian networks as these offer the possibility of graphically representing the probabilistic relationship between a set of variables⁷ (Koller *et al.* 2009). In Bayesian logic, each element (node) is a random variable and the link between two nodes (called "parent" and "child") represents the dependence in probabilistic terms of the relationship between the two random variables. Thus, a "child" node is associated with a conditional probability dependent on the linkage with the 'parent' node. A child node can, in turn, be a parent, producing a network structure⁸.

⁷ To better understand the conditional distributions, the 10 factorial scores were transformed into 10 ordinal variables with categories 'low' (0 to 33rd percentile), 'medium' (33rd to 66th percentile) and 'high' (66th percentile to the highest value).

⁸ For further methodological discussion, see Heckerman (2008) and Cowell *et al.* (2006).

5. SOCIAL SUSTAINABILITY AND CONTEXTUAL EFFECTS

The hypotheses we propose will be tested for each area associated with a specific ESM, before and after the pandemic. We want to verify three hypotheses:

H₁-The presence of a general neo-liberal isomorphic orientation.

H₂-A pole of attitudes that precedes that of behaviours.

H_{2.1}- In particular, ethnic tolerance assumes a central role as it mediates between pro-social attitudes and behaviours (this may be less relevant immediately after the pandemic due to the sudden change in the political agenda and the blocking of migration flows).

H₃- Significant differences between pre/post-pandemic occur, mediated by the role played by the European Social Model and related economic and social support actions put in place (isomorphic process – not only in Europe).

Before analysing the network structures of each welfare model, a comparison of the two surveys to the overall Europe seems useful (Fig. 2). The main change emerges from the origin of the network: during the first survey (before the pandemic), the main parent node is economic satisfaction (*Econ_Satis*) and social participation (*Social_Involv*) derives from political participation (*Political_Involv*). In the second survey (affected by the pandemic), it is trust in institutions (*Trust_in_Instit*) that generates the entire network. Thus, indications emerge about the possible path to resilience of social sustainability in Europe. It seems that widespread trust or mistrust in institutions and economic satisfaction play a crucial role in this regard and in general. Economic satisfaction, in fact, still plays an important role because it mediates between trust in institutions, satisfaction with the quality of services (*Satis_Pub_Services*) and institutions (*Satis_Instit*), and individual satisfaction (*Individ_Satis*). More generally, while in the network of round 9 economic satisfaction generates satisfaction with services and institutions, in round 10 the relationship reverses.

Consistent with the thesis that sustainability (in its various forms) is a context-dependent condition, the Continental model presents a specific structure (Fig. 3). Before the pandemic, in this context, it is political participation that generates the network structure by directly acting on the propensity to welcome immigrants, satisfaction with public services, and social relations.

In the post-pandemic survey, social trust generates trust in institutions, economic satisfaction, and individual satisfaction.

Looking at the Anglo-Saxon model (Fig. 4), it is social trust and trust in institutions that generate the network, both in the first and second surveys. Notewor-

Round 9

Round 10

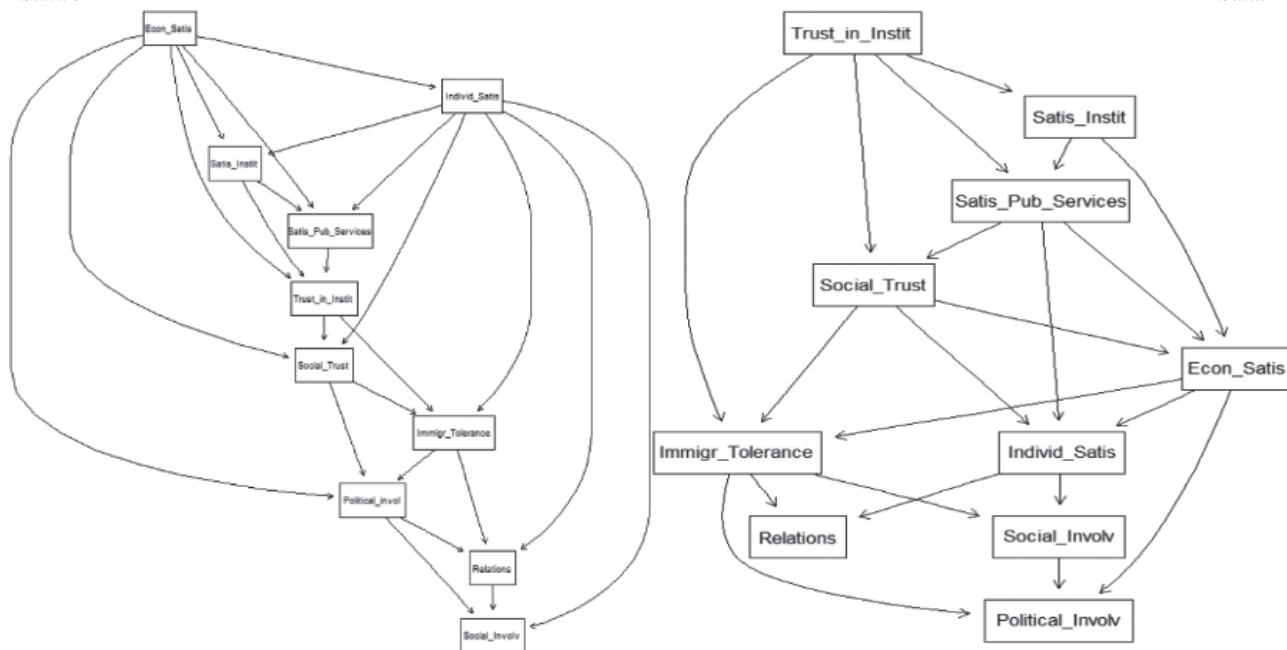


Figure 2. Europe: Structure of networks. Source: Authors' elaboration.

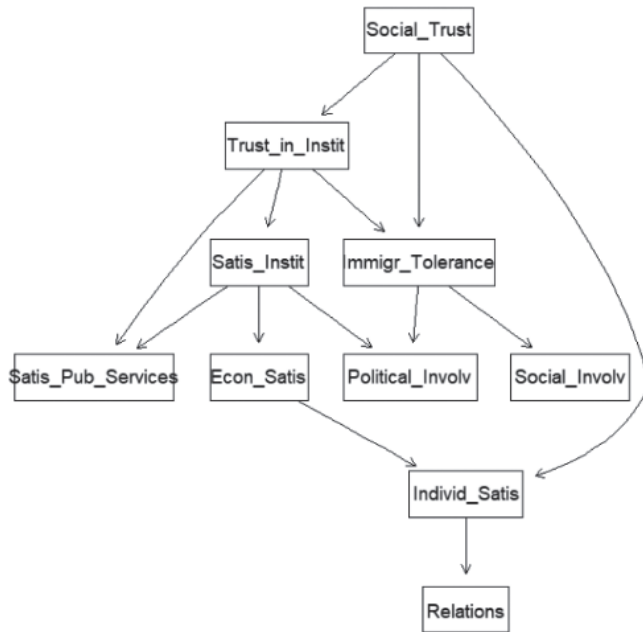
Round 9

Round 10



Figure 3. Continental ESM: Structure of networks. Source: Authors' elaboration.

Round 9



Round 10

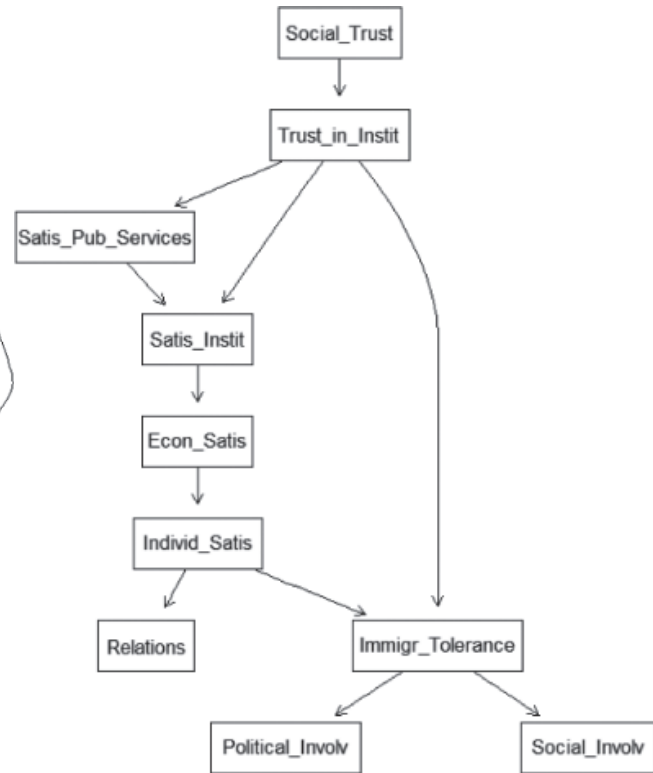


Figure 4. Anglo-Saxon ESM: structure of networks. Source: Authors' elaboration.

thy how political participation and social participation are outcomes of the structure, especially in the second round and, in both cases, produce no effect. After the pandemic, there is also a higher incidence of satisfaction with public services in the network structure.

The Nordic model probably shows the least change between the two surveys (Fig. 5). This might indicate greater stability and less difficulty in ensuring socio-economic sustainability and cohesion.

This context, on the other hand, also shows changes: although social trust always generates network structure, only in the first survey does social involvement appear to depend on relationships. Thereafter, relationship structure produces no effect and depends on individual satisfaction.

At the base of the network structure in the Mediterranean model we find, in both surveys, the Relations index (Fig. 6). However, before the pandemic, economic satisfaction is at the end of the network structure and does not generate any nodes. After the pandemic, however, economic satisfaction generates individual satisfaction (reversing the relationship observed in round 9) and political involvement. Moreover, economic satisfaction connects institutional satisfaction with individual satis-

faction and political involvement. This shows the importance of having individual resources to access political participation. Those who have more time, money and education have much higher probabilities of participation. Social trust, thus, appears to be more of an outcome than a vector of cohesion.

Finally, the Eastern countries (Fig. 7). In the first survey, tolerance toward immigrants appears at the end of the network structure. In the second, this index is generated by economic satisfaction and individual satisfaction and generates, in turn, political participation, reversing the relationship from what was observed in the previous round.

6. CONCLUSIONS

Overall, the hypotheses identified are confirmed. It emerges that the pandemic crisis has accelerated an isomorphic process in the liberal sense.

Indeed, the crisis is configured, above all, as economic and relational. After the pandemic, networks depend more on economic satisfaction and less on relational involvement. However, the importance of the role

Round 9



Round 10

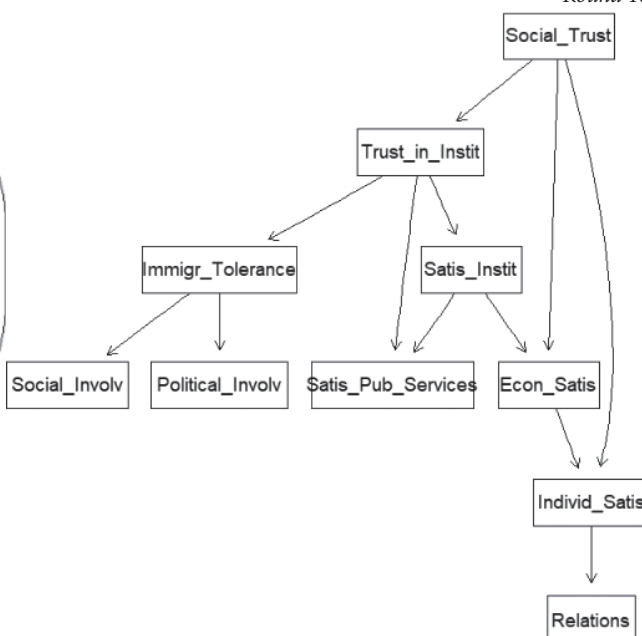
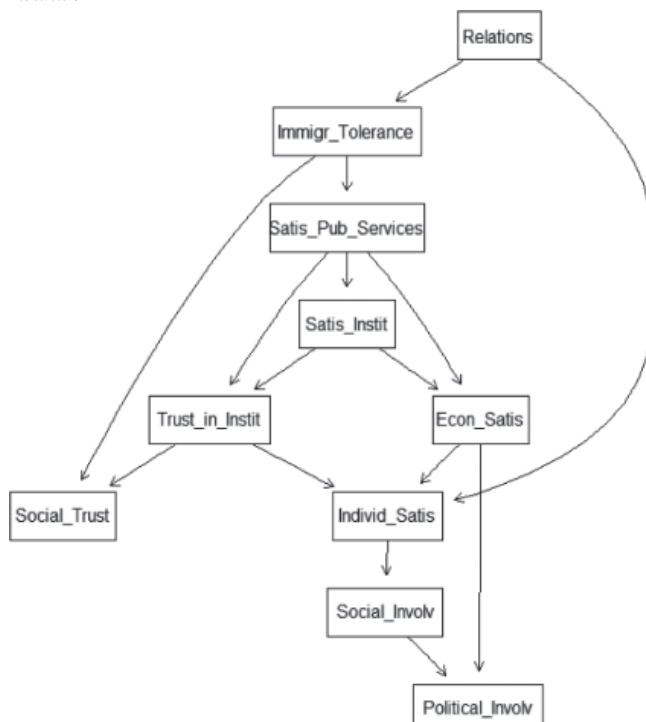


Figure 5. Nordic ESM: structure of networks. Source: Authors' elaboration.

Round 9



Round 10

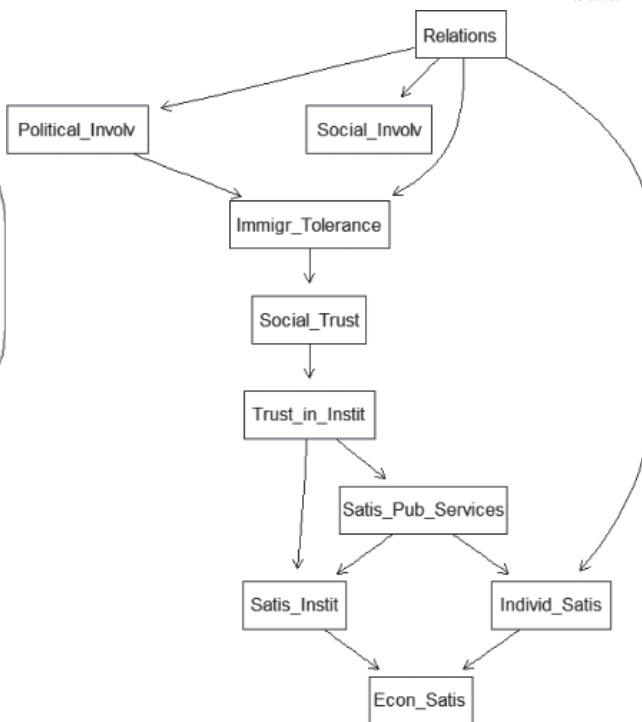


Figure 6. Mediterranean ESM: structure of networks. Source: Authors' elaboration.

Round 9

Round 10

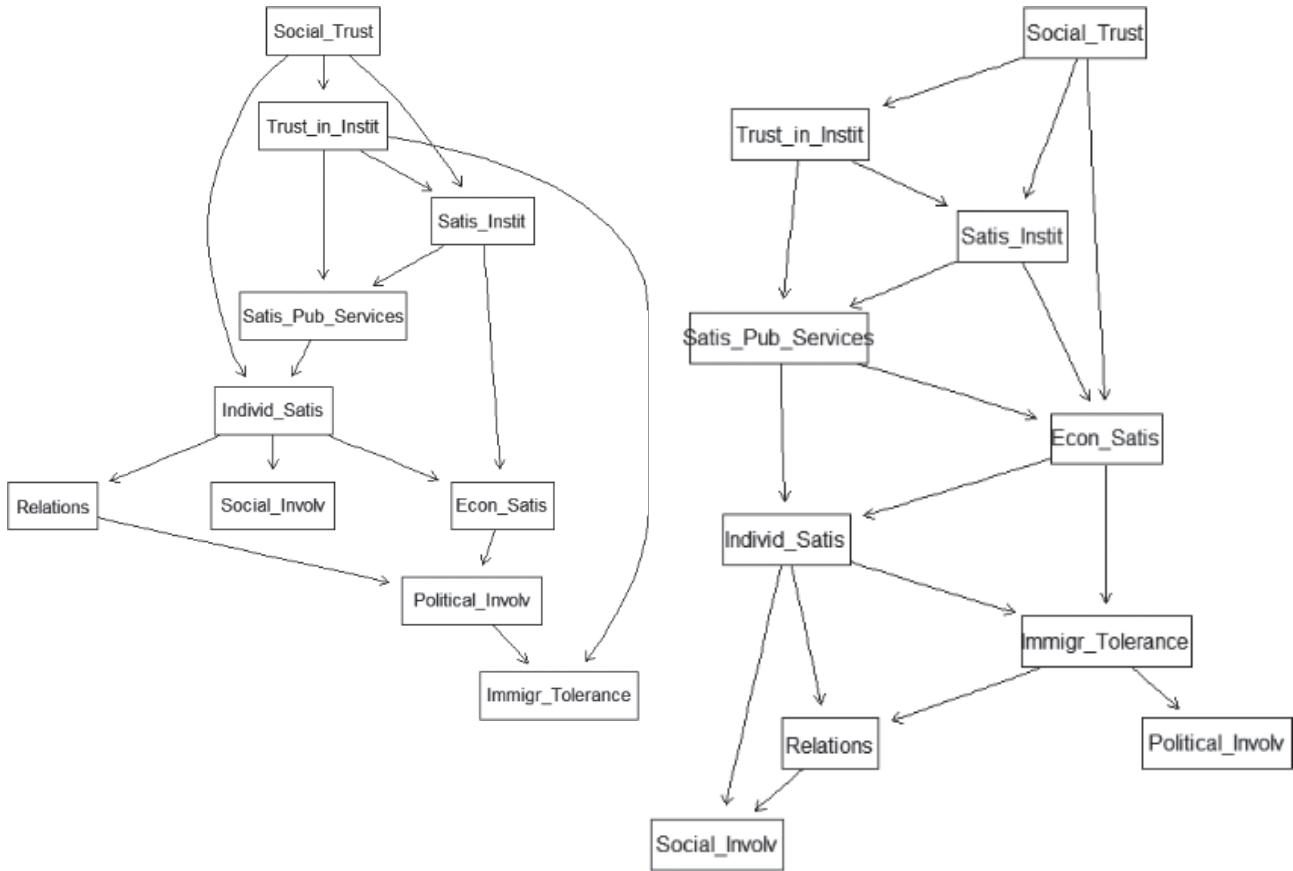


Figure 7. Eastern ESM: Structure of networks. Source: Authors' elaboration.

of trust is confirmed. The Mediterranean and Eastern European areas, in particular, present more distrust orientations. Both cohesion and social sustainability are at risk in these areas.

For the continental model, the pre-pandemic network shows significant differences from what we would expect. Three of four hypotheses (see par. 5) hold only after the pandemic. This is a context that changes a lot. Before the pandemic, the structure is governed directly by political participation. This means that there are probably other causes of political participation that are not controlled (actual income, high education, etc.). This condition is important because it promotes pro-social attitudes and tolerance to the point of generating social participation and economic satisfaction. Immediately after the pandemic, the network structure changes. The network in 2020-22 is derived from trust and pro-social attitudes, and economic satisfaction goes from irrelevant to tolerance and participation. After the pandemic this dynamic looks similar in all areas, replicating the conditions of a typical liberal model.

Table 6. Hypothesis (H) for each ESM.

H	Eu	Cont	Ang	Nord	Med	East
H ₁	Only ESS 10	Only ESS 10	Y	Y	Only ESS 10	Y
H ₂	Y	Only ESS 10	Y	Y	Only ESS 10	Y
H _{2,1}	Y	Only ESS 10	Y	Y	Y	N
H ₃	Y	Y	Y	Y	Y	Low

Source: Authors' elaboration.

What happens, then, in the case of the Anglo-Saxon model? The weight of liberal politics is evident here. Economic satisfaction is always crucial because it links the pole of attitudes and behaviours. Network structure always depends on trust (social and institutional) and satisfaction (personal, toward institutions and services). Moreover, social and political participation become only chain outcomes, dependent mainly on tolerance (or intolerance) toward immigrants. After the pandemic, however, individual satisfaction and economic satisfaction produce a set of conditions that favour or inhibit

both political and social participation. Perceived well-being directly affects attitudes of in/tolerance toward immigrants and indirectly affects opportunities for political and social involvement (which depend primarily on the trait of ethnic tolerance). These traits occur often and in different contexts, with some minor variation. It could be said that the pandemic has created a context in which, all things being equal, both the equity and solidarity/tolerance planes are reduced.

The Scandinavian context is the one on which the pandemic had the least impact, but even in the Nordic model, there is a direct and prioritized relationship between tolerance and socio-political involvement after the pandemic. Before 2020, the plane of political participation depended more on tolerance toward immigrants while social involvement derived from pro-social attitudes and orientations. After the pandemic, all forms of participation (political and social) depend on tolerance or prejudice toward immigrants. The latter is configured as separate from that of individual satisfaction, which is more related to the economic and relational sphere. Economic satisfaction in this context continues to play no important role in conveying forms of mobilization.

In the Mediterranean model, consistent with the assumption of the familyist model, everything is generated from the relational plane, and this is a trait that persists even after the pandemic. Economic satisfaction, which before 2020 did not affect the network, after the pandemic becomes the condition that most strongly affects individual satisfaction and political participation. It increases, in other words, the importance of individual resources (time, money, education) for access to political participation. There are, however, low probabilities of satisfaction and participation. Social trust becomes, on the other hand, an outcome and not a cause of the identified dynamics. These conditions seem particularly difficult for the creation of a socially sustainable environment.

Finally, the Eastern European context presents limited changes but shows different conditions from those recorded so far and, in particular, ethnic tolerance does not seem to be relevant while the dynamics producing political and social involvement are split.

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