

Identifying diverse paths toward successful policy performance in Organization for Economic Co-operation and Development (OECD) and European Union countries: A Qualitative Comparative Analysis (QCA) exploitation of the Sustainable Governance Indicators (SGI) data

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Abstract

Although the policy performance field acknowledges the importance of adopting a long-term decision making perspective to attain more sustainable policy outcomes, it overlooks the way in which sustainable governance conditions and policy performance relate to each other. We address this gap by investigating why some countries succeed in terms of policy performance while others do not. Applying a fuzzy-set QCA to 41 Organization for Economic Co-operation and Development and European Union countries of the Sustainable Governance Indicators data, we find out that successful economic and social policy performance is mainly driven by executive accountability conditions combined with effective implementation, while the high-quality of media plays a key role in successful environmental policy performance. Considering the multiple paths that practitioners can follow toward sustainable development benefits, they can also learn how to shift from short-term to long-term thinking by

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identifying “what works and why,” formulating good practices and guidelines for better policy performance in the respective national contexts.

KEYWORDS

data transformation, policy performance, qualitative comparative analysis, Sustainable Governance Indicators (SGI)

1 | INTRODUCTION

A central question of current policy research is under which conditions sustainable policy outcomes can be achieved. Challenges such as economic globalization, social inequality, resource scarcity, and demographic change cut across policy sectors and extend beyond national boundaries, calling for a long-term decision making perspective. This implies maintaining or improving the quality of life without posing an unfair burden on future generations, and safeguarding the long-term sustainability of economic, social, and environmental systems (IUCN, 1980; UN, 1992; UN, 2015; WCED, 1987). However, most national governments and policy-makers tend to act short term. The challenge of governments' capacity to act long term and—ultimately—to achieve more sustainable policy outcomes attracted considerable academic attention, and many governance performance indices have been developed (for a review, see Moldan et al., 2012; Mori & Christodoulou, 2012). Here, we refer to sustainable governance as “the capacity to govern,” which encompasses both “government's capacity to deliver sustainable policies” and “the participatory and oversight competencies of actors and institutions beyond the executive branch” (Schraad-Tischler & Seelkopf, 2015: 10). The Sustainable Governance Indicators (SGI) project constitutes a particularly ambitious attempt to systematically assess and compare governance performance in 41 countries of the Organization for Economic Cooperation and Development (OECD) and the European Union (EU) (Bertelsmann Stiftung, 2020a). It provides, in each country, detailed measurements of policy performances in key policy areas, as well as of the quality of democracy and of executive capacity and executive accountability.

At present, comparative policy research that addresses the question of sustainable governance and policy performance is still overlooked. Accordingly, as far as we know, there are no comparative studies applying a configurational approach, such as Qualitative Comparative Analysis (QCA), to establish a link between the SGI data on governance and policy performance. Yet, four reasons make QCA particularly suitable for addressing such a question (Engeli et al., 2014: 89–90). First, QCA allows to systematically compare policy outcomes in intermediate-N designs, with cross-national and cross-sectoral comparisons. Second, it facilitates the synthesis of information and allows the testing of alternative explanatory models leading to favorable or less favorable policy performances, as it allows the identification of different pathways toward a policy outcome (equifinality) and is underpinned by multiple conjunctural causations. Third, it enables scholars and practitioners to assess under which combinations of conditions a specific policy outcome is achieved. Finally, the configurational approach of QCA is acknowledged as a core asset for policy-oriented analysis, producing results applicable to specific sets of cases while also aiming at some form of generalization (Ragin, 1987; 1997)—which also makes QCA case-informed and case-oriented (see also Rihoux, 2020; Rihoux et al., 2011).

Against this background, our contribution is twofold. On the one hand, we explore the link between sustainable governance—defined as the executive capacity and executive accountability—and policy performance in three main policy areas: social, economic, and environmental. On

the other hand, we bring a methodological contribution to the potential of exploiting the SGI data—and thus other such systematic cross-country data—via QCA to run comparative policy analysis. In doing so, we highlight the richness of QCA and the added value of nourishing QCA (cross-case analysis) with case-based knowledge.

Our research question may therefore be formulated as follows: which core combinations of governance conditions related to executive capacity and executive accountability are conducive to successful economic, social, and environmental policy performance?

The remainder of the article is structured as follows: Section 2 presents the theoretical background; Section 3 discusses how to approach data transformation for QCA; Section 4 presents the research design; Section 5 unpacks the steps to transform the SGI data into fuzzy scores (i.e., the “calibration” procedure); Section 6 presents the results of our analysis; and Section 7 addresses limitations, steps for future research, and recommendations for practitioners and policy-makers.

2 | THEORETICAL AND CONCEPTUAL BACKGROUND

2.1 | Sustainable policy outcomes

The achievement of sustainable policy outcomes is a key priority for OECD and EU countries and entails integrating economic, social, and environmental policies, that is, the three pillars of sustainability. Indeed, sustainable governance requires that economic, social, and environmental systems be capable of effectively delivering successful performance in the long run. While much contemporary sustainability literature centers on the United Nations’ set of sustainable development goals (SDGs), the articulation of the three distinct aspects of sustainability were explicitly embedded in their formulation (Purvis et al., 2019). The concept of sustainability has been initially adopted with a narrow meaning, restricted to environmental issues, and was gradually adopted in the field of development policy until it expanded beyond its initial focus to include both economic and social aspects. Nowadays, the economic, social, and environmental dimensions of sustainability are largely acknowledged (Basiago, 1999; Boyer et al., 2016; Gibson, 2006; Goodland, 1995; Lozano, 2008; Pope et al., 2004; Schoolman et al., 2012; Waas et al., 2011).

In the scholarly literature, policy performance in terms of sustainability commonly refers to the systemic and substantive performance of political regimes in the three areas of economic, social, and environmental policies. Sustainable governance hence cannot be reached if economic challenges are not addressed with a future-oriented approach. Several elements intertwine when assessing economic policies performance through sustainability lenses: (1) the presence of a coherent institutional framework that enhances international competitiveness; (2) successful government strategies in addressing unemployment and increasing labor-market inclusion; (3) the promotion of social equity, competition, and long-term state-revenue prospects through effective tax policies; (4) budgetary policies underpinned by principles of fiscal sustainability; (5) the research and development policies contribution to capacity for innovation; and (6) the effective regulation and stabilization of international financial markets (Barrell & Weale, 2010; Bertelsmann Stiftung, 2020a; Schraad-Tischler & Seelkopf, 2015).

Further, sustainability in social policies entails not only protection against risks coming from accident, illness, old age, or unemployment but also empowerment of members of society to play an active role in public affairs (Schmidt et al., 2007: 410). Political, social, and economic systems should provide all members of society in equal measure with substantive opportunities for self-realization. Hence, seeking to foster sustainability means “ensuring the long-term viability

of social-welfare systems” (Brusis & Siegmund, 2011; Rüb & Ulbricht, 2011). Successful social policies performance entails (1) education policies fostering high-quality, inclusive, and efficient education and training systems; (2) sociopolitical measures that facilitate social inclusion, while effectively fighting against social exclusion and polarization; (3) high quality, fair, and efficient health care systems; (4) the presence of policy measures that make it easy to combine career and family; (5) prevention of old-age poverty and promotion of inter-generational equity and fiscal sustainability; (6) effective integration of migrants into society; (7) secure living conditions; and (8) international commitment in combating global social inequalities (Bertelsmann Stiftung, 2020a; Schraad-Tischler & Seelkopf, 2015).

As for environmental sustainability, it entails “ensuring that regenerative resources are used only to the extent that they can be replenished [...] and that nonrenewable resources are consumed only to the extent that renewable substitutes can be developed” (Bertelsmann Stiftung, 2020a: 7). The goal of sustainable environmental policies is to ensure the natural foundation of human existence and leave a viable ecosystem for future generations. Thus, successful environmental policies protect natural resources and promote livable environmental conditions, and countries commit to advancing binding global environmental-protection regimes.

2.2 | Sustainable governance: conjunction of executive capacity and accountability

The discourse on governance is based on the recognition that public policies are unlikely to be successful if they lack the direct involvement of relevant actors, including businesses and civil society. Addressing and solving societal problems can no longer be ensured through the traditional top-down exercise of state power. Rather, diverse actors and organizations have to be included and their actions effectively coordinated. In the last two decades, the traditional model of state hierarchy has been overcome by hybrid structures, combining state, economic, and societal actors (Jann & Seyfried, 2011). As a result, there has been a shift toward coordination and cooperation by public and societal actors, co-production of collective goods, and an increase in social and economic self-regulation (*ibid.*).

Here, we refer to governance as “the sum of the many ways individuals and institutions, public and private, manage their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action may be taken. It includes formal institutions and regimes empowered to enforce compliance, as well as informal arrangements that people and institutions either have agreed to or perceive to be in their interest” (UN, 1995: 2).

Based on the SGI framework, we identify two sets of potential conditions (to use QCA terminology)—executive capacity and executive accountability—that may be conducive to successful economic, social, and environmental policy performances, that is, favorable “outcomes” in QCA terminology. We see these two sets of governance dimensions as containing factors (conditions) that, in conjunction, can contribute to policy performance in the three areas of economic, social, and environmental policies, although each one of the individual conditions is not conceived as necessary or sufficient by itself. This conjunctional expectation, that is, our expectation, based both on our theoretical knowledge and empirical (case-based) observations, that governance conditions will most likely operate in combination(s), leads us away from “net effects thinking,” that is, the expectation that any given condition will exert a separate, “net impact” on the outcome (Ragin, 2006). It rather leads us to consider the potential factors as “conditions,” that is, not as “independent variables”—indeed, as also framed following QCA as an approach,

conditions are expected to intervene via conjunctions or combinations; hence they are by definition not “independent” (Rihoux, 2013, 2020). Our theoretical knowledge and our observation of the real social world are thus in line with some core foundations of QCA as an approach.

Executive capacity, it refers to the government's capacity to deliver sustainable policies and encompasses individual, organizational, and system capacities, allocated across all three dimensions of capacities (analytical, managerial, and political) (Hartley & Zhang, 2018; Wu et al., 2018). This includes (1) the steering capability of the government (Mayntz, 2016)—defined as strategic capacity, inter-ministerial coordination, application of evidence-based instruments, societal consultation, and coherent policy communication; (2) effective policy implementation (Charron & Lapuente, 2010); and (3) institutional learning, encompassing adaptability, and organizational reform capacities (Domorenok et al., 2021). The core actors carrying such capacities are governments and their institutional resources, such as government bodies, ministries, and agencies.

Executive accountability, it refers to “the participatory and oversight competencies of actors and institutions beyond the executive branch” (Schraad-Tischler & Seelkopf, 2015: 10; Bertelsmann Stiftung, 2020a). For policies to succeed in the long term and yield sustainable effects, governments cannot formulate and implement policies in isolation. This necessitates that non-state actors from across businesses and civil society carry information, expertise, diversity of opinion, and exercise oversight. Executive accountability includes (1) strong citizens' participatory competencies (Kooiman, 2008); (2) adequate information and oversight resources of legislative actors; (3) high-quality media; (4) strong advisory capacities of diverse intermediary organizations (parties and interest associations); and (5) independence of supervisory bodies (audit office, ombuds office, and data protection authority) (Papadakis, 2006).

3 | APPROACHING DATA TRANSFORMATION FOR QCA

To implement QCA and in particular the whole minimization procedure to obtain the QCA solution, one must transform any initial data, be it numerical or non-numerical, into crisp or fuzzy set membership values. This must be done both for the outcome and for the conditions, for each case, because QCA follows a “set-theoretic” approach, in which membership scores of cases in sets represent (social) scientific concepts (Schneider & Wagemann, 2012: 3). This data transformation is not a mere technical exercise, it is rather in line with a deeper epistemological position that may be subsumed in two major points. Firstly, relations between (social) phenomena are conceptualized as set relations (*ibid.*). In concrete terms, the duly transformed data enables one to systematically examine these set relations—especially framed in terms of necessity and/or sufficiency—between specific conditions and the outcome, or between some conditions, or between some combinations of conditions and the outcome, and conditions are expected to intersect and to combine (see above; and Rihoux, 2020: 9). Secondly, for any given case, the combination of all conditions (with their respective set membership values) included in the QCA model that is associated with a given outcome value for a case (or for a group of cases) constitutes a “configuration.” Each and every case will then be comprised of the QCA analytical steps, including the core minimization procedure that uncovers the key combination of conditions leading to a certain outcome value via “multiple conjunctural causation” (Berg-Schlosser et al., 2009; Rihoux, 2020: 9). This means that QCA also follows a “configurational comparative” approach. In other words: each case matters, which implies that data transformation for the purpose of QCA should always be case-informed, even in larger-N designs and even if the raw data are numerical or linear.

What is fundamental in data transformation for the purpose of QCA is that it is about establishing “differences in kind” (vs. “differences in degree”) in the data (Ragin, 2008). This requires researchers’ input based on their theoretical knowledge and on the nature of the condition or outcome that needs to be transformed—that is, it should not be a standardized, automated procedure. Attributing set membership scores, that is, the calibration procedure, requires case-based, contextual and theoretical knowledge beyond the data at hand (Schneider & Wagemann, 2012: 32; Ragin, 2008). Regardless of the type of calibration one opts for (there are several technical options), one always has to carefully perform three core operations, stepwise: (1) deciding where to locate the “point of maximum indifference” (or crossover point) about membership versus non-membership, that is, the 0.5 anchor point in fuzzy sets or the dichotomization threshold in crisp sets; (2) defining full membership (score of 1) and full non-membership (score of 0); and (3) deciding about the graded membership in between a certain number of *qualitative* anchor points—again, pointing to “differences in kind.”

Gladly, as discussed further below, there is a good fit between this whole qualitative and “difference in kind” logic underlying QCA and the way the SGIs have been constructed, with the 10-point scale and the 4 main categories on that scale (1–2; 3–4–5; 6–7–8; and 9–10). The fit with QCA also derives from the fact that the attribution of the country scores on the respective SGIs is context- and case-informed, thanks to the involvement of both country and regional experts and to the whole peer reviewing and fine-tuning process. Thus, although the SGI data takes a numerical form, it in fact embraces a qualitative logic. Because of its numerical form, it does make the data transformation (the calibration steps) easier than if the data format had been more “deeply qualitative,” that is, not numerical. In that case, some other strategies would nonetheless have been available (de Block & Vis, 2019).

4 | RESEARCH DESIGN

The aim of this study is thus to address the question of which core combinations of conditions related to executive capacity and accountability are conducive to successful economic, social, and environmental policy performance from a comparative perspective across 41 developed countries, members of the OECD, and the EU. We specifically investigate how sustainable governance conditions of executive capacity and executive accountability assessed in 2019 affect economic, social, and environmental policy performances assessed in 2020. Arguably, the effects of governance on policy performance are not simultaneous; therefore, we expect the conditions to unfold their effects at least 1 year later.

4.1 | The SGI data

The SGI data are a cross-national comparative database designed to identify and enhance effective policy-making, tackling how governments target sustainable development (Bertelsmann Stiftung, 2020a). It examines how well policies have performed in achieving social, economic, and environmental targets across 41 countries. Of the 41 SGI countries under scrutiny, 36 are OECD members and 27 are EU members. In assessing “what works,” the SGI data also examines the context and the conditions under which policies work, along two main pillars: democracy on the one hand, and governance on the other. The governance indicators examine the extent to which a country’s institutional arrangements enhance the public sector’s capacity to act (executive capacity) and the extent to which citizens, NGOs, and other organizations carry

the participatory competence needed to hold government accountable (executive accountability). To operationalize and measure the concepts identified as relevant to address the challenge of sustainable development and the policy outcomes, the SGI relies on a combination of qualitative assessments by country experts and quantitative data drawn from robust official sources. The policy performance, democracy, and governance indices scores are derived by calculating the arithmetic means of the scores for their respective categories, and the individual category scores (environmental policies, economic policies, social policies, executive capacity, accountability, etc.) are derived by calculating the arithmetic mean of the criteria scores. As to the qualitative indicators, the rating scale ranges from 1 (worst) to 10 (best) and the scale is differentiated into four categories (1–2, 3–4–5, 6–7–8, and 9–10), which ensures resonance between the numerical and qualitative assessment made by country experts.

The SGI data has been updated every year from 2015 onward—for example, the SGI 2015 assessed a period ranging from May 2013 to November 2014, and so on (+1 year) for the next yearly SGIs up to 2020. Prior to this, the periods covered were broader: the SGI 2014 assessed a period ranging from May 2011 to May 2013, the SGI 2011 from May 2008 to April 2010, and the SGI 2009 (the first one) from January 2005 to March 2007.

4.2 | Case selection

We have decided to compare all the 41 countries included in the SGI. From a global perspective, the OECD countries are comparable as they face similar challenges in relation to globalization, digitalization, shifting demographics, and climate change, and they are also comparable from a cases-as-systems perspective (Przeworski & Teune, 1970) as they all constitute nation-states displaying democratic systems of some nature, relatively advanced economies, and so on. At the same time, these countries face internal economic and social challenges that require national policy interventions. These include structural and financial weaknesses associated with states' social security systems, issues of social justice, shortcomings in education systems, integration problems, and unsustainable environmental degradation. Encompassing the 41 OECD and EU countries included in the SGI enables us to observe variation in the conditions and the outcomes while maintaining some background features constant.

5 | THE CALIBRATION PROCEDURE: FROM SGI DATA TO FUZZY SCORES

Here, we unpack the calibration procedure we applied to transform the SGI data—that are compatible with but not designed for QCA—into fuzzy scores ready to be used for QCA treatment: first the operationalization and aggregation of the conditions and outcomes, including the aggregation strategy for both, then the calibration decisions.

5.1 | Conditions' and outcomes' operationalization: aggregation

To operationalize the conditions (see Figure 1) and the outcomes (see Figure 2) we draw upon the SGI assessment at the times selected; these conditions and outcomes are thus produced by carefully aggregating the respective related SGI indicators.

5.1.1 | Executive capacity conditions

Executive capacity conditions include (1) the steering capability of the government (Mayntz, 2016)—defined as strategic capacity, inter-ministerial coordination, application of evidence-based instruments, societal consultation, and coherent policy communication; (2) effective policy implementation (Charron & Lapuente, 2010); and (3) institutional learning, encompassing adaptability, and organizational reform capacities (Domorenok et al., 2021).

Specifically, steering capability gauges the roles of strategic planning and expert advice, the effectiveness of inter-ministerial coordination and regulatory impact assessments, and the quality of consultation and communication policies. Effective implementation determines the government's ability to ensure effective and efficient task delegation to ministries, agencies, or subnational governments. Institutional learning refers to the government's ability to reform its own institutional arrangements and improve its strategic orientation (Bertelsmann Stiftung, 2020b).

5.1.2 | Executive accountability conditions

Executive accountability conditions include (1) strong citizens' participatory competencies (Kooiman, 2008); (2) adequate information and oversight resources of legislative actors; (3) high-quality media; (4) strong advisory capacities of diverse intermediary organizations; and (5) independence of supervisory bodies (Papadakis, 2006).

Specifically, executive accountability conditions are gauging the extent to which citizens are informed of government's policies, whether the legislature is capable of evaluating and acting as a monitor on the executive, whether intermediary organizations (media, parties, and interest associations) demonstrate relevance and expertise in exercising oversight, and whether independent supervisory bodies act effectively (Bertelsmann Stiftung, 2020b).

5.1.3 | Outcomes: economic, social, and environmental policy performances

The three outcomes are comprising 16 policy fields grouped in terms of economic, social, and environmental sustainability. Specifically, successful economic policy performance comprises (1) economic policy performance (the extent to which economic policy has been successful in providing a reliable economic framework and in fostering international competitiveness); (2) labor market policy performance (the extent to which labor market policy addresses unemployment and regulation is balanced and successful); (3) tax policy performance (the extent to which tax policies realize the goals of equity, competitiveness and the generation of sufficient public revenues); (4) budgetary policy performance (the extent to which budgetary policy realizes the goal of fiscal sustainability); (5) R&I policy performance (the extent to which R&D policy supports technological innovation and the introduction of new products is fostered); and (6) stabilizing the global financial system (the extent to which the government actively contributes to the effective regulation and supervision of the international financial architecture).

Further, successful social policy performance is gauging (1) education policy performance (the extent to which education policy delivers high-quality, equitable, and efficient education and training); (2) social inclusion policy performance (the extent to which social policy prevents exclusion and decoupling from society); (3) health policy performance (the extent to which health care policies provide high-quality, inclusive and cost-efficient health care); (4) family policy performance

(the extent to which family support policies enable women to combine parenting with participation in the labor market); (5) pension policy performance (the extent to which pension policy realizes goals of poverty prevention, intergenerational equity, and fiscal sustainability); (6) integration policy performance (the extent to which policies support the integration of migrants into society effectively); (7) internal security policy performance (the extent to which internal security policy protects citizens against security risks effectively); and (8) global social policy performance (the extent to which the government demonstrates an active and coherent commitment to promoting equal socioeconomic opportunities in low- and middle-income countries).

Finally, successful environmental policy performance encompasses (1) environmental policy performance (the extent to which environmental policy protects and preserves the sustainability of natural resources and environmental quality effectively) and (2) global environmental policy performance (the extent to which the government actively contributes to the design and advancement of global environmental protection regimes).

5.2 | Calibration

To calibrate the outcomes and the conditions (see [Table 1¹](#) and Table S1 in the Appendix), we first examine the original SGI data. To operationalize and measure the concepts identified as relevant to address the challenge of sustainable development and its policy outcomes, the SGI relies on a combination of

Executive Capacity conditions

1. Steering Capability

Strategic capacity

Strategic Planning AND
Expert Advice

AND Inter-ministerial Coordination

GO/PMO Expertise AND
Line Ministries AND
Cabinet Committees AND
Ministerial Bureaucracy AND
Informal Coordination AND
Digitalisation for Interministerial Coordination

AND Application of Evidence-based Instruments

RIA Application AND
Quality of RIA Process AND
Sustainability Check AND
Quality of Ex-Post Evaluation AND

AND Societal Consultation

AND Coherent Policy Communication

2. Effective Policy Implementation

Government Effectiveness

AND Ministerial Compliance

AND Monitoring Ministries

AND Monitoring Agencies and Bureaucracies

AND Task Funding

AND Constitutional Discretion

AND National Standards

AND Regulatory Enforcement

3. Institutional Learning

Adaptability

Domestic Adaptability AND
International Coordination

AND Organisational Reform Capacities

Self-monitoring AND
Institutional Reform Capacities

Executive Accountability conditions

4. Strong Citizens' Participatory Competences

Political knowledge
AND Open Government

5. Adequate Legislative Actors' Resources

Parliamentary Resources
AND Obtaining Documents Capacity
AND Summoning Ministries Capacity
AND Summoning Experts Capacity
AND Task Area Congruence

6. High Quality Media

7. Competent Parties and Interest Associations

Inclusive and open intra-party decision-making
AND Associations Competence

8. Independent Supervisory Bodies

Independent Audit Office
AND Independent Ombuds Office
AND Independent Data Protection Authority

FIGURE 1 Eight explanatory conditions (aggregation of SGI indicators). Source: Adapted from SGI-network.org

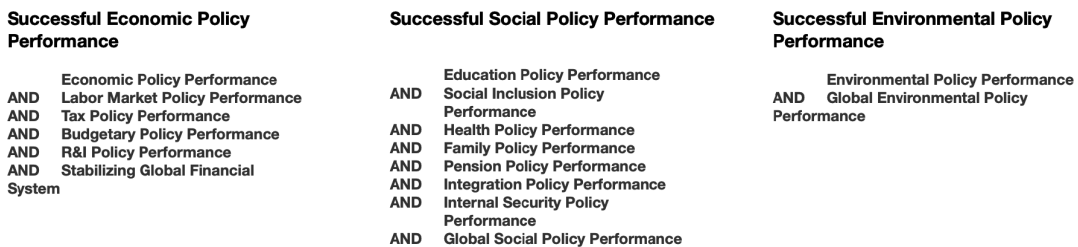


FIGURE 2 Outcomes: economic, social, environmental policy performances. Source: Adapted from SGI-network.org

qualitative assessments by country experts that provide scores on a scale from 1 (worst) to 10 (best). The scale is differentiated into four categories (1–2; 3–4–5; 6–7–8; and 9–10), which ensure resonance between the numerical and qualitative assessments made by country experts.

The SGI data lend themselves to four-point fuzzy sets, with the fully in (1.0), more in than out (0.67), more out than in (0.33), and fully out (0.0) values. We based the calibration decisions on the measurements of the concepts as operated in the SGI data and the four qualitative categories differentiating the 1–10 scale: 1–2; 3–4–5; 6–7–8; and 9–10. We calibrated the best logically possible case in the context of the SGI (namely, scoring 9–10 in the 1–10 scale) as fully in the set, and the worst logically possible case (namely, scoring 1–2 in the 1–10 scale) as fully out of the set.

To aggregate secondary-level dimensions, we apply a weakest-link logic (Goertz, 2020), which consists in assigning the minimum fuzzy set membership across these secondary-level dimensions. This is grounded in the assumption of non-substitutability, in line with the fuzzy logic of the necessary and sufficient conditions (ibid: 135). For instance, membership in the set environmental policy performance is derived by assigning the minimum observed value of the two secondary-level dimensions of environmental policy performance and global environmental policy performance. If a country has a membership score of 0.67 in the environmental policy performance dimension and of 0.33 in the global environmental policy performance dimension, the membership score in the set environmental policy performance will be derived by aggregating the two sub-dimensions with the logical AND, that is, taking the minimum—namely, 0.33. The reason for applying the weakest link logic is that either one of the individual dimensions should be present for the outcome to be present (de Block & Vis, 2019).

5.3 | The QCA model

After the calibration procedure, we draw a QCA model (see Figure 3) that represents how we expect to explain “successful policy performance” in the period 2019–2020. The QCA model contains (1) the conditions related to executive capacity (three conditions) and executive accountability (five conditions) and (2) three policy performance dimensions (social, economic, and environmental). The two macro-conditions containing eight conditions in the total form a conjuncture that jointly acts as sufficient to contribute to each successful policy performance outcome.

6 | FINDINGS

Next, we investigate which combinations of conditions are necessary (necessity analysis) and which combinations of conditions are sufficient (sufficiency analysis) for successful policy

performance, in particular, its economic, social, and environmental dimensions (see [Figure 2](#) above).² Details of the analyses can be found in the Appendix. All findings are evaluated in terms of potential generalization. We also discuss the relevant cases for each pathway that we identify.

6.1 | Economic policy performance

We present our findings from the Enhanced Standard Analysis (ESA) with fsQCA, that is, the solutions for attaining successful economic performance (ECP) and failed economic performance (~ECP). The ESA analysis enables barring untenable assumptions from being included in any solution term (i.e., a part of the QCA solution, or a causal path), and contradictory assumptions, that is, simultaneous subset relations and statements that can contradict the statement of necessity (Schneider & Wagemann, 2012). The 19 out of 41 cases display a positive outcome, only 5 of which are covered by the QCA analysis (Australia, Belgium, Estonia, Germany, Israel, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, New Zealand, Poland, Sweden, and Switzerland have been excluded; see Table S2 and Figure S1 in the appendix). The reason for the exclusion of 14 cases is that we apply the ESA analysis—excluding contradictory assumptions and contradicting statements of necessity from the truth table, and we set the threshold value for PRI³ at 0.51, which is a common good practice (Mello, 2022; Schneider & Wagemann, 2012). Cases with a PRI score below 0.5 indicate significant inconsistency (ibid.). We set the threshold value for consistency in sufficiency at 0.8 (Ragin, 2008). For a failed economic policy performance, 11 cases were covered out of 22 negative cases, excluding France, Spain, Austria, Czechia, Iceland, Ireland, Italy, Slovenia, South Korea, United States, and Japan (see Table S4 in the appendix).

6.1.1 | Necessity analysis

The analysis indicates that two single conditions are potentially required for a successful ECP: strong citizens' participatory competencies and adequate legislative actors' resources in 2019 (see Table S3 in the appendix). We also tested SUIN⁴ conditions for ECP and found out that the disjunctions (1) effective implementation combined with high-quality media, (2) high institutional learning combined with high-quality media, and (3) the absence of high-quality media combined with competent parties and interest associations can act as SUIN conditions for ECP. All these conditions have high consistency values (being above 0.9, coverage above 0.7, and relevance of necessity above 0.7; see [Table 2](#)).

The criteria for considering a condition as necessary or SUIN is its value in consistency, coverage, and relevance of necessity. The higher values the better. The good practices set the consistency value at 0.9 and coverage and relevance of necessity (RoN) at 60% as the minimum (Mello, 2022; Schneider & Wagemann, 2012). For the analysis of single necessary conditions, we have set the values of consistency at 0.9 and coverage and relevance at 80%; whereas for the analysis of SUIN conditions (based on the ESA truth table), we have placed the threshold at 70% for coverage and RoN. These criteria are also combined with case-based knowledge and evaluation of deviant cases (Oana et al., 2021). As only a few of the 41 cases are deviant consistency cases, and as we do not have theoretical grounds for which conditions or cases to include or not, we have selected all the SUIN conditions as necessary for a successful ECP.

TABLE 1 Calibration of the conditions and outcomes

Set	Operationalization	Concept structure	Calibration anchors		
Steering capability (STEERC)	Strategic capacity AND Inter-ministerial coordination AND Application of evidence-based instruments AND Societal consultation AND Coherent policy communication	Weakest link	0.0	0.33	0.67
			1-2	3-4-5	6-7-8
Effective policy implementation (IMPL)	Government effectiveness AND Ministerial compliance AND Monitoring ministries AND Monitoring agencies and bureaucracies AND Task funding AND Constitutional discretion AND National standards AND Regulatory enforcement	Weakest link	1-2	3-4-5	6-7-8
					9-10
Institutional learning (INSL)	Adaptability AND Organizational reform capacities	Weakest link	1-2	3-4-5	6-7-8
Strong citizens' participatory competencies (CIT)	Political knowledge AND Open government	Weakest link	1-2	3-4-5	6-7-8
					9-10
Adequate legislative actors' resources (LAR)	Parliamentary resources AND Obtaining documents capacity AND Summoning ministries capacity AND Summoning experts capacity AND Task area congruence	Weakest link	1-2	3-4-5	6-7-8
					9-10
High quality media (MED)	High quality media	Weakest link	1-2	3-4-5	6-7-8
Competent parties and interest associations (PART)	Inclusive and open intra-party decision making AND Associations competences	Weakest link	1-2	3-4-5	6-7-8
Independent supervisory bodies (ISB)	Independent audit office AND Independent ombuds office AND Independent data protection authority	Weakest link	1-2	3-4-5	6-7-8
					9-10
Successful economic policy performance (ECP)	Economic policy performance AND Labor market policy performance AND Tax policy performance AND Budgetary policy performance AND R&I policy performance AND Stabilizing global financial system	Weakest link	1-2	3-4-5	6-7-8
					9-10

(Continues)

TABLE 1 (Continued)

Set	Operationalization	Concept structure	Calibration anchors		
Successful social policy performance (SOCP)	Education policy performance AND Social inclusion policy performance AND Health policy performance AND Family policy performance AND Pension policy performance AND Integration policy performance AND Internal security policy performance AND Global social policy performance	Weakest link	1–2	3–4–5	6–7–8 9–10
Successful environmental policy performance (ENVP)	Environmental policy performance AND Global environmental policy performance	Weakest link	1–2	3–4–5	6–7–8 9–10

The same procedure is performed separately for the negated outcome (failed economic policy performance), given the causal asymmetry assumption in QCA (Mello, 2022; Schneider & Wagemann, 2012; Rihoux and Ragin 2009). We identify three single necessary conditions, namely the absence of effective policy implementation, the absence of high institutional learning, and the absence of competent parties and interest associations (see Table S5 and Figure S2 in the appendix). We also found seven SUIN conditions as necessary for the failed outcome (see Table 3).

6.1.2 | Sufficiency analysis

The QCA analysis produces three solutions: conservative, parsimonious, and intermediate. The conservative (or “complex”) solution is more descriptive and only refers to the observed cases. Conversely, the parsimonious solution reduces the solution to the main pathways with fewer conditions and also includes all non-observed cases (“logical remainders”) that are useful to obtain a shorter, more parsimonious solution. The intermediate solution is guided by theoretical expectations and includes a more limited number of simplifying assumptions (Rihoux and Ragin, 2009; Haesebrouck & Thomann, 2021). As an illustration, we will refer to the enhanced intermediate solution, which is typically recommended for interpretation purposes. In a nutshell, the argument is that such an intermediate solution is better informed by theory and by some substantive case knowledge, which makes it both theoretically and empirically “safer” than the parsimonious solution (see Schneider & Wagemann, 2012 and Álamos-Concha et al., 2021). Other solutions can be found in the Appendix⁵.

Table 4 presents a single pathway (or configuration) for a successful economic policy performance (the enhanced intermediate solution—ESA analysis). The overall solution has a consistency value of ≥ 0.97 . It denotes the extent to which cases correspond to the configurational relationship expressed in a solution (Fiss, 2011: 402). Overall solution coverage shows that this pathway explains 60% of the membership in the successful outcome.

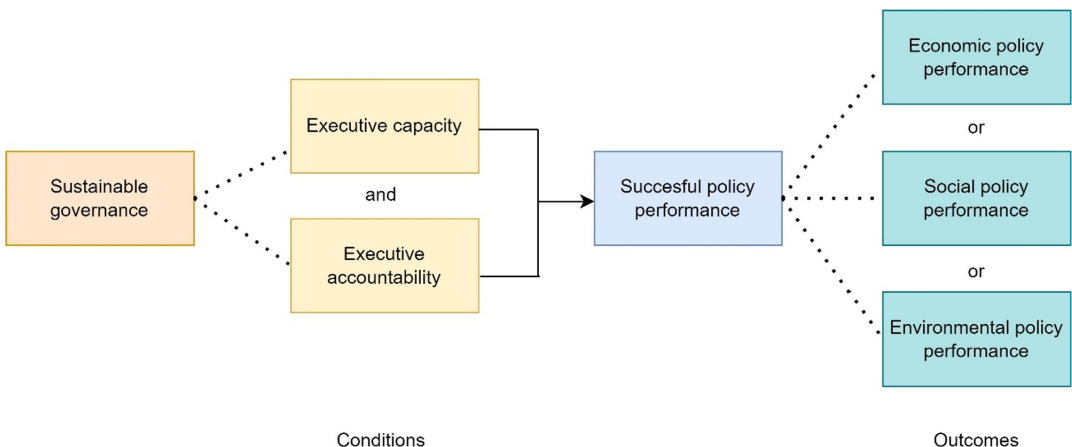


FIGURE 3 QCA model. Source: own elaboration. Note: dotted lines indicate “non-causal relationship,” that is, rather aspects that are part of the concept, as dimensions of the latter, while arrows stand for “some form of a causal relationship” (i.e., between the conditions and a given outcome) framed in terms of necessity and/or sufficiency

The single pathway is a conjunction of seven conditions, two being related to executive capacity and five related to executive accountability: the strong citizens' participatory competencies, combined with effective implementation of the policy, high institutional learning, adequate legislative actors' resources, high-quality media, competent parties and interest associations, and independent supervisory bodies are conducive to successful economic policy performance in Norway, the United Kingdom, Canada, Denmark, and Finland.

Table 5 displays a configuration conducive to a failed economic policy performance. The solution representing the pathway has an overall solution consistency value of 0.96 and an overall solution coverage of 77% of the membership in the present outcome.

The single pathway is characterized by the combination of five conditions that jointly lead to a failed outcome: the absence of high steering capacity combined with the absence of high institutional learning, the absence of effective policy implementation, the absence of strong citizens' participatory competencies and the absence of competent parties and interest associations are conducive to a failed economic policy performance. The cases covered by this solution are Chile, Cyprus, Hungary, Mexico, Turkey, Bulgaria, Greece, Malta, Slovakia, and Romania.

6.2 | Social policy performance

We now focus on the outcome of successful versus failed social policy performance. The 14 out of the 41 cases display a positive outcome. The QCA analysis covers only 3 out of 14 positive cases (see Table S10 in the Appendix). For a failed social policy performance, only 14 cases were covered out of 27 (excluding Australia, Belgium, Israel, Latvia, Switzerland, Austria, Czechia, Iceland, Ireland, Italy, South Korea, the United States, and Japan; see Table S12 in the Appendix).

6.2.1 | Necessity analysis

Our analysis reveals that one single condition is potentially required for a successful social policy performance (SOC): strong citizen participatory competence in 2019 (see Table S11 and Figure S3 in the appendix). We have also identified SUIN conditions as conjunctions and disjunctions for successful SOC. Nine SUIN conditions are considered as necessary and included in the ESA analysis for obtaining the enhanced parsimonious solution and the enhanced intermediate solution. We have identified five conjunctions and four disjunctions, respectively: (1) the absence of high steering capacity and strong citizens' participatory competencies; (2) strong citizens' participatory competencies and adequate legislative actors' resources; (3) strong citizens' participatory competencies and high-quality media; (4) strong citizens' participatory competencies and independent supervisory bodies; (5) adequate legislative actors'

TABLE 2 SUIN conditions for successful Economic Policy Performance

		inclN	RoN	covN
1	IMPL+MED	0.914	0.737	0.748
2	INSL+MED	0.948	0.729	0.755
3	~MED+PART	0.948	0.758	0.775

TABLE 3 SUIN conditions for a failed Economic Policy Performance

		inclN	RoN	covN
1	~STEERC*~IMPL	0.937	0.775	0.809
2	~STEERC*~INSL	0.921	0.825	0.841
3	~STEERC*~PART	0.905	0.859	0.864
4	IMPL+~CIT	0.905	0.828	0.838
5	INSL+~CIT	0.937	0.806	0.831
6	~CIT+~LAR	0.906	0.890	0.890
7	~CIT+PART	0.905	0.796	0.814

resources and high-quality media; and the disjunctions; (6) high steering capacity or competent parties and interest associations; (7) effective policy implementation or high institutional learning; (8) effective implementation or competent parties and interest associations; and (9) high institutional learning or competent parties and interest associations (see Table 6).

For a failed social policy performance, three single conditions have been identified: (1) the absence of effective implementation, (2) the absence of institutional learning, and (3) the absence of competent parties and interest associations (see Table S13 and Figure S4 in the appendix). We also found four SUIN conditions, two conjunctions: (4) the combination of the absence of steering capacity and the absence of effective policy implementation and (5) the combination of the absence of steering capacity and the absence of institutional learning; and two disjunctions: (6) the combination of high institutional learning or the absence of strong citizens' participatory competencies, and (7) the combination of the absence of strong citizens' participatory competencies or the presence of adequate legislative actors' resources (see Table 7).

6.2.2 | Sufficiency analysis

Table 8 presents a single pathway toward successful social policy performance. The solution displays a consistency value of 1.0 and a solution coverage that explains 64% of the cases with membership in the successful outcome.

The single pathway is a conjunction of seven conditions, two being related to executive capacity and five related to accountability. The absence of high steering capacity, the presence of effective implementation of the policy, strong citizens' participatory competencies, adequate legislative actors' resources, high-quality media, competent parties and interest associations, and independent supervisory bodies—all combined—are conducive to a successful social policy performance in Luxembourg, Norway, and the United Kingdom.

Table 9 displays the enhanced intermediate solution for the failed social policy performance outcome. The solution representing the pathway displays an overall solution consistency value of 1.0 and a solution coverage of 75% of the membership in the negative outcome.

The single pathway is characterized by the combination of five conditions that are jointly conducive to a failed outcome: the absence of steering capacity combined with the absence of effective policy implementation, the absence of institutional learning, the absence of strong citizens' participatory competencies, and the absence of competent parties and interest associations are conducive to failed social policy performance. Cases explained by this solution are Chile, Cyprus, Hungary, Mexico, Turkey, Bulgaria, Greece, Malta, Slovakia, Romania, Croatia, Poland, Portugal, and Slovenia.

TABLE 4 Enhanced intermediate solution for successful Economic Policy Performance

Configurations for successful Economic Policy Performance 2020	
	Solution
	Single pathway
Capacity	
Steering capacity	
Implementation	○
Institutional learning	○
Accountability	
Citizen participatory competence	○
Legislative actors' resources	○
Media	○
Parties and interest associations	○
Independent supervisory bodies	○
Consistency	0.973
Raw Coverage	0.607
Unique Coverage	-
Overall Solution Consistency	0.973
Overall Solution Coverage	0.670
Cases	Norway, United Kingdom; Canada, Denmark, Finland

Note: The empty circles indicate the presence of a condition and the empty space indicates that the condition does not matter. We have used an adapted method of visualization called “configuration charts” or “Fiss charts” (see Rubinson, 2019). Significance of bold values is over all values are highlighted.

6.3 | Environmental policy performance

Tables 11 and 12 display the findings for a successful versus failed environmental policy performance. 24 out of 41 cases display a positive outcome. The QCA analysis covers 21 out of 24 positive cases (see Table S18 in the Appendix). Cases that are not covered comprise Lithuania, New Zealand, and Latvia.

For a failed environmental policy performance, 13 cases were covered out of 17 negative cases, excluding Belgium, Israel, Czechia, South Korea, and the United States (see Table S20 in the Appendix).

6.3.1 | Necessity analysis

Our findings reveal that one single condition is potentially required for a successful environmental policy performance: high-quality media in 2019 (see Table S19 and Figure S5 in the appendix). For a failed outcome performance, three SUIN conditions have been identified as

TABLE 5 Enhanced intermediate solution for a failed Economic Policy Performance

Configurations for a failed Economic Policy Performance 2020	
	Solution
	Single pathway
Capacity	
Steering capacity	⊗
Implementation	⊗
Institutional learning	⊗
Accountability	
Citizen participatory competence	⊗
Legislative actors' resources	
Media	
Parties and interest associations	⊗
Independent supervisory bodies	
Consistency	0.961
Raw Coverage	0.779
Unique Coverage	-
Overall Solution Consistency	0.961
Overall Solution Coverage	0.779
Cases	Chile, Cyprus, Hungary, Mexico, Turkey; Bulgaria, Greece, Malta, Slovakia; Romania; Croatia, Poland; Portugal, Slovenia

Note: The crossed-out circles refer to the absence of a condition (see Robinson, 2019).
Significance of bold values is over all values are highlighted.

TABLE 6 SUIN conditions for successful Social Policy Performance








	N	incl	RoN	covN
1	~STEERC*CIT0	0.905	0.850	0.814
2	CIT*LAR	0.925	0.890	0.861
3	CIT*MED	0.945	0.846	0.821
4	CIT*ISB	0.906	0.878	0.844
5	LAR*MED	0.906	0.836	0.801
6	STEERC+PART	0.906	0.904	0.873
7	IMPL+INSL	0.906	0.891	0.858
8	IMPL+PART	0.946	0.901	0.877
9	INSL+PART	0.943	0.845	0.820

necessary: two conjunctions and one disjunction: (1) the absence of effective implementation combined with the absence of institutional learning; (2) the combination of the absence of institutional learning with the absence of competent parties and interest associations; and

TABLE 7 SUIN conditions for a failed Social Policy Performance

	<i>N</i>	<i>incl</i>	<i>RoN</i>	<i>covN</i>
1	~STEERC*~IMPL	0.941	0.844	0.878
2	~STEERC*~INSL	0.912	0.881	0.899
3	INSL+~CIT	0.912	0.847	0.873
4	~CIT+LAR	0.927	0.709	0.789

TABLE 8 Enhanced intermediate solution for a successful Social Policy Performance

Configurations for successful Social Policy Performance 2020	
	Solution
	Single pathway
Capacity	
Steering capacity	
Implementation	
Institutional learning	
Accountability	
Citizen participatory competence	
Legislative actors' resources	
Media	
Parties and interest associations	
Independent supervisory bodies	
Consistency	1.00
Raw Coverage	0.645
Unique Coverage	-
Overall Solution Consistency	1.00
Overall Solution Coverage	0.645
Cases	Luxembourg; Norway, United Kingdom

Note: The empty circles indicate the presence of a condition and the empty space indicates that the condition does not matter. The crossed-out circles refer to the absence of a condition (see Rubinson, 2019). Significance of bold values is over all values are highlighted.

(3) the disjunction of high steering capacity combined with the absence of high media quality (see Table 10).⁶

6.3.2 | Sufficiency analysis

Due to a low model ambiguity, we have obtained two solutions for explaining the successful environmental policy performance. We will present here one chosen solution containing eight pathways (solution 1). The other solution is presented in the Appendix (Table S25).

TABLE 9 Enhanced intermediate solution for a failed Social Policy Performance

Configurations for a failed Social Policy Performance 2020	
	Solution
	Single pathway
Capacity	
Steering capacity	⊗
Implementation	⊗
Institutional learning	⊗
Accountability	
Citizen participatory competence	⊗
Legislative actors' resources	
Media	
Parties and interest associations	⊗
Independent supervisory bodies	
Consistency	1.000
Raw Coverage	0.751
Unique Coverage	-
Overall Solution Consistency	1.000
Overall Solution Coverage	0.751
Cases	Chile, Cyprus, Hungary, Mexico, Turkey; Bulgaria, Greece, Malta, Slovakia; Romania; Croatia, Poland; Portugal, Slovenia

Note: The empty circles indicate the presence of a condition and the empty space indicates that the condition does not matter. The crossed-out circles refer to the absence of a condition (see Robinson, 2019). Significance of bold values is over all values are highlighted.

Table 11 contains solution 1. The enhanced intermediate solution, representing pathways 1a–h, has as overall solution consistency a value of ≥ 0.96 . It denotes the extent to which cases correspond to the configurational relationship that is expressed in the solution (Fiss, 2011: 402). Raw consistency values are equal to or above 0.97; this measures the degree to which configurations or terms belonging to the solution are subsets of the outcome (Ragin, 2008: 85). Overall solution coverage shows that pathways 1a–h jointly explain 87% of the membership in the successful outcome; this captures the extent to which the outcome is covered or explained by each solution term (raw coverage and unique coverage) and by the solution as a whole (overall solution coverage) (see Ragin, 2008: 85). Raw coverage measures the proportion of membership by each condition in the outcome, whereas unique coverage measures the proportion of cases following the specific configuration that leads to the outcome (ibid.: 86). Unique coverage indicates that pathways 1c and 1g are more significant than the other pathways in terms of frequency of occurrence of the outcome: 0.045 against 0.015, respectively. Based on raw coverage values, conditions are conducive to the positive outcome configurations at 58% for pathway 1a, 54% for pathway 1g, and 51% for pathway 1c (see solution 2 in Table S25 in the Appendix). We will refer to the mentioned pathways below.

TABLE 10 SUIN conditions for a failed Environmental Policy Performance

	N	incl	RoN	covN
1	~IMPL*~INSL	0.963	0.812	0.801
2	~INSL*~PART	0.926	0.860	0.834
3	STEERC+~MED	0.908	0.875	0.845

In the eight pathways, the high quality of media condition emerges as a critical condition for successful environmental policy performance. This suggests that, in successful environmental policy performance, governments need to focus their efforts on enabling the public to assess policy issues critically and improving the quality of the information dissemination, supporting media to provide in-depth information not only when decisions are taken, but also in advance, that is, when they are prepared and discussed among government members, members of Parliament, experts, bureaucrats, and stakeholders.

Pathway 1a is characterized by the presence of high-quality media combined with the presence of effective policy implementation and strong citizens' participatory competencies and competent parties and interest associations. Cases covered by this pathway are Switzerland, Luxembourg, Norway, the United Kingdom, Canada, Denmark, and Finland.

Pathway 1c exhibits the presence of high-quality media in combination with the absence of steering capacity and the presence of strong citizens' participatory competencies, the presence of adequate legislative actors' resources, and the absence of independent supervisory bodies. Cases covered by this pathway are Estonia, The Netherlands, and Japan.

Pathway 1g highlights the complementarity between the high-quality media and the absence of strong citizens' participatory competencies, combined with adequate legislative actors' resources and the absence of competent parties and interest associations and the presence of independent supervisory bodies. Cases covered by this pathway are Portugal, Slovenia, and Austria.

Table 12 displays the enhanced intermediate solution for explaining a failed environmental policy performance. The solution representing the pathway displays an overall solution consistency value of 0.95 and a solution coverage of 85% of the positive outcome cases.

The single pathway is characterized by the combination of five conditions that are jointly conducive to a failed outcome: the absence of steering capacity combined with the absence of effective policy implementation, the absence of institutional learning, the absence of high-quality media, and the absence of competent parties and interest associations is conducive to failed environmental policy performance. Cases covered by this solution are Chile, Cyprus, Hungary, Mexico, Turkey, Bulgaria, Greece, Malta, Slovakia, Romania, Croatia, Poland, and Australia.

6.4 | Calibration strategies in relation to robustness of results

Performing a QCA analysis using an existing dataset involves a series of analytic decisions that could alter the results, particularly with respect to changes in calibration, changes in raw consistency, and changes in the frequency cutoff. To test the robustness of our results, we have applied systematic robustness tests to assess the consequences of changes in our analytic decisions (documented in the Appendix) (Oana & Schneider, 2021). Here, we focus our attention on alternative calibration strategies, as they entail the application of different conceptual criteria.

In a first step, we calibrated the SGI data following the 4 qualitative categories of the SGI (1–2; 3–4–5; 6–7–8; and 9–10); see above. Nonetheless, the detailed qualitative empirical information

TABLE 11 (Continued)

Configurations for successful Environmental Policy Performance 2020									
Cases	Solution 1								
	1a	1b	1c	1d	1e	1f	1g	1h	
Switzerland;		Iceland; Israel,	Estonia,	Italy	France	Ireland	Portugal,	Israel, Spain;	
Luxembourg;		Spain	Netherlands;				Slovenia;	Germany; Sweden;	
Norway, United			Japan				Austria	Luxembourg;	
Kingdom;								Norway, United	
Canada,								Kingdom; Canada,	
Denmark,								Denmark, Finland	
Finland									

Note: The empty circles indicate the presence of a condition and the empty space indicates that the condition does not matter. The crossed-out circles refer to the absence of a condition (see Rubinson, 2019).
Significance of bold values is over all values are highlighted.

TABLE 12 Enhanced intermediate solution for a failed Environmental Policy Performance

Configurations for a failed Environmental Policy Performance 2020	
	Solution
	Single pathway
Capacity	
Steering capacity	⊗
Implementation	⊗
Institutional learning	⊗
Accountability	
Citizen participatory competence	
Legislative actors' resources	
Media	⊗
Parties and interest associations	⊗
Independent supervisory bodies	
Consistency	0.959
Raw Coverage	0.853
Unique Coverage	-
Overall Solution Consistency	0.959
Overall Solution Coverage	0.853
Cases	Chile, Cyprus, Hungary, Mexico, Turkey; Bulgaria, Greece, Malta, Slovakia; Romania; Croatia, Poland; Australia

Note: The empty circles indicate the presence of a condition and the empty space indicates that the condition does not matter. The crossed-out circles refer to the absence of a condition (see Rubinson, 2019). Significance of bold values is over all values are highlighted.

provided by the country experts assigning the scores in the SGI shows that there is some diversity between countries scoring 3, 4, or 5, as well as between those scoring 6, 7, or 8. To test the robustness of our results, and in line with a “back and forth dialogue between the cases and the theory” approach to QCA, we also tried different calibration strategies, including more fine-grained calibration (Ragin, 2008).

In a second step, we thus calibrated the SGI data into 6-point fuzzy scores (SGI score 1 → calibrated as fully out; 2–3 → calibrated as 0.2; 4–5 → 0.4; 6 → 0.6; 7–8 → 0.8; 9–10 → calibrated as fully in). Then, in a third step, we calibrated the SGI data into dichotomous crisp sets (SGI scores from 1 to 5 → fully out; SGI scores from 6 to 10 → fully in). Further, in a fourth step, we used the direct method of calibration: using the option *threshold setter* (Duşa, 2007), natural gaps in the distribution of cases are identified, and the thresholds for complete exclusion, complete inclusion, and crossover point are settled.

Eventually, the final calibration strategy that we opted for is the one that follows the 4 qualitative categories of the SGI, as it is the one that best links the dataset (as it has been conceived) and a set-theoretic approach. Moreover, calibrating the SGI scores into 4-point fuzzy scores—compared to the three other strategies—mitigates the issue of set skewness toward 0.5 and the consequent model ambiguity (see also below).

7 | CONCLUSIONS

In this study, we have embraced a double agenda. In empirical terms, we have examined, across 41 OECD and EU countries, the link between sustainable governance—defined as executive capacity and accountability—and policy performance in three main policy areas: economic, social, and environmental policies. In methodological terms, we have demonstrated and discussed QCA's potential for exploiting the SGI data for the purpose of comparative policy analysis.

7.1 | Empirical contribution

Though this piece gathers some still rather exploratory models calling for further iterations and refinements, we can already tease out some first useful empirical findings. First, executive accountability conditions seem to play a prominent role toward successful economic and social policy performances—being all present in the pathways sufficient for these two positive outcomes. Second, among executive capacity conditions, effective implementation is the one that seems to make a difference for both economic and social successful policy performances, being present in the sufficient pathways in combination with the other executive accountability conditions. Third, many roads lead to successful environmental policy performance: eight pathways have been identified, where the high quality of media condition emerges as a critical condition for successful performance—being present in all of them. Finally, the high quality of media seems to especially play a key role in successful policy performance—in all the three areas of economic, social, and environmental policies. It is combined with other executive accountability and executive capacity conditions, and it appears in all the pathways sufficient for the three positive outcomes.

7.2 | Core methodological contribution

Several points should be highlighted regarding our methodological contribution in connection with QCA. Firstly, we have unpacked what it entails to transform data into fuzzy scores avoiding a mere technical exercise, drawing on the deeper foundation of QCA: relations between (social) phenomena are conceptualized as set relations, and QCA follows a configurational comparative approach. Secondly, we have demonstrated the potential of the SGI dataset and its compatibility with QCA, as SGIs are case-informed, involving expert assessments that take into consideration deep contextual information on the cases. In addition, when attributing the scores, the SGI experts substantiate their assessment with empirical evidence. Thirdly and more specifically, we have demonstrated that the 4 qualitative categories of the SGI resonate well with a 4-point fuzzy score logic, encompassing differences “in kind.” For each indicator, a qualitative description of the four categories is provided, establishing also the differences “in degree.”

Fourthly, we have demonstrated that the SGI data are compatible with a configurational logic, via the aggregation of the respective indicators into broader QCA conditions and outcomes, and we have also demonstrated the appropriateness of the “weakest link” logic to perform this aggregation. Finally, in assigning the membership scores, we have substantiated the fact that the empirical (country) cases actually constitute complex configurations of conditions (the potential drivers) and of an outcome (the phenomenon to be explained).

7.3 | Limitations and steps for further research

This first attempt of ours does display some limitations. First, the SGI data provides a comprehensive overview of sustainable governance explanatory conditions, resulting in a very rich explanatory model, but covers an intermediate number of cases ($n = 41$). This raises the classical “limited empirical diversity” issue: when analyzing a not-so-large number of cases, we are constrained to include a rather limited number of conditions in the QCA model. Expanding the scope conditions to a larger number of cases would have enabled us to test some models also including quality of democracy conditions, which we had to exclude (focusing thus far only on capacity and accountability) to keep the number of conditions under control. Second, we have drawn on the assumption that sustainable governance conditions would take at least 1 year to show their effects toward policy performance. Admittedly this is still a quite basic rule of thumb which could be revisited. Third and not least, although the SGI dataset is compatible with a configurational comparative approach, especially given the shared “differences in kind” logic, it was not specifically *designed* for QCA treatment. This raises two thorny issues, which we discuss here in short (a detailed discussion would go way beyond the scope of this piece): (1) the SGI scores are quite strongly skewed toward intermediate values (i.e., indicator scores around 4, 5, 6, and 7). This type of skewness is challenging from the QCA perspective, because it pushes the fuzzy set membership scores toward 0.5, that is, the point of maximum ambiguity, which in turn generates model ambiguity and (2) following (fuzzy) set logic, which we have to do when applying (fs) QCA, the lower fuzzy set membership scores (below the 0.5 cut-off point—so: 0 and 0.33, following our calibration) have to stand for “not good performance” (i.e., in evaluation terminology: the “failure” concept we have opted for, designating “non-success”)—whereas, in contrast, the way the SGI scores have been conceived follows another logic, in which all scores between 0 and 5 correspond to relatively “bad performance.”

Considering these limitations and also looking further, a number of steps for future research may be suggested. First, future research should examine and fully present the results of the analyses of the three negated outcomes. This is especially important because of the causal asymmetry assumption of QCA. The research question addressed in this research could be reverted as “which core combinations of conditions related to executive capacity and accountability are conducive to *unsuccessful* economic, social, and environmental policy performance?”

Second, future research should also cover other points in time, as the SGI data are updated every year, offering the opportunity of testing the same explanatory model at different time points. For instance, the results of the analysis conducted in this research (examining the link between sustainable governance in 2019 and policy performance in 2020) could be compared with the respective results in the previous years (e.g., with the 2018–2019 sequence, the 2017–2018 sequence, and so on). Incidentally: expanding the research in these two directions (outcomes negations and different points in time) would enable us to exploit a much under-exploited QCA feature: the “intersection” function, namely the practice of systematically crossing the respective QCA solutions to compute their overlap: what do they have (and do not have) in common?

Third, expanding the number of cases, beyond the OECD and EU context, would enable us to address the question of whether the explanatory model accounts for sustainable policy performance in developing countries or “emerging economies”—the concrete difficulty being, though, that no data that would be fully equivalent to the SGI one is (yet) available. More generally speaking, by increasing the number of cases in terms of a number of countries and/or time points (see the previous point), we could possibly add the quality of democracy to the model to test whether it is a difference-maker for policy performance.

Fifth, a combination of QCA and process tracing via a multi-method research strategy (Álamos-Concha et al., 2021; Rihoux et al., 2021) would bring three further potential enrichments. To start with, it would enable us to examine both *what worked* (core combinations of conditions, via QCA) and *how it worked* (causal mechanisms, via process tracing), thereby not only explaining variation in policy performance but also understanding how the process toward successful policy performance actually unfolded (unpacking the “black box” of the process). Further, by focusing on the study of failed policy performance (at least 1 core negative case), we could zoom in on the processes that have broken down and understand what did not work and why. This would shed light on what stakeholders need to make policy performance successful. Finally, following such a more qualitative and case-oriented approach, future research could also unpack the contexts at play within which the different configurations unfolded. For instance: what worked in non-EU OECD countries did not necessarily work in EU countries. This would certainly be relevant and useful for stakeholders and decision makers when developing and implementing good practices.

7.4 | Recommendations for practitioners and stakeholders

The SGI data aims at contributing to identifying and fostering effective policy-making by exploring how governments target sustainable development. In line with this, stakeholders and policy-makers can learn how to shift their short-term thinking to long-term thinking for making policies work now and in the future. In light of this, our specific contribution to QCA is potentially useful to a variety of stakeholders in the countries studied, as it enables them to identify “what works and why.” By examining the different pathways (core combinations of conditions) that lead to policy performance, practitioners and stakeholders could improve their understanding of the design of policies that are conducive to performance, ultimately leading to sustainable development benefits. In concrete terms, building upon the QCA pathways, they could identify good practices and formulate some guidelines that would support better policy performance in their respective national contexts.

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CONFLICT OF INTEREST

No conflict of interest.

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ENDNOTES

- ¹ Table S28 in the Appendix details conditions and outcomes operationalization and calibration – including all secondary dimensions aggregated through the logical AND.
- ² We have performed the analyses in R (version 4.0.2) with the QCA package (version 3.15) (Duşa, 2019) and the SetMethods package (version 3.0) (Oana and Schneider 2018).
- ³ PRI = Proportional reduction in inconsistency (Mendel and Ragin 2011: 38).
- ⁴ SUIN condition is the acronym for “a sufficient but unnecessary part of a factor that is insufficient but necessary for an outcome” (Mahoney et al., 2009: 126).
- ⁵ See Tables: S6, S7, S8, S9, S14, S15, S16, S17, S22, S23, S24, S25, S26, and S27 in the Appendix.
- ⁶ No single necessary conditions identified for a failed environmental policy performance. See Table S21 and Fig. S6 in the Appendix.

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