

Between ‘Scientization’ and a ‘Participatory Turn’. Tracing shifts in the governance of policy advice

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Abstract

This study traces the claims of a ‘scientization’ and a ‘participatory turn’ in modern governance within the system of temporary policy advisory committees in Norway. It analyzes whether there is evidence of the two claims in these key governance institutions and to what extent these shifts are compatible with each other. As expressions of a participatory turn, a growing emphasis on citizen involvement and transparency in the committee system is searched for. A growing relevance of researchers and of science-based claims in the committees’ reports are taken as indicators of scientization. The longitudinal study shows an overall shift both towards science- and expertise-based governance and towards an increasing openness and public engagement, as well as some variation between policy fields.

Key words: scientization; participation; governance; policy advisory committees; Norway

1. Introduction

This study traces two sweeping claims about shifts in modern governance practices—the claim of a ‘scientization’ and of a ‘participatory turn’ in policymaking. These two claims are often made in studies of democracy, governance and politics, but rarely empirically assessed over time. What is more, they seem to draw into different directions and it is unclear in how far they are compatible.

Scientization refers to the growing reliance on scientific expertise to back up political claims and to draw up viable policy solutions, and it is related to an increasing complexity of policymaking (see Christensen and Holst 2017; Kitcher 2011; Lentsch and Weingart 2011). The claim of a *participatory turn* refers to an increasingly open process of policymaking that involves the public to a growing extent and responds to the legitimacy crisis of the representative model of democracy (see, e.g., Fischer 2009; Hood 2006; Jasanoff 2003).

In this study, we assess these two claims by focusing on a key policy advice institution that channels the input of external actors into political systems: ad hoc advisory committees that are set up by governments, produce policy proposals and assemble experts as well as civil society actors. These institutions are relatively flexible and have the double function of generating trustworthy policy expertise and integrating societal viewpoints. The shifts towards scientization and more direct public participation can thus be expected to manifest themselves here.

We analyze whether there is evidence of the two claims in these key governance institutions, and to what extent these shifts are compatible with each other. We use the example of Norwegian advisory committees (*Norges offentlige utredninger*—NOU), which produce ‘Official Norwegian Reports’, a series of policy proposals with high status and a long tradition in Norwegian policymaking. We track changes over time by studying NOUs that have deliberated on similar issues but were set up at different times—and we do so by comparing four different policy areas: tax policy, climate policy, energy policy and gender equality and family policy. In each policy area, we examine, on the one hand, changes over time in the reliance on scientific experts and expertise within advisory committees and, on the other hand, changes in the participation of citizens and the openness of the committee process.

In the next section, we outline ‘scientization’ and a ‘participatory turn’ as two central trends in contemporary governance (Section 2) and discuss their relationship. We then introduce the research design: a longitudinal analysis of scientization and a turn towards public involvement and transparency in the system of Norwegian advisory bodies, reaching across a set of ‘most different’ policy areas. In this third section, we also present the data and indicators used in the study, describe the Norwegian system of NOUs, and justify our case selection. The sections that follow present the empirical findings, policy field by policy field (Sections 4–7). We find that

both scientization and an increased emphasis on participatory, transparent governance takes place in most fields, but that the tendency is not equally strong across policy areas. We subsequently discuss the findings (Section 8) and suggest explanations for the policy field variation. On relatively new policy issues that are closely linked to social movements we see the strongest trends towards extending public engagement, public data access and account-giving practices, while scientization seems to be damped in policy fields with strong ministries and where the expertise of environmental groups plays a pronounced role. A brief concluding section succinctly summarizes our findings, outlines the study's broader significance, discusses some of its limitations and points to future research agendas.

2. Pressures towards scientization and a participatory turn in modern governance

Pressures to 'scientize' public policymaking have been traced back to modern governance's growing dependence on specialized, and in particular science-based, knowledge (Christensen and Holst 2017; Kitcher 2011; Lentsch and Weingart 2011). The last decades have seen the emergence of 'knowledge societies', characterized by a sharp and steady increase of access to information, scientific knowledge and levels of education and attainment around the world (Bormmann and Mutz 2015; Meyer et al. 1997; OECD 2017), as well as increasing numbers of knowledge-producing institutions and 'depoliticized' expert bodies (Curtin 2007; Vibert 2007). Despite public contestation of the authority and accountability of experts and disappointment about science's failures to provide certainties, there is a widely held belief in modern societies that a sound knowledge basis and recourse to scientific insights help to ensure the quality of public policies. As Meyer et al. (1997: 152) observe, states 'make valiant efforts to live up to the model of rational actorhood' and build policies on expert knowledge to retain credibility and legitimacy, to justify choices and to find viable and trustworthy solutions. Being perceived as uninformed, irrational and not 'evidence-based' can become a strain on public institutions' reputation (Carpenter 2010). The 'ceremonial worth of expertise' (Meyer and Rowan 1977) not only pertains to state actors: In many policy fields, activists build their initiatives on robust scientific arguments to back up their demands (Yearley 2005).

While the relevance of expertise and a general rationality mandate for public policymaking may not be a new theme (Douglas 2009), some recent shifts have intensified these demands and particular importance is accorded to science as modern society's main provider of reliable knowledge. For one thing, the management of contemporary high-pace technological change and the regulation of risks associated with it make scientific expert knowledge ever more indispensable (Christensen and Holst 2017; Gornitzka and Krick 2018). For another, the ongoing expansion of state functions, the subsequently growing complexity of policymaking and a concurrent tendency to minimize state administration have extended the demand for external policy advice (Lentsch and Weingart 2011). This together with the relatively recent emergence of a science-based policy advice market is likely to have accelerated scientization tendencies during the last two decades (Lentsch and Weingart 2011). We can assume that these shifts have contributed to changes in ideas about what constitutes 'good governance' and to have pushed governance towards scientization (Krick and Gornitzka 2019). We therefore expect scientization to be reflected in the set-up and operations of policy advisory bodies. More specifically, we examine whether the relevance of researchers and of science-based claims in

public advisory committees has increased during the last decades (see for more details Section 3).

A second major trend, which partly responds to scientization tendencies and partly to intensified criticism raised against representative democracy, is the pressure to 'open up' policymaking to the public and to tap into new sources of legitimacy. Political commitments to public participation have been codified in several key political agreements and proposals of the last two decades.¹ A common framing of these calls for more public participation has been to present the involvement of the less powerful, the non-professionals, the non-elites, of less established grass roots groups, 'the public' at large and the 'ordinary', 'lay' people—as an antidote to technocratic, expert- and elite-led governance.² Building on the direct model of democracy, emphasis is put on more immediate, issue-specific and deliberative forms of participation within 'mini publics' such as consensus conferences and online debate forums or through referenda (Fischer 2009; Fung 2006; Gora et al. 2018). In addition to citizens' direct involvement in policy development, public access to information is considered a prerequisite for meaningful involvement and the doctrine of transparency has arguably attained 'quasi-religious significance' (Hood 2006: 3) in contemporary debates about legitimacy and good governance. Although the highest-flying hopes connected to the idea of increased citizen participation can often not be fulfilled,³ it does hold some normative potential: public participation is bound to increase general awareness of political issues and offers opportunities for those with little power to be heard, develop political self-efficacy and learn from the processes (Brown 2009; Fischer 2009; Irvin and Stansbury 2004). In addition, broader involvement can add to the accountability of public policymaking because those involved will have co-responsibility for the political solutions that are developed.

With concepts such as 'mode-2-knowledge production' or the 'co-production of knowledge', the sociology of knowledge and science has also pointed to possible *epistemic* merits of opening up policy development (see Jasanoff 2003; Nowotny et al. 2001). The idea is that experts and policymakers can learn about citizens' views and concerns by involving the public more broadly; from this perspective, the inclusion of 'local knowledge' or 'experts by experience' can enrich the policy process with further viewpoints and generate 'socially robust' or even more 'rational' solutions to collective problems (Nowotny et al. 2001; Wynne 1992). In this study, we want to examine whether the participatory turn has reached the Norwegian advisory committee system. More specifically, we search for signs of a growing emphasis on citizen involvement and transparency of committee decision-making.

Against the background of these assumptions, a key question becomes how these two trends relate to each other (see also Krick and Holst 2018). Are these contradictory or complementary shifts in governance practices? Given the quite different rationales behind science- and research-based governance on the one hand and the inclusion of (lay) citizens perspectives into policymaking on the other, it is easily conceivable that we get one at the expense of the other. Emphasis on public participation can push aside scientists in policy advice venues or weaken the legitimacy of science-based claims. In settings where science-based claims enjoy a high status, in contrast, public involvement may be considered irrational or uninformed. Yet, a coexistence, compatibility and even a mutual re-enforcement is also thinkable. After all, scientization can trigger calls for a 'democratization' of public participation as compensation for technocratic developments. Similarly, in practices of 'co-production' of policy expertise, (lay) citizens may need to be supported, assisted and

informed by scientists. Our research design allows us to assess to what extent these trends co-occur. However, it does not allow us to tell whether one development actually *reacts* to the other; on this issue, more research is needed over a longer period of time and with a focus on actor level strategies and justifications.

3. Research design

We trace the trends of scientization and extended public participation within the Norwegian system of ad hoc policy advisory committees, known as NOUs. These are central governance instruments and providers of policy expertise in the Norwegian political system. NOUs are usually publicly visible and it can therefore be costly for governments to ignore their advice. Their high status is reflected by the common practice of building on NOU reports in subsequent law proposals and official statements. NOU committees are furthermore hybrid advisory institutions (Krick 2015) that address both the government and the public; they provide information and guidance, but are also used for societal involvement and policy coordination; they assemble experts from different backgrounds alongside societal representatives and civil servants, and they tend to be open to public input in one way or another.

The annual number of NOU reports has decreased since the heyday of corporatism in the 1970s but is still substantial (about twenty reports per year). Throughout the period of study NOUs have remained rather informal institutions: there are few formal rules that govern the composition and operation of these bodies (Tellmann 2016). Governments have several mechanisms for exercising control over commissions: they define the terms of reference and appoint their members, and civil servants often sit on commissions and in the secretariat. Yet, there has been no clear trend towards greater government control of commissions. For instance, while ministry officials over time have increased their presence within commission secretariats, they are less frequently appointed as chair or member of commissions (Christensen and Holst 2017).

NOUs are thus in several respects a suitable setting for examining possible shifts in the reliance on scientific expertise and public input, respectively, in governance. First, if the trends are salient we should be able to track them not only under special circumstances, but within the NOU system in general since it constitutes one of the key auxiliary governance structures of the Norwegian polity. Second, NOUs are relevant for the study of both our selected trends. If NOU committees were introvert committees producing purely expertise-based advice, with the bureaucracy as their exclusive recipient, a 'participatory turn' as described here would not be likely. Conversely, if the NOUs were simply public arenas for negotiations between societal interests, the scientization expectation would be less obvious. However, since NOUs have multiple, and both social and epistemic functions, both expectations seem to be viable. Third, studies of the NOU system describe it as flexible and adaptive (Tellmann 2016), in contrast to more rigid and formalized advisory systems where governance trends of the kind we are interested in would less likely strike in. Finally, as the NOU system is comparably transparent with detailed public reports and additional material available on the government's official webpage, data availability for our longitudinal study is high and allows us to cover a range of different policy fields and indicators.

At the same time, the results of our study are not confined to the Norwegian case, but speak to larger governance trends and shifts in the 'politics of expertise' and their effects on advisory mechanisms and committee systems. Importantly, the central role of the hybrid

ad hoc advisory committee as an instrument of governance is not limited to the Norwegian political system, but is typical for compromise-based political systems with a corporatist legacy and consensus-oriented cultures of public sense-making and expertise-production, such as the Scandinavian, the German-speaking and the Low countries, as well as the European Union (see e.g. Campbell and Pedersen 2014; Christensen et al. 2017; Jasanoff 2005; Krick 2015; Krick and Holst 2018; Lijphart 2012; Siefken 2007).

We examine the trends of scientization and extended citizen participation by looking at advisory commissions within four 'most different' policy areas. The logic behind this most different systems design is to assess whether scientization and a participatory turn are trends that unfold across the board. By examining policy areas that are representative of the broader population on important dimensions, we are able to say something about the generality of these trends. For instance, if scientization of advisory bodies is manifest across very different policy areas, this would indicate that this development is of a general character, rather than limited to specific domains.

The policy areas selected for study are climate change policy, taxation policy, energy policy and gender equality and family policy. These areas differ along a number of dimensions. First, climate change and energy policy combine regulatory and distributive elements, primarily, family policy is mainly distributive,⁴ while taxation policy is both redistributive and distributive (see Lowi 1979 for these distinctions of policy types). Second, taxation is an old and well-established policy field, energy policy as well as gender equality and family policy combine older and newer issues,⁵ while climate change is a relatively recent concern, and as a result, cuts across established policy issues, government departments and sectors. Third, tax policy can be placed within the traditional materialist policy paradigm with the corresponding social cleavages and interest group constellations, while climate issues, in contrast, are related to the rise of post-materialist values and new social movements. Gender equality and family policy as well as energy policy constitute in-between areas.⁶ Fourth, tax policy and energy policy fall under 'strong' ministries (the Ministry of Finance and the Ministry of Petroleum and Energy, respectively), whereas family policy and climate change fall under 'weaker ministries' (the Ministry of Children and Equality and the Ministry of Climate and Environment, respectively). Finally, taxation, energy, and climate change policy are often treated as more 'technical' policy fields, while family and gender policy is often subsumed under 'social policy' in the broader sense.⁷

Within each policy area, we trace developments over time by examining all advisory commissions set up by a specific department that investigated a specific policy issue from the mid-1980s up until today. This includes four commissions appointed to investigate the climate change issue, five commissions examining the overarching features of tax policy, four commissions dealing with equal pay and policies for families with children and four commissions assessing energy system and supply issues. The commissions examined within each field are highly comparable, thereby allowing us to isolate and identify changes in the reliance on scientific knowledge and in citizen participation over time.

The analysis draws on data from official documents: commission reports and material available on commission websites. The documents have been analyzed both quantitatively and qualitatively. We have traced scientization and a participatory turn by looking at a series of indicators.

As signs of a *scientization* of NOU governance we take an increasing involvement of researchers and a growing relevance of

science-based claims. While the role of the expert is of course not confined to scientists, and while useful policy expertise can come from various sources (see Krick 2015, 2018), we here want to grasp a possibly growing authority of *scientific* knowledge and therefore focus on researchers and science-based validity claims. To capture scientization, we analyze:

- a. *Composition*: To what extent do researchers participate on commissions as members and chairs? Researchers are defined as individuals who hold a PhD and professionally conduct research. In terms of their organizational affiliation, we distinguish between researchers located at independent research institutions (i.e. universities and (politically and financially) independent research institutes) and those at research-conducting public agencies ('research directorates' such as Statistics Norway (SSB) or the Norwegian Institute of Marine Research).
- b. *Citation patterns*: The citation analysis includes studies that were ordered by NOU commissions as input to its deliberations ('commissioned studies') as well as the literature referenced in commission reports. Here we take an increase of academic commissioned studies, of citations in general and of references to academic publications in the report as signs of scientization.⁸ As *academic* studies we count those conducted by research institutions (universities and independent research institutes) and publications in peer-reviewed journals and academic publishing houses.
- c. *Epistemic language*: This part of the analysis traces the use of epistemic keywords in the terms of reference and reports of commissions, such as 'evidence', 'knowledge', 'data', and 'research'.⁹

As signs of a *participatory turn* of NOU governance we take a growing emphasis on public/citizen involvement and increasing transparency of the committees' work. While there are of course other forms of participation, most traditionally by established special interest groups such as trade unions, we here try to capture access channels for less established, less powerful societal voices. We therefore primarily search for the involvement of 'ordinary', non-organized, lay citizens, but we also assess whether public interest, human rights and non-established grassroots groups (such as citizens' initiatives) were involved.¹⁰

We analyze:

- a. *Citizen inclusion*: To what degree are citizens included into the committee's work? Indicators are the participation of 'ordinary', non-organized citizens as well as ad hoc initiatives, cause groups¹¹ and grassroots organizations as committee members and their involvement through further open access channels (such as polls, email feedback, online debate forums, 'open', regional conferences and hearings that involve cause groups and/or are open to the public). We qualify these channels of inclusion by asking in which roles citizens were engaged (committee members, co-deciders, providers of fresh input, information receivers).
- b. *Transparency*: We further assess the degree of transparency and data access by analyzing, first, to what extent the NOU gives an account of its internal deliberations by making minutes, summaries of debates or interim results publicly available. Second, we assess the accessibility of key material used and processed by the committees (commissioned studies and written opinions to the commission available in annex or on website). Third, we examine whether the NOU commits to transparent, participatory and responsive procedures. We see this indicated by a report that entails an explicit description of the NOU's participatory

approach and its dissemination efforts (through op-eds, newsletters, lectures, website etc.), that lists the consulted stakeholders and describes the content and the processing of their input. It is important to note that we here rely mainly on information contained in the report itself, which does not allow us to capture all actual participation and dissemination. For instance, commissions may engage in dissemination without reporting it.

These indicators all capture theoretically important aspects of scientization and a participatory turn. To be sure, each single indicator may not offer a perfect expression of the overarching phenomenon. For instance, measures of the degree to which reports use scientific language are sensitive to how the dictionary of keywords is compiled. However, taken together, we believe that the measures provide a valid expression of the phenomena we seek to examine. In the next section, we empirically trace scientization and participatory shifts within advisory commissions, examining the four policy areas in turn.

4. NOUs on climate change policies

Four NOUs on climate change policies were set up by the environmental ministry since the climate change issue gained momentum in the mid-1990s: The Measures commission (*Virkemidler i miljøpolitikken*, NOU 1995: 4) evaluated the efficiency of policies aiming at reducing environmental pollution and emissions. The Quota Commission (*Et kvotesystem for klimagasser*, NOU 2000: 1) focused on the establishment of a quota system for greenhouse gases, the Low Emissions Commission on the reduction of climate gas emissions (*Et klimavennlig Norge*, NOU 2006: 18) and the Adaptation Commission on adaptation measures to an already changing climate (*Sett pris på miljøet. Rapport fra grønn skattekommisjon*, NOU 2015: 15).

4.1 Scientization of climate change NOUs?

On the climate change issue, we see a certain tendency towards scientization, reflected within the composition as well as the citation patterns (Table 1). Over time, NOUs assemble more academics in their ranks and they are more likely to be led by a researcher in the chair position. The general scope and the number of academic publications in the reports' reference lists also grows considerably over time. An interesting shift is also observable in the framing of the report. The use of epistemic language is particularly marked in the latest report and there is a clear tendency towards a more frequent use of the terms 'research' (forsk(n)ing) and 'knowledge' (kunnskap).

4.2 A participatory turn on the climate change issue?

We see clear signs of a participatory turn amongst climate change NOUs, and this applies to both the citizen inclusion and the transparency criteria (Table 2). In the latest NOU, an environmental pressure group received a seat and, over time, non-organized, lay citizens were increasingly involved through various input channels in the role of input receivers and providers of fresh perspectives, but not as co-deciders or committee members. The NOU's internal deliberation is documented in more and more detail and public access to key documents is clearly increasing. Similarly, the newer reports describe their participatory approach in detail, account for their dissemination efforts, and increasingly summarize the public input they receive and the way the NOU dealt with it, although this feedback remains relatively vague.

Table 1. Results of the scientization analysis (climate change NOUs).

Indicators	NOU 1995: 4	NOU 2000: 1	NOU 2006: 18	NOU 2010: 10
Composition				
Scientific chair	No	No	Yes	No
Number and share of researchers as members (incl. chair)	2 18%	3 27%	3 43%	2 24% (plus 2 in 'researcher' positions at research directorates)
Citation patterns				
Number and share of academic commissioned studies	1 13%	4 44%	2 50%	6 60%
Number of publications in reference list	54	30	93	208
Number and share of academic publications in reference list	22 43%	3 10%	21 23%	69 33%
Epistemic language				
Number of epistemic keywords used	1100	529	258	1374
Frequency of epistemic keyword	2, 2 per page	1, 7 per page	1, 8 per page	5, 2 per page
Number of epistemic keywords in the mandate	2	1	0	14
Most frequent keywords (used more than 50×)	Data, metod*, analys*, teori/teoretisk, fag*	Metod*, data, modell, informasjon, analys*	Forskning	Kunnskap, forskning, analys*, data, fag*, informasjon, modell, undersøk*

5. NOUs on tax policy

Five commissions in the period 1980–2018 examined overarching aspects of tax policy. All of these commissions submitted their report to the Ministry of Finance. The Commission on Personal Taxation (*Personbeskatning*, NOU 1984: 22) examined the taxation of individuals. The Commission on Corporate and Capital Taxation (*Bedrifts- og kapitalbeskatningen—en skisse til reform*, NOU 1989: 14) investigated the tax system for businesses and different forms of capita. The Commission on Flatter Tax (*Flatere skatt*, NOU 1999: 7) looked at the possibilities for more proportional taxation. The Tax Commission (*Skatteutvalget*, NOU 2003: 9) examined all aspects of tax policy, whereas the Commission on Capital Taxation in an International Economy (*Kapitalbeskatning i en internasjonal økonomi*, NOU 2014: 13) looked more specifically at the challenges of internationalization for the tax system.

5.1 Scientization of tax policy NOUs?

There are signs of a scientization of NOU reports in the field of tax policy (Table 3). In terms of composition, the first commission was a 'broadly composed commission' that included a number of politicians but only one academic, whereas academics were well represented on the latest four commissions. However, we do not see a trend towards more scientific chairs. Citations in commission reports also suggest a scientific turn: the total number of references and the number and share of references to academic work increased over time. The use of epistemic keyword in reports was considerable throughout the period, with extensive use of keywords such as 'analyze/analysis', 'method', 'theory/theoretical', 'empirical', and 'data'. The use also increased somewhat over time according to our measures. However, it must be noted that these results are sensitive to the exact words included in the search dictionary. Some of the most commonly occurring keywords have multiple meanings in the context of taxation and do not always indicate scientific content (in particular 'model' and 'method'). When excluding these words, epistemic language still increases markedly between 1984 and 1999 but then drops in the latest two reports.

5.2 A participatory turn in tax policy NOUs?

There are very few signs of a participatory turn in tax policy NOUs (Table 4). In none of the commissions have citizens been involved as committee members or in other roles, nor has citizen, grassroots input been sought through other channels. In terms of transparency, none of the commissions established separate websites or provided documentation on internal deliberations. However, every commission published the commissioned studies it relied upon as annexes to the report. One commission also published an additional appendix online. Few dissemination activities were described in the reports, with the exception of an open seminar organized by the latest commission. Furthermore, none of the commissions explicitly described its participatory approach but two listed the interest groups they consulted.

6. NOUs on gender equality and family policy

Several NOU reports from the 1990s onwards were submitted in the gender equality and family policy area. Two NOU reports each were published on equal pay issues and policies for families with children. The mandate of The Ellingsæter Commission (*Offentlig støtte til barnefamilie*, NOU 2017: 6) refers to this commission as a follow-up to The Longva Commission (*Offentlige overføringer til barnefamilier*, NOU 1996: 13). On the issue of equal pay, The Equal Pay Commission (*Kjønn og lønn — Fakta, analyser og virkemidler for likelønn*, NOU 2008: 6) is a continuation of the work of The Nybøen Commission on Job Evaluation Schemes for Equal Pay (*Arbeidsvurdering som virkemiddel for likelønn*, NOU 1997: 10). All the selected reports were submitted to the Ministry of Children and Equality.

6.1 Scientization of gender equality and family policy NOUs?

Both composition and citation patterns have features that confirm the scientization expectation in the gender equality and family policy area (Table 5). There is a steep increase both in the number and share of researchers as commission members, in the number of publications included in the reference list, and in the number and share of academic

Table 2. Results of the participatory turn analysis (climate change NOUs).

Indicators	NOU 1995: 4	NOU 2000: 1	NOU 2006: 18	NOU 2010: 10
Citizen inclusion				
Citizens involved as committee members	No	No	No	No 'ordinary citizens' as members
Channels of citizen input	No (not mentioned in report)	Limited Cause groups provided input through additional external advisory panel ('reference group')	Yes 4 open access, regional, public conferences Public online debate forum Public survey	Yes 1 environmental group 1 open access conference 7 regional conferences (including cause groups)
Citizens involved in other roles than members	No (not mentioned in report)	No (not mentioned in report or on website)	Yes Mainly information receivers, but also providers of fresh perspectives	Yes Mainly information receivers, but also providers of fresh perspectives
Transparency				
Documentation of internal deliberation	No (not mentioned in report)	No (not mentioned in report)	Moderate Summaries of NOU's debates on lavutslip.no	Yes Minutes of committee meetings and regional conferences were available on klimatilpasning.no
Easy access to key material used/processed by the committees	Commissioned studies partly in annex	9 written opinions annexed to report Commissioned studies available to stakeholder advisory panel	13 written opinions annexed to report Commissioned studies available on website lavutslip.no	22 written opinions delivered, but not annexed to report Commissioned studies, minutes and presentations from conferences available on klimatilpasning.no
NOU's self-description as transparent, participatory and responsive	No	Moderate Committee members attended external conferences List of members of reference groups that provided input Vague description of content and processing of the received input	Yes Explicit description of participatory approach Handouts, leaflets, newsletter, informative website List of interest groups that provided input Description of content and vague description of processing of the received input	Yes Explicit description of participatory approach Pamphlets, committee members attending conferences and holding lectures, informative website Description of content and vague description of processing of the received input

publications referred to. The assessment also shows that *Forsk(n)ing/forsker* (research/researcher) is an epistemic keyword most often used by the most recent NOUs. However, some sub-area differences occur, in particular in the key word analysis, where the number of epistemic keywords in mandates and their frequency in general are consistently lower in the family policy NOUs than in the equal pay commissions.

6.2 A participatory turn in gender and family policy NOUs?

There are some signs of a participatory turn in the gender equality and family policy NOUs, even if the tendency is far from clear-cut (Table 6). It goes for all the studied reports that commissioned studies are accessible in the annex. The earliest NOUs score however negative or low on the rest of the citizen inclusion and transparency indicators. One of the most recent NOUs—The Ellingsæter Commission on family policy (NOU 2017: 6) scores almost as low. However, the Equal Pay Commission (NOU 2008: 6) has significant participatory features. This commission emphasized and specified a participatory approach laid out in the report. It had also channels of

citizen input and involvement—a website and a public seminar—and scored higher than the other commissions on transparency.

7. NOUs on energy policy

Four NOU commissions focused on the energy system and supply security during the last decades and submitted their reports to the Ministry of Petroleum and Energy. Two committees assessed Norway's energy and power balance and the long-term conditions of energy policy (*Energi og kraftbalansen mot 2020*, NOU 1998: 11 and *Energiutredning - Verdiskaping, forsyningssikkerhet og miljø*, NOU 2012: 9). Two further committees made recommendations about stimulating the use of eco-friendly natural gas and hydrogen, respectively (*Gassteknologi, miljø og verdiskaping*, NOU 2002: 7 and *Hydrogen som fremtidens energibærer*, NOU 2004: 11).

7.1 Scientization of energy policy NOUs?

There are no clear signs of a scientization of commission reports in the field of energy policy (Table 7). First, there is no obvious trend

Table 3. Results of the scientization analysis (tax policy NOUs).

Indicators	NOU 1984: 22	NOU 1989: 14	NOU 1999: 7	NOU 2003: 9	NOU 2014: 13
Composition					
Scientific chair	No	Yes	No (SSB)	No	No (SSB)
Number and share of researchers as members (incl. chair)	1 6%	3 27%	2 29% (+1 SSB)	3 27%	3 38% (+1 SSB)
Citation patterns					
Number and share of academic commissioned studies	5 71%	5 83%	3 43% (+ 4 SSB studies)	4 44% (+ 4 SSB studies)	2 66%
Number of publications in reference list	25	23	91	48	156
Number and share of academic publications in reference list	10 40%	2 9%	47 52%	28 58%	88 56%
Epistemic language					
Number of epistemic keywords	471	656	795	817	912
Frequency of epistemic keyword	0, 9 per page	1, 4 per page	1, 9 per page	1, 9 per page	2, 5 per page
Number of epistemic keywords in the mandate	1	5	8	7	19
Most frequent keywords (used more than 50×)	Metod*, analys*	Metod*, analys*, teori/teoretisk	Analys*, empiri*, teori/teoretisk, metod*, data, modell	Metod*, analys*, empiri*, modell	Metod*, modell, analys*, informasjon, empiri*

Table 4. Results of the participatory turn analysis (tax policy NOUs).

Indicators	NOU 1984: 22	NOU 1989: 14	NOU 1999: 7	NOU 2003: 9	NOU 2014: 13
Citizen inclusion					
Citizens involved as committee members	No	No	No	No	No
Channels of citizen input	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)
Citizens involved in other roles than members	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)
Transparency					
Documentation of internal deliberation	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)
Easy access of key material used/processed by the committees	Commissioned studies annexed to report	Commissioned studies annexed to report	Commissioned studies annexed to report	Commissioned studies annexed to report	Commissioned studies annexed to report + additional appendix online
NOU's self-description as transparent, participatory and responsive	No (not mentioned in report)	Very limited List of interest groups that provided input	No (not mentioned in report)	Very limited List of interest groups that provided input	No (not mentioned in report)

in the composition of commissions: The two commissions in the 2000s had a researcher as chairperson and one additional academic member, whereas the 1998 and 2012 commissions did not contain any academics (only a member from the national statistical office SSB). Moreover, none of the groups commissioned academic studies; the studies commissioned were either produced by SSB or by subcommittees of mixed composition. The citation patterns even suggest a downward trend in the reliance on academic knowledge: the greatest number and share of references to academic literature are found in the two earliest reports. Finally, the frequency of epistemic keywords is relatively high in all reports but higher in the two reports from the 2000s than in the earliest and most recent reports. In other words, we cannot conclude based on these data that energy policy commissions have come to rely more heavily on academic knowledge.

7.2 A participatory turn in energy policy NOUs?

Amongst NOUs that focused on energy supply, we see overall moderate levels of public involvement and transparency and some traces of a participatory turn over time (Table 8). Environmental cause groups were represented in the influential role of committee member in all NOUs, and their input was furthermore gathered through additional channels such as bilateral meetings, hearings or conferences, in all but the oldest case (NOU 1998: 11). There was access to key documents throughout, information about the consulted stakeholders and the latest NOU additionally describes how it dealt with the received public input. Yet, none of the commissions established separate websites for further public information, provided documentation on its internal deliberations or explicitly described its participatory approach.

Table 5. Results of the scientization analysis (gender equality and family policy NOUs).

Indicators	NOU 1996: 13	NOU 1997: 10	NOU 2008: 6	NOU 2017: 6
Composition				
Scientific chair	No (SSB)	No	No	Yes
Number and share of researchers as members (including chair)	2 18% (+1 SSB)	2 15%	6 75%	7 78% (+1 SSB)
Citation patterns				
Number and share of academic commissioned studies	7 47% (+8 SSB studies)	0	1 33% (+ 1 SSB study and 1 study from other research directorate)	0 (+1 SSB study)
Number of publications in reference list	158	83	231	489
Number and share of academic publications in reference list	36 23%	14 17%	126 55%	317 65%
Epistemic language				
Number of epistemic keywords used	1742	1098	1413	872
Frequency of epistemic keyword	2, 5 per page	3, 9 per page	4, 6 per page	2, 4 per page
Number of epistemic keywords in the mandate	1	4	13	4
Most frequent keywords (used more than 50×)	Undersøkelse, Analys*, Modell, Data, Forsk(n)ing/forsker, Teori/teoretisk, Metod*, Fag/lig, Empiri*	Fag/lig, Metod*, Analys*, Informasjon, Kunnskap, Undersøkelse	Analys*, Fag/lig, Forsk(n)ing/forsker, Modell, Undersøkelse, Teori/teoretisk, Informasjon, Data	Modell, Forsk(n)ing/forsker, Data, Analys*, Kunnskap

Table 6. Results of the participatory turn analysis (gender and family policy NOUs).

Indicators	NOU 1996: 13	NOU 1997: 10	NOU 2008: 6	NOU 2017: 6
Citizen inclusion				
Citizens involved as committee members	No	No	No	No
Channels of citizen input	No (not mentioned in report)	No (not mentioned in report)	Yes 1 open access public seminar Online debate forum (likelonn.no)	Limited Written statements by cause groups
Citizens involved in other roles than members	No (not mentioned in report)	No (not mentioned in report)	Yes Primarily information receivers, but also providers of fresh perspectives	No (not mentioned in report)
Transparency				
Documentation of internal deliberation	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)
Easy access of key material used/processed by the committees	Commissioned studies annexed to report	Commissioned studies annexed to report	Commissioned studies and written opinions annexed to report	Commissioned studies annexed to report
NOU's self-description as transparent, participatory and responsive	No	No	Moderate Explicit description of participatory approach List of members of reference group that provided input Committee members attended public conferences, produced media coverage, interviews/op-ed Website	Very limited List of interest groups that provided input

Table 7. Results of the scientization analysis (energy policy NOUs).

Indicators	NOU 1998: 11	NOU 2002: 7	NOU 2004: 11	NOU 2012: 9
Composition				
Scientific chair	No	Yes	Yes	No
Number and share of researchers as members (including chair)	0 (+ 1 SSB)	2 25 %	2 33 %	0 (+ 1 SSB)
Citation patterns				
Number and share of academic commissioned studies	0 (+ 3 SSB studies)	0	0	0 (+ 1 SSB study)
Number of publications in reference list	83	82	8	105
Number and share of academic publications in reference list	39 47 %	26 32 %	1 13 %	10 10 %
Epistemic language				
Number of epistemic keywords used	1,044	484	396	402
Frequency of epistemic keywords	1, 7 per page	3, 1 per page	4, 4 per page	1, 7 per page
Number of epistemic keywords in the mandate	2	1	9	3
Most frequent keywords (used more than 50×)	Modell, informasjon, forsk(n)ing/forsker, analys*, kunnskap, data, metod*	Forsk(n)ing/forsker, metod*	Forsk(n)ing/forsker, ekspert	Kunnskap, forsk(n)ing/forsker, informasjon

Table 8. Results of the participatory turn analysis (energy policy NOUs).

Indicators	NOU 1998: 11	NOU 2002: 7	NOU 2004: 11	NOU 2012: 9
Citizen inclusion				
Citizens involved as committee members	No 'ordinary citizens' 1 environmental group	No 'ordinary citizens' 1 environmental group	No 'ordinary citizens' 1 environmental group	No 'ordinary citizens' 1 environmental group
Channels of citizen input	No (not mentioned in report)	Moderate 1 open conference Meetings with interest groups (including cause groups)	Limited Meetings with interest groups (including cause groups)	Moderate 1 open conference Presentations by interest groups (including cause groups)
Citizens involved in other roles than members	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)
Transparency				
Documentation of internal deliberation	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)	No (not mentioned in report)
Easy access to key material used/processed by the committees	Commissioned studies partly annexed to report	Written opinions partly annexed to report	Commissioned studies partly available on government's website	Commissioned reports annexed or available on government's website
NOU's self-description as transparent, participatory and responsive	Very limited List of interest groups that provided input	Very limited List of interest groups that provided input	Very limited List of interest groups that provided input	Limited List of interest groups that provided input Vague description of the received input

8. Discussion

Our analyzes confirm the expectation of scientization in most but not all of the policy areas. The notion of a 'knowledge society', with its growing focus on building public policies on scientific knowledge and "evidence", has set its mark on temporary policy advice commissions: Academics are increasingly making up and chairing committees, and reports have ever-growing reference lists and refer increasingly to academic literature. Commissions also make active use of epistemic language, although there is no uniform increase in the frequency of science-oriented keywords over time. The main exception is the field of energy policy, where there is no clear tendency

towards greater reliance on science and expertise. At the same time, we see signs of a turn towards more participatory and transparent committee governance in three of our four selected policy areas: In the climate change, the energy policy and the family and gender policy fields, channels of citizen and grassroots input are amplifying, citizens tend to be included in slightly more active, responsible roles, the degree of documentation and data access grows and commissions increasingly show commitment to participation, transparency and responsiveness. Our findings thus indicate that scientization does in fact often come in tandem with an increased focus on citizen participation and transparency. This confirms the theoretical point

that the two trends are not generally contradictory, even if we, on the basis of our data, cannot say whether increased scores on participatory turn indicators are a response to increased scientization, or vice versa, or whether the two trends are independent.

Yet, neither the scientization tendency nor the participatory turn are unambiguous: In some fields, we do not see scientization reflected in the terminology used in the NOU reports, for instance. Besides, also in early commissions were scientists included as members and were academic references significantly used. Thus, the scientization trend we observe is taking place in a commission system where scientists, scientific knowledge claims and terminology have been playing a role for quite some time. Similarly, we do not see a full-fledged participatory turn on all of the selected indicators. If lay, 'ordinary' citizens are involved or addressed at all within the observed practices, they are mainly included in relatively passive roles and they are therefore unlikely to significantly shape public policies through these channels. Non-organized lay citizens and grassroots groups were in many cases welcome to provide additional input and fresh perspectives, but these voices were neither strong nor binding. That 'the public' is hardly included as a force to be reckoned with may have to do with the complexity of the commissions' mandates and the concomitant need for specialized expertise, as well as with the corporatist tradition of the Norwegian political system. Interest groups have traditionally been involved as members of Norwegian advisory committees, through additional external advisory panels ('reference groups'), more informal bilateral exchanges and as routine providers of written statements during the hearing process that takes place after submission of the report and lets affected interests have a say. In many of our cases, these corporatist channels of influence still play a pronounced role, despite the widespread evocation of an 'end of corporatism', and they may well contribute to the participatory functions that many expect from *direct* citizen inclusion. The limitations to data access and transparency could also be a path-dependent feature linked to the corporatist bargaining system, which is relatively closed during negotiations in order to facilitate concessions and package deals.

There are moreover noteworthy differences between the policy areas. Several scientization indicators increase most steeply in the gender equality and family policy area. This is a policy area with a relatively weak ministry with limited budgets and considerably less agenda-setting power within economic and social policy than for example the Ministry of Finance or the Ministry of Labor and Social Affairs. The civil society and interest groups in this area are also relatively weak. Obviously, key issues in gender equality and family policy overlap with questions that are central to the social partners (pay, welfare services and benefits, etc.). However, in these organizations, gender perspectives are often trumped by other concerns, and the women's movement outside of political parties has in recent years become relatively marginal both in terms of members, budget, and influence (Skjeie et al. 2017). Overall then, gender equality and family policy is an area where ideas of knowledge-based policymaking are particularly likely to be embraced in order to increase salience and impact. The period we have studied is furthermore one where Norwegian women and gender studies have become more deeply institutionalized as an academic field, while preserving its relatively applied and policy-oriented orientation. These additional factors seem to sit well with high and increasing scores on scientization variables.

We also find indications of scientization in the taxation field, although the changes over time are moderate. In this area, there appears to be a movement towards commissions with substantial

participation of academic experts, citation of academic literature and use of epistemic language—features shared by the three most recent commissions. Scientific knowledge seems to have found a rather stable position in this field—that is it has become institutionalized. This may be linked to the more settled character of the taxation field and the power of the administrative body in charge of tax policy, the Ministry of Finance.

In the field of climate policy, we see a moderate scientization of the committees' compositions and citation patterns. This may partly be explained by the presence of environmental pressure groups in the field. These groups have been shown to be amongst the most professionalized and knowledge-oriented, using information as 'access goods' to the policy process (Bouwen 2004; Yearley 2005). They also advocate public concerns, not special interests, and are thus likely to be considered relatively impartial. Their trustworthiness and professionalization may have equipped their representatives with the capacity to replace the input of scientists to a certain extent.

Finally, energy policy stands out as the only area where we find no evidence of a scientization trend. The reliance on research is also generally low compared to the other policy fields, with few or no researchers among committee members, no academic studies commissioned, and reports with a limited amount of academic and other entries in the reference lists. This may be partly related to the quite pronounced presence of environmental groups in the relatively powerful role of committee members in all the analyzed NOUs in this field, but it may also reflect the influence of a strong ministry in combination with strong entrenched economic and political interests in the energy policy area. These features of energy policy are likely to be particularly pronounced in Norway, a large oil producer and exporter.

As for the participatory turn, it turns out to be most pronounced in the climate change area. In this new policy field, power relations and bargaining structures are less fixed and there are fewer strong, resourceful pressure groups with pronounced ownership in the policy field. Institutional flexibility is likely to be higher and societal demands (such as for participatory governance) can be more easily incorporated. Besides, in the climate policy field, 'cause groups' dominate. In contrast to 'sectoral groups' that advocate special interests and are established players in many of the traditional policy fields, environmental cause groups represent post-materialist viewpoints, stand for collective concerns and human rights, and often radiate a certain moral authority. They are closely interlinked with social movements and typically promote more direct citizen participation. Besides, within environmental policy, political commitment to the openness of policymaking seems particularly pronounced, reflected, for instance, by the ambitious Århus Convention (UN 1998), national legislation on Environmental Impact Assessments and the multitude of participatory experiments in this field (Lidskog 2008). The relative newness of the climate change issue also means that policy approaches, problem definitions, and agendas are more dynamic (see also Rothstein 1998 on the distinction between 'static' and 'dynamic' policies). The NOUs on climate change policy we studied reflect this. Problem definition was not completed and policy solutions were not treated as known. In fact, these NOUs were relatively open to new perspectives and new actors. From this perspective, public inclusion into policy development may be more of an asset than a mere liability.

In contrast, neither a general commitment to citizen participation nor a shift towards such a governance style were visible in taxation policy. This may be linked to the technical complexity of the

tax system, which makes it more amenable to scientific analysis than to citizen input. However, this kind of argument should not be accepted too quickly: tax policymaking also involves important value choices, for example about the degree of redistribution. Rather, it can be argued that administrative and scientific actors have succeeded in progressively de-politicizing tax policy preparation, pushing interest groups to the margins of advisory commissions, and making few efforts to actively involve citizens.

Gender equality and family as well as energy policy fall in an in-between category. In energy policy, we see some signs of a participatory shift and overall moderate commitment to transparency and public engagement. In contrast to tax policy, all NOUs in this field made efforts to involve cause groups through a range of channels, in the relatively influential role of committee member, through conferences and additional advisory panels. In gender equality and family policy, the two sub-issues studied vary systematically. There are few signs of any increased concern for broad inclusion and transparency in the reports on policies for families with children. ‘Families’ were established as objects for technocratic policy interventions well before the rise of the feminist movement with its new actors and participatory approach to policy-making. In accordance with this legacy, family policy has been conceived of as a rather technical and settled field, with SSB, at least up until recently, as a dominant producer of policy-relevant knowledge. Hence, there may not be so much fertile ground for a participatory turn in this area. In contrast, the equal pay agenda is more closely connected to the new and more participatory grammar of politics introduced by the new women’s movement.

9. Conclusion

Overall, we find a stronger reliance on science-based claims and on academics as policy advisors as well as on openness and citizen involvement within Norwegian temporary advisory committees, in most but not all policy areas. We believe that such changes in the routines of policymaking reflect—and shape—our cultural understandings of democratic legitimacy and of the validity of public claims-making and that their analysis is therefore highly relevant for society and for political decision-making. The actors involved and the perspectives included in advisory institutions make a difference for the substance of the policy advice generated and thus the way a problem is framed, addressed and eventually solved in a certain policy domain. Of prime importance here is the question of composition of an advisory body. Not accidentally are questions of composition often issues of fierce political struggle behind the scenes when advisory committees are set up. This is particularly the case when advisory institutions are of such central importance in a system of governance as the here-analyzed NOUs. Virtually every important social reform, every new or especially contested issue has been taken up by an NOU in the past and these reports tend to be translated into a white book by the government. Key for their prime importance in a consensus-oriented knowledge society such as Norway is their double function and their traditionally hybrid composition (Arter 2004; Christensen et al. 2017; Christensen and Hesstvedt 2019; Krick and Holst 2018). They assemble both key holders of relevant knowledge and societal perspectives and thus generate ‘negotiated expertise’ (Krick 2015), that is knowledge-based as well as agreed upon by the main societal stakeholders and thus particularly implementable, usable and socially embedded. When the participation patterns of these important venues of policy

development change, this tells us something about shifting societal understandings of valid knowledge and of democratic legitimacy—and these institutional changes may then reconfirm such cultural shifts. When governments increasingly open up advisory processes to the public, they probably value this kind of input as such, or at least flag a commitment to public scrutiny and grassroots involvement. When they build policy advice more substantively on research, they probably value this kind of knowledge as particularly helpful and valid—but they may also use the status of science for policy reforms in order to appear as rational and objective.

Our analysis is an important first step towards tracing the two popular claims in real-life policymaking, not least since there is a pronounced lack of longitudinal assessments of these trends. Yet, our study clearly has several limitations. By focusing on specific policy areas, we have ensured strong comparability between reports over time. However, this limits the number of reports analyzed, which restricts our ability to draw firm conclusions. One direction for further research would be to apply the indicators of scientization and a participatory turn to a larger number of NOU commissions. Another direction would be to extend the analysis to other European consensus-democracies that attribute a similarly important, cooperative, pacifying and knowledge-producing role to hybrid advisory committees, such as Germany, the EU, or other Scandinavian countries. Furthermore, our indicators are sensitive to how they are specified. For instance, exactly which keywords are included in the dictionary of epistemic language matters for the scores and the trends over time. We also draw on the commission reports as the primary source of data. Our indicators thus capture visible aspects of these reports and the reported behaviour of the commissions. They do not allow us to examine other ‘hidden’ aspects of the commission’s work, such as the role of scientific arguments in the commissions’ deliberations or their actual engagement with citizen input. This could be an interesting path for subsequent research.

Notes

1. See [European Commission \(2001\)](#), [\(2016\)](#), [OECD \(2016\)](#) and [UN \(1998\)](#). Interestingly, all these policy instruments emphasize transparency and citizen involvement, but they also stress the importance of efficient expertise- and evidence-based decision-making.
2. In these debates, ‘public’ and ‘citizen’ are often used as positive buzzwords, which are rarely clearly defined, yet seem to denote somehow more legitimate, more democratic political processes that are closer to ‘the people’. Such a general way of speaking can be problematic, when it indicates a unified public will ignored by ‘the elites’, and altogether purer motives of ‘ordinary’ people. Of course, such normative concepts need to be substantiated, particularly when trying to grasp and trace them empirically, as we do here. We will define and discuss these notions in Section 3, when we operationalize our key indicators.
3. Meaningful citizen participation is not easy to realize and the inherent dilemmas of these practices are often overlooked. The most important one is the distorted representation that particularly innovative, deliberative forms of public participation tend to show and the resulting ‘class bias’ of such experiments (see [Fung 2006](#); [Krick 2019](#)).
4. The broader field of gender equality and family policy cuts across these distinctions, but the issues we will focus on in this article—equal pay and families with children—are primarily distributive.

5. Demography (fertility, birth control, marriage, etc.), for instance, is an older issue, while women's equal opportunities is a more recent focus. Within energy policy, infrastructure and supply security are rather classic issues, while concerns around CO₂-emission or nuclear waste storage, for instance, are newer.
6. The economic elements of energy policy and controversies around some family policy schemes have a corporatist underpinning, while sustainability concerns in energy policy and concerns over anti-discrimination laws and protection in gender equality policy exemplify issues that cut across traditional cleavages and are lobbied for by new social movements, emerging environmental groups or feminist organizations and the rising LGBT-movement.
7. Taxation issues are, however, not naturally more complex and less tangible than for example family policy issues. Rather, such framings are often politically motivated, reflect societal power relations and can be used to attract or deviate public attention.
8. Changes in the number of citations to academic publications may in part reflect the fact that scientific publications have become more accessible over time. However, previous research has shown that the number of citations in Norwegian commission reports is strongly correlated with the share of academics on a commission (Christensen 2018). This indicates that the number of citations is a valid measure of scientization.
9. The full list of epistemic keywords is: *Akademisk/lakademia* (academic/academia), *Kunnskap* (knowledge), *Data* (data), *Valid** (valid*), *Vitenskap** (science), *Forsk(n)ing/forsker* (research/researcher), *Informasjon* (information), *Ekspert** (expert), *Undersøkelse* (investigation), *Metod** (method), *Hypotese* (hypothesis), *Modell* (model), *Eksperiment* (experiment), *Analys** (analyze/analysis), *Fag/lig* (scientific/professional), *Sakkyndig* (expert), *Teori/teoretisk* (theory/theoretical), *Empiri** (empirical), *Kvantitativ* (quantitative), *Kvalitativ* (qualitative), *Evidens* (evidence), *Bevis* (proof), *Inferens* (inference), *Signifikansnivå* (significance level), *Regresjon* (regression), *Reliabilitet* (reliability), *Korrelasjon* (correlation), *Survey* (survey), *Kausal** (causal).
10. In the tables summarizing the data of the case studies, we also mention stakeholder access channels where appropriate, but these do not generally count as indicators of a participatory turn from the perspective we take here, unless it is cause groups or grassroots NGOs that are incorporated as stakeholders.
11. In contrast to 'sectoral groups' that advocate special interests, 'cause groups' advocate public, collective concerns or human rights (see Klüver and Saurugger 2013; Stewart 1958).

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