



IFAU – INSTITUTE FOR
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**Towards reason:
political disputes, public attention
and the use of expert knowledge
in policymaking**

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Towards reason: political disputes, public attention and the use of expert knowledge in policymaking^α

by

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Abstract

This article examines expert knowledge utilization in public policy processes. We study how much expert knowledge is employed and the extent to which decision-makers deliberate on the information provided by the experts, under various conditions of political disputes and public attention. We suggest four hypotheses. It is proposed that expert knowledge will be used more, but that there will be less deliberation in situations of political disputes. It is also suggested that expert knowledge will be consulted more and the decision-makers will take a more deliberative approach when there is a lot of attention from citizens. Our empirical findings, based on original data from local politics in Sweden, are in line with the hypotheses. The findings highlight the importance of both studying the extent of expert knowledge use and the way expertise is utilized. Another important insight is that politics seem to matter in relation to the role expert knowledge plays in public policymaking.

Keywords: Expert knowledge, Public policy, Political disputes, Public attention, Deliberation, Local government, Sweden.
Jel-Codes: H70, H83.

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1 Introduction

Important political decisions are difficult to make. Politicians often have scant information about whether earlier solutions had the intended effects. Even when that kind of knowledge is available, it is usually very hard to know whether a suggested solution will work in a new situation. Despite this complexity, most of us acknowledge that decisions can be based on some form of reasoning: in most situations, one decision is not just as good as any other decision. Therefore, we want political policymaking to be as sensible as possible, given the circumstances. First, we want relevant and important information to be made available for politicians. Second, we want politicians to ponder critically how to use the information. Both these things are necessary. Without good information, there is a strong risk of bad decision-making. Without a deliberative approach, there is a risk of misuse or misinterpretation of the information. This will not only produce doubtful decisions, but also jeopardize the basis for democratic accountability; politicians who can claim that they had little information, which was not discussed much by anyone, may try to avoid blame and be difficult to hold accountable. Thus, making use of expert knowledge with a deliberative approach is important for a reason-based policy process. In this article, we study expert knowledge use both in terms of how much expertise is employed and the extent to which politicians deliberate on the information provided by the experts.

Policymaking based on “evidence” or “what works” is often viewed as a pathway towards reason in the public sector. Making use of expertise is expected to eliminate “inefficient uses of resources or wrong decisions” (Landry et al. 2003, p. 192). Accordingly, there is interest worldwide in integrating scientific work and expert reports on policy processes (see, for example, Boswell 2009; Davies et al. 2000; Drori and Meyer 2008; Furubo et al. 2002; Power 2003; Mulgan 2005). However, experts may have politically biased agendas (Mahon and McBride 2009), they can very seldom say something with certainty (Flyvbjerg 2001), and knowledge might be used in a symbolic instead of an instrumental way (Boswell 2009). Moreover, we do not want the policy process to be controlled by policy analysts and academic scholars rather than by democratically elected representatives (Dahl 1989; Torgerson 1986). This means that in order to find out what role expert knowledge has in policymaking it is important to find

out both the extent to which it is used and how it is used. Certainly, decision-makers should make judgments based on expert information rather than ignoring what expert studies have to say. But since we do not want politicians to select only those parts of available information that suit predetermined positions, and we do not want them to totally surrender to the experts, we argue that it is valuable if decision-makers approach expert knowledge in a reflective, deliberative way. That is, they should be truly interested in the information, scrutinize and evaluate it extensively, and be prepared to change their opinions if – but only if – convincing arguments are presented.

One important contribution of this article to the research literature is that we propose a way how to examine expert knowledge utilization and, especially, highlight the importance of simultaneously examine how much expert knowledge is used and the extent to which decision-makers deliberate. Another major contribution is that we study how political disputes and public attention to the policy process relate to these two dimensions of expert knowledge use. Political disputes and public attention have sometimes been discussed in relation to expert knowledge use (for example, Bourdeaux 2008; Boswell 2009). But as far as we know there is no study that generates hypotheses and empirically examines how expert knowledge is employed and deliberated upon given various levels of political conflicts and citizen attention.

We put forward four hypotheses: First, we suggest that expert knowledge will be used more when there are political disputes. Second, we expect politicians to deliberate upon the information to a lesser extent when there are disputes. Third, expert knowledge will be used more when there is a lot of public attention. Fourth, deliberation will be greater when there is public attention. Our empirical results support all four hypotheses.¹

The following insight from the study is particularly important: If our analysis had focused upon the extent of knowledge use only, the conclusions would have been that both public attention and political disputes have similar roles. That is, expert knowledge is used more when politicians disagree and the public is alert. However, by including an analysis of how decision-makers respond we can show that this is a somewhat misleading interpretation. Public attention correlates with an evidence-informed but critical reflection – this is not the case when opinions among policymakers diverge.

¹ It is important to note that the findings, like the findings in the literature in general, should be interpreted in terms of correlations rather than causal effects due to methodological difficulties.

That is, whereas public attention seems to be associated with a policy process based on reason, this is not the case when there are political conflicts.

The analysis is based on original quantitative data from Swedish local politics. The primary source of information is a questionnaire to managers in Swedish municipalities responsible for preparing decisions within four different types of committees/offices: (1) the municipal executive boards, and the offices responsible for (2) environmental policy, (3) labor market activities directed towards welfare recipients, and (4) primary education. The survey was conducted in 2010, and the response rate was 68 percent (747 individual responses).

The article proceeds as follows: First, previous research is briefly summarized and we present our hypotheses (*Section 2*). Second, case and data are described (*Section 3*). Third, empirical results are reported (*Section 4*). A concluding section sums up the findings and discusses potential implications (*Section 5*).

2 Knowledge and politics

What do we mean by expert knowledge, the main concept in this article? Unfortunately, it is hard to provide a really distinct answer. Boswell (2009) concludes that “the boundaries dividing expert and non-expert knowledge are blurred, fluid and frequently contested ... Ultimately the criteria for defining what counts as expert knowledge is contingent on the beliefs and interests of the administrators who are making use of it” (p. 25). We adhere to this position, but just like Boswell we think it is important to try to give the reader at least a somewhat more precise definition. Thus, we define expert knowledge as *systematically gathered information presented in research, expert or evaluation reports*. Systematically gathered information can be viewed as analysis that meets standards of coherence and honesty, and uses generally accepted research methods. Often, this corresponds to research findings produced by academic scholars. Sometimes, however, the concept is narrowed down to research results produced at universities (for example, Landry et al. 2003). But experts may not be academic scholars. Expert knowledge can be produced by, for example, research institutes, consultants, think tanks, or by units within the public administration itself or by other organizations. This means that we do not restrict the concept to work by academic

scholars at universities. What is important is not who the producer is, but that the information is grounded on a scientific basis.

Note that this definition implies that we are not interested in the expertise of officials and practitioners working with the issues at hand. Within primary education, for example, we do not count experiences by single teachers or head-masters, or even the general knowledge of officials at the department of education, as expert knowledge. This kind of expertise is of course important input to policy processes, but here we focus on a more academic type of expert knowledge.

2.1 The extent of knowledge utilization – prior research

How expert knowledge is integrated into policy processes has long been debated in the social sciences (for example, Boswell 2009; Caplan 1979; Lasswell 1971; Lindblom and Cohen 1979; Price 1965; Weiss 1979). The main task in the vast and disparate literature has been to develop and test theories on how to explain the extent of knowledge utilization within public organizations (for example, Belkhodja et al. 2007; Landry et al. 2003; Rich and Oh 2000).

In the so-called “science push model” the *supply of advances in research results* is emphasized as the main mechanism of knowledge use. Basically, it is claimed that utilization increases with scientific progress (Landry et al. 2001). In line with this, King (2007) argues that it makes a significant difference if experts agree that they have a solution to the problem, or if they can give only tentative answers. Another perspective, sometimes labeled the “demand pull model”, stresses *the needs of decision-makers*. That is, knowledge will be used to a greater extent when experts focus on what decision-makers really need (Weiss 1979; Landry et al. 2001). In a third model, *implementation barriers* are considered a major obstacle to knowledge use in the public sector (Landry et al. 2001; Weitzman et al. 2006). Within this discussion the “two-communities” hypothesis is often considered to be important (Caplan 1979). It suggests that politicians and experts belong to two different communities with different cultures and goals. This makes it hard for them to understand one another.

The literature is rather messy. Theoretical perspectives, definitions of central concepts, findings, and the interpretation of results diverge. Thus, despite the fact that there is a substantial amount of empirical research, the field is usually considered to be underdeveloped (Belkhodja et al. 2007). It is difficult to say what variables affect

knowledge use in general, and why they do so. Instead, the literature can provide us with check-lists of variables that are worth paying attention to if we want to understand the extent of knowledge utilization.

One problem with the focus on the extent of expert knowledge use is that these studies in a way assume that using more expert knowledge is good *per se*. This is not certain and in a number of studies it has been argued that expert knowledge can be used for other reasons than in order to improve policymaking and enhance performance. Symbolic reasons is an example of an alternative motive (for example, Ahlbäck Öberg and Öberg 2012, *forthcoming*; Boswell 2009; Weible 2008; Weiss 1989). In order to rationalize the positions policymakers already have they “select and draw on research according to their interest in justifying particular claims” (Boswell 2008, p. 475). Thus, there is a political aspect that should be taken into account.

Another problem with assuming that more knowledge use is always a desired goal is the risk that the policy process may become dominated by experts, where the politicians become little more than administrators. Suggestions put forward by the experts may be conceived as “truth” that is uncritically accepted, making the policy process resemble a technocracy (Ahlbäck Öberg and Öberg 2012, *forthcoming*; Torgerson 1986; Turner 2001).

This means that studying expert knowledge utilization without considering how the information is approached by the elected representatives making political decisions is problematic. In the next section, a possible way of taking these things into account is presented.

2.2 Two questions about expert knowledge use in policymaking

The studies that have criticized the mainstream assertion that expert knowledge use is something inherently good have proceeded by developing theories on how to explain when expert knowledge is employed in certain ways, for example, instrumentally or symbolically (for example, Boswell 2009). Such an approach is legitimate and interesting. However, in this article another possible approach is suggested.

If the goal is to understand what role expert knowledge has in policymaking, and ultimately how the policy process can be improved, we think it is important to ask at least two questions. The first is the question the literature has traditionally focused upon: *To what extent is expert knowledge employed when policy decisions are prepared*

within public bureaucracies? Basically, the question can be answered “very much”, “not at all”, or something in between. In *Section 3.3.1* below, we discuss the concept in more detail.

But as we have stressed above, it is also important to pay attention to politicians’ role in policymaking. Democratically elected or appointed officials are in a position to decide *how* to make use of information. This leads us to the second important question: *Do politicians react in a reflective, deliberative way to information?* Deliberation can be defined as a situation in which decision-makers are truly interested in and try to understand and scrutinize the information provided in expert studies. The politicians are prepared to change their opinions if good arguments are presented, but at the same time they do not accept expert suggestions without considering them thoroughly. This implies that there is no deliberation if expert knowledge is totally ignored or if it is used only in a symbolic way. On the other hand, it does not mean that politicians should always accept what experts have to say and automatically align decisions with expert suggestions. In essence, deliberation means that expert opinions are given a fair chance.

Deliberation is a frequently used concept within political science (for example, Bohman 2000; Dryzek 2000; Öberg 2002). Usually the focus is upon relationships and discussions among politicians, or between policymakers and the public. In this article, we use deliberation as a possible approach taken by decision-makers towards the information presented in expert studies.

2.3 Political disputes and public attention – four hypotheses

Hitherto, we have underscored the importance of studying both the extent of expert knowledge utilization and the extent to which expert knowledge is approached in a deliberative way by decision-makers. That is, we have positioned our two dependent variables. The next step is to take a closer look at two important elements of political life that may affect what role expert knowledge is given in the policy process, namely the level of *political disputes* and *public attention*.

Pluralism is a natural part of politics in modern democracies. Everyday politics is made up of controversies, conflicts and diverging opinions. Sometimes the disagreements are major, while other situations can be characterized by consensus. Public awareness, of course, is also something policymakers must pay attention to when making decisions. The public can sometimes be very alert, while at other times

policymaking is more hidden. Below, we propose how expert knowledge will be used given high and low levels of political disputes and public attention. As far as we know, there are no theoretical discussions or empirical studies on how the level of disputes and public attention affect how expert knowledge is treated in public policy processes.

We have some basic standard assumptions to start with. First of all, the situation we are interested in is policy formulation in public organizations in which elected or appointed politicians are involved. Some kind of bureaucracy takes part in the process by collecting information and perhaps also comes up with policy advice. Typically, we might think of decision-making within ministries at various levels of government.

Second, these units are assumed to maximize legitimacy and power, and they want to achieve some policy goals. Politicians want to accomplish something, but also get re-elected. Thus, they both want to perform well and do things that look appropriate in the eyes of the public. Bureaucracies need internal as well as external legitimacy in order to achieve policy goals, maximize budgets and, in the long run, survive.

Third, using expert knowledge has pros and cons. Evidence can, at least sometimes, provide answers and guide decision-making towards solutions that improve performance. Furthermore, referring to research, or to “evidence” or “what works”, is often a powerful argument in the debate; phrases such as “our decisions are in line with the latest research”, could be used to motivate decisions but also to put the blame on someone else if policies turn out badly. On the other hand, it is costly and time-consuming to acquire expert knowledge. Expert reports cannot always provide precise answers to the specific issues handled by political bodies. In addition, the answers experts offer are possible threats. They could challenge existing beliefs or be politically impossible to implement. Thus, expert knowledge usually cannot be regarded as a quick-fix, and it is therefore reasonable to assume that bureaucracies are not going to use it so much if there is no particular reason that drives them towards doing so.

How would expert knowledge utilization look at low and high levels of political dispute, given these baseline assumptions? If we start in a situation in which politicians agree to policy solutions to a considerable extent, there is really no reason to collect expert knowledge – neither for the bureaucracies nor for the politicians. Decisions are not likely to change if more research evidence is gathered, and it is a costly process that perhaps could disturb the existing order. On the other hand, when politicians disagree

the likelihood that expert knowledge will be sought is greater. It is more likely that someone will put pressure on the administration to gather information. Moreover, it is less clear what the appropriate decision would look like and it becomes more important to provide arguments. A first hypothesis is suggested:

H1. The extent of knowledge use will be greater in situations in which there are political disputes

However, this hypothesis concerns only the first question put forward in *Section 2.2*. As previously underscored, it is also essential to consider how politicians approach expert knowledge. We argue that when there are conflicts, and involved actors' opinions are far apart, it is less likely that politicians will respond with deliberation. Policy positions are threatened and it is more unlikely that compromises can be reached. Previous research suggests that cooperation decreases when actors' opinions diverge (Lundin 2007). Moreover, Flyvbjerg (1998) and Boswell (2008) argue that political disputes have negative effects on how expert knowledge is treated. Flyvbjerg concludes that:

... where power relations take the form of open, antagonistic confrontations, power-to-power relations dominate over knowledge-power and rationality-power relations; that is knowledge and rationality carry little or no weight in these instances. As the proverb has it: "Truth is the first casualty of war." (Flyvbjerg 1998, p. 232)

Similarly, Boswell (2008) claims that in contested policy areas, knowledge can be used selectively to support a particular policy position rather than in an instrumental, rational way. Accordingly, a second hypothesis is proposed:

H2. Politicians will be less deliberative with regard to expert knowledge in situations in which there are political disputes

A reasonable question now arises: If decision-makers do not listen that much to what experts have to say, as suggested by H2, why should information be sought, as suggested by H1? There are several possible answers. The most obvious is probably that it becomes even more important to use expert knowledge in a symbolic way; different

political camps seek information to strengthen their position, leading to more expertise being used in policy formation. Another possibility is that the bureaucracy becomes more eager to justify an “expert position” when politicians disagree a lot.

Turning to public attention, we can start by noting that in Western societies it is “appropriate” to be rational (March and Olsen 1989). Even though no politician (or bureaucrat) wants to be described as “strategic” to the point of being cynical (Öberg and Hallberg Adu 2009), rational behavior is a solid norm. Consequently, even powerful actors want to avoid being caught ignoring reasonable arguments. From this follows that it matters whether policy processes mainly are out in the open or proceed behind closed doors. Processes that are audited by the public may force the actors to behave in line with what Goodin (1995) calls “laundering preferences” in public debates, or Elster’s (1998) assertion that self-interested motives are almost impossible to use in public debates. Hence, the pressure on politicians and bureaucracies to use and treat expert knowledge in a deliberative way should be greater when they are scrutinized by the public. From this follows:

H3. The extent of knowledge use will be greater in situations in which there is a lot of public attention to the policy process

H4. Politicians will be more deliberative towards expert knowledge in situations in which there is a lot of public attention to the policy process

Table 1. Summary of hypotheses

	Knowledge use	Deliberation
Political dispute	H1: +	H2: -
Public attention	H3: +	H4: +

To sum up (see *Table 1*), we expect public attention to imply both more knowledge use and more deliberation. Political disputes, on the other hand, are expected to be associated with more expert knowledge utilization, but less reflection by the involved politicians.

3 Case and data

The hypotheses are examined within the context of Swedish local government (municipalities). The selected case is good for several reasons. It gives us an opportunity to use large- n data and to analyze various units handling similar questions, but in different environments. This means that we can hold constant characteristics that are specific to certain municipalities and to certain policy areas. Moreover, since we are interested in the role of politicians in the policy process it is important to study organizations in which politicians are clearly visible. The Swedish municipalities are an obvious example of this. Public authorities are not such a good idea to analyze, since they operate at arm's length from politicians. Central government ministries are suitable, but getting reliable large- n on knowledge use and deliberation within central government is probably not very easy.

3.1 Swedish local politics

In Sweden, there are 290 municipalities with an average population of about 30,000 residents. The municipalities differ in size considerably: around 3,000 inhabitants live in the smallest entities and almost 800,000 in Stockholm, the largest city. Local governments have the constitutional right of self-government. They decide on their own organization and can freely set the local income tax, which is their main revenue. Municipalities employ about 20 percent of the workforce and provide a lot of services within, for example, the welfare sector. This includes daycare, social welfare services, primary education, and care of the elderly. In a comparative perspective, Swedish municipalities are often considered to have a high degree of autonomy (for example, Lidström 1996).

Local policy is decided by politicians in various local committees, such as municipal executive boards and social welfare boards. Sometimes, committee members are full-time, but most fulfill their mandate part-time (a couple of hours per week). The boards are served by a public administration that prepares decisions for committee meetings. We study the extent to which these administrations integrate expert knowledge when policies are designed, and the reactions of committee members towards the information.

3.2 Data – a survey conducted within four policy areas

Data consist of a survey of managers responsible for preparing decisions in the Swedish municipalities conducted in spring/summer 2010. Four different types of administrative

office were selected. The *municipal executive committee* is the municipality's government and exists in all municipalities. Local top politicians are members of the executive boards and here lies the overall responsibility for managing and coordinating the whole local administration, including financial responsibility. The executive committees are the most powerful political institution at municipal level in Sweden (Bäck 2005). It is important to note that committee members are appointed in proportion to mandates in the municipal assembly: that is, they are coalition governments that include all parties in the assembly.² The office preparing decisions for the executive committees is the first category of local administrative units included in our sample.

In addition, we study three specific policy areas. *Primary education* is one of the municipalities' key responsibilities. The Swedish system for daycare and primary education was fairly centralized until the 1990s. A reform in 1990, when the authority to run primary (and secondary) schools was decentralized to the municipalities, changed this. The municipalities got full financial responsibility and the scope for differences between schools increased. Several other reforms in the years that followed augmented this development: wage-setting for teachers was decentralized, school choice was introduced, and steering by objectives became more important (Björklund et al. 2004). Schools must of course follow certain curriculums and rules established at national level. Nevertheless, the task of organizing primary education at local level is an important responsibility of local politicians.

We also include units responsible for *environmental policy* in our sample. The municipalities have traditionally played an important role with regard to environmental policy, both as implementers of national legislation and by initiating local policies (Eckerberg and Mineur 2003). The municipalities are responsible for tasks such as health and environmental protection, sanitation and waste management, and water and sewage. Many of the tasks are somewhat technical and regulated by national law.

The last policy area to be studied is *labor market policy*; or more precisely activation policies for social welfare recipients. Active labor market policy is a central, not a local government responsibility in Sweden. Thus, most political decisions are taken at national level and the Public Employment Service (*Arbetsförmedlingen*) implements

² This applies to the other committees studied in this article as well.

policy. Although labor market activities are not mandatory for local governments, they participate in labor market activities in various ways and are close partners with local PES offices. The main issue municipalities usually deal with is arranging labor market programs for unemployed social welfare recipients (Lundin 2007, 2008; Mörk 2011). In comparison to the three other types of unit studied in this article, labor market activities must be considered a minor issue.

Scanning Internet homepages and making some telephone calls, we identified 1,093 different units to include in our sample of administrative offices. It was possible to find administrations responsible for preparing decisions for the municipal executive boards and the committees of education in all 290 municipalities. We found environmental protection offices (or units with similar names) in 250 municipalities. Certain municipalities coordinate environmental issues with other municipalities. These were excluded. In addition, we could not locate an office, another unit or a specific individual handling environmental policy in some municipalities.³ Labor market policy units of some kind were identified in 263 municipalities. There are some municipalities that are not involved in labor market issues at all, or have so few cases that no specific unit or individual has formal responsibility. This explains why we do not have 290 municipal labor market units.

The survey was conducted among managers. Certainly, civil servants' subjective judgments are not optimal assessments of what is really going on in the municipalities' administrations. Nevertheless, it is hard to get really good objective indicators of the variables studied here, and we believe senior civil servants can provide the most credible description. Managers do have good insight into what is going on within their own, usually rather small, administrative unit. In addition, they observe the committee members' actions close at hand. For instance, they normally participate in committee meetings.

To collect data, we used a web survey as a first step, including three reminders. In order to increase the response rate, we distributed a somewhat shorter version as a postal questionnaire among non-responders in a second step. We use information from both procedures in this article. In the end, 747 answers were received which implies a

³ In many of these cases, the municipal executive board deals with environmental tasks.

good overall response rate of 68 percent.⁴ The response rate was better in the case of municipal executive boards (about 78 percent), but worse within labor market policy (about 56 percent). Since labor market policy is a marginal municipal issue, often organized together with other tasks, the somewhat lower figure is not that surprising.

An analysis of background characteristics showed that respondents are very similar to the population. Thus, we conclude that the non-responses are probably not too problematic in this case.

3.3 Measures

3.3.1 Knowledge use and political reflection

Measuring the extent of expert knowledge use is, of course, difficult. There is a vast literature on the methodological problems associated with this, and several scales and indices have been suggested (Mandell and Sauter 1984; Landry et al. 2003). We will apply a process-oriented approach where knowledge utilization can be used at different “stages in which each is a link in the chain of utilization” (Knott and Wildavsky 1980, p. 545). This measurement has been employed in a number of studies (for example, Belkhdja et al. 2007; Landry et al. 2001, 2003; Lester 1993). In the original scale produced by Knott and Wildavsky (1980), there were seven stages of knowledge utilization. Landry et al. (2001; 2003) collapsed three stages that were closely linked into a single category, but added another one, ending up with a scale based on the following six stages:

- Reception – the extent to which expert knowledge is viewed as important within the administration
- Cognition – the extent to which expert and research reports are read and understood by civil servants
- Discussion – the extent to which there are discussions on findings presented in expert and research reports within the administration
- Reference – the extent to which references to expert and research reports are provided in relevant document produced by the administration

⁴ The various analyzes are conducted on somewhat fewer observations, due to internal missing values on some important variables.

- Effort – the extent to which civil servants make an effort to make politicians take expert knowledge into account
- Influence – the extent to which expert knowledge influences decisions

We make use of the scale suggested by Landry and his colleagues, but make some small adjustments. We think it is less important to talk about “reception” and therefore we leave that stage outside our analysis. Moreover, in the “cognition” stage we think it is cleaner to let respondents assess the extent to which expert and research reports are read, leaving out the somewhat vague word “understand.” Thus, our scale of *knowledge use* is based on five stages. The managers were asked to assess (on a scale of 1–5) the extent to which each step applies to the work within their unit.

To ensure that the items are one-dimensional and that they can be used to measure a non-manifest concept we conducted a factor analysis. By doing this, we obtain a more reliable measurement of knowledge utilization than is normally the case within the research literature.

Table 2. The use of expert knowledge in local politics (principal component factor analysis)

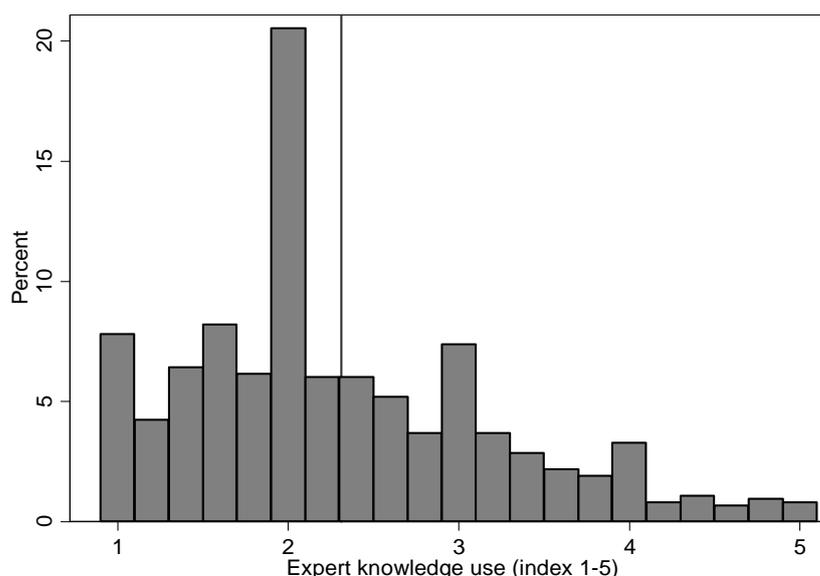
Item	Short description	Factor loadings
Cognition	Read research or expert reports	0.875
Discussion	Discuss research or expert reports	0.881
Reference	Cite research or expert reports in documents presented to local politicians	0.899
Effort	Make an effort to make local politicians take research or expert reports into account in decision-making	0.897
Influence	Research and expert reports are important for decisions-making in the municipality	0.866

Note: The question was formulated as follows: “How often does your unit use research and expert reports (from the Swedish Association of Local Authorities and Regions, public authorities or universities) in the follow ways when issues are prepared before political decision-making?” All items were measured on a scale 1–5, where 1 = “never or in almost no issues” and 5 = “in all or almost all issues”. The retention of factors is based on the Kaiser criterion (i.e., eigenvalues greater than 1). The eigenvalue for the first dimension is 3.9 and this is the only dimension that fulfills the Kaiser criterion. The factor explains 78 percent of the variance in the variables. The Kaiser-Meyer-Olkin measure of sampling adequacy is .88 (values over .5 are often considered *acceptable* and values over .8 are often considered *meritorious*).

Table 2 reports the results. All items load positively and very high on a single dimension. Thus, it looks like the items really can be used to calculate an index of the non-manifest variable *knowledge use*. The next step is to construct the index, which we compute by taking the mean value of the five survey questions. This implies that the variable’s range is 1–5; a higher score means that more expert knowledge is used by the

administrative unit.⁵ *Figure 1* shows the distribution of the variable. The mean is 2.31, which is indicated by the vertical line (additional descriptive statistics are reported in *Table A 1*).⁶

Figure 1. Index of knowledge use



Note: The index is based on the mean value of the survey questions reported in *Table 2*. The vertical line at 2.31 indicates the mean.

The measure presented above does not incorporate decision-makers' actions and behavior when policy is formulated and decided. In order to capture this, we asked the managers to evaluate how the politicians in the committee they serve respond to the information presented by the civil service. In this case, we did not have any established method or scale to use. What we wanted to measure was the extent of deliberation. This includes (i) a willingness to understand the information, (ii) an attempt to scrutinize information, (iii) a preparedness to change opinions if good arguments are presented, but (iv) at the same time not accepting suggestions without critical reflection. We asked four questions on these matters in our survey. In order to see whether it was feasible to

⁵ As a robustness test we have also calculated factor scores from the factor analysis, and used them to construct an alternative index that puts different weight on the items (depending on the factor loadings). This approach is perhaps more correct, but the problem is that the results become difficult to interpret. Thus, the index based on the factor scores is not reported in the article. However, the results are not altered when this alternative index is employed.

⁶ Note that the average is lower within the municipal executive boards (1.93) than within in the three other policy areas included in the study (statistically significant at the .05 level). The mean is 2.58 within primary education, 2.46 within labor market policy and 2.37 within environmental policy. The differences between these areas are, however, not statistically significant at the .05 level.

construct a one-dimensional index of deliberation based on these items, we conducted another factor analysis (see *Table 3*).

Table 3. Deliberative approach to the information presented by the administrative unit (principal component factor analysis)

Item	Short description	Factor loadings
Effort	Committee members make an effort to understand the information presented by the administrative unit	0.849
Scrutinize	Committee members ask questions and scrutinize the information put forward by the administrative unit	0.810
Preparedness to change	Committee members are prepared to change their opinions if good arguments are presented	0.707
Submissiveness	Committee members do not accept suggestions from the administrative unit without critical reflection	0.490

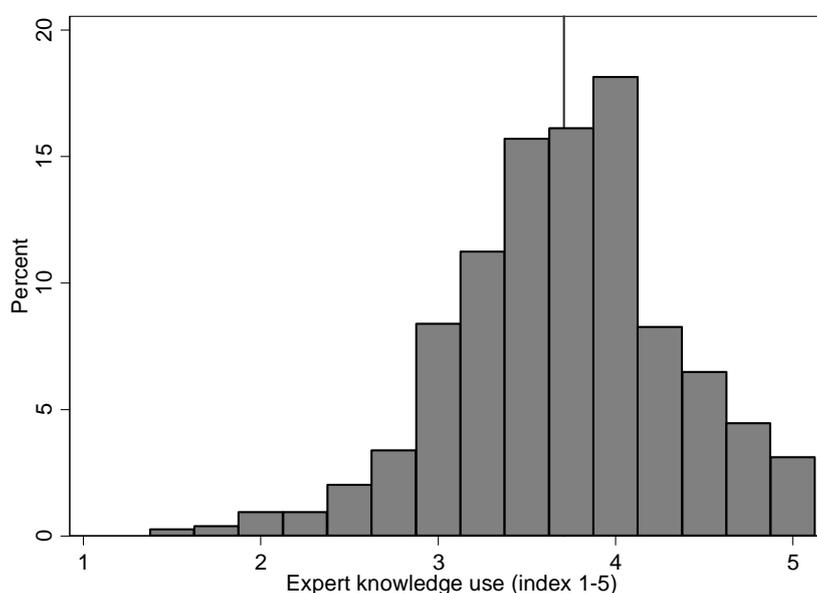
Note: The question was formulated as follows: “To what extent do the following statements apply to the committee members your unit serves? All items were measured on a scale of 1–5, where 1 = “to a very low extent” and 5 = “to a very high extent”. The retention of factors is based on the Kaiser criterion (i.e., eigenvalues greater than 1). The eigenvalue for the first dimension is 2.1 and this is the only dimension that fulfills the Kaiser criterion. The factor explains 53 percent of the variance in the variables. The Kaiser-Meyer-Olkin measure of sampling adequacy is .69 (values over .5 are often considered *acceptable* and values over .8 are often considered *meritorious*).

Once again, all items loaded as expected on a single dimension. We predicted positive factor loadings and this was also what we found. Accordingly, it is appropriate to use the four survey questions to compute an index of *deliberation*.⁷ Exactly as in the case of *knowledge use*, we use the mean of the survey questions. That is, the index ranges 1–5 and a higher score implies that the committee members take on a more reflective approach towards the information. *Figure 2* describes the index (additional descriptive statistics are reported in *Table A 1*).⁸

⁷ Note that the factor loading of item four is lower than the other three (although still rather high). However, we have performed additional analyses to examine whether the results are robust to various definitions of *deliberation*. First, we have computed an index based on factor scores (i.e., item four gets a lower weight in the index). Second, we have excluded item four from the index. These analyses yield similar results.

⁸ There are no statistically significant differences between the four policy areas.

Figure 2. Deliberation index



Note: The index is based on the mean value of the survey questions reported in *Table 3*. The vertical line at 3.71 indicates the mean.

3.3.2 Political disputes and public attention

Political disputes and *public attention* are also measured through managers' subjective opinions. On a scale of 1–5, where 1 = “never or almost never” and 5 = “in all or almost all issues”, the managers stated how often (i) the politicians in the committee they serve have clear differences of opinions (*political disputes*), and (ii) the municipal inhabitants are very interested in the issues decided in the committee (*public attention*).⁹ Descriptive statistics are reported in *Table A 1*.

3.3.3 Model specification and control variables

In *Section 4* we will use linear regression models where *knowledge use* and *deliberation* are our dependent variables, and where *political disputes* and *public attention* are our main independent variables.¹⁰ The analysis starts out with simple models (called A1 and B1), with no control variables included. In order to minimize the risks of spurious correlations, additional control variables are successively introduced. Descriptive statistics are reported in *Table A 1* in the *Appendix*.

⁹ Another survey question concerned perceived media attention to the issues handled in the administration. We have tried this question as an alternative definition of *public attention* and the results are not changed.

¹⁰ We include *political disputes* and *public attention* as linear variables in the regressions. But we have also specified models that use dummy variables to capture conflicts and citizen attention instead. These more flexible specifications produce similar results and the conclusions are not altered.

A first step (A2 and B2) is to add area-specific effects and some municipal characteristics. It is reasonable to assume that policymaking is different within the four policy areas. For instance, we know that central government regulations vary, as well as types of issues and the politicians' and staffs' backgrounds. This motivates policy area fixed-effects. In addition, the conditions might be different in different types of municipalities. Exactly what municipal variables matter is hard to tell, but factors such as size (*Log(population)*) and economy (*tax base*) can make it easier to make use of expert knowledge. Political leadership (*government*) can also be important. For instance, Barrling Hermansson (2004) has shown that members of the Swedish parliament approach expertise and knowledge in various ways, depending on what party they represent. Furthermore, the population trend (*population change*) is added as a control variable. The political climate becomes very different when the population decreases, since it means a severe threat to the municipal tax base. This can affect political conflicts and public attention, as well as the use of expert knowledge. Lastly, two citizen characteristics are incorporated in the model specification: how old the inhabitants are, on average (*average age*), and educational level (*high education*). A more highly educated or a younger population could perhaps trigger expert knowledge use.

In models A3 and B3, five specific variables for each administrative unit/committee are added to the model specifications. We control for the managers' estimation of available *resources* and the proportion of issues that involve cutting expenses (*economy measure*). The amount of resources and the extent of financial difficulties may have an impact on how expert knowledge is treated, but it could also affect relationships between politicians and the attention citizens pay to dealings within the specific committee. Moreover, the degree to which issues can be characterized by *expert consensus*, *high complexity* and *regulation* is also controlled for. More complexity and expert consensus are certainly expected to increase expert knowledge use. These factors could also affect the political climate. For instance, expert consensus might trigger consensus among politicians. The extent to which issues are regulated by law might affect the scope for expert knowledge use, as well as freedom of choice for local policymakers.

Lastly, we replace the municipal variables with municipal fixed-effects in models A4 and B4. The motive for this is that it is obvious that some municipal specific characteristic might be important, and that the control variables introduced in previous models are not enough to rule this possibility out. These specifications are demanding, since it means adding almost 300 dummy variables to an analysis conducted on slightly more than 700 observations. However, as we will show below, the findings look fairly robust even with these specifications.

4 Findings

4.1 Main results

Table 4 reports the results from a number of OLS regressions where *knowledge use* and *deliberation* are used as dependent variables. Starting with the left part of the table, where *knowledge use* is analyzed, we can see that *political disputes* has a positive coefficient in all model specifications. In the three first models it is around .10 and statistically significant at least at the .05 level. With the strictest model specification the coefficient drops a little to .08 and becomes statistically insignificant. The main reason, however, is a large increase in the standard error (by approximately 50 percent). Since model A4 includes municipal fixed-effects, this is not surprising. Thus, we think that the overall pattern indicates that expert views are, indeed, employed more when politicians disagree. It is always difficult to know whether an estimated correlation is small or large. In this case, *knowledge use* is increased, on average, by about .10 (on a scale 1–5) if *public disputes* increases by one step. In other words, going from the sample minimum to the sample maximum indicates an average difference of about a half scale step. In our views, this is a substantial although not extremely high difference.

The effect of *public attention* is similar (around .10 to .17), but even larger and more stable when it comes to statistical significance. In units where the managers perceive the public to be very interested in the committee's work, expertise is used to a greater extent.

Table 4. OLS regressions with knowledge use and deliberation as dependent variables

	Knowledge use				Deliberation			
	(A1)	(A2)	(A3)	(A4)	(B1)	(B2)	(B3)	(B4)
Political disputes	0.097 ** (0.041)	0.109 *** (0.038)	0.107 *** (0.037)	0.079 (0.057)	-0.103 *** (0.026)	-0.129 *** (0.027)	-0.105 *** (0.027)	-0.100 ** (0.041)
Public attention	0.173 *** (0.034)	0.133 *** (0.034)	0.101 *** (0.034)	0.115 *** (0.053)	0.107 *** (0.024)	0.100 *** (0.024)	0.086 *** (0.025)	0.115 *** (0.038)
Policy area: Education		0.603 *** (0.076)	0.600 *** (0.077)	0.630 *** (0.113)		-0.083 (0.552)	-0.047 (0.053)	-0.087 (0.080)
Labor market policy		0.499 *** (0.090)	0.468 *** (0.089)	0.507 *** (0.129)		-0.041 (0.061)	-0.036 (0.060)	-0.073 (0.085)
Environment		0.498 *** (0.085)	0.297 *** (0.115)	0.213 (0.169)		-0.083 (0.067)	-0.036 (0.086)	-0.023 (0.132)
Log(population)		0.010 (0.054)	-0.003 (0.054)			0.104 ** (0.040)	0.032 (0.041)	
Population change		-0.024 (0.053)	-0.029 (0.057)			0.002 (0.041)	0.012 (0.039)	
Tax base		-0.000 ** (0.000)	-0.000 ** (0.000)			0.000 (0.000)	0.000 (0.000)	
Average age		-0.002 (0.020)	-0.002 (0.020)			-0.009 (0.016)	-0.004 (0.015)	
High education		3.437 *** (1.036)	3.626 *** (1.027)			-0.087 (0.982)	-0.072 (1.010)	
Government: Left		-0.160 ** (0.077)	-0.149 * (0.076)			-0.082 (0.056)	-0.086 (0.056)	
Cross-bloc		-0.208 ** (0.092)	-0.186 ** (0.089)			0.021 (0.066)	0.040 (0.065)	
Regulation			0.046 (0.031)	0.068 (0.050)			-0.024 (0.025)	-0.008 (0.043)
Economy measure			0.099 * (0.055)	0.068 (0.073)			0.002 (0.032)	0.049 (0.056)
High complexity			0.131 *** (0.038)	0.152 *** (0.057)			-0.011 (0.029)	-0.062 (0.045)
Expert consensus			0.039 (0.032)	-0.025 (0.056)			0.019 (0.024)	0.028 (0.038)
Resources			0.073 * (0.039)	0.073 (0.064)			0.159 *** (0.026)	0.165 *** (0.045)
Constant	1.618 *** (0.109)	1.875 (1.153)	1.418 (1.126)	0.676 ** (0.262)	3.605 *** (0.079)	2.879 *** (1.003)	3.321 *** (0.989)	4.189 *** (0.196)
Municipal fixed-effects	NO	NO	NO	YES	NO	NO	NO	YES
Adj. R ²	0.06	0.16	0.19	0.25	0.04	0.07	0.12	0.17
N	717	717	705	705	724	724	712	712

Note: All standard errors (in parentheses) are clustered on municipality. * p < .10; ** p < .05; *** p < .01. The reference category to policy area is the municipal executive board. The reference category to type of government is right government.

Turning to the right part of the table, *deliberation* is used as the dependent variable. The coefficients of the main independent variables have the expected signs and are statistically significant in all specifications at least at the .05 level. The coefficient of *public attention* is positive (around .08 to .11) and the coefficient of *political disputes* is negative (around $-.10$ to $-.13$). This means that whereas politicians reflect more when the public is observant, they are more inclined to ignore expert information when their opinions diverge to a large extent. The coefficients in the last column should be interpreted as follows: When *political disputes* increases one unit, *deliberation* will be .10 lower on the scale 1–5. And when *public attention* increases one unit, *deliberation* is approximately .11 higher. Accordingly, the magnitudes of the effects are similar as in the case when *knowledge use* was analyzed.

In sum, we find support for all four hypotheses: In committees where there are large political disagreements, more expert knowledge is collected. But at the same time the committee members approach the information in a less deliberative, reflective way. In committees where the managers observe a strong interest from municipal citizens, expert studies are consulted to a greater extent and the politicians take a more deliberative approach.

4.2 Some methodological caveats and additional robustness checks

There are some methodological problems with the analysis presented in *Table 4* that call for comment. Our main variables are measured on the basis of managers' subjective opinions. This could, of course, be a source of measurement error: questions and response alternatives might be interpreted in various ways. Unsystematic variations in interpretation are not particularly problematic, but there could be systematic bias as well. As a line of defense, it should be noted that using bureaucrats' subjective opinions is the standard way to measure important variables within the relevant literature, and it is hard to come up with better research approaches that are viable.

Another issue is that we cannot rule out the possibility of omitted variable bias. We have included a lot of control variables, but since our empirical setting is far from being some kind of experiment it is difficult to know whether all important factors are taken into account. The most obvious possibility is perhaps the risk that some units, for some unknown reason, "operate better" than others. This can certainly affect our two

dependent variables, but also how much attention the public pays to what is going on and the level of political conflict.

A third potential problem is that the assumed causal order could be questioned. The most apparent risk is that it could be the case that if politicians are very reflective the disputes among them decrease, rather than the other way around.

The three caveats mentioned above lead us to the conclusion that it is appropriate to view the empirical results as correlations and tentative answers. However, we must stress that we are in no worse position than anyone else using questionnaires in order to find out the relationship between expert knowledge use and various independent variables.

We have performed several robustness checks to see whether there are other possible problems with our findings in *Section 4.1*. First, alternative operationalizations of the main variables (see *section 3.3*) do not change the conclusions. Second, we have analyzed each policy area separately. Since the number of observations, of course, becomes much smaller than in the main analysis, the effects are often statistically insignificant. The sizes of the regression coefficients vary to some extent, but not enough to make us draw the conclusion that there are substantial differences among policy areas. However, it seems like the effect of *public attention* on the extent of *knowledge use* is larger within executive committees and smaller within labor market policy. In fact, in the latter case the effect is more or less zero. Moreover, we can see a slight tendency that *political disputes* has a more negative effect on *deliberation* within environmental issues and education policy than within the other two policy areas. Third, we have examined the potential interaction effects of *political disputes* and *public attention*. No significant interaction effect was detected. Fourth, various tests showed that we have no problems with influential outliers or multicollinearity. Fifth, we included control variables to account for how the data were collected (web survey or postal questionnaires). The main results were unaffected by this.

5 Conclusion

In this article we have studied the extent of expert knowledge use and how expertise is approached by politicians in policy processes under various conditions of political disputes and public attention. It is important to underscore that we have presented

correlations, but not proved causation. However, our results indicate that public attention and political conflicts are associated with pressure for a political organization to make more use of expert studies. While this seems to indicate a rational process, since information is gathered “when it is needed”, less rational results could have been expected. If the use of expert reports was obtained by standard operating procedures – that is, information only gathered by default, the same way in every situation – we would not find these correlations. Alternatively, if political organizations purposely closed themselves to the outside world when exposed to internal and external pressure, we would have found a negative relationship. The findings are, in this regard, encouraging to advocates of politics based on enlightened understanding.

But we have argued for the importance of also studying how politicians approach the information gathered. More precisely, to what extent do politicians deliberate upon the information? The results are in line with our hypotheses that public attention is positively associated with a more deliberative approach, while politicians are less reflective in situations of political conflict. These findings suggest that public attention tends to imply instrumental rational utilization of knowledge in order to improve performance, whereas this is not the case when there are political disputes. Perhaps expert knowledge is often used in a symbolic way when there are large political disagreements.

Accordingly, politics seems to matter with regard to the role research evidence and similar information play in policy processes. If we had focused only upon the extent of knowledge use, we would have missed this important insight. An important lesson for future research is therefore that politics should be taken into account, and that a key task is to try to illuminate under what conditions expert studies are used extensively but also in a deliberative way.

In our opinion, an especially interesting aspect worthy of further study is therefore the role of political disputes. Our measure of political dispute does not distinguish between the *intensity* of the conflict and the *distance* between the conflicting parties. It might well be that these two dissimilar dimensions of political conflicts are differently associated with the use of research reports and other evidence-informed data. One hypothesis that we unfortunately are unable to test is that a polarized but less intensive conflict is easier to solve with more and better information than less polarized but more

intense conflicts. Furthermore, we do not have information about what kind of conflicts we are studying. Although we might have satisfying control over this since we compare political organizations with the same assignments, there might be differences between conflicts over values (ideas, ideology), and conflicts over technical, administrative issues, or quarrels over particular issues unrelated to ideology. If political disputes in local politics basically are about value issues – redistribution and/or prioritizing of resources – it might be a sign of democratic health that politicians are more independent and trust their ideological compass more than expert reports in situations of severe political conflict. The results that indicate less reflection on expert knowledge when politicians disagree would in this case perhaps not be such a discouraging finding as it first appears to be.

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Appendix

Table A 1. Descriptive statistics

Variable	Short description	Mean	Std. Dev.	Min	Max
<u>A. Dependent variables</u>					
Knowledge use	The extent to which expert knowledge is used in policy formulation (index)	2.31	0.91	1.00	5.00
Deliberation	The extent to which committee members approach information in a reflective way (index)	3.76	0.63	1.50	5.00
<u>B. Main independent variables</u>					
Political dispute	The extent to which committee members disagree to a large extent	2.02	0.92	1	5
Public attention	The extent to which citizens pay a lot of attention to the issues in the committees	2.86	1.06	1	5
<u>C. Policy area fixed-effects</u>					
Executive committee (reference)		30.25			
Education		26.91			
Labor market policy		19.81			
Environment		23.03			
<u>D. Municipal characteristics</u>					
Log(population)	Number of inhabitants (logarithm)	9.87	0.94	7.82	13.63
Population change	Change of population (percent) between 2008 and 2009	0.14	0.95	-2.20	4.55
Tax base	Tax income per inhabitant (Swedish crowns)	155,562	18,399	125,829	300,491
Average age	Mean age of inhabitants	42.77	2.49	36.30	48.50
High education	Proportion of inhabitants with a college degree	0.13	0.06	0.07	0.43
Government					
Right (reference)		51.94			
Left		32.26			
Cross-bloc		15.80			

Continued

Table A 1. Continued

<u>E. Features of the specific administrative unit</u>					
Regulation	The extent to which the issues handled in the unit are regulated in detail	2.85	1.29	1	5
Economy measure	The extent to which issues involve cuts in expenditure	1.87	0.85	1	5
High complexity	The extent expert knowledge is needed to understand the issues	2.06	1.06	1	5
Expert consensus	The extent to which experts agree on the solutions to the issues handled in the unit	2.78	1.13	1	5
Resources	The extent to which managers think the administrative unit has adequate resources (index)	0.00	1.00	-2.61	1.81

Note: All variables under headings A, B and E are based on assessments of the managers of each administrative unit. The variable *Resources* is based on managers' assessments of available economic, staff, time, and competence resources on a scale of 1–5 (5 = no resource shortage at all). Data on the type of government (right, left or cross-bloc) are available through the Swedish Association of Local Authorities and Regions: *Right* = government where one or several of the following parties take part (but none of the parties included in the category *Left*): Conservative Party, Centrist Party, Liberal Party, and Christian Democratic Party. *Left* = government where the Social Democratic Party and/or the Left Party are included, but none of the parties in the category "Right" above. *Cross-bloc* = At least one party from each bloc is represented in the government. Other municipal characteristics under heading D are based on official data from Statistics Sweden (SCB).

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