The role of expert discourses in policy design

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Abstract

Over the past decades, a large body of research in fields such as knowledge utilization, evidence-based policy making, or epistemic communities, has been addressing the conditions under which expert advice can play a role in policy design. This research has been successful in exploring the complex role of expertise in the policy process and has produced a number of hypotheses relating to institutional and cultural factors that influence the extent to which expert advice can actually influence policy design. However the findings of this research have not yet been integrated into a coherent model of the policy process. This paper develops such a model based on the Advocacy Coalition Framework. It also presents the design of a research project testing this model for the case of minimum wage policy in the OECD countries.
Introduction

Over the past decades, a large body of research in fields such as knowledge utilization, evidence-based policy making, or epistemic communities, has been addressing the conditions under which expert discourses can play a role in policy design (e.g. Adler and Haas 1992; Heller 1986; Nutley, Walter, and Davies 2007). This research has been successful in exploring the complex role of expertise in the policy process, which may represent a source of short or long term learning, but may also be used as a resource providing legitimacy in political conflicts. It has also produced a number of hypotheses relating to political, institutional and cultural factors that influence the extent to which expert discourse can actually influence policy design.

However, two challenges persist. The first one is to integrate hypotheses regarding the role of expert discourses in policy design into a coherent theoretical framework of the policy process. So far, the literature on the role of expert discourses has shown relatively little interest this task. The result is a lack of clarity regarding the assumptions of and the relationship between the different hypotheses sustained in the literature. Moreover, the perhaps most advanced attempt to theorize expert influence on policy design, the epistemic communities approach, focuses strongly on very specific circumstances – the existence of an epistemic community able to authoritatively define the 'true' knowledge on a policy issue – in which experts can exert a very strong influence over policy (Cross 2012). Yet, it does little to explain the role of experts and expert discourses outside of these exceptional situations.

This paper attempts to develop a more general theoretical approach to explaining the role of expert discourses in policy design based on the advocacy coalition framework (ACF). While some work on the role of experts in policy-making has already been conducted within the ACF (e.g. Jenkins-Smith 1990; Weible and Sabatier 2009; Weible, Pattison, and Sabatier 2010), this paper tries to extend this work by systematically including results from various strands of research into an ACF theoretical approach to the role of expert discourses in policy design. Developed for the study of minimum wage policy-making, this approach identifies national minimum wage policy subsystems as the arena in which the role of expert discourses in minimum wage policy design should be analyzed. It specifies the relevant actors and coalitions in the subsystem, identifies a number of factors that shape the way in which expert discourses become relevant for policy making, and determines the relationship between learning from expert discourses and other sources of policy change.

A second challenge is to provide sufficient testing for the hypotheses and causal mechanisms specified in the literature. Strongly relying on single case studies and relatively rarely employing comparative or large-N designs, existing research has so far been more successful in developing hypotheses and illuminating causal mechanisms than in conducting rigorous and generalizable tests for these hypotheses. For example, institutions facilitating dialogue between experts and politicians have been hypothesized to further experts' role in policy design (Jenkins-Smith 1990, 99–103). There are, however, very few studies systematically comparing countries or policy fields where such institutions are an important feature of the policy process, and those, where they are not. Large-N studies of expert influence on policy making, which would provide more generalizable re-
sults, are virtually nonexistent. To tackle this shortcoming, the second part of this paper sketches the design of a research project empirically testing the theoretical model developed in this paper for the case of minimum wage policy making in the OECD countries.

**State of research**

There is a rich literature dealing with the role of experts and expert knowledge in the design of policy. Relevant strands of literature include utilization research (Lindblom and Cohen 1979; Heller 1986; Boswell 2009), evidence-based policy-making (Sanderson 2002), policy learning (Dolowitz and Marsh 1996; Rose 1993; Biegelbauer 2013), and epistemic communities (Adler and Haas 1992; Thomas 1997; Cross 2012). This section will give a brief overview of this literature which will clarify some basic terms and serve as a starting point for the development of a theoretical model of the role of expert discourses in policy design.

**Defining expert knowledge**

The idea underlying research on the role of expertise in politics is that there is something distinct to expert knowledge which sets it apart from other kinds knowledge – for example the knowledge of civil society groups – and which makes the use of expert knowledge in politics a distinct field of study. Boswell (2009, 23–25) argues that expert knowledge is associated with two features: *First*, it is held by people who, as a function of their educational training and institutional position are considered as experts (see also Hird 2005, 35–39). *Second*, it must satisfy certain procedural and substantive requirements, such as having theoretical and conceptual coherence, and employing a methodology regarded as sound by significant parts of the expert community. This definition, of course, stays uninformative as long as it is not stated what the relevant educational training, the relevant institutional positions, and the procedural and substantive requirements are. Boswell chooses them in a way that expert knowledge equates to the results of academic research. This definition, which narrows down the notion of expert knowledge to the professional knowledge of academic experts contrast with notions of expert knowledge being produced by a broad variety of actors, many of them being outside of academia. For example, epistemic communities – expert groups with a shared knowledge base and a common political project – have been defined to consist of a variety of members, some of them working in academia, and others in government agencies, civil society organizations, or the private sector (Mamudu, Gonzalez, and Glantz 2011). Others have argued that academic knowledge can have no greater truth claim on statements about social phenomena than the knowledge held by professionals outside of academia (Fischer and Forester 1993; Majone 1989), making the restriction of the term expert knowledge to academic knowledge unwarranted.

This paper uses a narrow definition of expert knowledge, building on Boswell's second criterium. Thus, for the purposes of this paper, expert knowledge on an issue will be defined as the content of the expert discourse on this issue. The expert discourse is defined to consist of all academic, peer-reviewed publications on this issue – which are publications that can be expected to conform to the procedural and substantive requirements peculiar to academic research. Compared to Boswell's two
criteria, this definition has the advantage of being more parsimonious and, thus, more easy to apply in empirical research. With regard to what counts as expert knowledge and what does not, leaving out the requirement of having a specific education or institutional position will make little difference, as most peer-reviewed academic publications are written by scholars. However, the definition excludes those statements from the body of expert knowledge which conform to the procedural and substantive requirements of academic research, but appear outside of peer-reviewed publications. Moreover, the definition used in this paper excludes a wider understanding of expert knowledge such as the one used in epistemic communities research. Both exclusions are made based on practical reasons. It should be kept in mind that all conclusions about the role of expert discourses in policy design based on this definition only refer to a specific type of expert knowledge.

**Expert knowledge and policy design**

Using expert knowledge – however defined – to improve the quality of policy design has long been a topic in political science literature. The early knowledge utilization literature of the 1960s and 70s was built on the idea of policy making being guided by academic expert knowledge. After the Second World War, spending on social science research had increased dramatically, reflecting a widespread enthusiasm for a scientization of politics (Cherns 1986; Hird 2005, chap. 1; Weiss and Heller 1986). Early enthusiasm was followed by frustration on the part of researchers, who soon became aware of the fact that the results of studies commissioned by government agencies to assess certain policies were often ignored, rather than put into practice. Society and politicians, on their side, became increasingly disillusioned concerning the possibility of replacing politics with a more 'rational', scientific way of problem solving. As a result, researchers started to critically review the use of expert knowledge in policy design (Hird 2005, chap. 1; Hoppe 2005, 203).

Part of these efforts has been to shed light on the different ways to use research in policy design. While utilization research initially expected politicians to turn to experts in order to find the best solution to a specific problem, it soon became clear that this problem-solving use of expertise is the exception rather than the rule. Thus, it was shown that research is much more often used by politicians to support decisions already taken (political use), or to signal that decisions are made in consideration of all relevant facts (tactical use). Actual influence of research on political decisions, in contrast, has been shown to often be a medium to long-term process, in which concepts and theories developed in research creep into the political system and become influential there over the course of several years – the enlightenment function of expert knowledge (Weiss 1979).

Based on this typology of knowledge utilization, one can expect a small role of expert knowledge in policy design in the short term, and a potentially larger role in the medium and long term. Empirical studies seem to sustain this result. In day-to-day decision-making, scientific knowledge is regularly discarded in favor of political considerations (Boswell 2009). Studies analyzing policy change over longer time periods, however, often find a substantial impact of expert knowledge on the design of policies, for example with regard to the global spread of Keynesianist policies in the mid-20th century (Hall 1989).
Besides asking in what ways expert knowledge is used and what impact it has, a substantial part of the literature not only in utilization research, but also in neighboring fields such as evidence-based policy making has analyzed the conditions under which expert knowledge becomes relevant in policy design. Among the most important factors which have been hypothesized to be influential are, first, aspects of the policy problem such as the complexity of an issue and its analytical tractability (Jenkins-Smith 1990, 97–99); second, whether experts are able to find a common position on a subject (Haas 1992; Pielke 2007, chap. 6); third, political culture, which may attribute more or less authority to experts (Habermas 1968; Straßheim 2013); and, fourth, institutional aspects of a political system (Nutley, Walter, and Davies 2007, 77).

Toward a theory of expert influence on policy design

While the literature reviewed in this section has undoubtedly contributed to improving the understanding of the role expert discourses play in policy design, it has arguably failed to integrate its findings into a coherent theoretical body explaining the role of expert discourses in the policy process. Thus, existing approaches usually combine a number of different hypotheses relating to institutional and cultural features of the policy-making process, as well as to features of expert discourses, to explain under which circumstances individual policy-makers are likely to use expert knowledge in one way or the other, and, as a result, may change their policy preferences (e.g. Crewe and Young 2002; for an overview, see Nutley, Walter, and Davies 2007, 61–88). However, a preference change of an individual actor is not the same as a policy change, and policy changes do not simply arise from the addition of many individual preference changes. As will be argued below, the question whether preference change will lead to policy change hinges on who changes preferences, and on the political environment in which this happens. Moreover, this kind of theory does not illuminate the ways in which the influence of expert discourses on policy relates to other influences on policy. Better suited in this respect is the epistemic communities approach, which explicitly aims at explaining policy change. This strand of research, however, focuses on expert influence in very specific situations. Thus, the explanation of policy change regarding a specific issue hinges on the existence of an epistemic community able to authoritatively define a political problem and its solution in terms of policy. This will only happen, however, if there is unanimity among experts, if this expert community pursues a common goal in terms of influencing policy, and if it gets some form of privileged access to decision-making bodies (Adler and Haas 1992; Cross 2012). These circumstances are the exception rather than the rule, and there is an interest in a theoretical model explaining what role expert discourses play in policy design if some of these assumptions are violated.

Developing such a model is the main goal of this paper. This is done building on the Advocacy Coalition Framework. While most applications of the ACF do not focus on the role of expertise in the policy process, the ACF has explicitly been designed to include processes of learning as a source of policy change (Sabatier and Weible 2007), which makes it a good foundation for a theoretical model of the role of expert discourses in policy design. Moreover, in developing this model, one can build on existing research on the role of experts and expertise within the ACF (Jenkins-Smith 1990; Weible and Sabatier 2009; Weible, Pattison, and Sabatier 2010).
To be regarded as valid, of course, any conjecture about the role of expert discourses in policy design must be tested empirically. While there is a large empirical literature researching the extent to and the conditions under which expert discourses can become relevant for policy-making, there is still a need for further testing of the hypotheses developed in this literature. Thus, existing literature—testing, for example, hypotheses about institutional variables facilitating expert influence on policy—strongly draws on single-case studies (for an overview, see Nutley, Walter, and Davies 2007, chap. 3), and there is a lack of qualitative or quantitative studies systematically comparing policymaking in environments where these factors are present with policymaking in environment where they are absent. Where this is done, expert influence is usually measured by asking policy makers in parliaments or the bureaucracy how much they use research in their daily work (e.g. Landry, Amara, and Lamari 2001). As has been argued above, however, this does not necessarily answer the question under which circumstances research influences policy output. After developing a model of the influence of expert discourses on policy design, therefore, this paper sketches the design of a study intended to test this model.

An ACF model of the role of experts in policy design

Policy subsystems and advocacy coalitions

From an ACF perspective, political decision-making is to be analyzed within policy subsystems comprising the “set of actors who are involved in dealing with a policy problem” (Sabatier 1987, 659). Geographically, the size of policy subsystems is therefore linked to the policy problem: local policy problems will be connected to local policy subsystems, national policy problems to national policy subsystems, and so on. Policy subsystems usually include a broad range of actors, including government agencies, parliamentary committees, interest groups, journalists, academic researchers, and so on (Sabatier 1993). These actors are usually grouped into different advocacy coalitions, which are held together by shared political beliefs among their members, who advocate a common policy project. Moreover, actors in the policy subsystem not affiliated with any coalition might act as policy brokers, mediating between the different advocacy coalitions and fostering political compromises.

An advocacy coalition's ability to translate its policy preferences into government action depends on the resources available to its members, such as legal authority, expertise, number of supporters, and money (Sabatier 1987, 664). The distribution of such resources is influenced by events outside of the subsystem, such as elections, changes in socio-economic conditions, or fluctuations in public opinion (Jenkins-Smith et al. 2014, 194). Policy change can thus come about in two ways: either events external to the subsystem change the power distribution within the subsystem, or individual subsystem actors or whole advocacy coalitions change their beliefs, and therefore, their policy preferences due to processes of learning and persuasion taking place within the subsystem.
Expert discourses entering policy subsystems

From this perspective, expert discourses will become relevant in policy making when individual subsystem actors or whole coalitions adjust their beliefs in line with expert discourses. There are numerous ways through which this might happen. The ACF assumes subsystem actors to constantly try to improve their knowledge about the policy issue at hand in order to better understand how to implement their own policy preferences and how to respond to critiques brought forth by challengers.

Trying to improve their understanding about the policy issue, subsystem actors will use knowledge from a variety of sources including their own and colleagues’ professional experience, interest groups, the media, experts and so on (Hird 2005, 139). Policy learning, therefore, cannot be expected to be confined to learning from the kind of expert knowledge connected to academic discourses defined above. How important expert knowledge is in comparison to other sources of knowledge is an open question. While the procedural and substantive standards connected to expert knowledge might lead subsystem actors to ascribe a high credibility to expert knowledge, policy makers have also frequently been cited with claims that academic knowledge is too abstract and too far removed from their actual needs, which limits its utility (Gill 1986). Therefore, one should expect expert knowledge to be only one of several elements in the complex process of learning within policy subsystems.

Expert discourses can be expected to enter a policy subsystem through a variety of channels. On the one hand, subsystem actors like political parties, government agencies or interest groups might access expert discourses directly, for example by commissioning studies, reading professional journals, meeting with experts (who may be part of the subsystem or not), or by visiting expert conferences. On the other hand, there are a variety of ways in which expert discourses can indirectly reach subsystem members. Subsystem members might read publications by think tanks which may be based on theories and concepts from experts discourses. Expert knowledge which has reached some subsystem actor might subsequently be proliferated in the interaction of this actor with other subsystem members. Moreover, new staff members at organizations in the subsystem will bring with them expert knowledge they have learned during their education (Adler and Haas 1992; Biegelbauer 2013; Boswell 2009).

Each channel through which expert discourses percolate through a policy subsystem will in one way or another involve a biased representation of these discourses. In fact, given that expert discourses consist of a large number of statements that have to be condensed in some way to be communicable, it seems impossible to objectively determine what would constitute an unbiased representation of expert discourses. In practice, several ways of weighting individual parts of expert discourses are observable. First, among experts themselves – or at least among experts in academia – it is customary to privilege written over oral statements, and to weight written statements according to the prestige of the publication they have appeared in and to how often they have been cited. Second, another way to weight the importance of individual statements in expert discourses is by geographic proximity. For example, researchers have been shown to preferentially cite publications by scholars working in the same country as they do, and to collaborate more often nationally than internationally.
(Frenken, Hardeman, and Hoekman 2009; Hennemann, Rybski, and Liefner 2012). Reasons for such geographical differentiation might be that the work of scholars in similar social and cultural contexts is assumed to be more relevant, but also that it is more easily accessible due to lower travel costs and less language barriers within national borders. Third, political proximity might be used to weight individual contributions in the expert discourse. For example, a think tank trying to inform subsystem actors about how experts assess a certain issue might choose to convey those parts of the expert discourse that conform to its political mission, or a subsystem member might choose to ignore information contradicting its political beliefs. Finally, weighting of the different parts of expert discourses can proceed in an erratic way. This might happen, for example, if subsystem actors randomly read publications about an issue within attempting to get a structured overview of the expert discourse on the issue.

How much information from expert discourses enters a policy subsystem, and in which ways these discourses will be biased in the process, partly depends on institutional arrangements within the subsystem. Three ideal typical constellations are conceivable, which does not exclude hybrid forms. First, a policy subsystem might include prestigious, state-sponsored or nonpartisan institutions explicitly designed to make expert discourses more relevant in policy design. An example for this is the minimum wage subsystem in the United Kingdom, where decisions about minimum wage hikes are taken according to the advice of the Low Pay Commission, a body regularly commissioning studies about minimum wage effects and including, among others, scholars (Low Pay Commission n.d.). In the presence of such institutions, one can expect expert discourses to relatively strongly percolate a policy subsystem. The bias with which these discourses arrive in the subsystem can be supposed to resemble the bias experts themselves have: individual contributions to the expert discourse are likely to be weighted according to where they have been published and how often they have been cited. Geographic and cultural proximity is also likely to play a role. The political bias can be supposed to be relatively low. Second, a policy subsystem might include prestigious, civil-society sponsored and partisan organizations which aim to influence political outcomes using results, theories, and concepts from expert discourses. Examples for such institutions might be the increasingly politicized think tank population in the US (Rich 2004). Where such institutions are strong, one can also expect expert discourses to relatively strongly percolate the policy subsystem. However, the bias with which expert discourses reach the subsystem are expected to differ from the first case. While the geographic bias will also be present, the prestigious-publication bias will be less pronounced, and the political bias will be strong. Where several think tanks with different ideological orientations are present, it is likely that subsystem actors will be confronted with different ‘versions’ of the expert discourse. Finally, a policy system might involve no prestigious institution trying to convey knowledge from expert discourses to subsystem actors. In this case, the percolation of the subsystem by expert discourses can be supposed to be relatively low. Moreover, weighting of the different elements of expert discourses is supposed to proceed erratically, possibly with elements of a political bias.
Policy-oriented learning from expert discourses

The fact that expert discourses reach a policy subsystem does not, however, mean that they will become relevant in policy design. A prerequisite for this to happen is that at least some actors engage in policy-oriented learning (Sabatier 1987) – that is, adjust their beliefs and preferences according to information coming from expert discourses. The likelihood with which an individual actor engages in policy-oriented learning from expert discourses depends on individual characteristics, institutional and cultural characteristics of the policy subsystem, issue characteristics, and features of the expert discourse.

On the level of an individual actor, policy-oriented learning corresponds to a change of political beliefs. Within the ACF, beliefs are usually divided into a deep core, which contains fundamental normative and ontological axioms; a policy core, which contains the fundamental policy positions concerning the basic strategies for achieving the goals set by the deep core; and secondary aspects, which contain beliefs about the instruments necessary to implement the policy core (Sabatier 1987, 667). While the deep core hardly ever changes, aspects of the policy core may change if they prove to be in grave contradiction with experienced reality. Secondary aspects of policy beliefs are most open to change (Sabatier 1993). The implication for policy-oriented learning from expert discourses is that subsystem actors will mostly learn from those parts of the expert discourse which are compatible to their core beliefs. Knowledge strongly contradicting core beliefs, on the other hand, is likely to be ignored (Boswell 2009; Jenkins-Smith 1990; Pielke 2007). As a result, in policy subsystems where expert discourses mainly reach subsystem actors through partisan organizations such as think tanks, it might be expected that subsystem actors will only learn from those parts of the expert discourse which are ideologically close to themselves, and ignore contradicting knowledge. Moreover, the range of subsystem actors who might potentially change their policy preferences regarding the issue at hand is limited to moderate actors – that is, those actors whose core beliefs do not strongly oppose alternative policy options.

Subsystem institutions may not only facilitate the flow of ideas from expert discourses into policy subsystems, they may also facilitate the use of such information for actual policy learning. Thus, ACF scholars have underlined the importance of fora dominated by professional norms in which members of the different coalitions regularly participate, leading to “a serious analysis of methodological assumptions, to the gradual elimination of the more improbable causal assertions and invalid data, and thus probably to a greater convergence of views over time concerning the nature of the problem and the consequences of various policy alternatives” (Sabatier 1987, 680; see also Jenkins-Smith 1990, 99–103). In practice, institutions facilitating the flow of information from expert discourses into a policy subsystem and institutions facilitating learning from this information might overlap. The Low Pay Commission mentioned above probably serves both purposes.

Moreover, policy-oriented learning from expert discourses might be facilitated by political culture. Subsystem actors are exposed to multiple sources of information, and it is far from clear which one is the best to learn from. Empirically, as has been argued above, policy makers often perceive expert knowledge to be too abstract and too far away from actual policy problems. Theoretically, doubts have been cast on the supposed superiority of scientific knowledge over professional experience
(Lindblom and Cohen 1979; Majone 1989; Fischer and Forester 1993). How much trust a subsystem actor should put in the validity and usefulness of expert discourses therefore does not seem to be a question which can be answered analytically; rather, it is a question of beliefs. While of course not all actors in a policy subsystem can be supposed to have the same beliefs concerning how much trust to put in expert discourses, it has been argued that these beliefs are influenced by political culture. The epistemic authority of scientific research can thus be supposed to vary across countries as well as across time (Stråheim 2013), with decision-making styles taking different places on the continuum between technocracy and decisionism (Habermas 1968).

The probability with which actors in a policy subsystem will learn from expert discourses also has to do with the uncertainty attached to an issue. A major motivation for subsystem actors to engage in learning is to better understand how to achieve core policy objectives (Jenkins-Smith 1990, 93). Motivation to engage in learning will be higher if actors are uncertain about how to reach their goals: faced with different alternatives for action, they do not know which alternative will best deliver the desired results (Haas 1992; Pielke 2007, chap. 5). This kind of uncertainty is not objective, but a matter of perception. Thus, what determines whether or not policy makers will turn to experts for advice is not how well they can predict the outcomes of different policy alternatives, but how well they think they can predict these outcomes (Haas 1992, 14). While the individual uncertainty about an issue therefore always has an idiosyncratic component, it will be influenced by certain issue characteristics. Thus, technically complex issues such as financial regulation have more uncertainty attached to them than issues where political discussion circles more around moral or distributional issues than around technical questions. Moreover, new issues will have a higher uncertainty attached to them than old issues with which policy subsystem actors have already dealt with for a long time. Finally, uncertainty will rise in crises, during which it may become obvious that formerly accepted policy instruments don't work anymore (Cross 2012).

Policy learning from expert discourses not only depends on the uncertainty attached to an issue, but also on the capacity of expert discourses to reduce that uncertainty. The chances that experts can reduce policy makers' uncertainty by providing authoritative answers to questions about the effects of different policy alternatives strongly depends on the degree of consensus within the expert community (Haas 1992; Pielke 2007, chap. 5). Such a consensus at least partly depends on a subject's analytical tractability (Jenkins-Smith 1990, 97–99): If analysts working on a particular issue have agreed upon the validity of certain data sources, theories, and concepts, they will likely be able to come to similar conclusions regarding the effects of different policy alternatives. The more complex an issue is, however, the less likely will analysts be to find enough common ground with regard to data, theories, and concepts to reach common conclusions.

Finally, another characteristic of expert discourses that influences how important they are in policy-oriented learning is their ideological distance to subsystem members. Above, it was argued that political actors will discard information that strongly contradicts their core beliefs. This statement can be reverted to argue that if the implications of large parts of the expert discourse on an issue contradict the core beliefs of the most influential actors in a policy subsystem, this expert discourse will have little relevance for policy-oriented learning in this subsystem. On the other hand, if there is only a very small gap between the beliefs of policy subsystem actors and the content of expert disc-
courses, there is little reason for subsystem actors to engage with these discourses, and their impact will be low as well. Policy-oriented learning is therefore strongest when there is a medium-level disagreement between subsystem members and those parts of the expert discourse with which subsystem members engage (Sabatier and Jenkins-Smith 1993, 219).

Policy-oriented learning and policy change

The fact that policy-oriented learning happens does not guarantee that policy change takes place, and even preference change of a number of subsystem actors might be without consequences for policy. This section will clarify the conditions under which policy-oriented learning leads to policy change.

On the one hand, policy-oriented learning might take place without preference change. For example, the result of policy-oriented learning from expert discourses may be that a policy subsystem actor better understands the causal mechanism through which a specific policy instrument to which the actor adheres (a peripheral belief) achieves the goals set by the actor's core beliefs. In this place learning – a belief change concerning the mechanisms through which a policy instrument is effective – has taken place, but the actor's preference for this policy instrument has remained constant. It is therefore only a subset of learning processes that is relevant for policy change.

On the other hand, preference changes do not automatically translate into policy changes – what matters is who changes preferences, and in what context this change takes place. Above, it was argued that policy decisions emanate from the distribution of power between the different subsystem coalitions. One or several dominant coalitions will collectively be able to shape policy on a certain issue, while the actors belonging to the other coalitions will have little means to shape policy. Therefore, preference change as a result of policy-oriented learning will only lead to immediate policy change in three scenarios. First, policy change takes place if preference change happens within the dominant coalitions. Here, of course, it is crucial that powerful actors within these coalitions alter their preferences: a preference change of a governing political party will be more important than a preference change of an individual journalist within the same coalition. Moreover, this sort of policy-oriented learning only leads to very gradual policy change. Thus, as subsystem actors usually discard knowledge contradicting their core beliefs, it is unlikely to assume that an important number of coalition members will radically alter their policy preferences due to policy-oriented learning. A more rapid policy change is possible in a second scenario. Here, policy-oriented learning leads a moderate actor to withdraw its support for its current advocacy coalition and, possibly, to join another coalition. This might change the balance of power in favor of the latter coalition, and therefore lead to a rapid and relative profound policy change (Sabatier and Jenkins-Smith 1993, 219). Finally, policy-oriented learning in a third scenario does not involve immediate policy change, but may lead to policy change later on. Thus, when important members of the minority coalitions change their preferences due to policy-oriented learning, this will not have an immediate impact on policy; however, policy might change later, when external events such as elections tilt the power distribution in the subsystem in favor of the former minority coalitions. Here, the time horizon is relatively long; however, given that learning within the minority coalitions might take place over longer time periods before they can shape policy again, the cumulated impact of such learning may be high. There
are, thus, three different scenarios in which preference change following policy-oriented learning might lead to policy change. The first involves short time periods and small policy changes; the second involves short time periods and relatively large policy changes; the third involves long time periods and relatively large policy changes.

The theoretical considerations laid out above allow to make some tentative predictions concerning the circumstances under which each scenario will prevail. Thus, all three scenarios will benefit from the circumstances furthering policy-oriented learning discussed in the previous section. The second scenario, moreover, will be more likely when there are strong minority coalitions and powerful actors who have moderate beliefs and are therefore likely to change their coalition affiliation as a result of policy-oriented learning. This corresponds to a situation in which there is low political polarization. Finally, the third scenario can be supposed to prevail in policy subsystems where the coalition structure is more rigid, and in which minority coalitions have the chance to become dominant. This corresponds to a situation in which political polarization in the subsystem is higher, and in which the different camps regularly alternate in power.

Wrapping it up: a theoretical model

The previous sections have reviewed various strands of research concerned with expert influence on policy and have, based on the ACF, developed a number of propositions regarding the conditions under which policy-oriented learning from expert discourses can be expected to take place and, ultimately, to lead to policy change. This section unites the parts of this discussion in a coherent theoretical model describing the influence of expert discourses on policy design. This model refers to a specific case, on which it will later be tested: minimum wage policy-making in the OECD countries.

The model presupposes the existence of a national minimum wage policy subsystem in all OECD countries with national statutory minimum wages. The most important actors within the minimum wage system are assumed to be bureaucratic agencies (especially labor or economic ministries), those political parties present in the national parliament, national trade union federations, and national employer associations. Two advocacy coalitions are assumed to be present within each subsystem: a progressive coalition in favor of raising real minimum wages; and a conservative coalition in favor of lowering real minimum wages. Each actor in the subsystem may be part of one of the two coalitions, or might take a more neutral stance.

In this model, the design of minimum wage policy is a result of the policy preferences of the two coalitions, and of the power distribution between them. Preferences concerning minimum wage policy design may refer to favored minimum wage levels, but also to further questions such as possible exceptions from the minimum wage for young people or other groups. Some of the more important external variables that might influence the resource distribution within national minimum wage subsystems and thereby policy output are (see also Boeri 2012; Dickson and Myatt 2002): (1) the vote shares of progressive and conservative parties, which are likely to be key members of the subsystem; (2) participation of political parties present in the minimum wage subsystem in national gov-
ernment; (3) the strength of trade unions, which can be supposed to be key members in the progressive minimum coalition; (4) high inflation, which will lead to a decline of real minimum wages that might not always be countered by political decisions to raise the minimum wage; (5) high median wage growth, which might provide an argument for raising minimum wages in order to prevent an increase in wage dispersion; (6) high unemployment, which might provide arguments for lowering minimum wages; (7) high social inequality, which might provide arguments for raising minimum wages; and (8) high economic growth, which may strengthen the progressive coalition vis-à-vis fears that high minimum wages threaten economic efficiency. The different variables influencing the likelihood of decisions to increase minimum wages are summed up in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Direction of influence</th>
</tr>
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<tbody>
<tr>
<td>Positive assessment of minimum wages in expert discourses</td>
<td>+</td>
</tr>
<tr>
<td>Relative vote share of parties in the progressive coalition</td>
<td>+</td>
</tr>
<tr>
<td>Participation of parties from the progressive coalition in government</td>
<td>+</td>
</tr>
<tr>
<td>Trade union strength</td>
<td>+</td>
</tr>
<tr>
<td>Inflation</td>
<td>-</td>
</tr>
<tr>
<td>Median wage growth</td>
<td>+</td>
</tr>
<tr>
<td>Unemployment</td>
<td>-</td>
</tr>
<tr>
<td>Inequality</td>
<td>+</td>
</tr>
<tr>
<td>GDP growth</td>
<td>+</td>
</tr>
</tbody>
</table>

*Table 1: Variables influencing the likelihood of minimum wage hikes, and the direction of influence.*

Policy change happens either when these external conditions and, therefore, the power balance within the system change, or a result of learning processes leading to preference changes. While subsystem actors learn from multiple sources, this model exclusively focuses on policy-oriented learning from expert discourses. Relevant expert discourses can mainly be found in economics, but also in adjacent disciplines such as sociology. In line with the discussion above, the extent to which policy design is influenced by these discourses depends on institutions connecting subsystem actors to expert discourses, variables influencing policy-oriented learning, and factors that make policy change as a result of policy-oriented learning more or less likely. First, two kinds of institutions have been argued to increase the flow of ideas from expert discourses to policy subsystems, and to influence the kind of bias with which expert discourses reach a policy subsystem: government-sponsored or nonpartisan institutions on the one hand, and partisan institutions on the other hand. It has been argued above that the existence of strong partisan institutions will lead to the emergence of multiple, ideologically fragmented images of the expert discourse, which allow subsystem members to choose the one which is corresponds to their preexisting beliefs. Therefore, the existence of this latter kind of institutions is expected to be negatively correlated with policy change as a result of policy-oriented learning experts. In contrast, the former kind of institutions are expected to be positively correlated with this type of policy change. Moreover, they have been argued
to be associated with a specific kind of bias in presenting expert discourses to subsystem members, privileging prestigious publications as well as publications from their own country of origin. Second, a number of variables have been hypothesized to increase the possibility of policy-oriented learning from expert discourses once these discourses have entered the minimum wage subsystem. These are prestigious fora in which important subsystem members regularly convene to discuss different approaches to minimum wage policy; a technocratic political culture; a high degree of uncertainty about the effects of minimum wages; a high degree of consensus between experts; and a medium ideological distance between expert discourses and important subsystem actors. Third, political factors have been argued to influence the extent to which policy-oriented learning in the subsystem leads to changes in minimum wage policy. Thus, the existence of influential moderate actors in the subsystem has been connected to the possibility of a strong influence of expert discourses on policy output. In the absence of such actors, an influence of expert discourses has been argued to occur over longer time periods. An overview of these hypotheses is presented in Table 2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Direction of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonpartisan institutions facilitating the flow of ideas from expert discourses into the policy subsystem</td>
<td>+</td>
</tr>
<tr>
<td>Partisan institutions facilitating the flow of ideas from expert discourses into the policy subsystem</td>
<td>-</td>
</tr>
<tr>
<td>Prestigious fora for the discussion of minimum wage policies</td>
<td>+</td>
</tr>
<tr>
<td>Technocratic political culture</td>
<td>+</td>
</tr>
<tr>
<td>Uncertainty about minimum wage effects</td>
<td>+</td>
</tr>
<tr>
<td>Consensus in expert discourses</td>
<td>+</td>
</tr>
<tr>
<td>Ideological distance between expert discourses and subsystem actors</td>
<td>curvilinear</td>
</tr>
<tr>
<td>Existence of influential moderate actors (for short-term policy change)</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 2: different variables influencing the likelihood with which a positive assessment of minimum wages in expert discourses leads to minimum wage hikes.

Research design: testing the model

So far, this paper has developed a theoretical model of the influence of expert discourses on minimum wage policies based on the advocacy framework. The remainder of this paper will present the design of a research project testing this model through a regression analysis.

As a case for testing the model, minimum wage policy in the OECD countries between 1975 and today has been chosen. The reason for choosing minimum wages was that, while this is a technical issue with a significant amount of uncertainty concerning the effects of minimum wages on unemployment and other variables attached to it, it is also a distributional issue. Therefore, it is neither an extremely likely nor an extremely unlikely case for policy design being influenced by expert discourses, giving the analysis some confirmatory as well as some disconfirmatory power.
This is important as hypotheses about the extent of expert influence on policy still diverge considerably. Moreover, minimum wages have the practical advantage that they change frequently, and therefore deliver enough variance for the statistical analysis. The analysis is limited to those OECD countries that have statutory minimum wages. Those OECD countries without statutory minimum wages are excluded (and not coded to have a minimum wage of 0) following the assumption that the mechanisms behind minimum wage adjustments and the first introduction of minimum wages are different from each other.¹

The regression analysis will be performed on a dataset including data on expert discourses about minimum wages, institutions facilitating the exchange between experts and other actors in national minimum wage subsystems, political culture, political polarization, and a number of control variables such as inflation and party vote shares. While most of this data is available from international organizations such as the OECD or from other research projects, I will have to collect data on expert discourses through a content analysis of articles about minimum wages published in selected scientific journals. The final data set will combine cross-national with time series data.

First, the dependent variable of this research project is minimum wage policy, which will be operationalized as the minimum wage as a fraction of the median wage in a given country. Data on minimum wage levels is available from the OECD. Graph 2 shows the development of minimum wages in those OECD countries with statutory minimum wages from 1980 to 2013. It illustrates the fact that minimum wage levels differ markedly from country to country, but also over time. Eye-balling the data does not reveal an obvious time trend.

¹ For example, in countries where labor market institutions guarantee that trade unions can effectively set (non-statutory) minimum wages through collective bargaining, even policy makers who believe minimum wages to be effective wouldn't probably want to introduce a statutory minimum wage.
Second, the main independent variable of the project is experts’ assessment of minimum wage effects. To measure expert discourses about minimum wages as defined above, I will systematically analyze the content of scientific articles published in selected peer-reviewed journals, mainly (but not exclusively) from the economics discipline. The articles will be coded with regard to their overall assessment of minimum wages, as well as their assessment of minimum wage effects on unemployment, economic efficiency, and social equality. Moreover, information about the date and place of publication, the authors’ institutional affiliations, and the empirical data on which the research relies will be gathered. From this raw data, the independent variable is derived by computing a three-years moving average, thus accounting for the fact that the social scientific state of the art rarely changes because of a small number of new findings. Reflecting the argument that different elements of the expert discourses will be weighted differently by subsystem members and institutions transferring knowledge into the subsystem, each article will be weighted with regard to whether its authors work at domestic and prestigious institutions or not, and with regard to the prestige of the publication in which it has appeared.

Third, a number of variables were hypothesized to facilitate the influence of expert discourses on policy design (see Table 2). Two of these referred to partisan and nonpartisan institutions facilitating the flow of ideas into minimum wage subsystems. Institutions which are relevant in this respect are mostly think tanks and institutions explicitly designed to bring scientific evidence into minimum wage setting such as the Low Pay Commission in the United Kingdom or the Fair Work Commission in Australia. It is still unclear how these variables can be operationalized. A starting point might be qualitative work comparing policy advisory systems in different countries (Weaver and Stares...
as well as the International Labour Organization's Working Conditions Laws Database (International Labour Organization, n.d.). Another institutional variable are prestigious fora for discussion between the minimum wage subsystem members. The main institutions important in this respect are the bi- or tripartite bodies advising minimum wage setting in a number of countries. Data on this variable is also available through the Working Conditions Laws Database. Political culture being technocratic or decisionist has also been hypothesized to affect the influence of expert discourses on policy design. Data on this variable might be available through the World Values Survey, in which respondents are, among others, asked about the extent to which they think political decisions should be handed over to experts (World Values Survey Association 2015). Moreover, uncertainty has been argued to increase the influence of expert discourses on policy design. Uncertainty is partly issue-specific and, in this respect, invariant in this research design. However, as has been argued above, uncertainty is higher for new policies and in crises. High values for this variable might therefore be operationalized as occurring in the first years after the introduction of minimum wages, as well as in periods when unemployment or social equality rise steeply, calling established beliefs about the effects of minimum wages into question. Furthermore, consensus in expert discourses has been argued to increase their influence on policy design. This variable can be operationalized by the variance of the articles which are aggregated to form the independent variable. Finally, two variables regarding the subsystem actors' beliefs have been hypothesized to be influential: the ideological distance between those beliefs and expert discourses; and the existence of subsystem actors with moderate beliefs regarding minimum wages. While the ideological orientation of most subsystem members cannot be measured, it is possible to measure this variable for one central type of actors, political parties. For this, the Party Manifesto Database will be used (Volkens et al. 2014).

Fourth, a number of relevant variables external to the minimum wage subsystem have been identified above (see Table 1), which will enter the analysis as control variables have been identified. Thus, a high vote share of parties in the progressive coalition as well as their participation in government has been associated with higher minimum wages. Data from the Party Manifesto Database can be used to determine party positions on economic regulation as well as on their vote shares (Volkens et al. 2014), while data on the participation of parties in government might come from the Parties, Governments and Legislatures Data Set (Cusack, Fuchs, and Müller 2007). Moreover, strong trade unions have been connected to higher minimum wages. Trade union strength might be operationalized as union density. Data on this variable is provided in the ICTWSS data set (Visser 2013). Finally, the unemployment rate, the poverty level, the inflation rate, GDP growth, and the growth rate of the media wage have been hypothesized to influence minimum wage development. Data on these variables is available through the OECD.
Conclusions

This paper has developed a theoretical model of the influence of expert discourses on minimum wage policy design based on the Advocacy Coalition Framework. Compared to existing approaches, this model has the advantage of integrating hypotheses and findings from a number of different research traditions into one coherent structure. Moreover, it clarifies the relationship between policy-oriented learning from experts and other reasons for policy change.

The model assumes national minimum wage policy subsystems to be the adequate unit for the analysis of national minimum wage policy making. Each minimum wage policy subsystem is assumed to be populated by two major advocacy coalitions, one in favor of higher and one in favor of lower minimum wages. The most important actors in these coalitions are government agencies, political parties, trade unions, and employer organizations. Changes in minimum wage policy come about in two ways: either external events such as elections, government changes, changes in trade union membership, and changes in socio-economic parameters such as poverty, unemployment, inflation, and GDP growth tilt the power balance between the two coalitions in one or another direction; or policy-oriented learning from expert discourses might lead to a preference change of relevant subsystem actors. The degree to which such preference change following policy-oriented learning from expert discourses takes place and leads to policy change, has been argued to depend on a number of institutional, political, and cultural variables: the density and type of institutions facilitating the flow of ideas from expert discourses into the policy subsystem, as well as institutions facilitating discussion within the subsystem; political culture, which may be technocratic or decisionist; the degree of uncertainty connected to an issue, which depends on issue characteristics, but may also change over time and during crises; the degree of consensus among experts about the issue; the ideological proximity between expert discourses and influential subsystem members; and the existence of influential moderate actors within the subsystem.

A theoretical model is, of course, only adequate if it accurately describes empirical reality. The second part of this paper has sketched a research project testing the model developed in the first part in a large-N study of minimum wage policy-making in the OECD countries over a time period of about 40 years. The discussion has pointed out ways to operationalize the variables in the theoretical model and has also indicated possible data sources. What is still lacking, however, are the statistical models with which the theoretical model can actually be tested.
Bibliography


Jenkins-Smith, Hank, Daniel Nohrstedt, Christopher M. Weible, and Paul Sabatier. 2014. “The Ad-


Low Pay Commission. n.d. “Who We Are.” Available at: https://www.gov.uk/government/organisations/low-pay-commission/about#who-we-are.


