

## **From policy theory to application: Best practices for operationalizing the multiple streams framework**

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### **Abstract**

Addressing the multiple streams framework's (MSF) figurative language and lack of a joint terminology, this article develops a best practice for case studies testing the framework's core hypothesis. This hypothesis reads: Agenda change becomes more likely if (a) a policy window opens, (b) the streams are ready for coupling, and (c) a policy entrepreneur promotes the agenda change. Based on an extensive literature review, the article introduces operationalizations for each of the framework's key concepts (streams, policy window, and policy entrepreneur) and specifies what researchers must empirically observe if the MSF's core hypothesis is met.

**Key words:** multiple streams framework, case studies, best practice, agenda change

The multiple streams framework (MSF) is at a crossroad: Although the MSF offers a set of necessary conditions and hypotheses that must be met to increase the chances for an agenda change to happen (for an up-to-date summary, see Herweg, Zahariadis, and Zohlnhöfer 2017), literature reviews revealed that most scholars do not test them (cf. Jones et al. 2016, Cairney and Jones 2016, as an exception, cf. Zohlnhöfer 2016). At the same time, calls for applying the MSF systematically and rigorously are getting louder (Weible and Schlager 2016, Jones et al. 2016).

One reason why the MSF nonetheless tends to be applied superficially might be its figurative language and the resulting lack of a joint terminology (cf. Engler and Herweg 2017). For instance, Herweg and Zahariadis (2018) unveiled in their review of MSF-guided analyses of European Union (EU) policy processes that each application defined the EU's political stream differently. This application practice makes it almost impossible to conduct comparative research and accumulate knowledge regarding the framework's strengths and weaknesses.

To overcome this barrier for systematic MSF applications, it is essential to develop a best practice for applying the MSF (cf. Weible 2018: 366). This article is a first step in this direction. It develops a guideline for case studies testing the MSF's core hypothesis, which reads: "Agenda change becomes more likely if (a) a policy window opens, (b) the streams are ready for coupling, and (c) a policy entrepreneur promotes the agenda change" (Herweg et al. 2017: 30). For each of the MSF's key

concepts, we introduce a set of questions researchers must answer if they aim at testing this hypothesis. Furthermore, we offer suggestions how to operationalize the key concepts, either based on codings of the breakthrough articles identified by Jones et al. (2016), operationalizations suggested in more recent studies or our own understanding of the framework. The article is structured as follows: Section 2 deals with the problem, political, and policy stream, section 3 with the policy window, and section 4 with policy entrepreneurs and coupling activities. The final section concludes.

### **The problem, political, and policy streams**

One prerequisite for agenda change to happen is that the streams are ready for coupling. Consequently, researchers applying the MSF need to answer two questions: First, how can we operationalize the streams, and second, what do we have to observe to be able to conclude that the streams are ready for coupling.

#### *The problem stream*

The problem stream consists of all conditions that policymakers or people around them perceive as problematic. To capture policymakers' attention, conditions must become known to them. According to MSF thinking, this happens via one or a combination of the following attention generating mechanisms: indicators, focusing events, and feedback. Moreover, following Kingdon (1984, 115), there are no objective problems but only socially constructed ones. In this regard, the problem broker is pivotal. The problem broker is defined as an actor who "frame[s] conditions as public problems and work[s] to make policy makers accept these frames" (Knaggard 2015: 450). Moreover, due to cognitive limitations, policymakers are not able to attend to all problems at the same time, thus problems (and problem brokers) are in competition for policymakers' attention and it will be important to consider the conditions under which a problem makes it on the agenda.

Empirically, to operationalize the problem stream researchers must check whether any indicators, focusing events or feedback drew policymakers' attention to a specific condition. Which kind of indicator, focusing event or feedback is relevant, varies with the policy field and case in question.

*Indicators* can direct policymakers' attention to an issue if the level of an indicator changes (e.g., a rise in the housing affordability index draws attention to the state of the housing market, see Tiernan and Burke 2002). The second attention generating mechanism, *focusing events*, includes disasters (e.g. floods, see O'Donovan 2017 ), crises (e.g. the 2003–2005 Stability and Growth Pact crisis, see Saurugger and Terpan 2016), personal experiences (e.g. importance of obesity-related personal health problems

of leading politicians for evaluating childhood obesity as problematic, see Craig et al. 2010) and symbols (e.g. Knut, the polar bear born in the Berlin Zoo, was used as a symbol for global warming, see Brunner 2008). The third path to generate attention, *feedback*, can occur via formal channels such as systematic monitoring and evaluation studies or informal channels such as feedback from the bureaucracy.

Given that problems usually contain a “perceptual, interpretive element” (Kingdon 1984, 115), only pointing to some ‘objective’ problems will not always be enough in a MSF case study; rather, researchers will need to demonstrate that actors were aware of a condition and that they indeed thought it necessary to deal with this problem politically. Potential sources for these kinds of actor perceptions are interviews with key actors, their speeches or in some cases their memoirs, to give a few examples. In some cases problems are so large that they “simply bowl over everything standing in the way of prominence on the agenda” (Kingdon 1984, 101); this is usually reflected in the salience of the issue among the electorate (at least in a democracy) at a given point in time. Likewise, if a government runs the risk of failing to attain a major goal (e.g. a core election promise), it may also be highly likely to define the situation as problematic. In instances like these, even in the absence of an explicit quote from the relevant policymakers, researchers can argue that not doing anything is not an option for policymakers and that they are highly likely to have perceived the respective condition as a problem. Nonetheless, ideally researchers should at least point to these circumstances when they suggest a specific condition was regarded as a problem only based on ‘objective’ data.

If researchers take into account that different issues compete for policymakers’ attention, they must explain why one specific problem and not another received attention. Explanations could refer, for instance, to the electoral relevance or the magnitude of the problem.

Summing up, to operationalize the problem stream researchers must document what indicators, focusing events, and/or feedback attracted policy-makers’ attention to conditions which at least one problem broker managed to frame as problematic. If these conditions are met, the problem stream is ready for coupling.

### *The political stream*

The political stream consists of three elements: the government and parliament, interest groups, and the national mood. The guiding question is whether these elements support the rise of an issue on the governmental agenda, which is defined as “the list of subjects that are getting attention” (Kingdon 1984: 4).

Despite MSF's general assumption that policymakers tend to have unclear preferences, the ideological affiliation of the members of parliament and government may provide researchers with a first idea whether a specific issue or proposal will have an easy time getting support from these actors. Thus, elected policy-makers are more receptive to deal with issues that are in line with their party's policy program. Travis and Zahariadis (2002), for instance, assume that in the United States, Democrats are more inclined to spend money in foreign aid programs than Republicans. Therefore, these authors operationalize this element of the political stream by looking at the party the president belongs to and the party that holds the majority in the Senate.

Nonetheless, precisely because policymakers' preferences are not assumed to be fixed, their ideological orientation is often not a precise predictor of whether a policy-maker will support a specific proposal, not least because the same proposal can be framed very differently, making it compatible with very different ideological orientations. For example, we can think of cuts to unemployment benefits as being closer to the ideology of a conservative, rather than a social democratic government. If, however, a policy-entrepreneur can convince a social-democratic government that the cut is necessary in order to deal with another problem (for example, unemployment), then that government might be willing to adopt the cut despite its ideological position. Thus, researchers have to take a closer look at the positions of parliamentarians and ministers at least when they support policies that may not fit their ideological orientation at first glance.

Whereas data on the composition of the government and parliament can easily be collected, it is less clear how to operationalize whether interest groups are receptive for an agenda change. In order to assess whether interest groups are in favor of or opposed to a specific proposal, their positions need to be collected. In most instances, it is quite evident which interest groups show an interest in a specific issue and their positions can be gathered by analyzing parliamentary hearing or press coverage. Unless interest group activities all point to the same direction, it depends on how policy-makers perceive the balance between interest groups supporting and opposing agenda change (Kingdon 1984: 157). To raise policy-maker attention, interest group activities must be visible for the broader public. One proxy to measure their activities is counting the number of participants in demonstrations or the money spent in the campaign.

The national mood, defined as "a rather large number of people out in the country (...) thinking along certain common lines" (Kingdon 1984: 153), is also a concept challenging to measure. Similar to interest groups activities, what matters is how policy-makers perceive the national mood. Consequently, Kingdon (1984) warned that the national mood is not necessarily congruent with opinion polls. Thus, preferably, researchers should rely on information of policy-makers' perceptions of the national mood. For example, Zohlnhöfer (2016), in a study on German labor market reforms,

discusses the relevant actors' perception of the national mood with the help of several sources, mostly memoirs, and is able to show that key actors misjudged the national mood. Other possible sources for how actors perceived the national mood are interviews with the relevant actors – either press interviews (preferably during the policy process, i.e. without the benefit of hindsight) or interviews that are conducted by the researcher herself. However, these statements might not always be available or too expensive or time-consuming to obtain. In these cases, a more pragmatic approach is advisable. Given political party and policy-maker professionalization in the last decades, we argue that this provision of how to measure the national mood is too strict. Instead we suggest following more recent research, which highlights that policy-makers themselves commission (and make use of) opinion polls (cf. Herweg, Huß and Zohlnhöfer 2015). MSF contributions measuring the national mood via opinion polls are, for instance, those by Cook and Rinfret (2013) and Tiernan and Burke (2002).

Trickier than operationalizing the political stream's elements is specifying when the political stream is ready for coupling. There are two reasons why this specification is challenging: First, regarding interest groups, the question is not whether they favor agenda and policy change but how policy-makers perceive their willingness to a change. Second, the political forces comprising the political stream might point in opposite directions. According to recent research (Herweg, Huß, Zohlnhöfer 2015; Herweg, Zahariadis, Zohlnhöfer 2017: 25-26), government and parliament should be considered the most relevant actors in the political stream – who, however, might be influenced by the national mood and interest group campaigns. Government and parliament are assigned a more prominent role simply because these are the actors that are responsible for adoption of a proposal. At the same time, we do not need to be too demanding when evaluating if the political stream is ready for coupling. At the agenda-setting stage, it is not yet necessary that parliamentary majorities for a specific proposal are already forthcoming. What is necessary, however, is that a key policy-maker like the responsible minister or an influential member of parliament, i.e. a political entrepreneur (in the sense of Roberts and King 1991: 152),<sup>1</sup> actively supports the proposal and is willing to bring together a majority for it during decision-making (cf. Zohlnhöfer 2016; Herweg, Zahariadis and Zohlnhöfer 2017: 26). Therefore, researchers need to assess whether a political entrepreneur is present and identify who that person is. If a political entrepreneur is willing to invest resources into a specific project and to attempt to stitch together a majority for that project, that person is likely to believe that the political stream could allow the adoption of the proposal.

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<sup>1</sup> Keep in mind that a political entrepreneur has a different role than a policy entrepreneur. The latter is active in the policy stream and develops a proposal step-by-step but does not have to occupy an elected leadership position. In contrast, the political entrepreneur does not have to be involved in the development of the policy but is key when it comes to stitching together a majority for a proposal precisely because (s)he occupies an elected leadership position. Thus, the political entrepreneur “takes over” from the policy entrepreneur during agenda-setting. Empirically, it is of course possible that the same person is policy and political entrepreneur.

### *The policy stream*

In his seminal book *Agendas, Alternatives, and Public Policy*, Kingdon (1984) aims at explaining how issues gain agenda status and how the alternatives from which policy-makers choose are generated. In both cases researchers must identify, first, the relevant policy community, second, the members that comprise it, third, the ideas the policy community generates and forth, the softening-up process these ideas must survive. If researchers focus on how issues gain agenda status, they must also specify when the policy stream is ready for coupling. However, if they focus on how alternatives are generated, researchers must also specify how to measure the policy community's structure given that the MSF assumes that there is a relation between this structure and the generation of alternatives. As this article's focus is on agenda-setting, we abstain from dealing with the policy community's structure.

A policy community "is mainly a loose connection of civil servants, interest groups, academics, researchers and consultants (the so-called hidden participants), who engage in working out alternatives to the policy problems of a specific policy field" (Herweg 2016: 132). Herweg (2016: 132) suggests that an "actor's engagement in working out policy alternatives" should serve "as a distinction criterion for being considered a policy community's member". If a person contributes ideas that other members are aware of, (s)he can be regarded a member of the policy community. Given the loose connection between the members, most contributions define the policy community only vaguely. For instance, in his analysis of urban road pricing, Dudley (2013) refers to those actors that propose solutions to road congestions as members of the policy community. In other cases, scholars were able to delineate policy communities more precisely. For example, the European gas policy community analyzed by Herweg (2016, 2017), was to a substantial degree created by the European Commission. Consequently, a specific forum, the Madrid Forum, existed in which the policy community started exchanging views. Münter (2005), in his book-length account of British devolution policies in the 1970s and 1990s, looks at very different sources. For the (failed) attempt to devolve competences in the late 1970s, he compiled the members of the policy community and their proposals by analyzing various green books, white books, reports of party commissions and bills. In contrast, in the 1990s, all proponents of devolution for Scotland assembled in the Scottish Constitutional Convention. Therefore, Münter uses its proceedings and final report to identify the respective policy community and to reconstruct the softening-up process. If no such focal points for the deliberations can be identified, scholars could start by collecting relevant policy proposals (e.g. in parliamentary hearings) and follow the interactions between the various actors. Ideally, researchers can apply a discourse network analysis in order to analyze systematically the relations between the members of the policy community.

As long as researchers are interested in explaining agenda change and not in the specification of alternatives, a broad definition of the policy commission (such as delivered by Dudley 2013) might be sufficient. However, researchers must specify which ideas the policy community has developed and whether they meet the criteria of survival. These criteria are technical feasibility, value acceptance, tolerable costs, and receptivity among decision-makers. The policy stream counts as ready if at least one alternative is available that meets the criteria of survival.

### **Policy windows**

A policy window constitutes “an opportunity for advocates of proposals to push their pet solutions, or to push attention to their special problems” (Kingdon 1984: 173). It can open in the problem stream or in the political stream.

For a policy window to open in the problem stream (so-called problem windows) two conditions must be met: First, a relevant indicator deteriorates, feedback points to a mismatch between a program’s goal and its effects, or a focusing event relevant for the policy field in question occurs (this is congruent with how to capture whether the problem stream is ready for coupling) (see section 2.1). Second, policy-makers must deem the issue relevant for which an indicator, feedback or a focusing event raised attention. Herweg, Huß and Zohlnhöfer (2015) argue that conditions that put a policy-maker’s re-election at risk are (much) more likely to gain her scarce attention, i.e. an issue’s relevance can be read of its chances to make a difference at the next election. To capture this second condition empirically, researchers must make plausible that policy-makers believed that their re-election was threatened by the condition. For instance, the first German red-green government under Chancellor Gerhard Schröder had promised to reduce unemployment to a specific number. However, it was only half a year before the next election was scheduled that the government addressed this issue. Based on quotes from Peter Hartz, the head of the commission that worked out the ideas that were later referred to as the Hartz reforms, Zohlnhöfer (2016) makes it plausible that the government, in particular the chancellor, believed these reforms would help dealing with unemployment and that if the government would not address that problem, its re-election would be endangered.

A policy window opens in the political stream (so-called political window) if the composition of government or parliament changes or the national mood shifts. The third element of the political stream, interest groups, is not relevant for the opening of a policy window because interest groups focus on blocking or adapting proposals that are already on the governmental agenda and do not tend to set agendas on their own (Kingdon 1984: 208). Thus, the opening of a political window can be

measured via electoral changes (e.g. election of a new government or change of single ministers) or changes in the national mood (see section 2.2).

Whereas most MSF applications deal with agenda change, it would be desirable if these applications also identify potential policy windows that opened due to a change in the problem or political stream but did not lead to agenda change but stability. Analyzing not only policy windows that led to agenda change is pivotal to deal with the criticism that the MSF serves as a “*deus ex machina* in ex-post argumentation” (Cairney and Zahariadis 2016: 100, emphasis in original). We return to this issue when discussing coupling activities in the next section.

### **Policy entrepreneurs and coupling activities**

Policy entrepreneurs couple the streams in times of an open policy window. According to Kingdon (1984: 189), “one can nearly always pinpoint a particular person, or at most a few persons, who were central in moving a subject up on the agenda and into position for enactment.” How do researchers actually pinpoint these persons? Since it is irrelevant where policy entrepreneurs are located (e.g. inside or outside the government or administration), researchers identify policy entrepreneurs via their activities. More precisely, they look for actors that invest time, energy, reputation, and/or money to move an issue higher on the agenda (Kingdon 1984).

For instance, in their analysis of greenhouse gas emission regulation in the United States, Cook and Rinfret (2013) identify Lisa Jackson, the Environmental Protection Agency (EPA) administrator, as a policy entrepreneur. They did this by comparing the number of public speeches and addresses on climate change she had given with that of her predecessors (hers being tremendously higher). Furthermore, the authors documented that Lisa Jackson dealt with climate change since the beginning of her term in office and that she urged the EPA to push the issue forward. Similarly, Dudley (2013) makes plausible that the Mayor of London, Ken Livingstone, acted as a policy entrepreneur, because in addition to promoting the introduction of the Congestion Charge, he tied his reelection to its successful implementation.

The vast majority of contributions focus on identifying one or several policy entrepreneurs and do not attempt to operationalize their characteristics and strategies. However, the MSF argues that (in addition to the streams being ready for coupling) it depends on policy entrepreneur characteristics and strategies if they succeed coupling the streams. Favorable characteristics are persistence, political well-connectedness, access to policy makers and negotiating skills (Kingdon 1984).

Following Kingdon (1984: 190), persistent policy entrepreneurs “spend a great deal of time giving talks, writing position papers, sending letters to important people, drafting bills, testifying before congressional committees and executive branch commissions, and having lunch, all with the aim of pushing their ideas in whatever way and forum might further the cause.”

Political connectedness refers to policy entrepreneurs’ relational profile in the policy network. If policy entrepreneurs hold a central position, they are more likely to be able to influence others. One advanced way to measure whether a policy entrepreneur is politically well-connected, is to conduct a social network analysis (cf. Christopoulos and Ingold 2015). However, in many cases, a policy entrepreneur’s formal role in the policy-making process allows researchers to conclude how well (s)he is connected. Returning to the examples quoted above, the EPA administrator and Mayor of London are key policy-makers with formal decision-making competences. Resulting from their daily business, they are personally acquainted with other key decision-makers, interest groups representatives or journalists. Consequently, they are politically well-connected. It remains far more demanding to measure how well a policy entrepreneur is connected if (s)he belongs to the hidden participants. In that case, interviews with relevant actors might be informative. Actors many interviewees refer to are most probably much better connected than actors only few interviewees mention.

Access to policy-makers refers to having a claim for a hearing. This claim results from at least one of the following sources: from “expertise; an ability to speak for others, as in the case of the leader of a powerful interest group; or an authoritative decision-making position, such as the presidency or a congressional committee chairmanship” (Kingdon 1984: 189).

Negotiating skills capture how competently policy entrepreneurs manage to push for their favorite policy in negotiations with other key actors. Measuring this skill directly is rather challenging. An indirect way to measure it, is to analyze how well policy entrepreneurs make use of strategies to couple the streams. Strategies they have at their disposal are, for instance, framing of a problem, affect priming, “salami tactics,” and the use of symbols (Zahariadis 2003, 14; 2015).

Although the MSF is a theory of the policy process, the coupling process is either dealt with as a black box or only implicitly summarized in the analysis. Consequently, there has not yet evolved a best practice to answering the question of what to observe if coupling takes place. Gladwin et al. (2008), for instance, apply the MSF as a conceptual framework to investigate how in-school daily physical activity was adopted in Alberta’s educational system while walk-to-school initiatives were not supported. They give a detailed and systematic description of the framework’s key elements. In contrast, the coupling process is only briefly summarized as follows: “a physician with personal beliefs about the benefits of PA [physical activity] took office as the Minister of Learning and linked the

solution with the political stream through his ministerial power” (Gladwin et al. 2008: 335). It requires further research to deduce how the coupling process can be captured and measured in a way that allows for comparative analysis.

The analysis of failed couplings is important to put the MSF’s core hypothesis to the proof. According to this hypothesis, agenda change is less likely in times of open policy windows if (a) any of the streams is not ready for coupling or (b) if there is no policy entrepreneur aiming to couple the streams. Despite the necessity to analyze failed coupling, there are only few contributions that analyze agenda stability. The contribution by Venters et al. (2012) is a welcome exception. The authors analyze how the state of the political stream prevented agenda change regarding the introduction of a national sales tax for education in the United States during the Nixon administration. Another example is the contribution by Zahariadis (1996). He analyzes the privatization of British Rail that came in 1993 by focusing on four political windows and two problem windows between 1974 and 1992. The comparative analysis of failed and successful couplings reveals how important policy entrepreneurs’ position and strategy are and that problem windows and political windows differ in terms of how coupling takes place. More such analyses provide an opportunity to test the framework more thoroughly.

### **Conclusion**

In 2007, Sabatier criticized the multiple streams framework (MSF) for being difficult to falsify due to its lack of explicit hypotheses and its fluid structure and operationalization (Sabatier 2007). While MSF scholars have addressed the first point of criticism by introducing explicit hypotheses, there is still the need to specify how to operationalize the framework’s key concepts. We agree with Weible (2017) who highlights the importance to develop best practices for applying the theories of the policy process and to make these practices available for anyone interested in applying any of these theories. This article is a first step to develop a best practice regarding how to operationalize the MSF’s key concepts. Regarding some of the framework’s key concepts, there seems to have evolved a consent how to measure them (e.g, the national mood), while others need to be put to test (e.g, measuring potential policy windows) or to be specified (e.g. operationalizing the coupling process). This article opens a discussion on how to carry forward the development of best practices for MSF applications.

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