

Policy persistence, risk estimation and policy underreaction

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Published online: 9 July 2014
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Abstract In recent years, there has been remarkable progress in our understanding of policy persistence, on the one hand, and of the psychological phenomenon of underreaction, on the other. Surprisingly, there has been no attempt to use robust findings, derived from these efforts, in order to understand the nuances of policy underreaction. *Policy underreaction* refers to systematically slow and/or insufficient response by policymakers to increased risk or opportunity, or no response at all. This article tries to give the concept of policy underreaction a robust analytical identity by integrating cognitive, social, psychological and emotional variables in the explanation of policy underreaction and by introducing a variation across different types of contextual sources of policy persistence as explanatory variables of this phenomenon. It develops an analytical framework that revolves around two key elements of decision making in situations of risk unfolding over time: (1) policymakers' underestimation and accurate estimation of increased risks and (2) intra- and extra-organizational sources of policy persistence. Based on these dimensions, the article identifies and illustrates four distinct modes of policy underreaction which reflect differences in the nature of implemented policy.

Keywords Policy underreaction · Risk underestimation · Policy persistence · Warnings · No action · Bounded rationality

Introduction

In recent years, there has been remarkable progress in our understanding of policy persistence, on the one hand (e.g., North 1990; Hammond 1986; Meyer and Rowan 1977; Tsebelis 2002; Helmke and Levitsky 2004; Baumgartner and Jones 2009), and of the psychological phenomenon of underreaction, on the other (e.g., Bar-Hillel 1973; Cohen et al. 1972; Knäuper et al. 2005; Tversky and Kahneman 1973, 1974; Slovic 2007, 2010;

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Dickert and Slovic 2009). Surprisingly, there has been no attempt to use robust findings, derived from these efforts, in order to understand the nuances of policy underreaction. Although this phenomenon as well as “too little” and “too late” patterns of public policy (Walker and Malici 2011) have been mentioned (e.g., Jones and Baumgartner 2005a; Bazerman and Watkins 2008), no attempt has been made to give this concept a robust analytical identity.

Policy underreaction refers to systematically slow and/or insufficient response by policymakers to increased risk or opportunity, or no response at all. Based on this definition, the article tries to fill this theoretical gap by introducing a variation across different types of contextual sources of policy persistence as explanatory variables of policy underreaction and by integrating cognitive, social, psychological and emotional variables in the explanation of this phenomenon. It develops an analytical framework that revolves around two key elements of decision making in situations of risk unfolding over time: (1) policymakers’ underestimation and accurate estimation of increased risks and (2) intra- and extra-organizational sources of policy persistence. Based on these dimensions, and focusing on situations of increased risk which involve escalating repeated warnings,¹ the article identifies and illustrates four distinct modes of policy underreaction which reflect differences in the nature of implemented policy.

Directed underreaction emerges when policymakers accurately estimate increased risk but are predominantly influenced by intra-organizational sources of policy persistence. The subsequent policy comprises (long/short sequences of) self-initiated small/partial adjustments in the same direction. *Forced underreaction* emerges when policymakers accurately estimate increased risk but view the policy at hand as primarily subject to extra-organizational constraints, such as the expected response from other players with a dominant position in the relevant system. The policy implemented revolves around policymakers’ giving in to, or being forced to adapt to or comply with external constraints, but still being able to initiate small policy adjustments over the dominant dimension of risk. *Symbolic underreaction* emerges when policymakers underestimate increased risk (i.e., do not recognize the need for a substantial policy change) and are predominantly influenced by intra-organizational sources for policy persistence, such as organizational and cultural imperatives, leading to “tunnel vision” and routine modes of thought. The policy implemented involves willingness to express full support for the issue at hand and engagement in a disingenuous or surface-level attempt to change policy. *No action* emerges when policymakers underestimate increased risk and are predominantly influenced by extra-organizational constraints.

The analytical framework advanced here offers a foundation for a graded understanding of the concept of policy underreaction which goes beyond the analytical reach of the terms “too little” and “too late” (Walker and Malici 2011). In addition, the analytical framework and the subsequent illustrations of each type of policy underreaction contribute to our understanding of a large spectrum of policy underreactions. Surprisingly, no conceptual statement regarding this diversity has ever been made before, so this study is a lone voice calling for more research on this topic. Because policy underreaction is a feature of all polities at some point in time, policy scholars everywhere may look at the research program described in the concluding section and use it to provide a detailed perspective of this phenomenon in their polities. I also encourage policy scholars to read this article in conjunction with my studies on policy overreaction (Maor 2012), policy bubbles (Maor

¹ This article does not deal with situations of policy adjustment to constant risk, a reduction of risk and opportunities (such as scientific inventions).

2014a) and policy anti-bubbles (Maor 2014b) and hope that these studies will stimulate further research in the area of the dynamics of non-proportionate policy response.

Throughout this article, I have ignored the value-laden component of policy underreaction and instead infused it with a robust conceptual identity. The idea is to force scholars to recognize that policy underreaction may not automatically signify irrational behavior. Rather, under some conditions, it may be consistent with policymakers' goals and even beneficial to policy systems and sub-systems (e.g., restraints in policy response). By designing a positive rather than a normative conceptual framework that provides an explanation of why one often encounters policy underreaction, I lead this framework to a better explanation of why policymakers do what they do and, at the same time, to a better understanding of the complexity of policy processes.

The article proceeds as follows. The second section introduces the concept of policy underreaction. The third presents the analytical distinction among the four modes of policy underreaction. The fourth illustrates each mode of policy, and the final section presents an agenda for future research.

What constitutes policy underreaction?

Two premises are required to understand the core concept of this article. First, it is possible to point to aspects of government response and find evidence to warrant the label of "underreaction." Second, "in order to evaluate the worth of [government response], we would ideally need to know what would have happened without it, or what alternative courses of action were possible (and their likely consequences)" (McConnell 2010, p. 66). For the former, there is no doubt that difficulty exists in understanding what constitutes an underreaction because of methodological problems, differing benchmarks and perceptions, variance over time and more. I would argue that neglecting policy underreaction for reasons such as these is akin to refusing to engage in research where no perfect answers exist. In my opinion, the way forward involves incremental, step-by-step movement in the hope that we will be able to advance our understanding of the topic at hand. Based on the definition provided here, policy underreaction may be assessed by cost-benefit analysis and by subjective evaluations (i.e., perceptions) over time. Policy underreaction may also be measured by a comparison of policy outcomes with (national or international) standards developed by experts. For example, a government air quality policy may be compared with the World Health Organization's recommendations for air quality standards which were developed by an international group of experts (e.g., Tosun 2013).

Regarding alternative courses of action, policy underreaction can be measured by taking into account factual and counterfactual components and by capitalizing on advances made in the measurement of policy success and failure, especially the *types of evidence* used to assess policy success and failure (McConnell 2011, p. 69). In order to accommodate these insights, the following formulations take into account objective and subjective utilities without restricting the weight of either.

Regarding the factual component, the *actual net utility of a policy* ($NetU^A$) is the difference between the actual objective and subjective benefits that are derived from the policy enacted (B_{O+S}^A), and the actual objective and subjective costs (C_{O+S}^A) derived from this policy choice. B_{O+S}^A/C_{O+S}^A represents the set of positive/negative objective and subjective changes in utility due to the actual policy choice, respectively. "Benefits" refer to the present value of future streams of benefits, and "costs" refer to the present value of future streams of costs. Both can be assessed over three dimensions of policy success/

failure, namely the political, the process and the program dimensions (Marsh and McConnell 2010; McConnell 2010, 2011). This can be written as follows:

$$NetU^A = (B_{O+S}^A - C_{O+S}^A)$$

The *net utility which may have occurred if there had been a response, and if so, if this response had been sufficient and timely* (net utility counterfactual, $NetU^C$), is the difference between the objective and subjective benefits that would have occurred if there had been a response, and if so, if this response had been sufficient and timely (B_{O+S}^C), and the objective and subjective costs that would have been incurred if there had been a response, and if so, if this response had been sufficient and timely (C_{O+S}^C). B_{O+S}^C/C_{O+S}^C represents the set of positive/negative objective and subjective changes in utility due to the counterfactual policy choice, respectively. This can be written as follows:

$$NetU^C = (B_{O+S}^C - C_{O+S}^C)$$

Policy underreaction is a policy whose actual net utility ($NetU^A$) is smaller than a counterfactual net utility ($NetU^C$) which can be written as follows:²

$$NetU^A - NetU^C < 0$$

Given that the main features of this concept are subjective, experimental manipulation using hypothetical scenarios of risk unfolding over time combined with varying types of warnings, may be a reasonable research strategy to follow. Warnings may be classified, for example, as tactical or strategic (Davis 2009, p. 173), as a point estimate or a range, or as qualitative or quantitative (Bulkley and Herreras 2005, p. 604), and according to their level of credibility. The idea is to use an experimental design framework within which escalating repeated warnings and their outcomes are manipulated in order to ascertain policy responses by participants or preferably, by policymakers. Another methodological option is to employ a survey technique, but this may be problematic because it is likely to be biased when interviewees differently interpret response categories. That is why surveys of policy underreaction should be employed in conjunction with anchoring vignettes (King et al. 2004) as a means to rectify self-evaluations for heterogeneity in responses. The idea is to test whether there is evidence that the policy underreaction selected by the respondents reflects the combined effect of the psychological and contextual factors and varies along different types of warnings.

Analytical framework

This analytical framework adopts a bounded rationality approach (Simon 1947; Jones 2003). The core concept of policy underreaction is conceptualized here solely in situations of increased risks which involve escalating repeated warnings in order to ascertain trends in policy response. “Risk” refers to unknown political, economic, technological, natural and other outcomes whose probability of occurrence can be measured or at least learned about (Knight 1921). It is predominantly treated here as “anything to do with situations where “bad” [...] things may, or may not happen” (Spiegelhalter 2011, p. 17). Uncertain

² I thank Raanan Sulitzeanu-Kenan for these formulations. Note that these formulations are equally applicable to policy overreaction, i.e., it may define any case of non-proportionate policy response, regardless of the level of activity. In this article, however, I delve into the mechanisms that generate different types of policy underreaction.

events that we do not know how to describe and situations where there is no risk involved do not fall under the analytical framework advanced here. Policy underreaction in situations of increased risk implies policy inefficiency in such situations. However, there is more than one way to take inefficiency into account. Policy underreaction may be a result of policymakers' inability to carry out a response or may stem from their inability to do it in a sufficient and timely manner.³ These inability may derive from a weak position, which undermines their efforts to mobilize proper political resources to address the problem by firm political action, and/or from inefficiency inherent in the policy process itself. Regarding policymakers' ability to mobilize resources, this analytical framework assumes, as does "[...] the vast majority of research on the policy processes" (Weible et al. 2012, p. 4), that policymakers are individuals rather than "collectives" (e.g., Sabatier 1988; Jones 2001). It also assumes that policymakers are able to mobilize proper political resources to address the problem by firm political action. Regarding the inefficiency in the policy process, this analytical framework assumes that the contribution of the expected inefficiency inherent in the policy process is relatively modest compared with the contribution of a number of factors described here which, in different ways, contribute to the explanation of policy underreaction.

The estimation of increased risk

The analytical framework advanced here focuses on risks that unfold over time. Policymakers have to evaluate such risks and respond in a way that matches their severity. Conceptually, the detection of an increase in risk is necessary as a starting point because "[i]t is not always straightforward how to dissect whether the underlying mistake was diagnostic [i.e., intelligence-related] or prescriptive [i.e., policy-related] and whether the latter was necessarily caused by the former" (Walker and Malici 2011, p. 54). In addition, material increase in risk may not be noticed. In the event that it is noticed, it sometimes may lead to an explicit warning. The warning is "a pure information event [which has] a very large initial impact, and [is] a signal about a specific and imminent [threat] realization" (Bulkley and Herrerias 2005, p. 622). Focusing on risky events that unfold over time therefore introduces elements of increased predictability regarding the nature and direction of risk, visibility (at least for some policymakers) and a growing need to depart from the original intentions because of the increased risk. Focusing on risky events that unfold over time also reduces the uncertainty policymakers may experience about the degree to which intra- or extra-institutional constraints are sufficiently strong to undermine or hinder any policy response. As warnings regarding increased risk are accumulated, so may be information regarding the constraints because policymakers interact with individuals, groups, organizations or politics which mobilize these constraints and are therefore able to gauge their real political power.

The accuracy of risk estimation—the first critical dimension of the analytical framework—is often crucial to decision outcomes. In real-world decisions, attention is a scarce resource and so is cognition. In some situations, policymakers willingly violate the axioms of rationality (e.g., Tversky and Kahneman 1986); in others, they do not. Inaccurate perceptions of the dynamics of unfolding events, risk management and decision-making processes and practices often manifest the failure of many policymakers to infer practical regularities from years of experience. Accurate estimation of new evidence which runs

³ An example of the latter situation is LeBlanc et al. (2000) study which proposes that majority-rule legislatures will under-invest in public goods.

counter to one's firmly held views is possible, but the potential for underestimation of such evidence, when one perseveres in his/her belief or is subject to judgment and decision biases, cannot be easily dismissed. In fact, studies have shown that individuals underestimate the cumulative effect of events (e.g., Bar-Hillel 1973) mainly because they use cognitive heuristics and judgment strategies (e.g., Kahneman 2011).⁴ Motivational processes have been shown to be an additional factor in the underestimation of risks that accumulate over time through their effect on people's perceptions of situations (e.g., Knäuper et al. 2005). Cognitive heuristics (e.g., Tversky and Kahneman 1973, 1974), disproportionate information processing and inattention (e.g., Simon 1947, 1957; Jones and Baumgartner 2005b; Sabatier 1988; Hall 1993), as well as affective tags in mental images (e.g., Peters and Slovic 2000; Slovic et al. 2005; Slovic 2007; Dickert and Slovic 2009) and social psychological biases (e.g., Asch 1952; Ross and Nisbett 1991; Ross 2013), may be as important as the aforementioned factors. It is therefore reasonable to rely on these two contradictory types of risk assessment—an accurate estimation of increased risk and an underestimation of increased risk—in the design of the causal-explanatory typology advanced here.

Organizational sources of policy persistence

In a well-crafted analysis of institutional frictions, Baumgartner et al. (2009, p. 616) have urged scholars to “[...] start looking for variation within [the] general picture” of the specific workings of institutional friction in each setting. A convenient starting point for doing this is the recognition that intra- and extra-organizational sources of policy persistence may independently act to constrain policymakers seeking to initiate policy change in a given policy area. At the outset, policymakers respond to a mix of formal and informal institutions (North 1990). Among the intra-organizational sources of policy persistence which take the form of formal institutions, the actual structure of the organization (e.g., Hammond 1986; Meyer and Rowan 1977) and organizational decision rules (e.g., Wildavsky 1964) may narrow the number of alternatives faced by policymakers. Among the intra-organizational sources of policy persistence which take the form of informal institutions, organizational norms of behavior, conventions, codes of conduct and moral values may also constrain policymakers in pursuit of their goals (e.g., Crozier 1964; Helmke and Levitsky 2004). Policy monopolies (Baumgartner and Jones 2009) within organizations and institutional veto players (Tsebelis 2002) that entrench the intra-organizational status quo may narrow the number of alternatives policymakers are willing to consider, and reduce the level of innovation in agency response. Extra-organizational sources of policy persistence which take the form of formal institutions (e.g., courts, legislature, constitution, laws and regulations) and informal institutions (e.g., executive–legislative relations, ideology and culture) may also constrain policymakers. Mental constructs (North 1990, p. 96) and cultural traits, such as ethnocentricity and an overreliance on problem solving by technological means (Bar-Joseph and McDermott 2010), may further narrow the number of alternatives policymakers are willing to consider.

⁴ The anchoring and adjustment heuristics may lead to excess moderation, that is, underreaction (Tversky and Kahneman 1973), and so are the omission bias (Ritov and Baron 1995) and the availability heuristic (Tversky and Kahneman 1973).

Modes of policy underreaction

The discussion so far brings to the fore two analytical dimensions of decision making in situations in which risk unfolds over time: (1) the effects of policymakers' underestimation and accurate estimation of increased risks and (2) the effects of intra- and extra-organizational sources of policy persistence. Based on these dimensions, it is possible to identify four modes of policy underreaction—depicted in Table 1—that reflect differences in the nature of implemented policy.

Directed underreaction emerges when policymakers accurately estimate increased risk but are predominantly influenced by intra-organizational sources of policy persistence. In other words, policymakers are willing to change their policy because they are fully aware of the severity of the risk, but they are able to do so only in an inert way because of internal constraints. The subsequent policy comprises (long/short sequences of) self-initiated small/partial adjustments in the same direction. Although these policy steps do not match the severity of the risk, they are certainly a response to this type of risk. This type is similar to Hall's (1993) "first-order" changes which occur when the calibration of policy changes within existing institutional and instrumental confines. Once warnings regarding an unfolding risk materialize, future policy actions may not be contingent on the arrival of new information but, instead, may be hampered by internal sources of policy persistence. Directed underreaction is therefore based on the recognition that the level of underreaction may not necessarily vary with information uncertainty.

Forced underreaction emerges when policymakers accurately estimate increased risk but view the policy at hand as primarily subject to external constraints. So although policymakers may be able to radically change their policy, they are unwilling to do so due to their expectations of the likely response to their actions by external actor/s. Suffice it to mention the challenger disaster (Heimann 1997, p. 51) or the fear of legal liability which may block risk reduction initiatives. The policy employed is contingent upon either conceding to external forces or being compelled to adjust or acquiesce to them. Put differently, forced underreaction involves an exogenous entity or force which blocks radical policy reconfigurations, but (formally or informally) allows small policy adjustments over the dominant dimension of risk. Whatever the scope, intensity and probability of the risk, the basic properties of the policy change will be defined in ways which reflect adaptation to the external constraint. It will represent a compromise based on the specific political dynamic in place. Although these policy steps do not match the severity of the risk, they are certainly a response to this type of risk. This type of policy response therefore represents a deliberate strategy of policy underreaction because policymakers are not only influenced by extra-organizational constraints, but also accurately estimate these constraints.⁵

⁵ The same awareness of external constraints that exists in the case of *forced underreaction* exists also in a certain case of policy overreaction. In this case, rather than succumbing to constraints, policymakers deliberately ignore them, opting for overreaction no matter what. A reason for this may involve an adherence of policymakers to the *Precautionary Principle*, according to which even a small risk of a catastrophic outcome is enough to require a serious response (Sunstein 2007). A related explanation may be applied in cases other than worst-case scenarios, that is, when the likelihood and magnitude of risk is lower than that in worst-case scenarios (Sunstein 2007). It is based on the premises that responding to risk by policy underreaction, if perceived as such by the target populations, is not likely to change the status quo. The same outcome may be reasonably expected when policymakers respond in (what they perceive as) a proportionate manner, which may be wrongly perceived by the target populations as underreaction. By contrast, if policymakers aim at changing the status quo, policy overreaction at the core of the policy problem is likely to leave no room for interpretative error by the target populations regarding the intention of those who overreact.

Table 1 Modes of policy underreaction

Sources of policy persistence	Estimation of increased risk	
	Accurate estimation	Underestimation
Internal	Directed underreaction	Symbolic underreaction
External	Forced underreaction	No action

Symbolic underreaction emerges when policymakers underestimate increased risk (i.e., do not recognize the need for a policy change) and are predominantly influenced by internal sources for policy persistence. It involves compensatory actions rather than substantial ones and aims at reassuring people who feel threatened by some unforeseen event or political action (Edelamn 1977, pp. 12–15). Among the factors that could lead to a situation in which policymakers may be complacent and unwilling to engage in “real” policy change, one can mention the use of “off-the-shelf” intelligence products rather than zero-based analysis of the increased risk, blame culture within the organizations and mythology ascribing greater or lesser wisdom to particular units within the organizations (Fingar 2011, p. 100). At the same time, however, these policymakers may be willing to operate according to routine guidelines which are applied when no policy commitment is in place (i.e., no binding policy choices are taken). They may also be willing to make use of rituals—“the motor activity that involves its participants symbolically in a common enterprise” (Edelamn 1977, p. 16), showing their full support for the policy at hand and for its target audience and engaging in disingenuous or surface-level attempts to change policy. Suffice it to mention the presence of politicians in regions hit by a disaster, and promises for financial aid (‘t Hart 1993).

No action emerges when policymakers underestimate increased risk and are predominantly influenced by external constraints. In other words, policymakers do not recognize the need to make a policy change due to increased risk and are predominantly influenced by external policy actors’ preference for no action. Based on a case study of the 1985 Heizel football stadium tragedy, ‘t Hart et al. (1993) identify three types of policy inaction, namely “decisions not taken” (the decision to avoid monitoring the flood of calls), “decisions not to do” (the decision by the Belgian Interior Minister not to go to the stadium, despite living nearby) and “decisions not to act on” (the refusal of the police to make arrests for fear of aggravating an already hostile crowd). In addition, McConnell (2012) has identified three types of inaction, namely deliberate, reluctant and unintentional (i.e., non-willful neglect), but adds that “[w]e may not be able to know which is which, because we do not have access to the mindsets of the decision makers involved [...]” (p. 3). And Hacker and Pierson (2010) have distinguished drift—defined as “the transformation of a policy’s effects not through the amendment or replacement of existing policy rules, but through politically mediated inaction in the face of changing social circumstances” (p. 3)—from inadvertent inaction. Although drift is a “largely hidden process” (p. 3) of institutional change, it requires the failure of efforts by policymakers to update policy rules (p. 11). In the “no action” type of policy underreaction, no efforts are undertaken to quickly adjust policy to the severity of the risk.

The reader should recognize that each of the types of policy underreaction may be framed in ways that hide its true meaning. For example, “inaction may be framed in ways ranging from ‘astute politics’ to ‘dereliction of responsibilities’” (McConnell 2012, p. 2). This “presentation strategy” (Hood 2011) is tied to the fact that it is much harder to blame

decision makers for doing nothing than for doing something. A closer look at the facts of each case is therefore of the utmost necessity.

The relations between policy under- and overreaction

Before we focus on a few valuable illustrations of the different types of policy underreaction, it is important to understand the relations between policy underreaction and policy overreaction. Policy overreaction may emerge as a result of policy underreaction, which is derived from a lack of systemic issue attention. This situation has already been conceptualized in the punctuated equilibrium model (Jones and Baumgartner 2005a; Baumgartner and Jones 2009). In this conceptualization, “[e]motion is the gateway to selective attention: when emotion is roused, attention follows” (Jones and Baumgartner 2005a, p. 16), and this, in turn, may explain the reason behind policy alternation between under- and overreaction. Needless to say, policy over- and underreaction may interact and, therefore, facilitate processes of learning over time. Such a process may evolve when policymakers correctly remember prior expectations.

However, when policymakers incorrectly remember prior expectations (i.e., hindsight bias), no efficient learning is possible because such learning requires comparing new information to previous expectations. Hindsight-biased policymakers, learning about volatile risk, may tend to underestimate it, and, learning about constant or declining risk, may tend to overestimate it. Consequently, policy overreaction may follow policy underreaction and vice versa.

Illustrations

Guided by the analytical framework developed here, this section employs plausibility probes in an attempt to disaggregate the sequences and variables in a way that highlights the phenomenon studied and to alert us to differences among types of policy underreaction. The illustrations presented here, however, are not case studies in a structured comparative research. They have been selected because they have extreme values on the dependent variable, that is, they differ radically from each other in policy outcomes, to the extent that the features of the analytical framework advanced here clearly emerge. Selecting on the dependent variable “is not considered a problem for process-tracing within case studies, which does not involve comparisons and which follows an arguably different inferential logic [...]” (Levy 2008, p. 8). In addition, whether or not each of the cases is considered by the reader as a policy success or failure is irrelevant for the purpose of this conceptual exercise. This is because policy underreaction (as well as policy overreaction) may at times be considered a policy success or a policy failure. The reader is encouraged to focus on the policy neglect stage, which is the manifestation of policy underreaction, rather than the alternate stage, which is often considered as policy overreaction. Due to the page constraints in this article, the illustrations remain at the general level. The first paragraph of each illustration summarizes the argument made and provides a clear sense of what alternative decisions made by the decision maker would constitute a proportionate reaction.

Directed underreaction

Directed underreaction emerges when policymakers accurately estimate increased risk but are predominantly influenced by internal sources of policy persistence. The policy

underreaction during the preparation for what has become a gross policy overreaction—the 2010 Turkish *Mavi Marmara* incident outside Israel’s territorial waters—is an example of directed underreaction. During the preparation for this incident, there had been an accurate estimation by the Israeli Army Chief of Staff that there would be a violent response from the flotilla passengers (State Comptroller 2012, p. 68), coupled with disorganized decision-making processes in government as well as an organizational culture that accorded great weight to the military as opposed to other response options (State Comptroller 2012). But what alternative decision, made by the prime minister, who has the authority to make the decision to react, would have constituted an appropriate reaction in this case? If the Israeli Prime Minister had let the flotilla sail to Gaza, the Turkish–Israeli regional alliance would have been maintained, and Israel’s worldwide legitimacy as well as the reputation of the Prime Minister and the government would have been solidified.

On May 31, 2010, Israel Defense Forces (IDF) took over six flotilla ships which were attempting to breach Israel’s naval blockade of the Hamas-controlled Gaza Strip. One of the ships—the *Mavi Marmara*, which was owned by a Hamas-linked Turkish Islamic group—was carrying 600 protesters. Nine passengers were killed, and nine naval soldiers and 55 passengers were injured. According to the State Comptroller’s report (2012), information regarding the problematic nature of this particular flotilla, the nature of its funding organization and its participants, and the number of vessels that would take part, had begun to accumulate from early 2010. Further, in the month before the flotilla sailed, the Defense Minister, the IDF Chief of Staff and other ministers and senior IDF officers had warned of a potentially violent response from the flotilla passengers which might include the use of weapons (State Comptroller 2012, p. 68). In addition, the IDF Chief of Staff had held four meetings with the Prime Minister and had raised the issue with him. He had also argued in the Forum of Seven, the Israeli inner cabinet, that he had no doubt that there would be a violent response from the flotilla passengers (State Comptroller 2012, p. 68). Following these warnings, numerous diplomatic efforts had been carried out by the Prime Minister in an attempt to stop the flotilla, yet the Turkish Premier refrained from action (State Comptroller 2012).

Perhaps the most substantive criticism in the report is directed at the Prime Minister’s handling of the preparation for this incident, especially his decision to fly abroad before it took place, while failing to delegate responsibility to the Deputy Prime Minister in his absence. This left the Prime Minister’s military aide in command. Another issue was the Prime Minister’s failure to instruct the National Security Council (NSC) to formulate an integrated policy. Consequently, the NSC was uninvolved in dealing with the Turkish flotilla. The absence of NSC involvement reflects the deep differences between the NSC and the military, along with the Minister of Defense and the secret services, which generally attempt to preserve their monopoly over presenting military alternatives (Oren 2012). This struggle has not been hidden from the public eye, was also evident during the Second Lebanon War in 2006 and was documented by a commission of inquiry following this war (Winograd Committee) and the subsequent committee in charge of implementing the recommendations of the former (Lipkin-Shahak Committee). The State Comptroller’s report also criticized the decision-making processes in the run-up to the incident as unsystematic and disorganized. For example, representatives of the various security forces and the NSC did not attend critical meetings and minutes were not taken; therefore, it was unclear what decisions were taken (State Comptroller 2012). Overall, an accurate estimation of increased risk combined with an organizational culture that gives great weight to military as opposed to other considerations (Oren 2012; Dror 2012) and disorganized

governmental decision-making processes led to the policy underreaction by the Israeli government in the planning and preparation for the *Mavi Marmara* incident.

Forced underreaction

Forced underreaction emerges when policymakers accurately estimate increased risk but view the policy at hand as primarily subject to external constraints. The Israeli decision not to launch a preemptive attack hour before the 1973 Yom Kippur War, fearing the U.S. response to such a move which would have denied military and diplomatic support to Israel during the war (Bar-Joseph 2005), and the resulting call-up of the reserves instead, is an example of forced underreaction. But what alternative decisions, made by the Israeli prime minister, would have constituted an appropriate reaction in this case? The Israeli prime minister could have declared that the Israeli government was willing to begin peace talks and offer some symbolic concessions. She also could have decided to seriously tackle the fundamental flaws in the Israel Defense Force (Zeira 2004, pp. 79–80), especially its operational plans. And, a few days before the war, she also could have decided on complete war deployment along the border with Egypt and Syria (Maoz 2006, pp. 148–151). This move could have been considered a proportionate response because of the information held by Israeli intelligence, a day before the war broke out, regarding the military readiness of the Egyptian and Syrian forces (Bar-Joseph 2005).

The Yom Kippur War broke out at 2:00 pm, October 6, 1973. The Syrian–Egyptian attack came as an almost complete strategic surprise to the Israelis. Yet this surprise was not due to the lack of accurate information, but rather to the misinterpretation of the “ample amounts of warnings” provided by the intelligence (Bar-Joseph 2005, p. 235; Bar-Joseph 2008; Bar-Joseph and Kruglanski 2003). Specifically, on October 6, the option of a preemptive strike by Israel was seriously considered by Prime Minister Golda Meir, Defense Minister Moshe Dayan and the Army Chief of Staff David “Dado” Elazar. At the outset, according to Bar-Joseph (2005), in all war scenarios prior to the war, especially during preparations for war in May 1973 (“Blue-White” state of alert), Dayan had granted the Israel Air Force (IAF) permission to launch a preemptive strike (e.g., Bar-Joseph 2005, p. 219). “On October 5, the Chief of Staff (without getting government approval) authorized a full mobilization of the Israeli Air Force, so that it would be ready to launch a preemptive strike if the need arose. The first call he made on learning that war would break out on that very day, was to the IAF commander, to prepare a preemptive strike” (Bar-Joseph, email to author, 9.8.2012). However, there is sufficient evidence that on the morning of October 6, Dayan still estimated that war was unlikely. He therefore objected to a preemptive strike and a large-scale mobilization (e.g., Bar-Joseph 2005, pp. 188–9).

Dayan’s estimation was expressed in two crucial discussions. 8 h before the war, he met with the Chief of Staff in his office for an intensive 1-h discussion and rejected his demands for a preemptive strike and a full-scale mobilization, explaining that “on the basis of messages from Zvika [Zamir, the Mossad chief], you don’t mobilize the whole army” (Bar-Joseph 2005, p. 190). 6 h before the war began, when it was clear that war was imminent, Golda Meir met with Dayan, as well as with the IDF chief of staff and the IDF intelligence chief. The preemptive strike option was mentioned a few times during the meeting. Dado argued that a preemptive strike would provide Israel with “a huge advantage and save many lives [...] We can wipe out the entire Syrian air force at noon” [quoted in Sakal (2011, p. 404) and Druckman (2010)]. Golda Meir did not agree with Dado, referring to the potential reaction of world leaders: “Preemptive strike—very appealing, but this is not 1967 [i.e., the Six Day War]. This time the world will reveal the

nastiness of its character. They will not believe us [...] Preemptive strike: We could not explain it”.⁶ She considered that Israel would not be able to rely on European military aid and that it was only the USA which could come to Israel’s aid. Concerned that the USA would find it more than difficult to intervene if it appeared that Israel had initiated the fighting, Golda Meir decided not to strike in advance. However, it was ultimately decided at the meeting to call up Israel’s entire reserve forces. Prime Minister Golda Meir immediately notified the American administration of her decision. Golda Meir’s estimation of the US response in case of a preemptive attack proved to be correct as Henry Kissinger, US Secretary of State at the time, later argued that if Israel had initiated a preemptive attack, it would not have received “so much as a nail” (Meir 1975).

Symbolic underreaction

Symbolic underreaction emerges when policymakers underestimate increased risk and are predominantly influenced by internal sources for policy persistence. An example is the response of the US Securities and Exchange Commission during the 2008 financial crisis. This could be attributed to the SEC’s underestimation of the risk that a liquidity crisis rather than capital inadequacy would lead to Bear Stearns’ failure (GAO 2009, p. 56), combined with internal procedures which hampered the ability of enforcement staff to bring tough cases, as well as to a sense of organizational decay and low morale within the agency (Davidoff and Zaring 2009; Anderson 2008). But what alternative decisions, made by the SEC’s Commissioners, who have the authority to make the decision to react, would have constituted an appropriate reaction in this case? The SEC Commissioners could have, for example, abolished the effective oligopoly granted to credit agencies, increased net capital requirements, and strengthen supervisory standards in line with the explosive growth of the market.

Prior to the financial crisis, the SEC lacked explicit statutory authority by Congress to regulate the large investment bank holding companies, but it still had jurisdiction over the safety and soundness of investment banks (Cunningham and Zaring 2009, p. 50). Rather than employing the aforementioned strategies, the SEC decided to exercise its oversight through a voluntary program, namely the Consolidated Supervised Entity (CSE) program (SEC 2008; Cunningham and Zaring 2009). The program was created in 2004 in order to supervise broker-dealer holding companies on a consolidated basis (SEC 2008). The companies included Goldman Sachs, Bear Stearns, JP Morgan, Morgan Stanley, Merrill Lynch, Lehman Brothers and Citigroup. The idea was to monitor for financial or operational weakness in a CSE holding company that might place regulated broker-dealers in the USA at risk (SEC 2008). The unprecedented collapse of Bear Stearns due to a liquidity crisis caused by lack of confidence, the acquiring of this investment bank by JP Morgan, the insolvency of Lehman Brothers and the sale of Merrill Lynch, compelled the SEC to eliminate the CSE.

During the CSE, “[the] SEC did not rate risk-management systems or use detailed risk assessment processes to determine areas of highest risk [...]” (GAO 2009, p. 41). Not surprisingly, “[...]the] SEC and Bear Stearns did not anticipate that certain sources of liquidity could rapidly disappear” (GAO 2009, p. 55). Furthermore, neither the SEC nor the broader regulatory community anticipated the refusal of many lenders, concerned that Bear Stearns would suffer greater losses in the future, to provide funding for the firm, even

⁶ A summary of Consultation in the Prime Minister’s Office, Tel Aviv, Yom Kippur, 6.10.1973, available (in Hebrew) at <http://www.hativa14.org.il/?CategoryID=1040> (Accessed 16.6.2014).

on a fully-secured basis with high-quality assets provided as collateral (GAO 2009, p. 55). In addition to the underestimation of increased risk, intra-organizational constraints undermined the ability of the SEC to effectively respond to the financial meltdown. According to “[s]taff lawyers in the SEC enforcement division, [...] high turnover, tight budgets and a new, looser attitude toward corporate wrongdoing [were] sapping morale” (Anderson 2008, p. 4). The agency also saw the highest level of turnover in 5 years in 2007 (8.6%) as well as a decline of 11% in enforcement jobs during the period 2005–2009 (Anderson 2008, p. 4). Perhaps most important is the fact that, according to “Joel Seligman, president of the University of Rochester and the author of a book on the history of the SEC”, the SEC Chairman “[...] worked very hard to build consensus [...]” (quoted in Anderson 2008, p. 4). This inclination hampered the ability of the enforcement staff to bring tough cases. “Previously, for example, staff lawyers negotiated settlements and then brought them to the commissioners for approval. Now, under a pilot program, the commission requires a majority of the commissioners to approve a range for settlements” (Anderson 2008, p. 4).

Consequently, SEC’s interventions during the financial crisis “were symbolic rather than substantive [...] [It] was acting more to show that it was indeed acting and providing value, however questionable, than for any holistic or integrity-driven regulatory purpose” (Davidoff and Zaring 2009, p. 501). The policy underreaction refers to the SEC initiating a ban against short sellers, issuing a clarification about “fair value” accounting and engaging in long-term investigations of credit-rating-agency evaluations rather than in immediate actions (Davidoff and Zaring 2009, p. 501). These policies did not much change the agency’s appearance of sitting idly by while the crisis unfolded, falling behind the firms it regulated. A clear example was the SEC decision to abstain from action when Merrill Lynch concluded a quick merger with Bank of America in the wake of Lehman’s failure (Davidoff and Zaring 2009, p. 503). Consequently, the agency lost “its authority to oversee the investment banks after the failures of Bear Stearns and Lehman” (Davidoff and Zaring 2009, p. 503).

No action

No action emerges when policymakers underestimate increased risk and are predominantly influenced by external constraints. An example is the Swedish government’s underestimation of the risk faced by Swedes who were caught up in the 2004 Asian tsunami and remained stranded in Thailand and elsewhere and especially the risk faced by those in need of medical treatment. The initial refusal to evacuate its citizens—although it could follow the proportionate response of the Italian government, which ordered all Italian flights bound for Thailand to bring Italians home—was justified by government ministers on grounds that the government believed that “measures taken to manage the crisis within the normal procedures [...] would suffice” (Swedish Tsunami Commission 2005, p. 511). The government furthermore claimed that the responsibility of Scandinavian governments for the protection of their citizens was tied to the national territory and, thereby, that travel agencies should have undertaken this task (Brändström et al. 2008).

The tsunami struck in the early morning of December 26, 2004, following an earthquake in the Bay of Bengal. At the time of the event, approximately 30,000 Swedes and thousands of other Scandinavians were on holiday in Thailand. With over 500 Swedes dead and thousands more injured, the inaction of the Swedish government stood in contrast to the activities of travel agencies and insurance companies. Whereas “travel agencies and insurance companies began their work on the basis of their obligations under law and their

contracts in relation to clients and insurance holders” (Swedish Tsunami Commission 2005, p. 509), the Swedish government did not react to the crisis during the first 24 h, and even thereafter, it took several days for the government to begin rescue attempts (Brändström et al. 2008).

“Warning of the earthquake [...] reached the Ministry for Foreign Affairs through the consular officer on duty and very soon both press officers and Duty officers were involved in the matter” (Swedish Tsunami Commission 2005, p. 512). However,

In the initial phase, no decisions were taken by the Government in matters of importance for crisis management nor was the Government convened. Instead, it was believed that measures taken to manage the crisis within the normal procedures for the Government Offices and the Ministry for Foreign Affairs would suffice [...] (Swedish Tsunami Commission 2005, p. 511).

The underestimation of the increased risk faced by the Swedish citizens stranded in Thailand and elsewhere and especially by those in need of medical treatment, was accompanied by a view rooted in the political environment of Scandinavian countries that the responsibility of the government for the protection of its citizens is tied to the national territory. “Initially, the [Scandinavian] governments did not consider themselves primarily responsible for their citizens abroad in the case of such a disaster overseas” (Brändström et al. 2008, p. 129). Not surprisingly, “[...] *the Government Offices did not have an efficient organization for handling serious crises*” (Swedish Tsunami Commission 2005, p. 518; *italics in original*). Based on this view, the Cabinet announced at a press conference that “travel agencies were primarily responsible for repatriating the Swedes that had flown to Thailand” (quoted in Daléus and Hansén 2011, p. 31). Consequently, while the first planes from Swedish travel companies started to evacuate Swedish tourists soon after the tsunami, the first three planes that the Swedish government had organized, including an ambulance plane, arrived only on December 30. In addition, the Swedish ministries “blamed the travel agencies who had said they would manage to evacuate the victims themselves and did not need governmental aid” (Brändström et al. 2008, p. 130).⁷

The main finding from the plausibility probes is that contextual variables as well as factors related to the estimation of risks play a key role in explaining different modes of policy underreaction. In the preparations to the 2010 Turkish Mavi Marmara incident as well as hours before the 1973 Yom Kippur War, there was an accurate estimation of the increased risk, but different modes of policy response emerged. In the former case, intra-organizational constraints (i.e., disorganized decision-making processes in government as well as an organizational culture that accorded great weight to military as opposed to other considerations) may have had a different impact on policymakers in comparison with external constraints in the latter case (i.e., the fear of the US response to a preemptive attack by Israeli forces). In contrast, policymakers underestimated increased risk in the case of the Swedish government’s initial refusal to evacuate its citizens who were caught up in the 2004 Asian tsunami and were in need of medical treatment, and in the response of the US Securities and Exchange Commission during the 2008 financial crisis. However, different modes of policy response emerged. External constraints in the former case (i.e., the Scandinavian governments’ responsibility for the protection of their citizens was tied to the national territory and the assumption that travel agencies should have undertaken this task) may have had a different impact on policymakers compared to internal constraints in

⁷ For the political ramifications of the Swedish government’s inaction, see: Brändström et al. (2008), Strömbäck and Nord (2006), Boin et al. (2010, p. 710), Nuder (2008, p. 272) and Daléus and Hansén (2011).

the latter case (i.e., internal procedures that hampered the ability of enforcement staff to handle tough cases, as well as the sense of organizational decay and low morale within the agency).

Conclusions and next steps

The analytical framework advanced here adopts Baumgartner et al.'s (2009, p. 616) plea to start looking for variation within the specific workings of institutional friction in each setting under investigation. It does so by introducing a variation between two types of contextual sources of policy persistence as explanatory variables of policy underreaction, alongside the integration of cognitive, emotional and social psychological variables in the explanation of policy underreaction. Drawing on two key elements of decision making in situations of risk unfolding over time—namely (1) intra- and extra-organizational sources of policy persistence and (2) policymakers' underestimation and accurate estimation of increased risks—the article identifies four ideal types of this phenomenon. The analytical framework advanced here has no difficulty accounting for policy underreaction in the fragmented policy processes in the USA, centralized policy processes in Russia, and policy processes undertaken in decentralized and centralized bureaucracies.

How can policy underreaction be mitigated or avoided? The conceptual framework developed here has significant potential value for practitioners. Decision makers should recognize that when risk is detected, the decision-making process is more complex than simple metaphors, such as “connecting the dots,” signal/noise ratio, separating the wheat from the chaff, or putting a jigsaw puzzle together (Marrin 2011, p. 22). These metaphors provide no mechanism for distinguishing the relevant obstacles which may lead to policy underreaction. One of the main skills required of a good decision maker is the ability to think, as well as to think about his/her process of thinking, that is, to develop deep knowledge (Weible et al. 2012). Without a conceptual map of the obstacles one may encounter in creating order out of chaos, and the potential ramifications of these obstacles in terms of policy choices, it will be difficult to make sense out of the information provided by, for example, competing sources.

The practical question that arises from this research is how to create a situation in which an accurate assessment of the threat bypasses endogenous and exogenous constraints. People's tendency to misperceive risks must first be counteracted by corrective mechanisms, such as cost-benefit analysis (Sunstein 2013). Thereafter, the most efficient way of assimilation is to turn the knowledge of the threat into an asset for the decision makers, as no organizational actor will be inclined to “give something” if they do not stand to “gain something” in return. The object is to move from a situation in which the evaluators process the information, assess the risk and then present it to the decision makers as a “closed caption,” to a situation in which the evaluators create a process which incorporates the decision maker in the development of the knowledge, allowing him/her to annex the resulting asset to him/herself. The goal of this investment in the (intelligence) network (Weible et al. 2012) is to create deep connections between the intelligence and evaluation teams and the decision makers.

The typology advanced here points to further research which I briefly discuss here. Conceptually, one may increase the usefulness of the analytical discussion of policy underreaction by elaborating on policymakers' estimation of the internal and external sources of policy persistence. It is reasonable to suggest that policymakers may accurately estimate these constraints, underestimate them or overestimate them. This implies that there may be

more categories of policy underreaction. Empirically, future research may systematically examine the extent to which cost-benefit analyses, subjective evaluations and comparison of countries' policies with recommendations for standards by expert committees are able to capture the extent of policy underreaction. It may also examine the ways cognitive, emotional, organizational and institutional factors interact to explain policy underreaction; the role of the media in the emergence of policy underreaction; and whether policy underreactions may be policy successes. Relatedly, one may rely on impression formation theories from social psychology in order to examine how members of the public make judgments about policymakers' underreactions. Finally, an important research agenda would be the examination of learning from policy underreaction by focusing on the quality of policy feedback (i.e., information precision and timeliness), and the consequences of policy underreaction in terms of the penalty imposed on policymakers by the general public. The extent to which the public is tolerant of policy underreaction when information is precise and timely may provide an indication of policymakers' inclination to avoid underreaction in future cases.

Acknowledgments Earlier versions of this article were presented at the 2013 Annual Conference of the Israeli Political Science Association, Jerusalem; the Political Science Departmental seminar, Hebrew University, Jerusalem; the 2013 International Conference on Public Policy, Grenoble, France; the 2013 Comparative Agendas Project Meeting, Antwerp, Belgium; and the CARR/LSE public policy group seminar, May 2014. I would like to thank Raanan Sulitzeanu-Kenan, Allan McConnell and numerous seminar audiences for very insightful comments. I also thank Eitan Shamir, Yossi Kuperwasser, Ran Segev, Issac Devash and Ron Tira for helpful discussions. I would also like to thank the *Policy Sciences* editors, and two anonymous reviewers, whose comments and suggestions helped me improve this article. The usual caveat applies.

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