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Framing Cooperation: Gains, Losses, and Public Support for International Compromise

Giorgio Malet¹ and Stefanie Walter²

How can political elites build public support for international cooperation when it requires costly compromise? This article compares two strategies: emphasizing the gains from cooperation or warning about the losses from noncooperation. Evidence from 25 Swiss referendum campaigns between 1986 and 2020 shows that gain-framed arguments generally receive more support, particularly among voters already predisposed toward cooperation. Five preregistered survey experiments conducted during ongoing international negotiations in four countries, however, reveal substantial variation. Loss frames increase willingness to compromise in the two security-related experiments but prove ineffective or counterproductive elsewhere. Gain frames produce limited average effects but more consistently reinforce support among pro-cooperation voters. These findings challenge the idea that losses invariably loom larger than gains. The persuasiveness of gain and loss frames depends on both the issue at stake and the audience receiving the message.

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Introduction

Public pushback against international cooperation has grown in recent years. Widespread public opposition has derailed several international agreements, from the Transatlantic Trade and Investment Partnership (TTIP) to the Anti-Counterfeiting Trade Agreement (ACTA). Referendums challenging international agreements and even membership in major international organizations have passed, and issues related to global governance are increasingly contested in public debates. A growing literature studies this backlash against international cooperation (Copelovitch and Pevehouse 2019; Mansfield and Pevehouse 2022; Walter 2021). Many studies highlight the role of nationalist and isolationist political actors, such as populist right parties and politicians, who oppose international cooperation and international institutions (Vasilopoulou 2018; Milner 2021; Colantone and Stanig 2019; De Vries, Hobolt, and Walter 2021). How such elites frame international cooperation in public debates has a considerable impact on public opinion. Several studies show that negative messaging (Dür and Schlipphak 2021; Nguyen and Spilker 2022; Dellmuth and Tallberg 2021; Maier et al. 2012; Avdagic and Sedelmeier 2024) and negative media coverage (Vliegthart et al. 2008; Brutger and Strezhnev 2017) of international cooperation can mobilize opposition against international institutions.

We know less about how political elites who favor international cooperation can build and sustain public support. Because international cooperation often requires costly compromise, it is important to better understand how political elites can effectively justify these costs to domestic audiences. A few studies demonstrate that politicians can mobilize popular support for international cooperation, even when this is costly or unpopular (Dellmuth and Tallberg 2023; Stoeckel and Kuhn 2018; Tobin, Schneider, and Leblang 2022). These studies typically focus on the selective presentation of arguments in favor of such cooperation, emphasizing the importance of communication.

We contribute to this research by studying *how* a given piece of information is best presented to the public (Cacciatore et al. 2016), rather than *what* is being communicated. There is considerable variation in how proponents of international cooperation try to convince voters to cooperate internationally. Some emphasize the benefits of the cooperative arrangement in question. For example, endorsing a free trade agreement between the European Union (EU) and MERCOSUR, 26 European business associations jointly argued that this agreement “will deliver increased market access and improved access to resources, while preserving key sectors in European

domestic markets, diversifying secure supply chains, and fostering investments for both sides. It will also help us deepen our cooperation on sustainable development, in areas such as fighting climate change, preserving biodiversity, and advancing labour and social rights.”¹ Others emphasize the costs of not entering into new agreements or of leaving existing formats of international cooperation. The most famous example of such a strategy comes from the Brexit referendum campaign, where the Remain-side warned that leaving the EU would not only create economic uncertainty, job losses, a downturn in growth, investment, and trade, but also diminish British influence in the world. Derided as “*Project Fear*” by Brexit-supporters, the campaign focused primarily on the benefits of EU membership that would be lost if Britain were to leave the European Union.

In light of this variation in communication strategies, we examine how effective these different communication strategies are in swaying public opinion in favor of or against international cooperation, especially when such cooperation requires costly compromise. We argue that elites favoring cooperation can frame substantively similar information about the net benefits of international cooperation either as something to be gained from international cooperation (gain frames) or something to be lost by not cooperating (loss frames). Existing theories offer contrasting expectations about which framing strategy is more effective. Prospect theory predicts that loss frames should exert a stronger influence because losses loom larger than equivalent gains (Tversky and Kahneman 1981). By contrast, research on “valence framing” suggests that emphasizing positive attributes can produce more favorable evaluations by activating positive associations and reducing reactance (Irwin P. Levin et al. 1998; Janiszewski et al. 2003; Erisen et al. 2014).

To examine the persuasiveness of these two framing strategies, we use both observational and experimental data. We start with an observational analysis about what types of frames proponents (and opponents) of international cooperation tend to use in actual policy debates, and which framing strategies are most effective in swaying public opinion on international cooperation. For this purpose, we exploit the fact that in Switzerland twenty-five popular votes were held on international cooperation issues over the period from 1986 to 2020. Each of these popular votes – on issues from membership in the United Nations to noncompliance with Swiss treaties with the EU – was preceded by a referendum campaign, in which some political elites argued in favor

¹<https://www.eurochambres.eu/wp-content/uploads/2025/10/13.10.2025-Mercosur-Joint-Business-Declaration.pdf>

and others against a given proposal. Post-referendum surveys regularly ask Swiss voters to evaluate the most prominent arguments made in each campaign, and this allows us to gauge the persuasiveness of different framing strategies. We classify altogether 167 arguments according to whether they are framed as gains or losses and then evaluate how convincing of arguments is to voters. The analysis shows that positive messages about what is to be gained from a respective proposal find significantly more agreement than negative ones about what might be lost. This effect is especially pronounced among voters generally inclined towards international cooperation.

Next, we assess both the external and internal validity of this finding by investigating the causal effect of framing on public attitudes with five preregistered survey experiments in multiple contexts following a “coordinated, sequential approach” (Blair and McClendon 2021). The experiments were fielded in a diverse set of countries and conducted against the backdrop of ongoing international negotiations that involved difficult compromises. In each experiment, respondents were asked to evaluate the compromises necessary for concrete forms of international cooperation salient in their respective context. Three survey experiments, conducted in Switzerland and Hungary, examine support for compromises in negotiations with the EU. In the Swiss case, the experiments focus on research and energy cooperation in the context of a new Switzerland–EU Institutional Framework Agreement. In Hungary, they examine support for complying with EU demands for domestic institutional reforms – such as strengthening judicial independence – in exchange for the continued disbursement of EU funds. Two additional experiments, conducted in Finland and Sweden, focus on negotiations with Turkey, which delayed the two countries’ NATO accession in an effort to secure stricter policies toward Kurdish organizations operating in the Nordic states.

We find that the effect of framing statements in positive or negative terms varies considerably depending on context. In Sweden and Finland, loss-framed messages are clearly more effective in convincing people to support international cooperation despite its costs. In contrast, in Switzerland loss-framed, “project fear”-style messages tended to backfire. These findings complement our observational evidence by suggesting that there is no “one-size-fits-all” communication recipe that will induce the public to support international cooperation across the board. Rather, political elites will have to pay much attention to the exact issues at stake. Overall, this paper demonstrates that the rhetoric employed by political elites when discussing matters of international cooperation matters for public opinion. “Project fear”-style arguments only work under very specific circumstances. The results therefore show that the effectiveness of different

communications strategies is highly context-dependent, opening up exciting avenues for future research.

To explore this heterogeneity, we examine several potential explanations. The clearest pattern concerns the issue area. Loss frames increased support for compromise in both NATO experiments, and the Swiss referendum analysis similarly shows that the usual advantage of gain frames is reversed for defense and security arguments. This suggests that loss framing may be especially persuasive when noncooperation entails a salient and immediate threat. Other exploratory analyses point to the possible roles of prior politicization, perceived personal stakes, risk aversion, and personality, although none consistently explains the variation across all five experiments. These findings identify important avenues for future research into how the political context, the nature of the threatened loss, and the characteristics of the audience jointly condition framing effects.

The paper makes three contributions. First, it shifts attention from whether elites communicate the benefits of international cooperation to how they present substantively similar information. Second, by combining naturally occurring campaign arguments with five preregistered experiments conducted during ongoing international negotiations, it evaluates framing effects across research designs, countries, and issue areas. Third, the results qualify both general claims about the persuasive advantage of loss framing and simple recommendations to avoid negative messages. Neither gain nor loss frames are universally superior: their effectiveness depends on the issue at stake and the context in which citizens encounter them. More broadly, the findings show that building public support for international compromise requires political elites to consider not only the substance of their arguments, but also how those arguments interact with the threats, prior debates, and predispositions that structure public opinion.

How messaging affects public support for international cooperation

Public opinion matters for state behavior in international politics (Putnam 1988), and its influence has grown as international cooperation has become more politicized in recent years (Hutter et al. 2016; Zürn 2014; Zürn et al. 2012; De Vries et al. 2021). Citizens have repeatedly derailed efforts at establishing, maintaining, or deepening international cooperation, either at the polls or through demonstrations and other types of political action. But because international affairs are often

complex and multidimensional, public opinion about international cooperation tends to be ambivalent (De Vries and Steenbergen 2013; Walter 2021). International agreements, for example, tend to involve both benefits – such as welfare gains from international cooperation, access to shared information, networks, joint projects and initiatives, as well as more concrete advantages such as money from international programs – and costs, such as financial commitments, potentially costly compliance with mutually agreed-upon rules, and limitations of national sovereignty (Thompson et al. 2019). Often, the benefits outweigh the costs; otherwise, sovereign governments would not participate (Keohane 2005; Abbott and Snidal 1998). But the assessment about the balance between costs and benefits is increasingly subject to heated debates among political elites and citizens.

When voters weigh the costs and benefits of proposals aimed at either increasing or reducing international cooperation, they confront a choice between the specific proposal and the “reversion point” – the expected outcome if the proposal is rejected. The reversion point could be the status quo, but it could also be an outcome that is different from the status quo (Frieden and Walter 2019), for example because unresolved problems continue to grow or because other states respond in an adverse manner. Many studies show that voters care about the reversion point when voting on proposals related to international cooperation and evaluate a proposal to increase or reduce cooperation by comparing the anticipated utility of the proposal with the reversion point in case the proposal is rejected (Hobolt 2009; Walter et al. 2018; De Vries 2018).

For political elites, the challenge lies in providing voters with access to information about the consequences of both the proposal and the reversion point. Given that voters’ information levels on such issues tend to be limited and that perceptions on these consequences can vary significantly (Owen and Walter 2017), they are usually receptive to cue-giving by elites and the media. Existing work shows that message framing can influence public attitudes on foreign policy issues as diverse as trade (Herrmann et al. 2001; Naoi and Kume 2015; Guisinger 2017), security (Levendusky and Horowitz 2012; Tomz and Weeks 2013; Kreps 2014; Kertzer and Zeitzoff 2017), and transnational issues such as climate change and international organizations (Bechtel and Scheve 2013; Tingley and Tomz 2014; Bush and Prather 2020). Framing the consequences of international cooperation as positive and beneficial can increase people’s willingness to compromise and support international cooperation. In contrast, if the consequences of international cooperation are framed as negative or costly, it can decrease people’s willingness to compromise and support international cooperation. For example, with regard to framing and the

EU, “[t]he basic finding of two decades of research is that political communications that frame European integration in terms of its benefits increase public support for European integration, while messages that frame it in terms of costs, risks or cultural threats lower support for European integration” (Abbarno and Zapryanova 2013, 583; De Vreese 2004; Schuck and De Vreese 2006; Medrano 2003). Likewise, studying the effect of elite cues on trade policy preferences, both Dür and Schlipphak (2021) and Nguyen and Spilker (2022) find that arguments emphasizing the costs associated with the Transatlantic Trade and Investment Partnership (TTIP), a major trade agreement under discussion at the time, seem more persuasive to respondents than arguments promoting gains from TTIP. In sum, there is considerable evidence that framing matters.

Political elites interested in communicating the benefits of an international cooperation policy or arrangement are not fully free in how to frame their messages, of course, but are constrained by wanting to convey one main message: that the cooperative policy or institution is overall beneficial. But they have considerable freedom in how they formulate these messages, as the examples cited in the introduction show. We focus on one characteristic of political statements about international cooperation, which pro-cooperation elites can readily adjust: whether they frame the benefits of international cooperation as something to be *gained* by cooperating or something to be *lost* by not cooperating. By clarifying the consequences of both the approval and the rejection of a proposal to cooperate, political elites can use these strategies to increase the expected utility from cooperation which voters may expect. The intended effect of a pro-cooperation argument is to convince voters that the utility that they derive from an international agreement is higher than the utility they can derive from a rejection of that agreement (see Figure 1, Panel A). We argue that in addition to the content of arguments about the costs and benefits of a proposal, the frame with which elites speak about these consequences affects voter opinions towards greater cooperation.

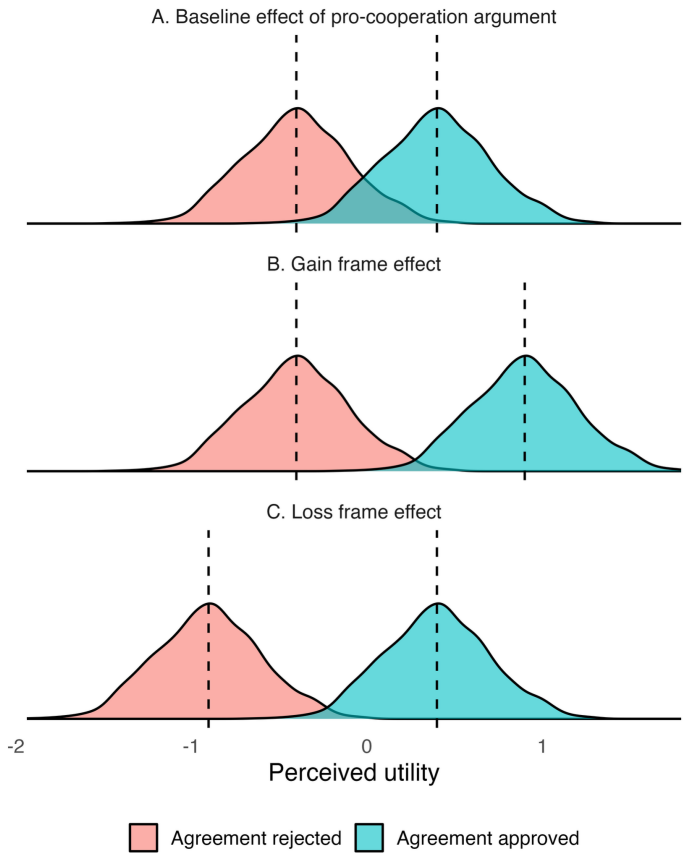
Framing strategies: Emphasizing benefits or opportunity costs?

Given a certain message conveying one concrete benefit of cooperation, political elites can decide whether they want to highlight the potential gain of the proposed international agreement, or whether they prefer to instead highlight the opportunity cost associated with not cooperating. For example, proponents of a trade agreement can emphasize the benefits to exporters from the agreement, or they can highlight how the same exporters would lose out if the agreement were

not concluded. In the Brexit campaign, the latter strategy gained notoriety as the “Project Fear” campaign, because its messaging focused on all the benefits of EU membership that British voters stood to lose if the UK opted to leave the EU.

We argue that framing a pro-cooperation message either as a gain or as a potential loss can induce a change in people’s perceived utility when it increases their assessment of the relative difference between the costs of not cooperating and the benefits of cooperating. Panels B and C in Figure 1 show this effect graphically. If gain-framed messages invoke stronger positive assessments about the public’s utility of cooperation, we would expect the perceived utility that people derive from an agreement to increase compared to panel A (the distribution on the right moves further right). If loss-framed messages exert a stronger influence, we would expect the perceived utility people derive from the rejection of an agreement to diminish (the distribution on the left moves further left).

Figure 1 – How gain and loss frames affect voters’ perceived utility of cooperation



Which of these strategies is likely to be more effective in swaying voters to support cooperation? According to prospect theory, human decision-making is contingent on the characterization of choice scenarios: People behave differently depending on whether outcomes are presented as potential gains or potential losses. They are more sensitive to prospective losses than to prospective gains (Tversky and Kahneman 1981), so that negative outcomes hold a higher psychological weight than positive ones (Druckman and McDermott 2008). As a result, negative stimuli tend to be more reliably detected (Dijksterhuis and Aarts 2003), trigger more elaborate attributions (Bohner et al. 1988), and generally demand more attention, leading to more elaborate processing (Baumeister et al. 2001). Negative frames also stimulate greater attention or activation, enable easier retrieval of relevant knowledge or generation of evidence (Hilbig 2012). Moreover, positively framing statements can lead recipients to feel that the source is trying to persuade them, which triggers reactance, reducing the perceived truth of the message and the trustworthiness of the source (Koch and Peter 2017; Hilbig 2009). This line of research thus suggests that *emphasizing the losses associated with the (opportunity) costs of not cooperating should increase people's willingness to support international cooperation more than emphasizing the gains from cooperating.*

A second set of studies, in contrast, suggests that positive frames focused on potential gains are likely to be more effective than negative frames that highlight actual or opportunity costs. This alternative “associative model” (Levin 1987; Irwin P Levin et al. 1998) argues that information is processed differently depending on whether the message is positively or negatively framed (Levin and Gaeth 1988; Irwin P Levin et al. 1998). This selective processing, in which information is processed and sorted in line with pre-existing attitudes or beliefs (so-called “biased encoding”) activates “valenced knowledge” – which can be positive or negative – that is then applied in subsequent evaluations (Cacciatore et al. 2016; Price et al. 1997; Price and Tewksbury 1997). This can lead to a biased interpretation of the information, as it activates and reinforces preconceived notions. As a result, positive frames evoke more favorable associations with the message or the object presented, leading to a more positive overall evaluation than negative frames. For example, telling people that 10 percent of customers are dissatisfied with public services makes them evaluate these public services much more negatively than when telling them that 90 percent are satisfied (Olsen 2015). Moreover, O’Keefe and Jensen (2008) show that gain frames also increase engagement with and comprehension of a message compared to loss frames. On the question of whether positive or negative messages are more effective in inducing support for international cooperation, this strand of research implies that *emphasizing the gains associated with cooperating should*

increase people's willingness to support international cooperation more than emphasizing the costs from not cooperating.

The remainder of this paper empirically evaluates these hypotheses across a wide range of contexts and international issues. A first set of analyses explores the effectiveness of different types of messages across a large spectrum of arguments made in 25 Swiss referendum campaigns on issues related to foreign policy and international politics. This setting allows us to explore the effectiveness of different communication strategies employed by pro-cooperation elites in real-life contexts where these messages are competing with messages opposing cooperation at the same time. A second set of analyses uses five preregistered survey experiments to hone in on the causal mechanisms and scope conditions. These experiments focus on pro-cooperation messages only and probe framing effects in very politicized and contested real-life settings in four different countries. These analyses thus explore how pro-cooperation elites can effectively communicate in such difficult settings.

Observational evidence from Swiss foreign policy referendum campaigns

To examine whether and how different communication strategies can sway public opinion in favor or against international cooperation, we begin with an observational analysis of real-life communication strategies on issues related to international politics. For this purpose, we focus on a context where voters regularly take actual foreign policy decisions, and these issues are therefore widely debated: Swiss referendum campaigns. Switzerland is a direct democracy, which means that many policy decisions are subject to a referendum vote. For example, international treaties are routinely ratified not just by parliamentary approval, but also by a popular vote. As a result, the Swiss have voted on foreign policy proposals ranging from entry into international organizations such as the UN or the Bretton Woods institutions, over EU-related issues to preferential trade agreements. They have also voted on proposals to not comply with international agreements or to terminate Swiss membership in international institutions.

Each of these popular votes is preceded by a referendum campaign, in which both sides try to persuade voters to vote for or against a given proposal. The arguments put forth in these campaigns about foreign policy-related issues vary considerably. Some involve rather abstract statements, whereas others invoke the concrete consequences of a proposal. Some are framed positively in terms of gains, others emphasize the losses looming if a certain proposal is accepted

or rejected. This provides us with a context that allows us to explore both what kinds of arguments dominate in public discourses about international cooperation and how people respond to different communication strategies.

Research Design

We leverage the fact that each referendum vote is followed by a high-quality post-referendum survey funded by the Swiss federal government (so-called VOX and VOTO-surveys), in which respondents are asked to what extent they agree or disagree with the most prominent arguments made in the respective referendum campaign.² We restrict our analysis to referendums or popular initiatives that relate to international cooperation, such as accession to, extension of, (non-)compliance with, retrenchment of, or termination of international treaties or international institutions. This leaves us with 25 referendum campaigns over the period of about 35 years (1986 to 2020). For each referendum campaign about 1500 respondents were surveyed about their actual voting decision and their evaluation of each of these statements. We use this data to assess how convincing different types of communication strategies employed by both the proponents and opponents of international cooperation are to voters.

For most campaigns, the surveys ask respondents to evaluate at least three of the most prominent arguments made by proponents and opponents each (amounting to 222 statements overall). For some prominent referendum campaigns (such as the vote on membership in the UN in 1986 or the European Economic Area in 1992), up to sixteen statements were included in the post-referendum survey. Since these statements were formulated so as to capture the essence of each referendum campaign, they provide a useful overview over the types of arguments used in actual campaigns on foreign policy issues.

To code the type of framing of each message, we had three people code each of the statements, and we jointly decided on each coding where at least one coding differed from the other assessments.³ Table 1 shows an example for the March 1986 referendum on UN membership,

² A list of referendums can be found in the online appendix (Section A). All survey data and additional information on each referendum can be found here: <https://swissvotes.ch/page/home>.

³ Coders were given the following definitions of gain- and loss-framed arguments: A gain-framed (loss-framed) argument emphasizes the potential positive outcomes or benefits (negative consequences or drawbacks) associated with a particular referendum decision. It focuses on what the country stands to gain from (lose or the risks involved in) either increasing or reducing its levels of international cooperation. It highlights

which was rejected with 75.7% of votes. It lists three prominent statements made by supporters and opponents of UN accession each, as well as the percentage of respondents agreeing with each statement. Table 1 demonstrates several features of this data that are useful for examining our argument. First, we can see that some statements in the debate are framed in terms of gains, whereas others are framed in terms of losses. Finally, although roughly 24% of Swiss voters ultimately ratified the decree to join the UN, there is considerable variation in how convincing respondents found the various arguments. Some arguments (such as that membership would increase the political influence of the West) were seen as much more convincing than others (e.g., that staying out of the UN would imply the isolation of Switzerland). Interestingly, voters discriminate considerably and are also willing to support arguments of the opposing camp.⁴

Table 1 – Arguments For and Against Joining the United Nations, March 1986

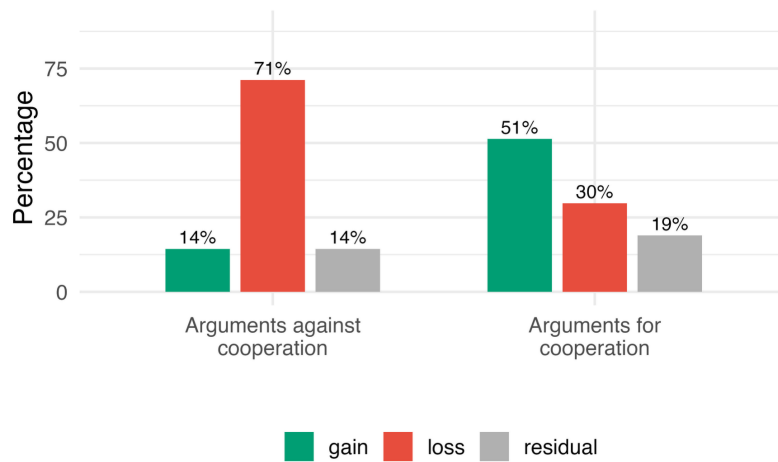
	<i>Argument</i>	<i>Frame</i>	<i>% agree</i>
pro	Joining the UN gives Switzerland an additional opportunity to safeguard its economic interests.	Gain	33
pro	If Switzerland joins the UN, Western democracies gain an additional voice.	Gain	54
pro	In a world that is constantly coming closer, there is no alternative to UN membership without isolating oneself.	Loss	29
against	Switzerland can offer its ‘good offices’ better by remaining independent and outside the UN.	Gain	67
against	Joining the UN only brings us new costs.	Loss	69
against	Joining the UN is incompatible with our neutrality.	Loss	54

Figure 2 provides a more systematic overview of the communication strategies used in the 25 referendum campaigns that we study. Overall, loss frames are used more frequently, but communication strategies vary across camps: loss frames vastly dominate among arguments levied *against* cooperation, whereas gain frames dominate among those *supporting* cooperation. Among pro-cooperation arguments, almost half of gain-framed arguments revolve around the economic consequences of cooperation, while political topics dominate among loss-framed arguments.

advantages, opportunities, or enhancements in terms of economic, political, social, or other relevant factors (potential harm, costs, or threats to the nation’s well-being). A residual category captures arguments that fall in neither of these categories.

⁴ For example, 46% of those voting against UN membership do acknowledge that such membership would give Western democracies an additional voice, and 29% of those supporting UN membership agree that this is in fact an expensive undertaking.

Figure 2 – Framing in Swiss referendums’ arguments about international cooperation



We use these data to examine the effectiveness of different communication strategies by exploiting variation in how the same respondent evaluates different campaign arguments. To do so, we reshape the data into a stacked respondent–argument dataset in which each respondent contributes one observation for every argument included in the survey. The unit of analysis is therefore the respondent–argument pair, and the dependent variable is the respondent’s level of agreement with each argument. Our main independent variable indicates whether the argument is framed in terms of gains or losses. We control for respondent characteristics (age, gender, education, party identification, and canton of residence) as well as argument-level characteristics, including issue area (economic, political, or cultural), concreteness, and focus (domestic versus international). All models include referendum fixed effects to account for unobserved differences across referendum campaigns, such as the political context and baseline levels of support. Because each respondent evaluates multiple arguments, observations are not independent; we therefore cluster standard errors at the respondent level to account for within-respondent correlation.

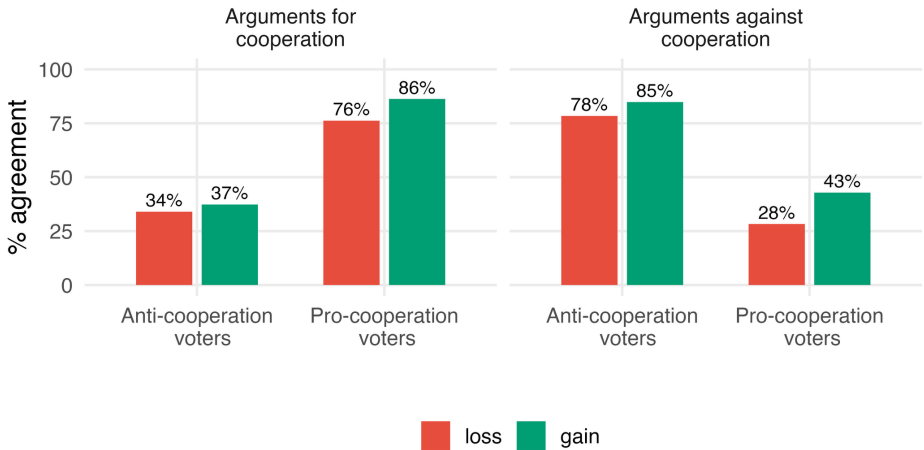
Findings: Gain frames find more agreement than loss frames

Figure 3 reports the mean agreement with each argument type (pro- vs anti-cooperation), by framing (gain vs loss) and voters’ predispositions (pro- vs anti-cooperation). Overall, gain-framed arguments receive higher support than loss-framed arguments. The advantage of gain framing is particularly pronounced among pro-cooperation voters: their agreement with pro-cooperation arguments is 10 percentage points higher when the arguments are framed as gains rather than losses. Among anti-cooperation voters – who, on average, agree with about one third of pro-

cooperation arguments – framing appears to matter little, with a difference of just 3 percentage points between gain and loss frames. Anti-cooperation arguments also benefit from gain framing. Notably, even pro-cooperation voters express substantial agreement with gain-framed anti-cooperation arguments (43%), suggesting that supporters of cooperation nonetheless find some non-cooperation arguments compelling when these are presented in terms of potential gains. The regression models in Table 2 corroborate the descriptive patterns. Models 1 and 3 indicate that respondents are about 7 percentage points more likely to agree with an argument when it is framed as a gain, regardless of whether the argument supports or opposes cooperation. Models 2 and 4 further show that this framing effect is stronger among pro-cooperation voters.

Overall, this analysis of a large variety of arguments taken from a real-life setting in which voters took actual decisions about whether or not to engage in various forms of international cooperation shows that communication strategies – *how* political elites present their argument – vary considerably and also seem to affect support for international cooperation. It also suggests that speaking about international cooperation in terms of gains, rather than losses or opportunity costs, tends to be more effective in mobilizing support for such cooperation in the Swiss context.

Figure 3 – Mean agreement by argument, frame, and voter



Note: The figure shows the percentage of agreement with an argument.

Table 2 – The effect of framing on the probability of agreeing with an argument

	<i>DV: Agreement with an argument (0/1)</i>			
	Pro-cooperation arguments		Anti-cooperation arguments	
	Model 1	Model 2	Model 3	Model 4
Gain frame	0.07*** (0.01)	0.05*** (0.01)	0.07*** (0.01)	0.02+ (0.01)
Pro-cooperation voter	0.44*** (0.01)	0.42*** (0.01)	−0.46*** (0.01)	−0.47*** (0.01)
Gain frame × Pro-cooperation voter		0.04*** (0.01)		0.06*** (0.01)
Num.Obs.	45841	45841	49325	49325
R ²	0.268	0.268	0.277	0.278
Individual-level controls	✓	✓	✓	✓
Argument-level controls	✓	✓	✓	✓

Note: + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors clustered at the respondent level.

Coordinated, sequential survey experiments during real negotiations

The observational analysis of Swiss referendums has shown that real arguments used during real campaigns vary substantially in both their concreteness and framing, and that these differences are associated with different levels of agreement by Swiss voters. To test whether these different communication strategies influence public attitudes beyond Switzerland, we fielded a coordinated set of sequential experiments in four countries. Persuading the public about the merits of international cooperation is most important in contexts in which international cooperation is heavily contested. In these contexts, it is particularly difficult for pro-cooperation elites to convince voters to cooperate with other countries. Not only do they need to communicate the net benefits of cooperation more convincingly in a setting where cooperation often also comes at considerable costs, they also interact with a public that often has already formed opinions on the issue at hand. Whereas most existing public opinion studies in international politics tend to focus on low-salience issues or ask respondents to respond to artificially created situations, our experiments revolve around highly debated international cooperation issues, in which cooperation is costly because other actors are making tough demands that require considerable *compromise*. Although these are settings in which it is least likely that voters can be swayed by communication

strategies, these are also the situations where the stakes are highest for supporters and opponents of international cooperation alike.

Moreover, in methodological terms, finding any effects of framing strategies in such contexts provides strong evidence that communication strategies can be important drivers of public opinion in international politics. Recent work suggests that situational hypotheticality does not substantively change experimental results, that a higher level of contextual detail may produce more conservative treatment effects, and that the salience of actors moderates these effects (Brutger et al. 2022). At the same time, it is well established that framing effects tend to be limited in the context of salient and contested policy issues (Bechtel et al. 2015; Guisinger and Saunders 2017). Although this means that we are likely to find smaller treatment effects, given our interest in providing practical advice to campaigners in real-life, contested contexts, we nonetheless decided to field survey experiments during actual international negotiations.

Research design

To evaluate how different ways of communicating about an international cooperation issue affect individual willingness to compromise in order to reach an international agreement, we fielded five preregistered survey experiments in four countries that were involved in contested international negotiations at the time the survey was fielded.⁵ These negotiations cover a diverse set of issues from national security over economic issues to questions of national sovereignty (see Table 3). The first two experiments explore support for NATO accession in Sweden and Finland, the third experiment gauges Hungarian voters' willingness to comply with EU demands in order to unlock substantial EU funds to Hungary, and the fourth and fifth experiments focus on Switzerland's negotiations with the EU about a closer and more institutionalized bilateral relation. In all five cases, international cooperation promised to unlock considerable benefits for the country in question but also required concessions and compromise.

This setup helps us to increase the external validity of the evidence we generate. Although recent work suggests that many IR survey experiments replicate in different countries (Bassan-Nygate et al. 2024), it is possible that framing effects may vary depending on the context and the issue at hand. Our experiments thus cover different types of international institutions and topics to

⁵ All studies were approved by the Ethics Committee of XXX (nr. 19.10.12 and 22.9.12) and preregistered. Discussion of the preregistration can be found in the Appendix (section D).

address the problem of generalizability of single-issue experiments (Clifford and Rainey 2023). In the Swiss and Hungarian contexts, we focus on advanced forms of close cooperation with a supranational actor, the EU, and test our hypotheses on three substantive cooperation issues: research collaboration and energy market in the Swiss case; international redistributive funding in the Hungarian case. In Sweden and Finland, in contrast we focus on national security and the concessions needed to enter an alliance (NATO) in the face of a deteriorating security context. The Swedish and Finnish decisions thus took place in a context of higher risk compared to the one faced by Hungarian and Swiss voters.

Our survey experiments were designed to explore how different communication strategies affect public opinion on these contested international cooperation issues. To identify framing effects, which occur when individuals who are exposed to different frames arrive at different positions on the issue, we follow Caciatore, Scheufele, and Iyengar (2016) who argue that framing analyses should compare “logically identical ways of making the same statement” (Druckman 2001). Such “equivalency frames” present the same information framed in either a positive or negative light (for example, 90 per cent employment vs. 10 per cent unemployment) but hold everything else constant. Although this is a conservative approach – effect sizes tend to be bigger when more elements of a message are changed (Nabi et al. 2020) – this is best suited to identifying the effect of the *way* in which a message is communicated, while keeping the content constant.

All three sets of experiments were set up in the same general way (the exact wording of all experiments is presented in the Appendix, Section C). First, we asked a pre-treatment question about respondents’ desire for cooperation or willingness to compromise in the context of the respective international issue. The survey experiments then all included one control and two treatment groups. People in the two treatment groups received a detailed description about the benefit of cooperation. The group receiving the “gain treatment” received this information framed in terms of the potential gains at stake. The “loss treatment” group received the exact same information, but formulated as an opportunity cost, highlighting what the country stood to lose by not cooperating. Differences in treatments were thus minimal and concerned only the way information was presented. For example, while respondents in the gain treatment were informed in the Hungary experiment that “Hungary will *continue to* access around 6.3 billion euros in regional funds”, those in the loss treatment learned that “Hungary will *lose* access to around 6.3 billion euros in regional funds.” Finally, all respondents were asked a post-treatment question about their willingness to compromise.

Table 3 – Overview of survey experiments

Country	Issue	Negotiation context	Required compromise	Post-treatment outcome
Switzerland	Research cooperation	European Union (non-member)	Lower regulatory autonomy vis-à-vis the EU	In your opinion, how should Switzerland behave in the negotiations with the EU on a deeper, institutionalized relationship <i>to gain access to Horizon Europe?</i> (1=It should not make any compromises, 7=It should fully comply with the EU's demands)
Switzerland	Energy market	European Union (non-member)	Lower regulatory autonomy vis-à-vis the EU	In your opinion, how should Switzerland behave in the negotiations with the EU on a deeper, institutionalized relationship <i>to enable Switzerland's integration into the EU internal electricity market?</i> (1=It should not make any compromises, 7=It should fully comply with the EU's demands)
Hungary	Financial subsidy	European Union (member)	Domestic reforms to uphold the rule of law	In your opinion, how should Hungary deal with the EU's demands <i>in order to unblock EU funds?</i> (1=It should not make any compromises, 7=It should fully comply with the EU's demands)
Sweden	Security	Negotiations with Turkey about approving Swedish NATO accession	Lower minority protection for Kurds in Sweden	How much do you agree or disagree with the Swedish <i>promise to comply with Turkey's demands in order to join NATO?</i> (0= Fully disagree, 10=Fully agree)
Finland	Security	Negotiations with Turkey about approving Finnish NATO accession	Lower minority protection for Kurds in Finland	How much do you agree or disagree with the Finnish <i>promise to comply with Turkey's demands in order to join NATO?</i> (0= Fully disagree, 10=Fully agree)

Note: In *italics*, we highlight the additional text contained in the post-treatment outcome compared to the survey question asked before treatment. See Section C in the Appendix for the full question wording.

We will present the average treatment effects from each experiment along with the treatment effects obtained from a meta-analytic random-effects model (Borenstein et al. 2021).⁶ All the coefficients presented in the main text are based on fixed effect models that analyze within-respondent variation between the pre-treatment and post-treatment outcome questions and include survey weights (as per preregistration). In the Appendix, all models are replicated by

⁶ Compared to fixed-effect meta-analyses, random effects models make the more plausible assumption that variance across country ATEs is due not only to sampling variability but also to true cross-country variation in treatment effects (Borenstein et al. 2021).

analyzing between-respondent differences in the post-treatment outcome, with and without the inclusion of survey weights.

Case 1: EU negotiations in Switzerland

The first case focuses on Switzerland, a country that is not a member of the European Union but has very close ties with it through a tight web of over 120 bilateral treaties on issues as diverse as market access, research cooperation and free movement of people. In 2014, Switzerland and the EU began to negotiate about a new agreement, which was meant to provide an institutional framework for these bilateral treaties including general rules such as a dynamic adoption of Swiss law in response to changes in relevant EU law and the introduction of a dispute resolution mechanism. Because of concerns that the framework agreement would limit Swiss sovereignty too much, it was contested in Swiss politics from the start of the negotiations. At the same time, the EU has increased pressure on Switzerland by showing itself unwilling to update any existing agreements or conclude new ones until a framework agreement is in place. Because of the static nature of the existing bilateral treaties, this means that their value to Switzerland will erode over time. As a result, Switzerland saw itself confronted with a choice between signing up to more cooperation with the EU or letting cooperation erode. For example, new certification hurdles for the medtech industry have emerged as the EU refused to update a relevant directive, and Swiss researchers lost their association to the EU's large research program Horizon Europe. In the long run, Swiss-EU cooperation could fall far below current levels.

Our survey was conducted a year after the Swiss government unexpectedly withdrew from the Swiss-EU framework agreement negotiations. This occurred amid broader discussions on how to resume talks with the EU regarding the future of Switzerland-EU relations, in a context where the EU's demands and Switzerland's reluctance to meet them remained largely unchanged. The Swiss survey was fielded in May 2022 and was the fifth wave of a multi-year online panel survey that we fielded among the voting-age Swiss population. The survey was implemented as a web survey by the polling company gfs.bern and relies on its internet panel to recruit respondents using quotas for age, gender, and language region. We included a refreshment sample to rebalance the representativeness that panel attrition had reduced. The survey was fielded in May 2022, and included 1800 respondents (1100 of previous panelists, plus 700 new respondents).

We ran two survey experiments on two concrete topics of ongoing discussion between Switzerland and the EU. After asking a pre-treatment question about the extent to which

Switzerland should compromise with the EU in the event of new formal bilateral negotiations, we implemented two experimental manipulations (whose order was randomized). Participants were randomly assigned to one of the following three conditions: In the control group, participants were told that two concrete issues were at stake in the negotiations: Swiss access to the EU's electricity market, and Swiss participation in the EU's research programme Horizon Europe. In very similarly worded ways, the two experimental conditions laid out the potential benefits (in the gain framing treatment) and potential losses (in the loss framing condition) that would arise from accepting or declining close cooperation with the EU with regards to these concrete issues at stake. After each of two experimental manipulations, respondents were then asked again about the extent to which Switzerland should compromise with the EU in order to secure the concrete cooperation benefit at hand.

Case 2: EU negotiations in Hungary

Our second case focuses on the relationship between Hungary and the EU, which started to deteriorate in 2010 when Viktor Orban's conservative Fidesz party won the elections on a deeply nationalist and traditionalist platform and started to move the country in an increasingly authoritarian direction (Ágh 2013). To have a more effective instrument against the Hungarian government (as well as the Polish one), in 2020 the European Council adopted the "conditionality mechanism," which linked the disbursement of funds to the rule of law in the receiving country. In 2022 the relationship between Hungary and the European Union became particularly strained, given the country's opposition to sanctions against Russia, ongoing rule of law concerns, and Brussels' decision to withhold funding equivalent to 8.5 percent of the country's GDP. Negotiations between the two sides became very intense. The discussions had two distinct legal legs — one relating to steps Hungary would have to take to unlock €14.9 billion in grants and soft loans from the Recovery and Resilience Facility (RRF), and the other relating to remedial measures needed to satisfy the "rule of law conditionality mechanism" to unlock €7.5 billion of EU cohesion funds. For Hungary, these negotiations meant that the benefit of international cooperation – in this case substantial sums of money – required considerable concessions on Hungary's side that required re-aligning its policies more closely with the EU's treaties, norms, and values.

We fielded an online survey among 3255 Hungarian citizens between March and May 2023 in partnership with the survey company Bilendi&Respondi. Respondents were first asked to rate

their (pre-treatment) support for complying with the EU's demands in the ongoing negotiations with the Hungarian government over violations of the rule of law. Participants were then randomly assigned to three experimental conditions: a control condition which only informed participants about the stakes of the negotiations (the unblocking of EU funds); a gain-framed message with more concrete information about the amount of funding that Hungary would receive and the benefits this would have for the economy, and a similarly worded loss-framed message where those benefits were framed as potential costs of non-cooperating with the EU. After receiving this information, respondents were asked how Hungary should deal with the EU's demands with the specific goal of unblocking EU funds.

Case 3: NATO negotiations in Finland and Sweden

In our third case, we focus on security and study the negotiations between Finland and Sweden, on one side, and Turkey, on the other, to allow the two Nordic countries to join the North Atlantic Treaty Organization (NATO). After decades of neutrality, Finland and Sweden expressed interest in joining NATO in response to Russia's invasion of Ukraine and the deteriorating security situation in the Baltic Sea. However, they faced a major obstacle because the President of Turkey, Recep Tayyip Erdogan, publicly stated his opposition to the entry of these two countries into the alliance, making his approval conditional on concessions by Sweden and Finland with regard to their treatment of Kurdish citizens. Erdogan opposed the protection and residence rights that Finland and Sweden provide to members of the Kurdistan Workers' Party (PKK), a group that is fighting against Turkey's harsh treatment of its Kurdish citizens and is viewed as a terrorist group by Turkey (as well as the US and EU). Nonetheless, Finland and Sweden have been reluctant to extradite members of the group to Turkey over human rights concerns, taking a moral stance on Turkey's position on Kurdish rights and publicly condemning the repressions of dissidents, intellectuals, journalists, and minority groups. Because NATO accession of new members requires unanimity among current member states, Turkey's opposition meant that Turkey was able to effectively veto the entry of Finland and Sweden. The two countries thus faced a situation in which they needed to make concessions with regard to their human rights policy in order to unlock the security benefits that NATO membership offered.

We partnered with the company Bilendi&Respondi to field a survey in Finland and Sweden, interviewing 3000 citizens in each country in November 2022. Respondents rated their support for their country's NATO accession bid in two outcome variables. The first one concerned

general support for NATO accession and was asked pre-treatment. The second question highlighted the costs associated with the decision to cooperate with NATO. It asked how much respondents agreed with the Swedish/Finnish promise to comply with Turkey's demands in order to join NATO and was solicited after the experimental manipulation.

Results: Experimental evidence

We examine whether information about the consequences of cooperation can increase public support for international agreements that require costly compromises, and whether its effectiveness depends on being framed as a gain from cooperation or a loss from noncooperation. Figure 4 reports the average treatment effects from each experiment and the corresponding random-effects meta-analytic estimates. It presents three comparisons: the loss frame against the control condition, the gain frame against the control condition, and the loss frame against the gain frame.⁷

The meta-analysis reveals no common framing effect across the five experiments: the pooled estimates for all three comparisons are small and statistically insignificant. The study-specific estimates, however, show meaningful variation. Relative to the control condition, loss-framed messages increased willingness to compromise by approximately four percentage points in Sweden and six percentage points in Finland. These are the only two experiments in which loss framing produced a significant positive effect, and both concerned NATO accession in the context of Russia's invasion of Ukraine. In Finland, loss framing was also more effective than gain framing, suggesting that emphasizing the security costs of remaining outside NATO was more persuasive than emphasizing the benefits of membership. Gain-framed messages did not significantly increase support relative to the control condition in any of the five experiments. In the Swiss electricity experiment, however, gain framing performed significantly better than loss framing – or, more precisely, was less counterproductive. In both Swiss experiments, the loss-frame estimates were negative, although they were not individually distinguishable from zero.⁸

⁷ Regression models, along with robustness tests, are presented in the Appendix (Section E, Tables E7-11).

⁸ It should be noted that, across all three alternative specifications to our preregistered main analysis, gain frames have small but statistically significant positive effects relative to the control group in the Hungarian experiment (see Table E9 in the Appendix).

Figure 4 – The effect of gain and loss frames: Average treatment effects

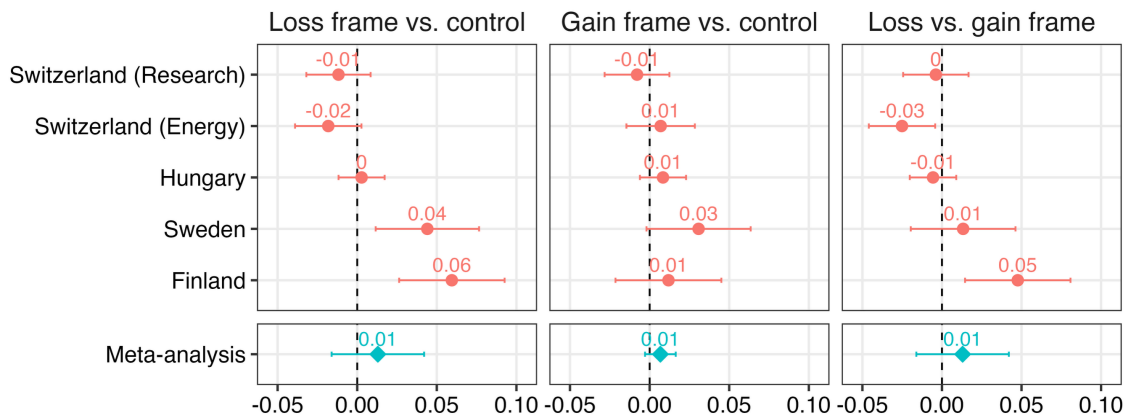
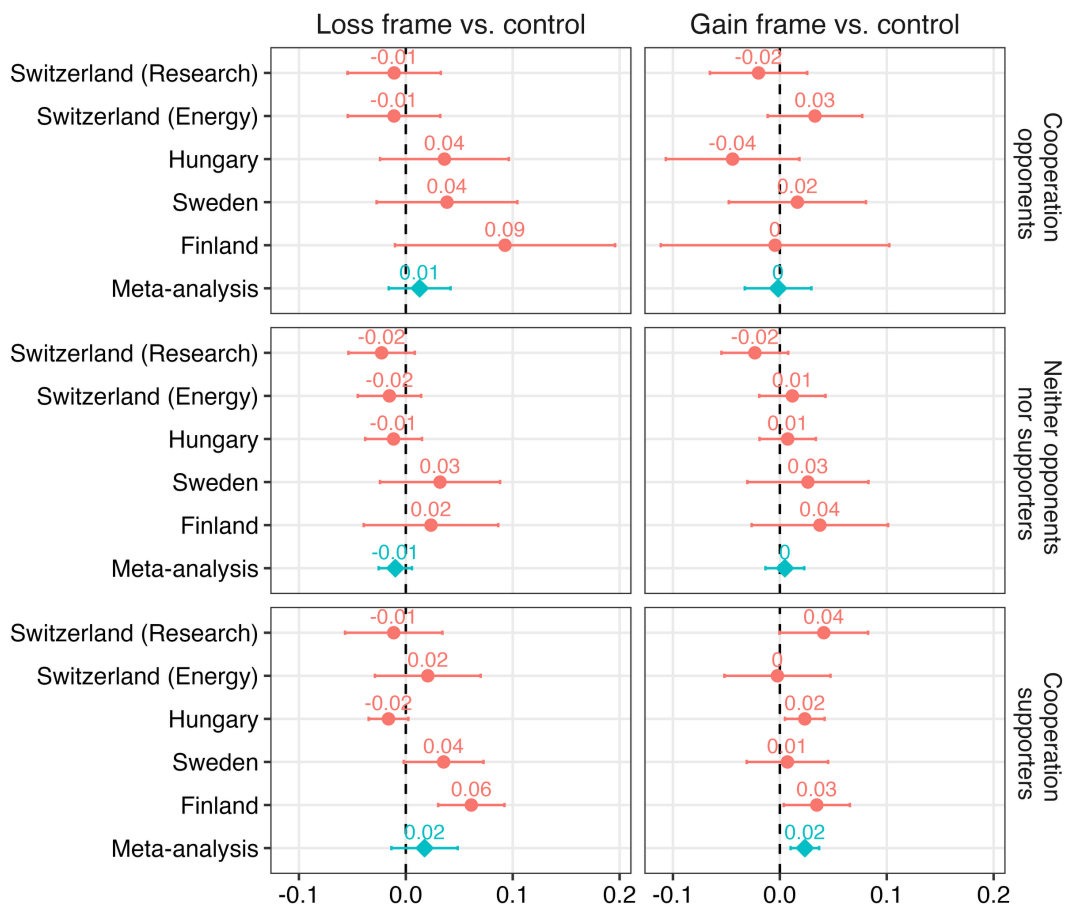


Figure 5 – Heterogeneous framing effects by pre-treatment support



We next examine whether these effects vary with respondents' initial support for cooperation. We divide the pretreatment scale into three fixed, equal-width intervals representing cooperation opponents, respondents with intermediate positions, and cooperation supporters. Figure 5 shows no consistent pattern for loss framing across these groups. Its pooled effect is close to zero among opponents and respondents with intermediate positions, and positive but imprecisely estimated among cooperation supporters. The clearest study-specific result again appears in Finland, where the loss frame increased willingness to compromise by approximately six percentage points among respondents who initially supported cooperation. Loss framing also produced positive estimates among Nordic respondents with lower or intermediate prior support, but these estimates are less precise.

Gain framing exhibits a more consistent relationship with prior attitudes. Among cooperation opponents and respondents with intermediate positions, its pooled effect is approximately zero. Among cooperation supporters, however, the meta-analytic estimate is positive and statistically significant, increasing willingness to compromise by approximately two percentage points. Positive estimates appear in several individual studies, most notably the Swiss research and Hungarian experiments. This pattern is consistent with the observational evidence from the Swiss referendum campaigns, where the advantage of gain-framed arguments was also strongest among voters predisposed toward international cooperation. Gain frames may therefore reinforce existing pro-cooperation orientations more reliably than they convert opponents, whereas the effectiveness of loss frames appears to depend more strongly on the issue and context.

Overall, the results provide little support for a universally superior communication strategy. Loss framing was persuasive in the two security-related experiments, particularly in Finland, but had no comparable effect in Hungary and risked producing a backlash in Switzerland. Gain framing generated few average effects but was more consistently effective among respondents already inclined toward cooperation. These findings suggest that pro-cooperation elites must consider both the issue at stake and the prior orientations of their audience. Loss frames may be effective when noncooperation entails a salient and immediate threat, while gain frames may be better suited to consolidating support among those already receptive to international cooperation.

Exploring variation in framing effects

Why did loss-framed messages increase support for compromise in Finland and Sweden, while producing no comparable effect in Hungary and tending to backfire in Switzerland? Because the five experiments differ simultaneously in country, issue, political debate, and stakes, they cannot identify a single causal explanation. We therefore examine several possible sources of heterogeneity. These analyses are exploratory: they assess the plausibility of different explanations and identify avenues for future research rather than provide definitive tests of moderation.

One possibility concerns prior politicization and the extent to which citizens had formed opinions about the specific compromise at stake. The Swiss and Hungarian negotiations with the EU occurred against the backdrop of longstanding and polarized debates. Respondents were therefore likely to have encountered extensive prior communication about the benefits and costs of cooperation. The disputes over Turkish approval of Finnish and Swedish NATO membership, by contrast, were newer and unusually fluid. Although NATO accession was highly salient, citizens may have been less certain about the specific concessions demanded by Turkey.

The “don’t know” responses support this distinction between attitudes toward cooperation in general and attitudes toward a particular compromise (see Figure F1 in the Appendix). Pretreatment uncertainty was low in every case: 2.8 percent in Switzerland, 4.2 percent in Finland, 4.5 percent in Hungary, and 7.2 percent in Sweden. Nordic respondents therefore appeared to have relatively settled views about NATO accession in general. Yet uncertainty increased sharply when they were asked about the specific concessions required to secure it: post-treatment “don’t know” responses reached 18.5 percent in Finland and 17.3 percent in Sweden, compared with 5.5 percent in Hungary and less than 4 percent in Switzerland. Because the pre- and post-treatment questions differed, this increase should not be interpreted as an effect of the treatments themselves. Rather, it indicates that many Nordic respondents distinguished between supporting NATO membership and accepting the concrete price demanded by Turkey. Loss framing may have been particularly influential because it clarified the consequences of rejecting a compromise about which many respondents remained uncertain.

The Swiss manipulation checks provide complementary evidence about prior information (see Figure F2 in the Appendix). Even in the control condition, 77.8 percent of respondents correctly answered the factual question about research cooperation and 75.3 percent correctly answered the question about electricity cooperation. The treatments increased correct responses only

modestly, to between 77.5 and 85.1 percent. The messages therefore conveyed relatively little new information to an already knowledgeable audience. In such a saturated environment, familiar warnings about the losses from noncooperation may have limited persuasive value and could even provoke reactance.

A second possibility concerns the issue area and the nature of the threatened loss. The only experiments in which loss frames clearly increased support for compromise involved national security. For Finland and Sweden, noncooperation meant remaining outside NATO following Russia's invasion of Ukraine. The potential consequences were immediate, consequential, and easy to imagine. The Hungarian and Swiss negotiations instead concerned economic and institutional benefits whose loss may have appeared more diffuse, delayed, or uncertain.

Additional analyses of the Swiss referendum data offer further evidence that the relative effectiveness of gain and loss frames varies by issue area (see Table B1 in the Appendix). For arguments unrelated to defense and security, gain frames received approximately 10 percentage points more agreement than loss frames. This relationship was reversed for defense and security arguments: gain-framed security arguments received approximately 19 percentage points less agreement than loss-framed security arguments, and the interaction is statistically significant. The general advantage of gain framing in Swiss referendum campaigns therefore does not extend to security issues.

Together, the observational and experimental findings suggest that loss frames may be especially persuasive when noncooperation entails a tangible security threat. Such threats may make potential losses appear more credible, immediate, and difficult to reverse. The evidence cannot establish, however, whether this pattern results from the security domain itself or from the exceptional geopolitical context surrounding the Nordic experiments. Finland and Sweden faced the same NATO accession process following Russia's invasion of Ukraine, while the referendum analysis compares naturally occurring arguments that may differ in other respects. Future research should distinguish the effect of issue area from the severity, probability, and immediacy of the threatened loss.

The treatments may also have resonated differently among respondents who felt more exposed to the stakes. We examined economic dissatisfaction in Hungary, tertiary education in the Swiss research experiment, and low income in the Swiss electricity experiment (see Table F1 in the Appendix). The results reveal no consistent pattern. Education and income did not significantly

moderate the respective treatment effects. In Hungary, gain framing was more effective among economically dissatisfied respondents, although the corresponding interaction with loss framing was not significant. This suggests that citizens dissatisfied with prevailing economic conditions may be particularly receptive to information about the gains from cooperation. Future research could test this possibility using more direct measures of whether respondents expect cooperation or noncooperation to affect them personally.

Risk perceptions offer another possible explanation. In the Swiss research experiment, loss framing reduced willingness to compromise among respondents with low risk aversion but became more persuasive as risk aversion increased (see Table F2 in the Appendix). Warnings about noncooperation may therefore resonate with individuals already motivated to avoid risk while provoking resistance among those more willing to tolerate it. However, risk aversion did not significantly moderate framing effects in the Swiss electricity, Finnish, or Swedish experiments and was not measured in Hungary. What matters may be less a stable disposition toward risk than perceptions of the particular threat described in the message. Future studies should distinguish general risk preferences from assessments of the probability and severity of specific losses.

Finally, exploratory analyses in Switzerland suggest that personality may shape responses to persuasive information (see Table F3 in the Appendix). In the electricity experiment, both treatments had more negative effects among respondents low in conscientiousness, while gain framing became less effective as neuroticism increased in both Swiss experiments. Conscientious respondents may engage more carefully with information about the longer-term consequences of cooperation, whereas highly neurotic respondents may find positively framed promises less credible or insufficiently attentive to possible risks. Because these patterns are confined to two experiments and emerge from multiple exploratory comparisons, they should be treated as hypotheses for future research rather than established scope conditions.

Overall, no single analysis fully explains the heterogeneity across the five experiments. The clearest pattern concerns security: loss framing succeeded in both NATO experiments, while the Swiss referendum analysis similarly shows that the usual advantage of gain frames is reversed for defense and security arguments. Loss frames may be especially persuasive when noncooperation involves a salient and immediate threat and citizens remain uncertain about the acceptability of the required compromise. In longstanding debates with knowledgeable audiences, or where the consequences are more diffuse, similar warnings appear less effective and may even be counterproductive. At

the same time, the exploratory findings concerning personal stakes, risk aversion, and personality indicate that the same message can be interpreted differently across audiences.

Conclusion

International cooperation has become increasingly politicized and contested in recent years (De Vries et al. 2021). How political elites discuss its costs and benefits has therefore become increasingly consequential. During the Brexit referendum campaign, for example, the pro-Brexit camp emphasized the expected gains from leaving the EU, promising that Brexit would free resources for the National Health Service, limit immigration, and create new opportunities for trade, employment, and growth. The anti-Brexit camp instead warned that leaving would entail significant risks, including the loss of access to the Single Market and numerous EU programs. Derided as “Project Fear,” this strategy proved ineffective, even though many of its warnings subsequently materialized. This raises a broader question: When does emphasizing the losses associated with noncooperation increase public support for international cooperation, and when does it backfire?

This paper has examined one specific communication strategy: whether the benefits of international cooperation are framed as gains from cooperating or as losses resulting from noncooperation. Existing theories yield contrasting expectations. Prospect theory suggests that loss frames should be more persuasive because losses loom larger than equivalent gains. Associative accounts of framing, by contrast, suggest that gain frames should elicit more favorable evaluations by activating positive associations.

Our empirical analysis proceeded in two steps. First, we examined the communication strategies employed in 25 Swiss referendum campaigns concerning foreign policy and international cooperation. Arguments generally received more agreement when framed as gains rather than losses, particularly among voters predisposed to support international cooperation. However, this relationship varied across issue areas: for defense and security arguments, the usual advantage of gain framing was reversed, and loss-framed arguments received substantially more agreement.

Second, we tested the causal effects of these framing strategies in five preregistered survey experiments conducted during ongoing international negotiations. The experiments examined

Switzerland's negotiations with the EU over closer institutional cooperation, Hungary's negotiations with the EU over rule-of-law reforms and the release of EU funds, and Finland's and Sweden's negotiations with Turkey over NATO accession. The results reveal considerable variation. Loss-framed messages increased willingness to compromise in Finland and Sweden, whereas they had no comparable effect in Hungary and tended to reduce willingness to compromise in Switzerland. Gain-framed messages generally produced small or statistically insignificant average effects, although they performed better than loss frames in the Swiss electricity experiment.

The effects of gain framing also depended on respondents' prior orientations. Across the five experiments, gain frames had no pooled effect among cooperation opponents or respondents with intermediate positions. Among respondents who initially supported cooperation, however, the meta-analytic estimate was positive and statistically significant. This mirrors the Swiss referendum evidence, where the advantage of gain-framed arguments was strongest among pro-cooperation voters. Gain framing may therefore be better suited to reinforcing support among citizens already receptive to international cooperation than to converting its opponents.

Overall, no single analysis fully explains the heterogeneity across the five experiments. The clearest contextual pattern concerns security: loss framing succeeded in both NATO experiments, while the Swiss referendum analysis similarly shows that the usual advantage of gain frames is reversed for defense and security arguments. Loss frames may therefore be especially persuasive when the costs of noncooperation involve a salient and immediate threat and the acceptability of the required compromise remains unresolved. In longstanding debates with knowledgeable audiences, or where the consequences of noncooperation are more diffuse, similar warnings appear less effective and may even be counterproductive. At the same time, the recurring advantage of gain frames among pro-cooperation voters, together with the exploratory findings concerning prior exposure, economic dissatisfaction, risk aversion, and personality, indicates that the same message may be interpreted differently across audiences.

These findings demonstrate that how elites present the costs and benefits of international cooperation can shape public willingness to accept costly compromises, but they provide no universally effective communication strategy. "Project Fear" may persuade when it invokes a credible and immediate threat, yet it also carries a risk of backlash. Gain frames appear less likely to produce such a backlash and may help consolidate support among citizens already favorably

disposed toward cooperation, but they have limited capacity to persuade opponents. Future research should examine how issue characteristics, prior exposure, perceived personal stakes, and recipient dispositions jointly condition responses to gain and loss frames. The central implication is not that one frame is universally superior, but that its persuasiveness depends on the interaction between the message, the nature of the threat, the surrounding political debate, and the audience receiving it.

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