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Do Precaution Measures Fuel Opposition to Nuclear Power? Empirical Evidence from Switzerland

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Abstract

Emergency preparedness measures regarding nuclear power may serve as information signals to households that highlight associated risks. We empirically examine whether the pre-distribution of iodine tablets around Swiss nuclear power plants affects attitudes and voting outcomes regarding the technology. Using individual survey as well as municipal-level direct democratic and national election data between 2004 and 2024, we employ a sharp geographic regression discontinuity design around exogenously changing iodine distribution boundaries. We find that receiving tablets increases expressed opposition towards nuclear power by 33 to 74 percent of a standard deviation compared to non-receivers, yet it does not affect trust in government. Differences in anti-nuclear attitudes fade with distance to plants, and do not translate into actual voting behaviour: we find no robust evidence on greater support for a popular initiative on nuclear energy phase-out, higher Green Party vote shares, or increased voter turnout. Overall, our findings indicate that nuclear emergency preparedness does not necessarily generate political backlash at the ballot.

JEL-Classification: D72, I18, Q42
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1 Introduction

Risks associated with nuclear power have been at the heart of the public debate since the introduction of the technology. Understanding dynamics that affect risk perceptions and political decisions of households plays a key role for policy-making to determine the contribution of nuclear power to the energy mix. At the same time, many countries with such power plants rely on civil-protection measures to mitigate the potential health consequences in case of an accident. By design, such programmes may render local nuclear risks more salient for potentially affected citizens.

In Switzerland, a central element of precaution measures is the pre-distribution of iodine tablets in the vicinity of nuclear power plants as an instrument to reduce thyroid cancer risk in the event of a severe accident (HERCA, 2023; Turcanu et al., 2020). Receiving a package, together with accompanying information material, signals to households that they live close enough to a nuclear facility to be singled out for special protection. From the perspective of policy-makers, this information treatment may influence both attitudes and voting decisions, especially in the Swiss context where direct democracy is a defining feature of the institutional system and nuclear power has been a recurring and contentious issue on the ballot.

Our paper examines whether the large-scale pre-distribution of iodine tablets is politically neutral or whether it systematically affects attitudes and voting behaviour. We exploit an institutional feature which generates sharp geographic discontinuities in exposure to the information signal of local nuclear risk (Thistlethwaite and Campbell, 1960; Lee and Lemieux, 2010; Cattaneo et al., 2024): tablets are pre-distributed automatically by post to all households based on technically defined radii around nuclear power plants, while otherwise similar households just outside the zone do not receive tablets by default. We examine three distribution waves between 2004 and 2024 with exogenously changing boundaries: an original radius based on meteorological and emergency response considerations, an extended radius additionally based on assessments of potential radiation exposure and recommendations by the World Health Organization and the International Atomic Energy Agency following Fukushima meltdown, and an updated zone after the scheduled closure of a nuclear power plant.

We find nuanced patterns by comparing observations just inside and outside the eligibility threshold. Individual-level survey evidence shows that receiving tablets increases expressed opposition towards nuclear power by 33 to 74 percent of a standard deviation along the original boundary close to power plants, with the strongest effect in 2011 following the Fukushima accident. These effects are consistent with a

risk-perception channel which triggers concern and perceived risk (Becker and Zanzonico, 1997; Chandra et al., 2020). Yet closeness matters: the attitude effect vanishes along the extended boundary which more than doubled the distance to the next power plant. In contrast to attitudes towards the technology, we find no systematic differences regarding trust in government which would point towards a countervailing safety-reassurance channel through which the repeated receipt of iodine tablets signals emergency preparedness and strong institutions (Mah et al., 2014; Ho et al., 2019, 2020). In addition, the heightened anti-nuclear attitude does not translate into actual voting outcomes at the municipal level: We find no statistically significant effects on voter turnout or support for a nuclear phase-out popular initiative, nor robust evidence of higher Green Party vote shares.

Our paper connects several branches of energy economics. Studies examine preferences over nuclear and renewable electricity (Murakami et al., 2015; Rehdanz et al., 2017) and how information changes the valuation of energy investments (Lang and Lanz, 2021). For nuclear power specifically, longitudinal evidence documents changes in acceptance following Fukushima (Visschers and Siegrist, 2013), while research on nuclear referenda links voting to proximity and learning (Pignataro and Prarolo, 2020). Recent experimental evidence further shows that local salience and risk information can reduce support for proposed nuclear plants (Seo and Rhee, 2026). A second strand examines the reception of nuclear emergency information, understanding of protective measures, and uptake of iodine tablets (Perko et al., 2013; Turcanu et al., 2020; Matsunaga et al., 2021; Charron et al., 2000; Blando et al., 2007), as well as how preparedness messages affect trust and acceptance (Ho et al., 2020; Becker and Zanzonico, 1997). Finally, research on the political consequences of public policy shows that voters respond differently to disaster relief and preparedness spending (Healy and Malhotra, 2009), and that the deployment of energy infrastructure can affect electoral support (Germeshausen et al., 2025). Our contribution lies at the intersection of these questions.

Specifically, we contribute to the aforementioned literature in at least three dimensions. First, we use geographically defined eligibility to study a tangible, large-scale and common precautionary programme around existing nuclear facilities with a clear empirical setting. Second, we examine nuclear attitudes and trust in government as outcomes relevant to the risk-perception and safety-reassurance channels. A further heterogeneity analysis along the boundary reveals a distinctly different response. Third, the Swiss setting makes it possible to observe popular support for a concrete, direct democratic vote on a nuclear phase-out proposal alongside the indirect measure of party support, rather than infer political opposition from parliament elections alone.

The remainder of the paper is organised as follows. Section 2 discusses the theoretical motivation. Section 3 describes the institutional setting, the iodine tablet distribution programme and anecdotal evidence concerning the information signal. Section 4 describes the data and empirical strategy. Section 5 reports the main results and Section 6 discusses robustness tests. Section 7 concludes.

2 Theoretical motivation

Precautionary measures communicate both risk and protection. In the case of nuclear power, the pre-distribution of iodine tablets gives households a concrete protective resource while drawing attention to the hazard that makes this resource necessary. Acceptance of nuclear power depends on perceived risks and benefits, with trust in the responsible institutions related to both evaluations (Visschers and Siegrist, 2013). At the individual level, we distinguish two countervailing channels through which the distribution enters these assessments: a risk-perception channel and a safety-reassurance channel.

The risk-perception channel operates through information and attention. Being selected for direct distribution makes nuclear risk personally relevant: the authorities have identified the recipient's place of residence as an area that requires advance protection. For households that previously regarded a nearby plant as unrelated to their own safety or were even unaware of the plant itself, this designation provides a reason to revise their assessment of risk exposure. The package also makes potential risks of a nuclear accident more tangible. Salience theory explains how greater attention to particular outcomes changes their weight in decisions under risk (Bordalo et al., 2012). Precaution can therefore strengthen opposition both by changing beliefs about exposure and by increasing the importance attached to an already recognised hazard. Experimental evidence illustrates this mechanism for technology. For example, Wiedemann and Schütz (2005) find that information about precautionary measures concerning electromagnetic fields from mobile phones and base stations can increase perceived risk.

The political relevance of this channel is evident in the debate over iodine-tablet distribution. Anecdotal evidence shows that the risk-perception channel has played a role in the debate on direct pre-distribution in the German federal states of Lower Saxony and Bavaria (Neue Zürcher Zeitung, 2004; Rheinische Post, 2004). Similar concerns were also raised in the United States, where the nuclear industry pointed to adverse public-perception effects as an argument against pre-distribution (Nuclear Management and

Resources Council, 1993). In opposing the iodine distribution boundary expansion after the 2011 Fukushima accident, the Swiss nuclear industry argued that sending tablets to additional households could unsettle the population (Nuklearforum Schweiz, 2014). Anti-nuclear campaigners, in turn, used the distribution to highlight the limits of protection and advocate plant closures (SRF, 2014a). Indeed, media evidence suggests that the distribution generated uncertainty and concern among some recipients (SWI, 2005; Berner Zeitung, 2004; Der Bund, 2005; SRF, 2014b,c; Basler Zeitung, 2004). The programme thus provided a focal point for competing interpretations of nuclear safety and for political mobilisation around the technology.

The safety-reassurance channel works in the opposite direction. Advance provision of tablets offers a means of protection and demonstrates that the authorities have prepared a response. Households that regard this provision as effective protection should perceive themselves as less vulnerable and place greater confidence in emergency preparedness. The institutional signal matters alongside the protective resource itself, especially in highly developed countries. Indeed, scholars have shown that communication about emergency preparedness may foster public trust (Renn and Levine, 1991; Heath and Palenchar, 2000; De Vocht et al., 2016). For example, Ho et al. (2020) find in a Singaporean survey experiment that emergency-preparedness messages which emphasise care for public well-being strengthen trust in government.

Specifically for iodine tablets, the strength of reassurance depends on understanding their purpose and trusting their effectiveness. While some research documents gaps in knowledge about iodine's protective role and concerns about side effects and effectiveness among potential recipients (Turcanu et al., 2020; Matsunaga et al., 2021), anecdotal evidence following Fukushima (BBC, 2011) and the outbreak of the war in Ukraine (Kostev et al., 2022; euronews, 2022) indicates that demand for iodine tablets rises sharply in periods of perceived threat. Overall, confidence in protection may mitigate the warning conveyed by the distribution and thus support a more favourable assessment of nuclear power.

Proximity and prior information further shape the balance between these channels. Proximity to a plant makes the hazard locally relevant, while familiarity with the technology affects how much new information the package conveys. Pignataro and Prarolo (2020) link learning and proximity to nuclear referendum voting, and distinguish experience with existing reactors from exposure to proposed ones. In a US survey experiment, Seo and Rhee (2026) find that local proximity cues and risk information reduce support for proposed nuclear projects. In Japan, however, Uji et al. (2021) find no general proximity-related opposition to reactor restarts. For iodine distribution, the warning

should carry greater weight where recipients regard nuclear risk as both personally relevant and insufficiently accounted for in their previous assessment.

The wider information environment gives these responses a temporal dimension. Reception of nuclear emergency information is related to knowledge, risk perceptions, and confidence in authorities (Perko et al., 2013). A major nuclear accident brings potential losses to public attention and provides a reason to reconsider earlier protective measures. A package received years before can thereby acquire renewed significance as a signal of local exposure. Swiss longitudinal studies that document changes in nuclear acceptance following the 2011 Fukushima meltdown establish the relevance of such events for public evaluations of the technology (Visschers and Siegrist, 2013; Visschers and Wallquist, 2013). This motivates examining the distribution across periods with different levels of nuclear-risk salience.

Political responses to changes in attitude depend on how such evaluations enter concrete decisions. The social-acceptance literature emphasises the object of a decision and its institutional context (Dermont et al., 2017). Holding other considerations constant, greater perceived nuclear risk makes an earlier phase-out more attractive. Support for a specific proposal also depends on its timetable and consequences, while party choice weighs nuclear policy against other issues. Increased issue salience can additionally mobilise both supporters and opponents. The framework therefore motivates examining nuclear attitudes, government trust, support for phase-out, party choice, and turnout as distinct responses to the same precautionary programme. The central empirical question is which channel prevails and how far its influence extends from evaluations of the technology to political choices.

3 Institutional background

3.1 Programme coverage and distribution boundaries

Iodine-tablet pre-distribution makes thyroid protection readily available in a nuclear emergency. Timely intake of stable iodine on the authorities' instructions reduces the thyroid's uptake of radioactive iodine and the associated risk of thyroid cancer (WHO, 2017). Since its first distribution in 1993/1994, Switzerland supplies households in designated areas around its nuclear power plants with iodine tablets in advance, with

replacement campaigns at roughly ten-year intervals (FDHA, 2003; ENSI, 2025b).[1] Outside the designated areas, the cantons themselves maintain stocks for distribution in an emergency (FOPH, 2025). The programme thus distinguishes between advance provision to households and distribution from public stocks in case of an emergency, rather than between protection and no protection. Our analysis covers the 2004/05, 2014/15, and 2023/24 campaigns, during which the household pre-distribution area changed substantially through plausibly exogenous factors.

In 2004/05, direct household provision covered emergency planning zones extending approximately 20 km around the nuclear power plants (Swiss Federal Nuclear Safety Inspectorate, 2014a). Zone 1 covers the immediate vicinity of approximately 3–5 km, while Zone 2 extends to about 20 km. These zones organise advance preparations for protective action (Swiss Federal Nuclear Safety Inspectorate, 2025b). The iodine tablet distribution inherited this emergency-planning radius established by the Swiss nuclear-safety authorities well before the campaign. According to the Swiss Federal Nuclear Safety Inspectorate (ENSI), the approximately 20 km radius was mainly based on considerations of average wind speed and the time required to implement suitable protective measures for the population (for details see Appendix A). In our sample, households received tablets between late November and mid-December 2004 (Swissmedic, 2005).

On 22 January 2014, following the reassessment of emergency preparedness after Fukushima, the Federal Council decided to extend household pre-distribution from 20 to 50 km. The decision also reflected difficulties in supplying large agglomerations, including Zurich, Basel, and Lucerne, within the twelve-hour emergency-distribution window (Swiss Federal Nuclear Safety Inspectorate, 2014a). Deliveries began in late October 2014 (Swiss Federal Office of Public Health, 2021). The new radius was based on recommendations by the World Health Organization (WHO) and the International Atomic Energy Agency (IAEA) on thyroid protection, alongside Swiss assessments of radioactive-iodine releases and atmospheric dispersion. Applying the protection criteria to the Swiss reference scenario identifies areas extending approximately 50 km from the plants (Swiss Federal Council, 2024; Swiss Federal Nuclear Safety Inspectorate, 2014b).

[1] The Swiss pre-distribution programme is defined around Swiss nuclear power plants only. The nearby French plant at Fessenheim therefore did not create a separate Swiss pre-distribution zone under the pre-2014 regime. Basel-Stadt was subsequently included when the radius around Swiss plants was expanded to 50 km (Secretariat of the Swiss Iodine Tablets Office, 2026; Kantonales Laboratorium Basel-Stadt, 2013).

The 2023/24 campaign retained the 50 km radius around operating plants but removed the area covered solely because of Mühleberg Power Plant. Its operator had announced the shutdown in October 2013, and electricity generation ended as scheduled on 20 December 2019 (BKW, 2019). Applying the existing radius to the remaining plants returned municipalities covered only by Mühleberg to cantonal stockpiling, while direct provision was retained within 50 km of other operating plants (BKW, 2025; Swiss Federal Office of Public Health, 2025). Household deliveries took place between mid-October and mid-November 2023, and covered approximately five million people in 779 municipalities (Secretariat of the Swiss Iodine Tablets Office, 2025; Swiss Federal Office of Public Health, 2025). Figure 1 shows the resulting changes of distribution boundaries.

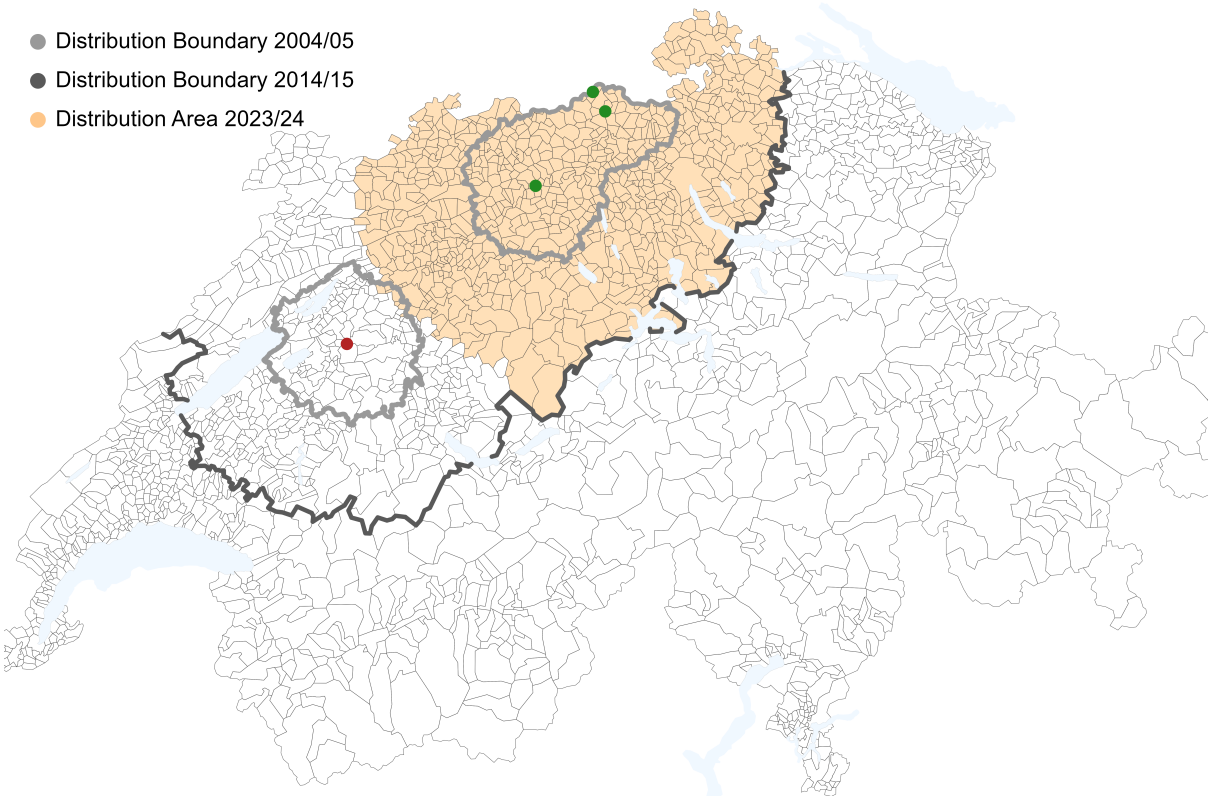
The geographical rules were implemented through designated municipalities, rather than by applying an exact distance cutoff to each household. The municipalities covered by the revised programme were listed in the annex to the Iodine Tablets Ordinance (Jordi and Henzen, 2014; Secretariat of the Swiss Iodine Tablets Office, 2025). Taken together, the original Swiss 20 km planning radius, the internationally informed extension to 50 km, and the revision following a plant closure provide the institutional basis for treating local programme eligibility as plausibly exogenous to households' nuclear attitudes. Changes in coverage were determined by these rules rather than local political considerations, while individual households neither applied for inclusion nor chose the applicable radius. The precise implementation of the boundaries and the corresponding robustness checks are discussed in Section 6.

The changing boundaries offer two complementary advantages for the analysis. First, the expansion from approximately 20 to 50 km moved the eligibility threshold farther from the existing plants, which places the local treatment–control comparisons at different distances from the source of risk. This is substantively relevant because proximity shapes both exposure to nuclear risk and the information acquired about a plant. Previous research links distance to nuclear-policy preferences and learning (Pignataro and Prarolo, 2020), electricity-mix preferences (Rehdanz et al., 2017), and the valuation of nuclear risk in Switzerland (Welsch and Biermann, 2016). The successive distribution boundaries therefore provide a setting for examining responses to the same type of precautionary measure among populations with different geographical exposure, rather than relying only on comparisons between residents close to and far from a plant.

Second, the earlier 20 km boundary provides a fixed geographical reference for following responses over time. Its definition predates Fukushima, which allows us to com-

pare the 2005 and 2011 survey waves at the same pre-existing eligibility boundary and to examine longer-run patterns in the 2014 wave. This is particularly informative given evidence that Fukushima changed the relationship between distance and the valuation of nuclear risk in Switzerland (Welsch and Biermann, 2016). Even after the 2014/15 expansion, when locations on both sides of the old boundary became eligible for direct provision, that boundary continued to distinguish earlier from later programme exposure. Retaining original boundaries alongside the contemporaneous ones thus allows us to examine whether patterns associated with earlier exposure remain visible in subsequent attitudes and voting outcomes.

Figure 1: Iodine-tablet distribution area in 2023/24 and earlier distribution boundaries



Data source: Swiss Federal Council (2003, 2014, 2023); ENSI (2016); FSO (2025)

The 2023/24 distribution area is shaded in light orange. Previous distribution boundaries are shown in grey. Green dots indicate operating nuclear power plants, while the red dot marks the Mühleberg nuclear power plant, which ceased operation in December 2019. Municipal boundaries are shown as of 2024.

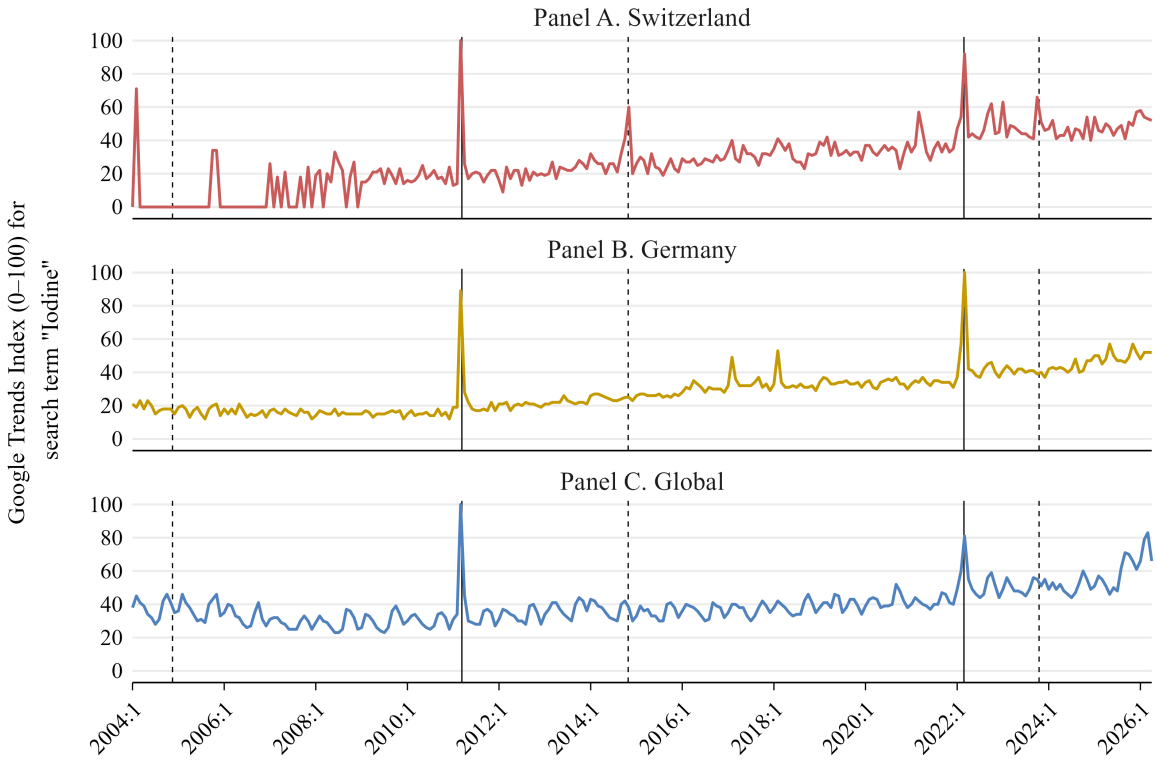
The campaigns delivered tablets by post without requiring households to apply (Kaliumiodid Versorgung, 2005; Jordi and Henzen, 2014; Secretariat of the Swiss Iodine Tablets Office, 2026). In 2014, municipal address lists were used to send each resident a personal package, while businesses and public institutions received separate

supplies (Jordi and Henzen, 2014). Eligibility continued between campaigns. After the 2004/05 distribution, cantons and municipalities were legally required to ensure that new residents moving into the iodine distribution area received iodine tablets within four weeks. From 2014 onward, municipalities instead provided new residents with vouchers that could be redeemed for iodine tablets free of charge at pharmacies or drugstores (Swiss Federal Council, 2003; Jordi and Henzen, 2014; Secretariat of the Swiss Iodine Tablets Office, 2025).

Communication accompanied delivery. Aside from the iodine tablets, the shipment included an information sheet in eight languages, and a dedicated hotline answered questions (Kaliumiodid Versorgung, 2005; Jordi and Henzen, 2014; Secretariat of the Swiss Iodine Tablets Office, 2026). The intervention thus combined a protective resource with direct, geographically targeted information on nuclear emergency preparedness.

Figure 2 highlights the distinction between attention associated with national distribution campaigns and international nuclear-risk events. The Swiss search series for "Iodine" and its German translation "Jod" shows peaks around the 2014 and 2023 distribution campaigns that are not mirrored by comparable peaks at those times in the German or worldwide series. By contrast, Fukushima and Russia's invasion of Ukraine coincide with pronounced peaks across all three series. This pattern is consistent with the distribution campaigns drawing specific attention to nuclear protection in Switzerland, alongside the broader increases in public attention associated with international events.

Figure 2: Google Trends Searches of “Iodine”



Data source: Swissmedic (2005); Secretariat of the Swiss Iodine Tablets Office (2026); Google (2026); FOPH (2021)

Note: Panels A–C display monthly Google search intensity for “Jod” in Switzerland and Germany, and for “Iodine” worldwide, from January 2004 to April 2026. The Google Trends index is normalised to the range 0–100 within each geographic unit, where 100 denotes the month with the highest search volume, while 0 indicates insufficient data. Comparisons over time are meaningful within panels, but levels are not directly comparable across panels. Dashed lines mark the start of iodine tablet distribution campaigns in Switzerland (2004/05, 2014/15, 2023/24). Solid lines mark the Fukushima disaster (March 2011) and the Russian invasion of Ukraine (February 2022).

3.2 Direct democracy and nuclear-policy votes

Swiss direct democracy makes the setting particularly informative for studying the political consequences of nuclear precaution. Citizens with voting rights can challenge federal legislation through popular voting and propose constitutional amendments through popular initiatives (Trechsel and Kriesi, 1996; Swiss Federal Department of Foreign Affairs, 2023). Crucially, voters can decide directly on nuclear-energy proposals rather than express their preferences only through parliamentary elections, where party choice bundles positions on many issues. We can therefore observe support for a specific nuclear policy without having to infer it solely from party vote shares.

The *nuclear phase-out initiative* emerged from the debate following the Fukushima accident. Led by the Green Party, the initiative entered the signature-collection stage in May 2011 and was submitted on 16 November 2012 with 107,533 valid signatures (Swiss Federal Chancellery, 2011, 2013). During 2011, the Federal Council and Parliament also endorsed a gradual phase-out in principle. Their approach, subsequently incorporated into the Energy Strategy 2050, envisaged no replacement of existing reactors with new ones, while allowing existing plants to operate as long as they met safety requirements. The initiative went further by seeking constitutionally binding limits on reactor lifetimes (Swiss Federal Department of the Environment, Transport, Energy and Communications, 2016).

Specifically, the proposed constitutional amendment prohibited the operation of nuclear power plants for electricity or heat generation, subject to transitional provisions for the existing reactors. Beznau 1 would have had to close one year after approval. Beznau 2, Mühleberg, Gösgen, and Leibstadt would have been limited to 45 years of operation, with earlier closure still possible on safety grounds (Swiss Federal Assembly, 2016). For the vote held on 27 November 2016, this implied the closure of three reactor units in 2017, another in 2024, and the final one in 2029. The initiative also required implementing legislation to prioritise energy saving, efficiency, and renewable energy (Swiss Federal Chancellery, 2016).

The campaign concerned both nuclear safety and the pace of the energy transition. Proponents argued that a fixed timetable would reduce nuclear risks and provide planning certainty for investment in renewable generation. The Federal Council and Parliament recommended rejection, and argued that the timetable would force an overly rapid shutdown, increase electricity imports, and create financial risks from possible compensation claims (Swiss Federal Chancellery, 2016). The initiative was rejected with 54.2% voting against and 45.8% in favour, on a turnout of 45.4% (Swissvotes, nd). The vote records a binding policy choice, not a general assessment on the technology: opposition to nuclear power need not imply support for this particular phase-out timetable.

The National Council elections of 2011 and 2015 provide further evidence on electoral responses. The 2011 election took place in the year of Fukushima, when the original 20 km distribution boundary was still in force, whereas the 2015 election followed the extension to 50 km. We examine the Green Party vote share because opposition to nuclear power has been a longstanding and prominent element of the party's identity and electoral campaigns.

The party's roots include the environmental movements against nuclear power plants that developed in the 1970s (Historisches Lexikon der Schweiz, 2017). In January 2011, before Fukushima, the Greens had already made opposition to new nuclear plants a central election-campaign theme and presented a Green vote as a vote against new reactors (Année Politique Suisse, 2011). At the launch of the final phase of the 2015 election campaign, the party again highlighted opposition to nuclear power alongside climate policy and asylum policy (Grüne Partei der Schweiz, 2015). Its sponsorship of the phase-out initiative further connected this electoral position to a concrete proposal to end nuclear generation (Swissvotes, nd).

The comparison with competing parties clarifies the interpretation. At the national level, the Social Democrats and Green Liberals also supported the 2016 initiative, whereas the Swiss People's Party, Liberals, Christian Democrats, and Conservative Democrats recommended rejection (Swissvotes, nd). The Greens were therefore not the sole party which advocated for nuclear phase-out, but it combined longstanding opposition, repeated electoral campaigning, and responsibility for placing a binding closure proposal on the federal ballot.[2]

Turnout complements the policy and party-vote outcomes by measuring political participation. This matters as opposition to nuclear power is not necessarily expressed in the same way across outcomes: a more critical attitude towards the technology does not imply support for a particular phase-out proposal, greater willingness to participate, or a change in party choice. Observing distinct outcomes therefore allows us to investigate several possible political responses to precautionary measures without treating them as interchangeable indicators of nuclear acceptance.

Official voting results are reported at the municipal level and can be linked to the programme's eligibility rules (FSO, 2017; FSO, 2014; FSO, 2019).[3] In the nationwide initiative vote, locations on both sides of a distribution boundary faced the same proposal on the same date, rather than different local projects. The combination of this common policy choice, elections involving a prominent anti-nuclear party, and geographically differentiated provision of a real precautionary measure allows us to examine politi-

[2] This position remains visible beyond the study period. In June 2026, the Greens joined the Social Democrats, Green Liberals, and other organisations in launching a referendum against legislation lifting the ban on new nuclear power plants. The Liberals, by contrast, welcomed Parliament's decision to lift the ban (GRÜNE Schweiz, 2026; FDP.Die Liberalen, 2026). These later positions illustrate continuity and inter-party differences. The motivation for our electoral outcome rests on the documented positions during the 2011 and 2015 campaigns.

[3] For some small municipalities in the canton of Bern, ballots are counted jointly with those of a neighbouring municipality (Swiss Federal Statistical Office, nd).

cal responses, which may be affected if receiving iodine tablets raises the salience of nuclear power (Vatter and Heidelberger, 2014), alongside the survey evidence.

4 Empirical approach

Our identification strategy exploits the sharp geographical discontinuity in iodine-tablet eligibility at the distribution boundaries. We compare observations just inside and just outside each boundary, where programme eligibility changes discretely. Following the geographic regression discontinuity literature and respecting the Swiss topographic structure, we use driving distance to the boundary as the running variable (Keele and Titiunik, 2015; Cattaneo et al., 2024; Lehner, 2024; Eugster et al., 2017). For each outcome, observation year, and distribution boundary, we estimate a separate local linear specification of the following form:

$$y_{i,k} = \alpha + \beta_1 \, Iod_i + \beta_2 \, distRoad_i + \beta_3 \, (Iod_i \times distRoad_i) + X'_{i,k}\boldsymbol{\delta} + \vartheta_{g(i)} + \varepsilon_{i,k}$$

where the outcome $y_{i,k}$ is drawn from two complementary data sources $k \in \{\mathrm{SHP}, \mathrm{voting}\}$. SHP denotes individual-level data from the Swiss Household Panel, while voting represents municipal-level voting outcomes. The two data sources are analysed separately with a separate regression for each outcome, observation year, and distribution boundary. The specification allows the outcome to have different intercepts and slopes on either side of the cutoff.

The SHP is an annual longitudinal survey of private households in Switzerland that collects information on individual circumstances, political attitudes, and evaluations (Voorpostel et al., 2025). We examine two specific survey outcomes. Respondents' preferences for a Switzerland with or without nuclear energy are recoded from three response categories to an index ranging from -1 to $+1$, with higher values indicating stronger opposition to nuclear power. Trust in the federal government, originally measured from 0 to 10, is rescaled to range from 0 to 1. The first outcome captures attitudes towards the technology through a risk-perception channel, the second provides an indirect measure of the institutional trust associated with the safety-reassurance channel. We restrict the survey sample to the voting population of Swiss citizens aged 18 or older and use the 2005, 2011, 2014, 2017, and 2023 waves. Survey waves can extend into the following calendar year (Voorpostel et al., 2026). Because fieldwork in 2014 and 2023 overlaps with the respective distribution campaigns, we also examine

samples restricted by interview timing. Descriptive statistics for the SHP survey waves are reported in Table A.1.

For voting outcomes, we use municipal voter turnout and the share of "yes" votes in the 2016 *Nuclear phase-out initiative*. The popular initiative, held on 27 November 2016, provides a direct choice over nuclear phase-out after the 2014/15 distribution. We also examine Green Party vote shares in the 2011 and 2015 National Council elections. The data on electoral outcomes are available through Swissvotes, and the Federal Statistical Office (FSO) separately publishes municipal party-vote results (FSO, 2017; FSO, 2014; FSO, 2019). Support for phase-out and Green Party vote shares capture expressions of nuclear-policy preferences, while turnout captures mobilization dynamics. Descriptive statistics for the municipal voting data are reported in Table A.2.

Iod_i equals one if the municipality associated with observation i, where the index denotes an individual respondent's municipality of residence in the survey year in the Swiss Household Panel and a municipality for voting outcomes, lies within the distribution area under examination, and zero otherwise. We use the municipal assignments in the applicable Iodine Tablets Ordinance and the corresponding municipal geometries by the Federal Statistical Office to construct each boundary (FSO, 2025). The assignment reflects the institutional design of the programme, under which eligibility is tied to current residence within the distribution area. Individuals moving into the distribution area are supplied with iodine tablets after registering in their new municipality. For historical boundaries, the indicator records location relative to the earlier distribution area, which may differ from current eligibility. Eligibility within the current distribution area continues between campaigns through the provision of tablets to new residents, as described in Section 3.

$distRoad_i$ is the signed driving distance in kilometres from the municipality's reference point to the relevant distribution boundary. Values are positive inside the distribution area and negative outside, with the cutoff at zero. Treatment status and the running variable are therefore shared by respondents in the same municipality. We use driving distance to reflect Switzerland's topography: municipalities that appear close in straight-line distance can be separated by substantial travel distances which reduce their comparability. Figure A.1 illustrates this distinction. Following Eugster et al. (2017), the reference point is each municipality's most important socioeconomic centre (FSO, 2026a).

Estimation uses observations within the selected bandwidth on each side of the cutoff and a triangular kernel, which gives greater weight to observations closer to the boundary. We report both a common mean squared error (MSE)-optimal bandwidth on the

two sides (*mserd*) and separate MSE-optimal bandwidths for the control and treatment sides (*msetwo*). While both approaches are considered, imposing a common bandwidth may generate an unfavourable bias–variance trade-off when the curvature of the conditional mean functions or the amount of information available differs between the two sides. We therefore adopt side-specific bandwidths as our preferred specification (Arai and Ichimura, 2018). Bandwidths are selected separately for each outcome, year, boundary, and specification (Calonico et al., 2017; Cattaneo and Titiunik, 2022). The repeated municipality-level values of the running variable are accounted for by the mass-point adjustment in bandwidth selection.

The covariates in $X_{i,k}$ depend on the outcome. For the SHP analyses, indicators for being a woman and being aged 65 or older are included to capture documented demographic differences in political behaviour and attitudes towards nuclear energy (Funk and Gathmann, 2015; Lutz and Lebert, 2017; Flynn et al., 1994; Wang and Kim, 2018; Nuclear Energy Agency, 2010). An indicator for having children addresses potentially stronger protective concerns regarding health and safety risks. Educational attainment is scaled to range from zero to one, while net personal income enters in logarithmic form. Both variables account for socioeconomic differences. Political interest and left–right political position are likewise rescaled to range from zero to one and capture underlying political engagement and ideological orientation. All covariates are obtained from Voorpostel et al. (2025). For the municipal voting analyses, the continuity checks consider the shares of women and residents aged 65 or older and log population (FSO, 2026b) as demographic controls, the ratio of taxpayers with taxable income above 75'000 Swiss francs to total population (FTA, 2023) to account for income effects, and the log public-transport travel time to the nearest agglomeration (ARE, 2023) to capture differences in urbanisation.

Covariates enter the adjusted specifications when the corresponding continuity tests indicate an imbalance at the cutoff. Covariate adjustment serves to assess the sensitivity of the estimates rather than to establish identification, which does not rely on covariate adjustment (Cattaneo et al., 2023). The continuity tests use the same local linear specification and bandwidths as the corresponding unadjusted outcome regressions. For the main voting outcomes, the continuity tests do not indicate imbalances requiring additional covariates. For the SHP data, covariates are included additively, with common coefficients on both sides of the cutoff (Calonico et al., 2019). Since political interest and left–right position could themselves respond to the programme, we additionally report specifications excluding these variables where they were included. The selected controls and continuity tests are documented in Section 6.

$\vartheta_{g(i)}$ denotes language-region fixed effects which account for broader regional differences in media exposure, political culture, and attitudes towards nuclear energy. This provides a parsimonious adjustment for regional heterogeneity while preserving substantial local variation around the iodine boundary.

$\varepsilon_{i,k}$ denotes the error term. Reported estimates and inference use robust bias correction, with standard errors incorporating uncertainty from the bias correction (Calonico et al., 2014, 2019). Standard errors are clustered at the municipality level for SHP outcomes and at the canton level for municipal voting outcomes, as indicated in the tables.

Each specification uses the available observations with non-missing information on its required variables. This avoids restricting the unadjusted model solely because covariates are missing. To distinguish changes due to adjustment from those due to sample composition or bandwidth selection, we also report common-sample, uniform-bandwidth comparisons for nuclear attitudes and the main voting outcomes. Within each such comparison, the unadjusted model's bandwidths are applied across specifications on a common complete-case sample. These comparisons, along with further checks of assignment, residential mobility, interview timing, pre-existing discontinuities, and other variable specifications are presented in Section 6.

5 Empirical results

We first examine nuclear attitudes and trust in government across the original and later distribution boundaries, then turn to referendum and election outcomes. The results show more nuclear-critical attitudes at the original boundary, most clearly in 2011, without a corresponding pattern at the more distant boundaries or a robust increase in political opposition.

5.1 Survey data: attitude towards nuclear power and trust

Table 1 summarises the local linear estimates of the effect of residing within an iodine distribution boundary on respondents' attitudes towards nuclear energy across the survey waves. The outcome ranges from -1 to $+1$, with positive coefficients indicating stronger opposition to nuclear power. Each pair of columns presents symmetric and asymmetric bandwidths, first without adjustment, then with selected covariates, and

finally with covariates and language-region fixed effects to compare the findings across survey waves and distribution boundaries.

Table 1: GRDD estimates for opinion on nuclear power across SHP waves and iodine boundaries

	Unadjusted		Controls		Controls + language-region FE	
	Symmetric (1)	Asymmetric (2)	Symmetric (3)	Asymmetric (4)	Symmetric (5)	Asymmetric (6)
Panel A: Iodine boundary 2004/05 (20 km)						
SHP 2005	-0.288	0.575*	-0.302	0.572*	-0.376	0.310
	(0.378)	(0.332)	(0.378)	(0.333)	(0.333)	(0.262)
SHP 2011	0.691	0.606**	0.487	0.519**	0.372	0.421**
	(0.459)	(0.261)	(0.414)	(0.216)	(0.362)	(0.196)
SHP 2014	0.101	0.588**	0.089	0.602**	0.100	0.422
	(0.428)	(0.283)	(0.430)	(0.286)	(0.377)	(0.258)
SHP 2017	-0.269	0.075	-0.181	0.165	-0.230	0.072
	(0.301)	(0.207)	(0.279)	(0.224)	(0.251)	(0.165)
Panel B: Iodine boundary 2014/15 (50 km)						
SHP 2014	-0.006	-0.009	-0.090	-0.121	-0.070	-0.109
	(0.168)	(0.161)	(0.173)	(0.158)	(0.175)	(0.154)
SHP 2017	0.029	-0.010	0.004	-0.028	-0.017	-0.046
	(0.102)	(0.113)	(0.100)	(0.109)	(0.095)	(0.101)
SHP 2023	-0.003	-0.019	-0.035	-0.076	-0.035	-0.078
	(0.130)	(0.117)	(0.128)	(0.113)	(0.127)	(0.114)
Panel C: Iodine boundary 2023/24 (50 km; w/o Mühleberg)						
SHP 2023	0.159	-0.015	-0.081	-0.109	-0.077	-0.115
	(0.173)	(0.152)	(0.138)	(0.126)	(0.142)	(0.125)

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates for opinion on nuclear power across SHP waves and iodine distribution boundaries. Higher values indicate more nuclear-critical attitudes. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Covariate-adjusted specifications use the boundary- and wave-specific controls identified in the corresponding covariate continuity tests. The SHP 2014 fieldwork overlaps with the beginning of the 2014/15 iodine tablet distribution, while the SHP 2023 fieldwork overlaps with the 2023/24 distribution. Detailed information on bandwidths and sample sizes is reported in the Appendix (Tables B.1 – B.8).

At the original 2004/05 boundary (Panel A), approximately 20 km from the plants, positive estimates appear in the 2005 survey under the preferred specification. They range from 0.310 to 0.575, with the unadjusted and covariate-adjusted estimates statistically significant at the 10% level. Notably, the selected MSE-optimal bandwidths differ sub-

stantially between the two sides, with approximately 22–23 km on the control side and only 6 km on the treatment side (see Table B.1).

Once language-region fixed effects are included or the symmetric MSE-optimal bandwidth specifications are used, estimates do not turn out to be statistically significant. The sample composition does not indicate a lack of treatment–control support within either language group (Table B.17).

The clearest attitude response emerges in 2011, the year of the nuclear accident in Fukushima. The asymmetric estimates range from 0.421 to 0.606 and are statistically significant at the 5% level in all three specifications, while the asymmetric bandwidths remain stable across the adjustment steps (Table B.2). The symmetric estimates do not turn out to be statistically significant, but are positive and broadly similar in magnitude.

The positive asymmetric pattern remains visible in 2014. The unadjusted and covariate-adjusted estimates are 0.588 and 0.602, respectively, and are both statistically significant at the 5% level. Again, with language-region fixed effects the estimates are not statistically significant, as are the symmetric estimates. Because the 2014 fieldwork overlapped with the start of the 2014/15 iodine-tablet distribution, we additionally consider interview timing by restricting the sample to respondents interviewed before the new distribution. Inferences do not change (Table B.22). The 2012 information campaign also targeted this area, so the 2014 comparison can reflect subsequent communication as well as earlier tablet provision (Section 6).

By 2017, the expansion to 50 km had made households on both sides eligible for direct provision. The historical boundary therefore distinguishes earlier from later programme exposure, rather than current eligibility. Indeed, none of the baseline specifications shows a statistically significant attitude discontinuity at the original boundary.

The expanded 50 km boundary shows no comparable positive pattern (Panel B). The 2014 estimates turn out to be not statistically significant across specifications. As fieldwork overlapped with the new distribution, we also examine interviews conducted before its start. These likewise show no statistically significant discontinuity (Table B.24). The 2017 wave provides the clearest post-distribution comparison at this boundary because all interviews took place after the campaign. Its estimates are close to zero and not statistically significant throughout the specification set. The 2023 results extend this pattern: Neither the earlier 2014/15 boundary nor the revised 2023/24 boundary (Panels C), which excludes areas covered solely by the decommissioned Mühleberg

plant, exhibits a statistically significant discontinuity.[4] Hence, we do not find empirical evidence of a renewed discontinuity in the context of Russia's war against Ukraine, despite the heightened iodine-related salience discussed in Section 2. Again, restricting the sample to pre-campaign interviews at the 2014/15 boundary and post-campaign interviews at the revised 2023/24 boundary yields no statistically significant estimates (Tables B.25 and B.27).

Taken together, the attitude results locate the clearest response at the original boundary. This geographical and temporal pattern is consistent with the risk-perception channel: precaution can make local nuclear risks more salient, with a major accident renewing the significance of earlier exposure. The timing also coincides with a decline in Swiss nuclear-power acceptance following Fukushima documented by Visschers and Wallquist (2013). For comparison, their longitudinal study reports a pre-to-post-Fukushima decline of approximately 31% of a standard deviation, whereas our 2011 estimates indicate a geographic discontinuity of 51–74%. This pattern suggests that the Fukushima accident may have increased the salience of receiving iodine tablets as a signal of local nuclear risk. No comparable pattern appears in the 2023 survey observations following Russia's invasion of Ukraine.

Table 2 presents the corresponding results from survey data for trust in the Federal Government, rescaled from zero (no trust) to one (highest trust).

Unlike nuclear attitudes, trust displays no systematic discontinuity at either the original or the later boundaries. None of the baseline estimates is statistically significant, under either bandwidth rule or at any adjustment step. We therefore find no evidence of the increase in general institutional confidence envisaged by the safety-reassurance channel (Heath and Abel, 1996; Ho et al., 2020). The contrast is particularly clear in 2011: at the same boundary where the attitude estimates are consistently positive and statistically significant under the preferred asymmetric specification, the trust estimates remain close to zero. Note that the result concerns trust in the Federal Government, rather than confidence in the specific arrangements for nuclear emergency preparedness.

[4] No directly comparable nuclear-attitude measure is available for 2022 or 2024. The two boundaries provide distinct geographical comparisons based on earlier and contemporaneous programme eligibility.

Table 2: GRDD estimates for trust in government across SHP waves and iodine boundaries

	Unadjusted		Controls		Controls + language-region FE	
	Symmetric (1)	Asymmetric (2)	Symmetric (3)	Asymmetric (4)	Symmetric (5)	Asymmetric (6)
Panel A: Iodine boundary 2004/05 (20 km)						
SHP 2005	-0.122	-0.072	-0.102	-0.073	-0.046	-0.016
	(0.089)	(0.078)	(0.084)	(0.075)	(0.080)	(0.060)
SHP 2011	0.021	-0.017	0.015	-0.033	0.005	-0.038
	(0.063)	(0.052)	(0.059)	(0.055)	(0.053)	(0.055)
SHP 2014	-0.042	0.041	-0.061	0.020	-0.065	-0.005
	(0.064)	(0.048)	(0.064)	(0.049)	(0.051)	(0.040)
Panel B: Iodine boundary 2014/15 (50 km)						
SHP 2014	0.025	0.021	0.027	0.026	0.027	0.028
	(0.025)	(0.026)	(0.025)	(0.024)	(0.024)	(0.024)
SHP 2017	-0.009	-0.003	-0.008	-0.002	-0.008	-0.002
	(0.022)	(0.020)	(0.021)	(0.020)	(0.021)	(0.020)
SHP 2023	0.036	0.031	0.018	0.016	0.022	0.018
	(0.038)	(0.036)	(0.035)	(0.034)	(0.034)	(0.032)
Panel C: Iodine boundary 2023/24 (50 km; w/o Mühleberg)						
SHP 2023	0.041	0.018	-0.013	0.009	-0.013	0.008
	(0.042)	(0.037)	(0.041)	(0.037)	(0.041)	(0.037)

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

The table reports robust bias-corrected local linear GRDD estimates for trust in government across SHP waves and iodine distribution boundaries. Higher values indicate greater trust in the Federal Government. The outcome is rescaled to range from 0 to 1. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Covariate-adjusted specifications use the boundary- and wave-specific controls identified in the corresponding covariate continuity tests. The SHP 2014 fieldwork overlaps with the beginning of the 2014/15 iodine tablet distribution, while the SHP 2023 fieldwork overlaps with the 2023/24 distribution. Detailed information on bandwidths and sample sizes is reported in the Appendix (Tables C.1–C.7).

5.2 Voting data: political behaviour

Table 3 summarises the estimates for voter turnout and the share of "yes" votes in the 2016 Nuclear phase-out initiative, as well as Green Party vote shares in the 2011 and 2015 National Council elections. Panel A reports outcomes at the original 20 km boundary, and Panel B reports outcomes at the expanded 50 km boundary. As in the survey analysis, we present symmetric and asymmetric bandwidths, with and without adjustment. The municipal covariate-continuity tests do not indicate statistically significant imbalances, so the adjusted voting models include language-region fixed effects without additional covariates (Tables D.7–D.12). Treatment–control support within language regions remains present at the 2004/05 boundary, although it is relatively limited among non-German-speaking treated municipalities, while support is comparatively balanced at the 2014/15 boundary (Table D.13). Overall, none of the baseline estimates is statistically significant.

The 2011 National Council election provides the closest electoral counterpart to the clearest survey finding: it concerns the same year and the same original boundary in which the survey results show the clearest discontinuity in nuclear-critical attitudes. Yet all four estimates for the Green Party vote share are small, negative, and not statistically significant. The 2015 election provides a further comparison following the expansion to 50 km. As before, the Green Party vote-share estimates are not statistically significant across the baseline specifications.

The 2016 nuclear phase-out initiative extends the analysis from party choice to a concrete policy proposal. At the expanded 2014/15 boundary, the baseline estimates show no statistically significant discontinuities in turnout or the "yes"-vote share. We also examine the 2016 initiative at the original 2004/05 boundary to assess whether earlier exposure to iodine tablets matters, finding the same pattern. Thus, the absence of a robust increase in opposition is also evident in a direct vote on nuclear phase-out, rather than only in parliamentary elections that bundle positions on many issues. Taken together, these results indicate that iodine-tablet exposure did not translate into changes in voting behaviour across the outcomes examined.

6 Robustness checks

We first examine whether departures from the assignment rules or subsequent municipal mergers drive the findings. Starting from the underlying mechanical 20 km threshold, the precise assignment of municipalities was determined in consultation

Table 3: GRDD estimates across different political voting outcomes and iodine boundaries

	Unadjusted		Language-region FE	
	Symmetric (1)	Asymmetric (2)	Symmetric (3)	Asymmetric (4)
Panel A: Iodine boundary 2004/05 (20 km)				
2016, Voter turnout	-0.008	0.026	-0.009	0.019
	(0.038)	(0.025)	(0.033)	(0.026)
2016, Share of "yes"-votes	-0.011	0.029	-0.019	0.005
	(0.060)	(0.042)	(0.035)	(0.023)
2011, Green Party vote share	-0.018	-0.001	-0.018	-0.003
	(0.019)	(0.011)	(0.019)	(0.011)
Panel B: Iodine boundary 2014/15 (50 km)				
2016, Voter turnout	0.006	0.007	0.010	0.012
	(0.019)	(0.020)	(0.017)	(0.016)
2016, Share of "yes"-votes	-0.013	0.001	0.008	0.014
	(0.045)	(0.046)	(0.016)	(0.016)
2015, Green Party vote share	0.005	0.008	0.011	0.012
	(0.024)	(0.024)	(0.015)	(0.015)
	Robust bias-corrected estimates; canton-clustered CR1 SEs.			
	Local linear estimation; triangular kernel; mass points adjusted.			

Note: *p$<$0.1; **p$<$0.05; ***p$<$0.01.

The table reports robust bias-corrected local linear GRDD estimates of the effect of being located inside the respective iodine distribution boundary on municipal-level voting outcomes. Voter turnout and the share of "yes"-votes refer to the 2016 Nuclear phase-out initiative and are examined at both the boundary in effect at the time of the vote (2014/15) and the earlier 2004/05 boundary, while Green Party vote shares refer to the 2011 and 2015 National Council elections, each examined at the iodine distribution boundary in effect at the time. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) include language-region fixed effects. No additional covariates are included, as the corresponding covariate continuity tests provide no evidence of statistically significant discontinuities at the cutoff. Detailed information on sample sizes and cluster counts is reported in Appendix D.

with the affected cantonal and municipal authorities. Using the historical assignment rule documented in a 1979 memorandum, we can reproduce the observed treatment assignment for all but a few municipalities along the boundary (see Appendix A and Figure A.2). Additionally, depending on the outcome year, one to six municipalities were affected by mergers across this boundary between distribution and outcome measurement. At the later 50 km boundary, no such mergers occurred during the relevant period. However, eight municipalities were included in or excluded from the 2014/15 distribution area following cantonal requests (FOPH, 2013), and two additional municipalities were included in 2023/24.[5] Re-estimating the respective models after excluding municipalities affected by assignment deviations or cross-boundary mergers preserves the main patterns in nuclear attitudes, trust in government, and voting outcomes (Tables B.18, C.15, and D.14). An isolated positive trust estimate reaches significance at the 10% level in 2014, but does not persist across the adjusted specifications.

For the SHP survey data, potential residential sorting is examined through continuity tests for residence duration and moves since 2005, as well as by restricting the sample to respondents who have remained in their current area of residence since 2005. For opinion on nuclear power, mobility measures show no statistically significant discontinuity in 2011 and at most weak evidence in 2014, while restricting samples to long-term residents leaves the asymmetric estimates similar in 2011 and somewhat larger in 2014 (Tables B.10, B.11, and B.19). Regarding trust-in-government results, mobility measures show no statistically significant discontinuity in 2011 but some evidence of differential residential mobility in 2014. The same sample restriction nevertheless leaves the trust estimates small and statistically insignificant (Tables C.9, C.10, and C.16). For municipality-level voting outcomes, we assess residential sorting indirectly through continuity tests for population size, which show no statistically significant discontinuities at the cutoff, although offsetting in- and out-migration cannot be ruled out (Tables D.7–D.12).

We next consider other emergency-information activities at the boundary of 2004/05, as before 2014, the distribution boundary coincided with the outer edge of another emergency planning zone (ENSI, 2025a). A postal campaign launched in early 2012 informed households in this area about protective measures, including iodine tablets (Kanton Aargau, 2012; Generalsekretariat VBS, 2012; Bundesamt für Bevölkerungsschutz, 2012). Restricting the 2011 SHP wave to interviews before this campaign leaves

[5] A list of all affected municipalities and an overview of the reasons for requests to include or exclude municipalities from the distribution area is provided in Table A.3 and Table A.4 in the Appendix.

the positive attitude estimates and the absence of a systematic trust response essentially unchanged (Tables B.20 and C.17). The 2011 finding is therefore not driven by the subsequent campaign. Later observations at the same boundary may reflect the combined exposure history.

Official reports furthermore indicate that emergency information had already been distributed to residents around Swiss nuclear power plants before 2004, although the timing and exact geographic scope are not precisely documented (Swiss Federal Nuclear Safety Inspectorate (HSK/DSN), 1998; Bundesamt für Gesundheit (BAG), 1999). We examine potential pre-existing attitude differences using the 2003 wave and pre-distribution interviews from the 2004 wave. The 2003 estimates do not turn out to be statistically significant. In 2004, symmetric specifications show a negative, statistically significant discontinuity, whereas asymmetric estimates are negative but not statistically significant (Tables B.29 and B.31). Although these 2004 results should be interpreted cautiously given the restricted sample and the absence of a statistically significant asymmetric discontinuity, the negative pre-distribution estimates are consistent with attitudes becoming more nuclear-critical on the treated side following the distribution at the original boundary.

Note that routine emergency exercises primarily involve plant organisations and public authorities, with operational activities concentrated at selected locations (Eidgenössisches Nuklearsicherheitsinspektorat, 2013b; Alertswiss Redaktion, 2015; Eidgenössisches Nuklearsicherheitsinspektorat, 2013a). Their exposure pattern therefore differs from a mailing to all households within a defined zone. These zone-specific considerations apply to the original 20 km boundary, whereas the expanded 50 km distribution boundary does not coincide with the emergency-planning zones.

The nuclear-attitude and voting results retain their qualitative patterns when specifications are compared on common complete-case samples using uniform bandwidths (Tables B.33 and D.15). Excluding political interest and left–right position, which could themselves respond to the programme, likewise leaves the general survey inferences unchanged (Tables B.41 and C.19). Thus, neither changing sample composition across specifications nor these political controls accounts for the main pattern.

Canton fixed effects have a more pronounced influence on the attitude estimates at the original boundary: coefficients generally become smaller and mostly statistically insignificant, while the later-boundary results and the available trust checks remain similar to the baseline (Tables B.34 and C.20). However, canton fixed effects shift estimation towards within-canton variation, even when treated and control observations across cantonal borders are geographically close. Within-canton treatment–control

overlap is uneven in all three waves at the 2004/05 boundary (Table B.39). For the 2011 attitude estimates in particular, the leave-one-canton-out diagnostics show greater sensitivity to cantonal composition with canton fixed effects (Table B.38).

For voting outcomes, canton fixed effects yield some negative, statistically significant estimates for the yes-vote share in the 2016 initiative at the expanded boundary and for the Green Party vote share in 2011 (Table D.16). The same concern about limited within-canton support applies here, particularly at the 50 km boundary, where treatment status and canton are nearly collinear along some sections of the boundary (Keele and Titiunik, 2015). The negative initiative estimates arise with re-selected, narrower bandwidths. Fixing the baseline samples and bandwidths returns estimates close to zero and statistically insignificant. The negative 2011 Green Party estimates are not driven by a single canton, although within-canton support remains uneven (Tables D.17 and D.18). The turnout estimates for 2016 and Green Party estimates for 2015 remain not statistically significant across these specifications.

To account for location along the boundary, we also use equal-length boundary-segment fixed effects where local support permits (Keele and Titiunik, 2015; Lehner, 2024). Figure A.4 illustrates the division of the 2014/15 boundary into five segments. At the shorter 2004/05 boundary, we instead distinguish between the Mühleberg component and the component encompassing Gösgen, Leibstadt, and both Beznau reactor units (Figure A.3), as further segmentation would leave insufficient local support. Separate component-specific estimates using both separately selected and pooled bandwidths, together with equality tests, are reported in Tables B.45–B.47. The positive 2011 attitude response is concentrated in the non-Mühleberg component, although their magnitude and the significance of component differences depend on bandwidth choice. The corresponding 2011 Green Party results show no systematic component differences (Tables D.24–D.25).

At the expanded boundary, segment fixed effects produce small positive estimates for Green Party support in 2015, with some asymmetric specifications reaching the 10% significance level. The finer ten-segment partition leaves minor support in some sections (Table D.27). These estimates provide limited positive electoral evidence, rather than a result shared across spatial specifications. By contrast, turnout and support for the 2016 initiative remain close to zero and not statistically significant with either five or ten segments, including under assignment restrictions and fixed baseline samples and bandwidths (Table D.26).

Finally, using straight-line rather than driving distance as the forcing variable preserves the positive asymmetric attitude pattern at the original boundary, with smaller and less

precise estimates in 2014. It leaves the voting conclusions unchanged (Tables B.40 and D.19). The bandwidth checks also show that the positive asymmetric attitude findings, in particular for 2011, are not confined to the exact MSE-optimal bandwidth choices. Trust and voting estimates remain statistically insignificant across the range of bandwidths examined (Tables B.42–B.44, C.21, C.22, and D.20–D.23).

Across these checks, the clearest effects on attitudes towards nuclear power remain at the original boundary in 2011, although the estimates are sensitive to spatial specifications. No comparable attitude pattern emerges at the later boundaries. The results further provide no robust evidence of increased government trust or greater political opposition at the ballot box.

7 Conclusion

This paper examines whether measures designed to protect households from a nuclear accident may also fuel opposition to nuclear power. We use the pre-distribution of iodine tablets and accompanying information around Swiss nuclear power plants to exploit distribution boundaries in a geographic regression discontinuity design. By examining individual survey responses as well as municipal referendum and election results, our analysis connects a tangible precautionary programme to both public evaluations of an energy technology and political choices over its future.

The survey results provide evidence of more nuclear-critical attitudes at the original 2004/05 distribution boundary amounting to an increase in expressed opposition towards nuclear power by 33 to 74 percent of a standard deviation, with the strongest effects in 2011 following Fukushima. Positive estimates also appear in 2005 and 2014 when asymmetric bandwidths are used, although these findings are more specification-sensitive. No comparable pattern emerges at the later, more distant distribution boundaries. The geographical and temporal pattern is consistent with the risk-perception channel, whereby precaution draws attention to local nuclear risks and can acquire renewed significance following a major accident. Across the survey waves and boundaries examined, we find no systematic effect on general trust in government. The evidence therefore does not show an accompanying increase in broader institutional trust of the kind envisaged by the safety-reassurance channel.

The findings on expressed attitude are not accompanied by robust evidence of actual greater political opposition. We find no robust increase in Green Party vote shares in the 2011 or 2015 elections. Similarly, neither turnout nor support for the 2016 nu-

clear phase-out initiative exhibits a statistically significant discontinuity in the baseline estimates at either the expanded or the historical boundary. Swiss direct democracy makes this evidence especially valuable: the policy vote records a decision on a binding nuclear phase-out proposal, rather than requiring nuclear-policy preferences to be inferred solely from parliamentary elections.

For energy policy, the central implication is that the acceptance effects of safety measures and their consequences for collective decisions should be assessed separately. More critical views of nuclear power do not necessarily imply support for a particular closure timetable or a change in party choice. Our findings challenge the presumption that making nuclear precautions visible necessarily generates political backlash: the Swiss evidence points to greater nuclear scepticism at the original distribution boundary, particularly after Fukushima, without a robust corresponding increase in opposition at the ballot box.

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A Descriptive statistics and institutional details

Table A.1: Summary statistics across Swiss Household Panel waves

	2005	**2011**	**2014**	**2017**	**2023**
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Panel A: Outcomes					
Opinion on nuclear power	0.235 (0.943)	0.527 (0.822)	0.445 (0.873)	0.553 (0.811)	0.164 (0.944)
N	5,272	6,426	6,107	8,121	8,727
Trust in government	0.537 (0.213)	0.575 (0.204)	0.596 (0.204)	0.630 (0.197)	0.636 (0.208)
N	5,439	6,524	6,263	8,323	9,212
Panel B: Individual characteristics					
Woman	0.564 (0.496)	0.560 (0.496)	0.545 (0.498)	0.546 (0.498)	0.526 (0.499)
N	5,511	6,595	10,404	8,408	9,448
Age 65+	0.169 (0.375)	0.225 (0.418)	0.255 (0.436)	0.285 (0.451)	0.302 (0.459)
N	5,511	6,595	10,404	8,408	9,448
Has children	0.616 (0.486)	0.663 (0.473)	0.699 (0.459)	0.685 (0.465)	0.681 (0.466)
N	5,511	6,595	10,114	8,293	9,176
Educational attainment	0.537 (0.276)	0.548 (0.287)	0.562 (0.292)	0.587 (0.294)	0.637 (0.299)
N	5,511	6,595	10,404	8,408	9,438
Political interest	0.600 (0.262)	0.533 (0.284)	0.542 (0.277)	0.530 (0.284)	0.573 (0.277)
N	5,507	6,592	10,390	8,395	9,350
Left–right political position	0.476 (0.207)	0.489 (0.218)	0.505 (0.213)	0.492 (0.218)	0.482 (0.230)
N	4,937	5,920	9,176	7,566	8,368
Log net personal income	10.069 (2.455)	10.274 (2.221)	10.397 (2.041)	10.470 (1.925)	10.657 (1.696)
N	5,094	6,189	9,635	7,802	8,356
German-speaking region	0.709 (0.454)	0.711 (0.454)	0.717 (0.450)	0.696 (0.460)	0.674 (0.469)
N	5,511	6,595	10,404	8,408	9,448
Panel C: Residential mobility					
Residence duration (years)	—	21.565 (17.733)	22.723 (18.074)	23.026 (18.563)	22.696 (17.858)
N	—	6,074	10,006	8,109	9,300
Moved after 2005	—	0.203 (0.402)	0.258 (0.438)	0.330 (0.470)	—
N	—	6,074	10,006	8,109	—
Moved after 2015	—	—	—	0.074 (0.262)	0.231 (0.422)
N	—	—	—	8,109	9,300

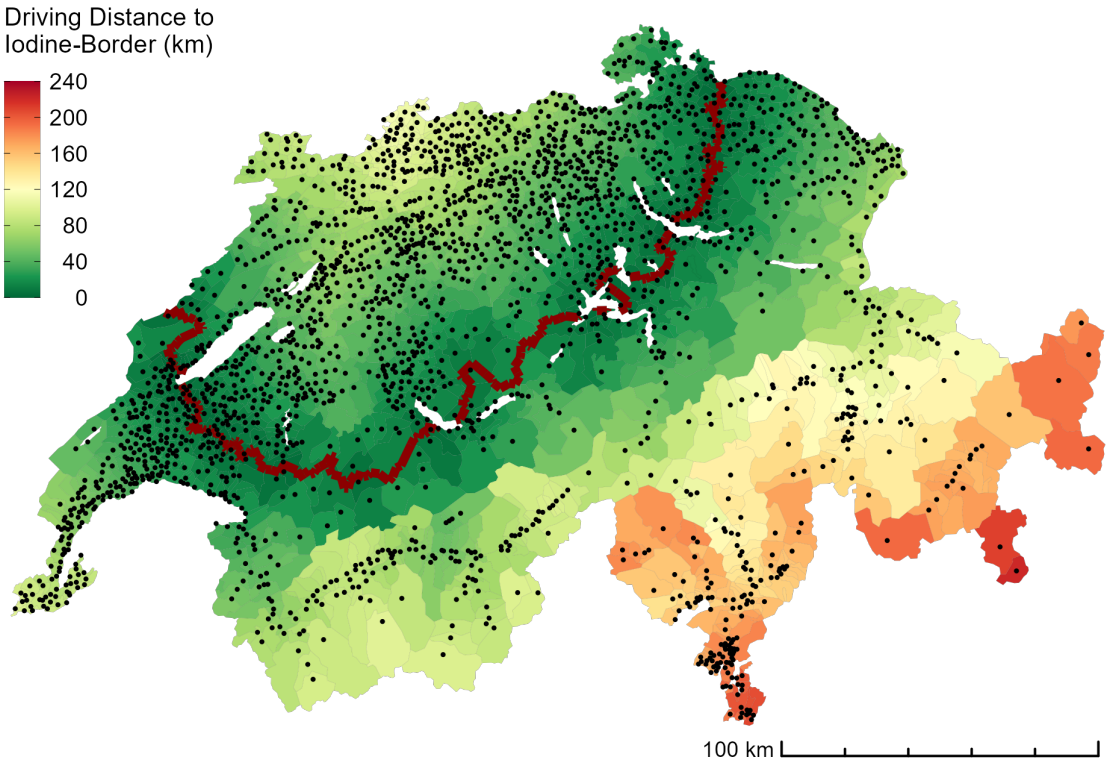
Notes: The table reports unweighted means with standard deviations in parentheses. The row below each variable reports the number of non-missing observations (N). Statistics are calculated separately for each variable using the full available sample in the prepared dataset for each SHP wave, without outcome-specific sample restrictions or bandwidth restrictions. Estimation samples vary across outcomes and specifications due to missing values in the variables required for estimation and the selected bandwidths. For binary indicators, means represent proportions. Dashes indicate statistics not reported.

Table A.2: Summary statistics for municipal voting data

	National Council election 2011	**National Council election 2015**	**Nuclear phase-out initiative 2016**
	Mean (SD)	Mean (SD)	Mean (SD)
Panel A: Outcomes			
Voter turnout	—	—	0.465 (0.078)
N	—	—	2,277
Share of "yes" votes	—	—	0.423 (0.099)
N	—	—	2,277
Green Party vote share	0.071 (0.042)	0.063 (0.043)	—
N	2,441	2,142	—
Panel B: Municipal characteristics			
Women share	0.500 (0.019)	0.498 (0.018)	0.498 (0.017)
N	2,504	2,314	2,277
Share aged 65+	0.170 (0.044)	0.182 (0.044)	0.184 (0.043)
N	2,504	2,314	2,277
High-income taxpayer share	0.118 (0.049)	0.130 (0.049)	0.138 (0.049)
N	2,504	2,314	2,277
Population size (log)	7.112 (1.318)	7.286 (1.280)	7.326 (1.265)
N	2,504	2,314	2,277
PT travel time to agglomeration (log)	3.508 (0.549)	3.482 (0.545)	3.475 (0.543)
N	2,504	2,314	2,277
German-speaking region	0.610 (0.488)	0.626 (0.484)	0.631 (0.483)
N	2,504	2,314	2,277

Notes: The table reports unweighted means across municipalities with standard deviations in parentheses. The row below each variable reports the number of municipalities with non-missing values (N). The 2011 and 2015 columns refer to the National Council elections, while the 2016 column refers to the Nuclear phase-out initiative. Statistics are calculated separately for each variable using the full available sample in the prepared dataset for each year, without outcome-specific sample restrictions or bandwidth restrictions. Estimation samples vary across outcomes and specifications due to missing values in the variables required for estimation and the selected bandwidths. Each municipality receives equal weight; the mean turnout and vote shares therefore need not equal the corresponding national aggregates. For the binary language-region indicator, the mean represents the proportion of municipalities in the German-speaking region. Dashes indicate outcomes not analysed for the corresponding year.

Figure A.1: Driving Distance from every municipality to the iodine boundary 2014/15



Data source: FSO (2025); FSO (2026a); Swiss Federal Council (2014)

Note: The iodine boundary of the 2014/2015 iodine distribution is shown in dark red. Black dots within the municipality polygons indicate municipal centres. North of the boundary, iodine tablets are distributed directly to households and firms every ten years. In municipalities in the southern and eastern parts of Switzerland, iodine tablets are not routinely pre-distributed directly to households. Driving distances are computed based on OpenStreetMap.

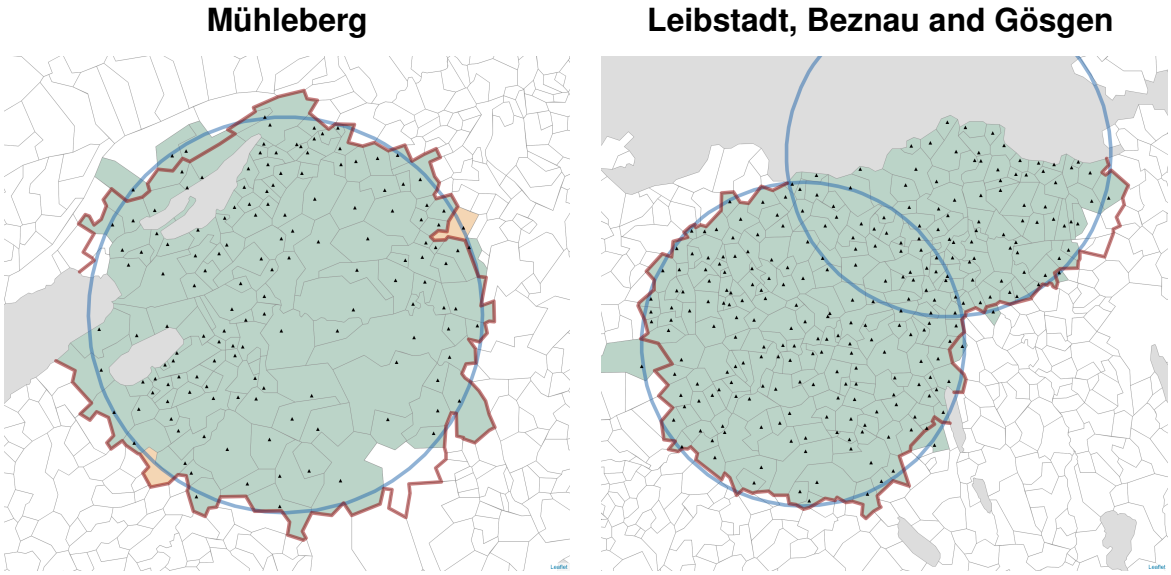


Figure A.2: Reconstructed Assignment Criterion and Observed Iodine Distribution Boundary (2004/05)

Notes: Blue lines indicate the 20 km radii, red lines the observed distribution boundary, and black points the municipalities' most important socioeconomic centres. Green municipalities satisfy the reconstructed assignment criterion. Orange municipalities deviate from the reconstructed criterion only because of subsequent cross-boundary mergers and are therefore not classified as assignment-rule mismatches.

A 1979 internal memorandum of the former Division for the Safety of Nuclear Installations, provided by the Swiss Federal Nuclear Safety Inspectorate (ENSI), documents how municipalities intersected by the 20 km radius were assigned to the iodine distribution area. Municipalities were included in their entirety when the area within the radius contained substantial residential areas, whereas they were excluded when only insignificant residential areas were affected relative to the municipality's main residential area.

To reconstruct this assignment rule, we use each municipality's most important socioeconomic centre (FSO, 2026a) as a proxy for its main residential area and additionally account for clearly identifiable substantial residential areas within the 20 km radius. For Beznau and Leibstadt, the historical procedure did not define separate 20 km zones around each plant. Because the two zones would have largely overlapped, the authorities instead established a common Zone 2 with its centre located between the two sites near Leuggern, primarily to simplify the organisation of warning and emergency procedures. We therefore apply this historically specified common 20 km radius when reconstructing the assignment rule. The reconstructed rule reproduces the observed treatment assignment for all but a few municipalities along the boundary, as shown in Figure A.2. Municipalities that remain inconsistent with the reconstructed rule are excluded in the corresponding robustness checks.

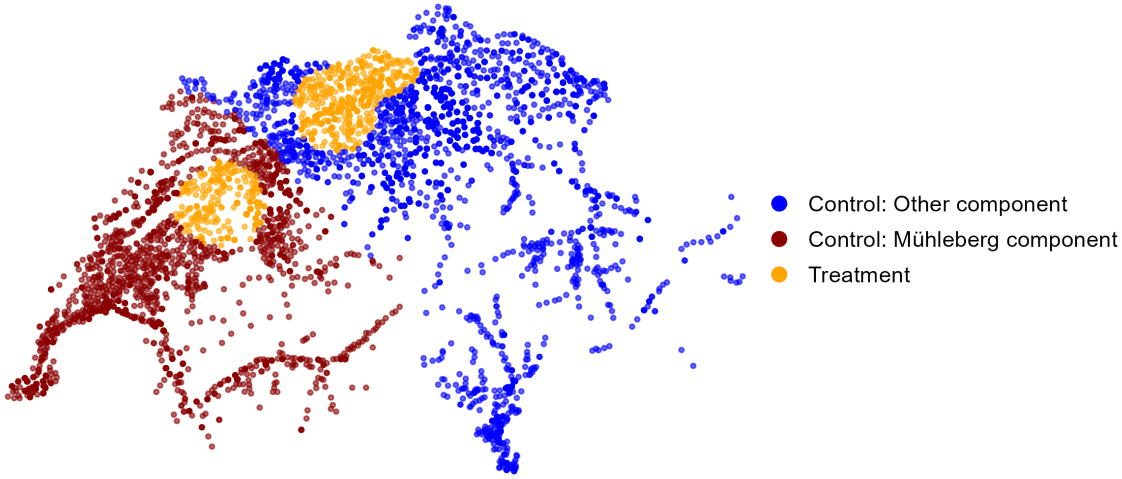
Table A.3: Changes to the original iodine distribution area, 2014/15 distribution

Canton	Comment	Municipalities
Lucerne	Request to include the four previously not covered municipalities in the iodine tablet distribution. Reason: uniform communication and handling of the tablets within the canton (FOPH, 2013). Based on the depiction of the 50 km radius in the FOPH (2013) document and a boundary map we constructed ourselves in accordance with the 2014 iodine tablet ordinance (Swiss Federal Council, 2014), the four municipalities can be clearly identified. They are also identifiable because they are simply appended to the list of municipalities in the annex to the ordinance (the remaining municipalities are listed in alphabetical order). The municipality of Greppen, likewise an exclave of the canton of Lucerne, was already within the 50 km radius before the canton submitted its request.	Inclusion: Vitznau, Weggis, Flühli, Escholzmatt-Marbach
Schwyz	Request that the municipality of Küssnacht am Rigi be excluded from the iodine distribution. Reason: it is the only municipality in the canton of Schwyz that would be affected by the direct distribution, and according to the cantonal government it would be "irritating" if a special rule were to apply to this single municipality (FOPH, 2013).	Exclusion: Küssnacht am Rigi
Zug	Request that the municipalities of Oberägeri, Unterägeri, and Walchwil be included in the annex to the iodine ordinance and thus in the iodine distribution area (FOPH, 2013).	Inclusion: Oberägeri, Unterägeri, Walchwil
Jura	Request that iodine tablets be distributed throughout the entire canton. Reason: a uniform solution and communication (FOPH, 2013). Implication: these municipalities are not excluded from the robustness test, as no iodine boundary runs through this canton (located on the northern Swiss border; far away from control municipalities at the 2014/15 iodine distribution boundary).	Inclusion: remaining municipalities

Table A.4: Changes to the original iodine distribution area, 2023/24 distribution

Canton	Comment	Municipalities
Solothurn	Request by the canton of Solothurn that the municipalities of Biezwil and Schnottwil, which lie just outside the 50 km radius around the Gösgen nuclear power plant at distances of 50.1 km and 52 km respectively, also be included in the iodine distribution area (information obtained from the Federal Office of Public Health (BAG) upon request).	Inclusion: Biezwil, Schnottwil

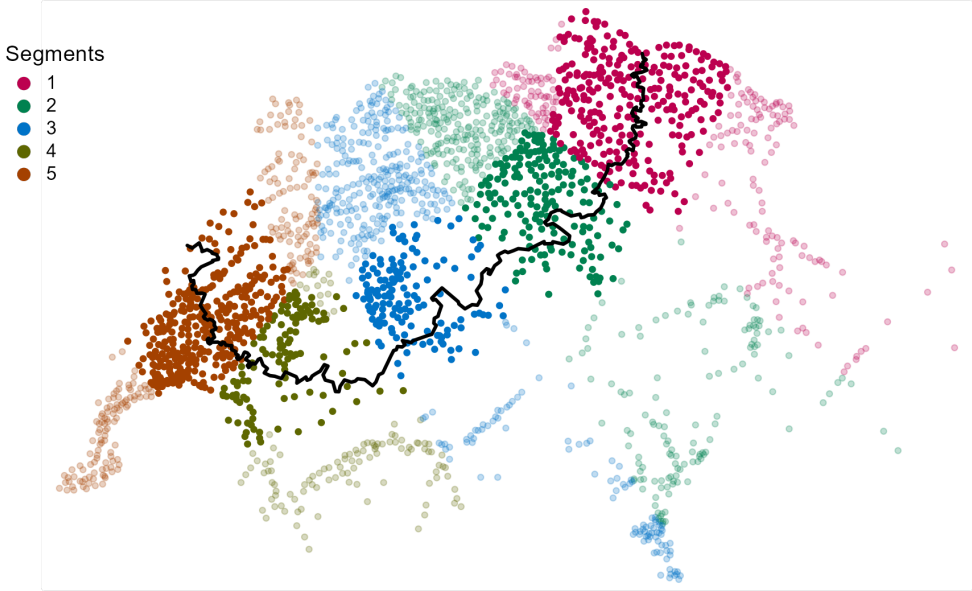
Figure A.3: Spatial distribution of SHP observations across the two boundary components, iodine boundary 2004/05



Data source: Own illustration based on the Swiss Household Panel (SHP) 2005 and ENSI (2016); FSO (2025).

Note: Blue dots denote control observations assigned to the non-Mühleberg boundary component, while dark red dots denote control observations assigned to the Mühleberg component. Orange dots denote treated observations within the 20 km iodine tablet distribution area.

Figure A.4: Swiss municipalities along the iodine boundary 2014/15, divided into five segments



Data source: Own illustration based on FSO (2025); FSO (2026a); Swiss Federal Council (2014)

Note: Transparent points lie outside a 40 km bandwidth, which exceeds all bandwidths used in the corresponding estimations, and are therefore not included in the estimation samples. Depending on the bandwidth used, some non-transparent points may also be excluded. Points represent municipal centres. The "iodine boundary," based on the iodine distribution in 2014 and 2015, is shown in black.

B Nuclear attitudes

B.1 Detailed baseline estimates

Table B.1: GRDD estimates for opinion on nuclear power (SHP 2005, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.288	0.575*	-0.302	0.572*	-0.376	0.310
	(0.378)	(0.332)	(0.378)	(0.333)	(0.333)	(0.262)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	6.47	23.43	6.46	23.32	6.43	22.34
bw treat. (km)	6.47	5.63	6.46	5.65	6.43	6.16
obs. left	311	1,687	311	1,686	307	1,644
obs. right	264	227	264	227	262	245

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for educational attainment, which shows evidence of discontinuity in the symmetric bandwidth specification (Table B.9).

Table B.2: GRDD estimates for opinion on nuclear power (SHP 2011, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.691	0.606**	0.487	0.519**	0.372	0.421**
	(0.459)	(0.261)	(0.414)	(0.216)	(0.362)	(0.196)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	5.46	22.34	5.89	22.64	6.45	20.22
bw treat. (km)	5.46	5.45	5.89	6.13	6.45	6.90
obs. left	278	1,955	319	1,973	363	1,717
obs. right	241	239	288	294	328	374

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being a woman and political interest, which show evidence of discontinuity in at least one bandwidth specification (Table B.10).

Table B.3: GRDD estimates for opinion on nuclear power (SHP 2014, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.101	0.588**	0.089	0.602**	0.100	0.422
	(0.428)	(0.283)	(0.430)	(0.286)	(0.377)	(0.258)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	5.82	32.65	5.80	32.25	5.86	26.84
bw treat. (km)	5.82	5.52	5.80	5.47	5.86	5.60
obs. left	304	2,578	304	2,556	310	2,214
obs. right	243	216	243	202	246	237

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being aged 65 or older and political interest, which show evidence of discontinuity in at least one bandwidth specification (Table B.11). Columns (5) and (6) additionally include language-region fixed effects.

Table B.4: GRDD estimates for opinion on nuclear power (SHP 2014, iodine boundary 2014/15)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.006	-0.009	-0.090	-0.121	-0.070	-0.109
	(0.168)	(0.161)	(0.173)	(0.158)	(0.175)	(0.154)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	29.82	41.86	27.16	48.13	25.10	48.22
bw treat. (km)	29.82	24.14	27.16	21.06	25.10	21.00
obs. left	946	1,151	808	1,163	749	1,166
obs. right	1,584	1,128	1,400	876	1,274	867

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates using the boundary of the 2014/15 iodine tablet distribution. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being a woman and left–right political position, which show evidence of discontinuity in at least one bandwidth specification (Table B.12).

Table B.5: GRDD estimates for opinion on nuclear power (SHP 2017, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.269	0.075	-0.181	0.165	-0.230	0.072
	(0.301)	(0.207)	(0.279)	(0.224)	(0.251)	(0.165)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	6.96	28.50	7.50	26.38	6.30	20.36
bw treat. (km)	6.96	8.72	7.50	8.67	6.30	7.83
obs. left	505	3,011	570	2,570	415	2,040
obs. right	451	658	452	620	364	465

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for log net personal income, selected based on the corresponding covariate continuity tests (Table B.13). Columns (5) and (6) additionally include language-region fixed effects.

Table B.6: GRDD estimates for opinion on nuclear power (SHP 2017, iodine boundary 2014/15)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.029	-0.010	0.004	-0.028	-0.017	-0.046
	(0.102)	(0.113)	(0.100)	(0.109)	(0.095)	(0.101)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	31.86	32.02	30.87	33.24	26.04	35.14
bw treat. (km)	31.86	19.10	30.87	19.16	26.04	19.29
obs. left	1,316	1,318	1,298	1,356	1,163	1,391
obs. right	2,182	1,066	2,124	1,072	1,561	1,114

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being a woman, which shows evidence of discontinuity in both bandwidth specifications (Table B.14).

Table B.7: GRDD estimates for opinion on nuclear power (SHP 2023, iodine boundary 2014/15)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.003	-0.019	-0.035	-0.076	-0.035	-0.078
	(0.130)	(0.117)	(0.128)	(0.113)	(0.127)	(0.114)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	34.22	48.57	31.41	52.19	32.19	52.04
bw treat. (km)	34.22	26.64	31.41	23.54	32.19	23.85
obs. left	1,527	1,955	1,449	2,006	1,462	2,006
obs. right	2,525	2,053	2,290	1,438	2,405	1,457

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being a woman, which shows evidence of discontinuity in both bandwidth specifications (Table B.15).

Table B.8: GRDD estimates for opinion on nuclear power (SHP 2023, iodine boundary 2023/24)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.159	-0.015	-0.081	-0.109	-0.077	-0.115
	(0.173)	(0.152)	(0.138)	(0.126)	(0.142)	(0.125)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	18.82	30.41	23.73	36.23	22.88	38.86
bw treat. (km)	18.82	17.67	23.73	18.76	22.88	18.32
obs. left	1,020	1,374	1,113	1,508	1,092	1,550
obs. right	1,148	1,114	1,308	1,084	1,282	1,062

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates using the boundary of the 2023/24 iodine tablet distribution. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for political interest and political positioning, both of which show evidence of discontinuity in the symmetric bandwidth specification (Table B.16).

B.2 Covariate continuity and sample composition

Table B.9: Covariate continuity tests for opinion on nuclear power (SHP 2005, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	-0.082	-0.174	311 / 1,687	264 / 227
	(0.115)	(0.111)		
Age 65+	0.114	-0.062	311 / 1,687	264 / 227
	(0.116)	(0.105)		
Has children	-0.091	-0.120	311 / 1,687	264 / 227
	(0.234)	(0.139)		
Educational attainment	-0.178**	-0.017	311 / 1,687	264 / 227
	(0.081)	(0.078)		
Political interest	0.096	0.075	311 / 1,687	264 / 227
	(0.121)	(0.082)		
Left–right political position	0.028	-0.014	287 / 1,544	242 / 207
	(0.087)	(0.078)		
Log net personal income	-0.022	0.171	290 / 1,560	246 / 214
	(0.832)	(0.800)		
bw contr. (km)	6.47	23.43		
bw treat. (km)	6.47	5.63		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, and having children are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table B.10: Covariate continuity tests for opinion on nuclear power (SHP 2011, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.195*	0.095	278 / 1,955	241 / 239
	(0.114)	(0.083)		
Age 65+	0.247	0.149	278 / 1,955	241 / 239
	(0.200)	(0.139)		
Has children	-0.193	-0.092	278 / 1,955	241 / 239
	(0.259)	(0.170)		
Educational attainment	-0.047	-0.001	278 / 1,955	241 / 239
	(0.111)	(0.067)		
Political interest	0.163	0.196**	278 / 1,955	241 / 239
	(0.105)	(0.089)		
Left–right political position	-0.030	-0.106	257 / 1,797	223 / 221
	(0.109)	(0.092)		
Log net personal income	0.075	-0.161	258 / 1,826	228 / 226
	(1.196)	(0.771)		
Residence duration	1.862	0.464	252 / 1,788	223 / 221
	(7.883)	(4.646)		
Moved after 2005	-0.022	-0.053	252 / 1,788	223 / 221
	(0.250)	(0.177)		
bw contr. (km)	5.46	22.34		
bw treat. (km)	5.46	5.45		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, having children, and moved after 2005 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table B.11: Covariate continuity tests for opinion on nuclear power (SHP 2014, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	-0.059	-0.069	304 / 2,578	243 / 216
	(0.153)	(0.131)		
Age 65+	0.401*	0.236	304 / 2,578	243 / 216
	(0.207)	(0.146)		
Has children	0.171	0.107	286 / 2,450	237 / 210
	(0.164)	(0.116)		
Educational attainment	-0.168	-0.036	304 / 2,578	243 / 216
	(0.125)	(0.078)		
Political interest	0.214*	0.206**	304 / 2,575	243 / 216
	(0.117)	(0.097)		
Left–right political position	-0.039	-0.058	274 / 2,356	223 / 198
	(0.111)	(0.097)		
Log net personal income	0.633	0.260	288 / 2,428	226 / 200
	(1.079)	(0.662)		
Residence duration	14.921*	8.225	281 / 2,419	231 / 204
	(7.894)	(5.461)		
Moved after 2005	-0.324	-0.172	281 / 2,419	231 / 204
	(0.214)	(0.153)		
bw contr. (km)	5.82	32.65		
bw treat. (km)	5.82	5.52		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, having children, and moved after 2005 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table B.12: Covariate continuity tests for opinion on nuclear power (SHP 2014, iodine boundary 2014/15)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.106**	0.102**	946 / 1,151	1,584 / 1,128
	(0.045)	(0.047)		
Age 65+	0.004	-0.030	946 / 1,151	1,584 / 1,128
	(0.074)	(0.066)		
Has children	0.004	-0.020	904 / 1,094	1,512 / 1,074
	(0.071)	(0.057)		
Educational attainment	0.017	0.050	946 / 1,151	1,584 / 1,128
	(0.047)	(0.048)		
Political interest	0.004	0.010	945 / 1,150	1,581 / 1,127
	(0.044)	(0.038)		
Left–right political position	-0.044	-0.067**	838 / 1,023	1,454 / 1,034
	(0.040)	(0.033)		
Log net personal income	-0.004	-0.042	889 / 1,078	1,489 / 1,062
	(0.253)	(0.260)		
Residence duration	-3.211	-2.178	893 / 1,081	1,493 / 1,067
	(2.955)	(2.797)		
bw contr. (km)	29.82	41.86		
bw treat. (km)	29.82	24.14		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, and having children are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table B.13: Covariate continuity tests for opinion on nuclear power (SHP 2017, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	-0.034	-0.048	505 / 3,011	451 / 658
	(0.102)	(0.075)		
Age 65+	-0.130	-0.044	505 / 3,011	451 / 658
	(0.131)	(0.065)		
Has children	-0.045	0.076	497 / 2,980	442 / 647
	(0.103)	(0.069)		
Educational attainment	-0.080	0.003	505 / 3,011	451 / 658
	(0.087)	(0.062)		
Political interest	0.070	0.051	504 / 3,007	451 / 658
	(0.077)	(0.047)		
Left–right political position	-0.033	-0.065	466 / 2,774	398 / 591
	(0.077)	(0.058)		
Log net personal income	0.125	0.361*	480 / 2,823	421 / 620
	(0.570)	(0.213)		
Residence duration	1.616	1.350	478 / 2,904	441 / 646
	(5.550)	(3.993)		
Moved after 2005	0.004	0.015	478 / 2,904	441 / 646
	(0.131)	(0.080)		
bw contr. (km)	6.96	28.50		
bw treat. (km)	6.96	8.72		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, having children, and moved after 2005 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table B.14: Covariate continuity tests for opinion on nuclear power (SHP 2017, iodine boundary 2014/15)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.093**	0.093*	1,316 / 1,318	2,182 / 1,066
	(0.042)	(0.051)		
Age 65+	0.047	0.090	1,316 / 1,318	2,182 / 1,066
	(0.061)	(0.070)		
Has children	0.045	0.038	1,298 / 1,300	2,165 / 1,057
	(0.072)	(0.080)		
Educational attainment	0.013	-0.010	1,316 / 1,318	2,182 / 1,066
	(0.044)	(0.048)		
Political interest	0.029	0.035	1,315 / 1,317	2,179 / 1,064
	(0.033)	(0.036)		
Left–right political position	-0.043	-0.013	1,190 / 1,192	2,014 / 979
	(0.040)	(0.038)		
Log net personal income	-0.071	-0.204	1,225 / 1,227	2,050 / 1,004
	(0.204)	(0.254)		
Residence duration	-3.491	-2.927	1,269 / 1,271	2,112 / 1,041
	(2.834)	(3.511)		
Moved after 2015	-0.020	-0.052	1,269 / 1,271	2,112 / 1,041
	(0.037)	(0.045)		
bw contr. (km)	31.86	32.02		
bw treat. (km)	31.86	19.10		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, having children, and moved after 2015 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table B.15: Covariate continuity tests for opinion on nuclear power (SHP 2023, iodine boundary 2014/15)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.065*	0.063*	1,527 / 1,955	2,525 / 2,053
	(0.036)	(0.034)		
Age 65+	0.018	0.029	1,527 / 1,955	2,525 / 2,053
	(0.055)	(0.064)		
Has children	-0.029	0.003	1,490 / 1,903	2,455 / 2,002
	(0.077)	(0.078)		
Educational attainment	0.009	-0.019	1,526 / 1,953	2,524 / 2,052
	(0.048)	(0.045)		
Political interest	0.028	0.032	1,523 / 1,951	2,515 / 2,043
	(0.038)	(0.036)		
Left–right political position	-0.022	-0.009	1,373 / 1,763	2,344 / 1,901
	(0.045)	(0.036)		
Log net personal income	-0.145	-0.212	1,375 / 1,756	2,295 / 1,853
	(0.172)	(0.189)		
Residence duration	-2.993	-2.411	1,504 / 1,926	2,482 / 2,019
	(2.713)	(2.572)		
Moved after 2015	0.013	-0.004	1,504 / 1,926	2,482 / 2,019
	(0.053)	(0.053)		
bw contr. (km)	34.22	48.57		
bw treat. (km)	34.22	26.64		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, having children, and moved after 2015 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table B.16: Covariate continuity tests for opinion on nuclear power (SHP 2023, iodine boundary 2023/24)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.054	0.027	1,020 / 1,374	1,148 / 1,114
	(0.045)	(0.042)		
Age 65+	0.090	0.064	1,020 / 1,374	1,148 / 1,114
	(0.111)	(0.112)		
Has children	0.004	0.130	992 / 1,341	1,127 / 1,093
	(0.108)	(0.096)		
Educational attainment	0.088	0.043	1,019 / 1,373	1,147 / 1,113
	(0.068)	(0.054)		
Political interest	0.087*	0.036	1,019 / 1,373	1,146 / 1,112
	(0.049)	(0.042)		
Left–right political position	-0.126**	-0.050	967 / 1,291	1,085 / 1,052
	(0.057)	(0.041)		
Log net personal income	0.052	-0.005	935 / 1,267	1,052 / 1,021
	(0.301)	(0.275)		
Residence duration	-1.018	-1.141	1,009 / 1,361	1,134 / 1,101
	(4.104)	(3.879)		
bw contr. (km)	18.82	30.41		
bw treat. (km)	18.82	17.67		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, and having children are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table B.17: Sample composition of the language-region fixed-effects specifications for opinion on nuclear power (iodine boundary 2004/05)

	Symmetric bandwidth		Asymmetric bandwidth	
	Control	Treatment	Control	Treatment
SHP 2005				
Bandwidth (km)	6.43	6.43	22.34	6.16
Respondents				
Non-German	37	66	246	64
German	270	196	1,398	181
Municipalities				
Non-German	11	11	62	10
German	61	53	246	48
SHP 2011				
Bandwidth (km)	6.45	6.45	20.22	6.90
Respondents				
Non-German	39	78	294	82
German	324	250	1,423	292
Municipalities				
Non-German	12	9	65	11
German	71	54	238	60
SHP 2014				
Bandwidth (km)	5.86	5.86	26.84	5.60
Respondents				
Non-German	40	69	404	69
German	270	177	1,810	168
Municipalities				
Non-German	10	7	66	7
German	60	42	303	39

Note: The table reports the composition of the estimation samples used in the language-region fixed-effects specifications for opinion on nuclear power at the 2004/05 iodine distribution boundary. The symmetric specifications use a common MSE-optimal bandwidth on both sides of the cutoff (*mserd*), whereas the asymmetric specifications allow for separate MSE-optimal bandwidths on the control and treatment sides (*msetwo*). Municipality counts refer to unique municipalities.

B.3 Identification checks

Table B.18: Robustness to assignment- and merger-related sample restrictions

	Unadjusted		Controls		Controls + language-region FE	
	Symmetric	Asymmetric	Symmetric	Asymmetric	Symmetric	Asymmetric
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Iodine boundary 2004/05 – assignment-rule mismatches and cross-boundary mergers						
SHP 2005	-0.249	0.567*	-0.258	0.564*	-0.307	0.321
	(0.379)	(0.327)	(0.380)	(0.327)	(0.335)	(0.261)
SHP 2011	0.975*	0.614*	0.882*	0.528**	0.696	0.409*
	(0.567)	(0.317)	(0.508)	(0.263)	(0.443)	(0.224)
SHP 2014	0.344	0.639*	0.310	0.647*	0.432	0.506
	(0.468)	(0.342)	(0.473)	(0.348)	(0.437)	(0.321)
SHP 2017	-0.187	0.060	-0.133	0.145	-0.155	0.070
	(0.280)	(0.218)	(0.289)	(0.237)	(0.262)	(0.175)
Panel B: Iodine boundary 2014/15 – treatment-assignment deviations						
SHP 2014	0.009	-0.001	-0.084	-0.110	-0.068	-0.098
	(0.171)	(0.162)	(0.175)	(0.157)	(0.176)	(0.153)
SHP 2017	0.025	-0.017	-0.0001	-0.037	-0.022	-0.051
	(0.104)	(0.114)	(0.102)	(0.111)	(0.097)	(0.102)
SHP 2023	0.008	-0.008	-0.026	-0.057	-0.025	-0.063
	(0.131)	(0.113)	(0.126)	(0.110)	(0.126)	(0.110)
Panel C: Iodine boundary 2023/24 – treatment-assignment deviations						
SHP 2023	0.161	-0.012	-0.078	-0.106	-0.072	-0.112
	(0.174)	(0.153)	(0.140)	(0.128)	(0.144)	(0.127)

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates after applying assignment-related sample restrictions. Panel A excludes municipalities whose observed treatment status is inconsistent with the reconstructed 20 km assignment criterion as well as municipalities affected by cross-boundary mergers. Panels B and C exclude municipalities whose actual iodine-tablet allocation deviated from the treatment status implied by the corresponding 50 km distribution boundary. Details on these exclusions are provided in Section A. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Covariate-adjusted specifications use the boundary- and wave-specific controls of the corresponding baseline specifications. Bandwidths and estimation samples are selected separately for each specification.

Table B.19: Robustness: GRDD estimates for opinion on nuclear power; reduced sample of stayers

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: SHP 2011, iodine boundary 2004/05						
RD estimate	0.409	0.577**	0.277	0.534**	0.276	0.531**
	(0.522)	(0.256)	(0.501)	(0.240)	(0.501)	(0.255)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	6.01	24.33	6.31	24.13	6.32	23.14
bw treat. (km)	6.01	6.57	6.31	7.13	6.32	6.91
obs. left	241	1,496	244	1,481	244	1,480
obs. right	212	244	235	284	235	273
Panel B: SHP 2014, iodine boundary 2004/05						
RD estimate	0.220	0.731**	0.170	0.728**	0.123	0.589**
	(0.503)	(0.324)	(0.494)	(0.321)	(0.438)	(0.294)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	6.11	30.09	6.14	29.76	6.43	25.65
bw treat. (km)	6.11	5.77	6.14	5.84	6.43	6.13
obs. left	218	1,694	218	1,682	224	1,423
obs. right	181	171	186	171	198	181

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates for reduced samples of stayers, defined as respondents who did not move after 2005. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Covariate-adjusted specifications use the wave-specific controls identified in the corresponding covariate continuity tests. For SHP 2011, these are being a woman and political interest; for SHP 2014, these are being aged 65 or older and political interest.

Table B.20: Robustness: GRDD estimates for opinion on nuclear power; pre-information campaign 2012 sample (SHP 2011, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.607	0.581**	0.628	0.602**	0.475	0.450**
	(0.453)	(0.249)	(0.454)	(0.253)	(0.395)	(0.214)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	5.57	22.51	5.56	22.51	5.99	20.39
bw treat. (km)	5.57	5.60	5.56	5.57	5.99	6.38
obs. left	275	1,951	275	1,951	334	1,731
obs. right	270	270	270	270	288	318

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates for the pre-information sample, restricted to respondents interviewed up to and including January 30, 2012. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for political interest, which shows evidence of discontinuity in the asymmetric bandwidth specification.

Table B.21: Covariate continuity tests for opinion on nuclear power; pre-information campaign 2012 sample (SHP 2011, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.179	0.071	275 / 1,951	270 / 270
	(0.116)	(0.082)		
Age 65+	0.259	0.150	275 / 1,951	270 / 270
	(0.193)	(0.131)		
Has children	-0.145	-0.061	275 / 1,951	270 / 270
	(0.252)	(0.164)		
Educational attainment	-0.045	-0.008	275 / 1,951	270 / 270
	(0.109)	(0.065)		
Political interest	0.150	0.184**	275 / 1,951	270 / 270
	(0.100)	(0.082)		
Left–right political position	-0.029	-0.106	255 / 1,795	250 / 250
	(0.110)	(0.091)		
Log net personal income	-0.149	-0.208	256 / 1,824	256 / 256
	(1.162)	(0.762)		
Residence duration	2.137	0.264	249 / 1,784	252 / 252
	(7.682)	(4.574)		
Moved after 2005	-0.011	-0.040	249 / 1,784	252 / 252
	(0.246)	(0.168)		
bw contr. (km)	5.57	22.51		
bw treat. (km)	5.57	5.60		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables for the pre-information sample, restricted to respondents interviewed up to and including January 30, 2012. Woman, age 65 or older, having children, and having moved after 2005 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power in columns (1) and (2) of Table B.20. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table B.22: GRDD estimates for opinion on nuclear power (SHP 2014, iodine boundary 2004/05, pre-distribution sample)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.076	0.584*	0.076	0.654**	0.057	0.457
	(0.485)	(0.321)	(0.487)	(0.333)	(0.401)	(0.279)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	5.85	32.46	5.85	30.63	5.88	24.96
bw treat. (km)	5.85	5.59	5.85	5.52	5.88	5.67
obs. left	178	1,716	172	1,603	177	1,298
obs. right	174	170	172	153	177	168

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the 2004/05 iodine distribution boundary is the forcing variable. The sample is restricted to respondents interviewed before October 27, 2014, i.e., before the start of the 2014/15 iodine tablet distribution. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3)–(6) control for being aged 65 or older, having children, and political interest, which show evidence of discontinuity in at least one bandwidth specification (Table B.23). Columns (5) and (6) additionally include language-region fixed effects.

Table B.23: Covariate continuity tests for opinion on nuclear power (SHP 2014, iodine boundary 2004/05, pre-distribution sample)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.117	0.013	178 / 1,716	174 / 170
	(0.181)	(0.147)		
Age 65+	0.521**	0.152	178 / 1,716	174 / 170
	(0.246)	(0.171)		
Has children	0.371**	0.183	172 / 1,658	172 / 168
	(0.187)	(0.133)		
Educational attainment	-0.164	-0.039	178 / 1,716	174 / 170
	(0.139)	(0.084)		
Political interest	0.215*	0.173*	178 / 1,714	174 / 170
	(0.120)	(0.090)		
Left–right political position	-0.043	-0.100	161 / 1,557	162 / 158
	(0.134)	(0.115)		
Log net personal income	0.518	-0.035	168 / 1,625	165 / 162
	(1.225)	(0.880)		
Residence duration	16.074	4.033	163 / 1,610	164 / 160
	(9.818)	(6.605)		
Moved after 2005	-0.332	-0.135	163 / 1,610	164 / 160
	(0.255)	(0.155)		
bw contr. (km)	5.85	32.46		
bw treat. (km)	5.85	5.59		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports covariate continuity tests corresponding to the restricted-sample GRDD specification in Table B.22. The sample is restricted to respondents interviewed before October 27, 2014, i.e., before the start of the 2014/15 iodine tablet distribution. The listed covariates are used as dependent variables, while the symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power in the restricted sample. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric.

Table B.24: GRDD estimates for opinion on nuclear power (SHP 2014, iodine boundary 2014/15, pre-distribution sample)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.029	0.056	-0.059	-0.059	-0.034	-0.040
	(0.183)	(0.171)	(0.198)	(0.171)	(0.197)	(0.166)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	34.15	44.58	28.89	58.27	27.53	57.67
bw treat. (km)	34.15	28.69	28.89	22.28	27.53	22.91
obs. left	698	793	565	845	556	843
obs. right	1,213	1,040	950	592	924	604

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

The table reports robust bias-corrected local linear GRDD estimates using the boundary of the 2014/15 iodine tablet distribution. The sample is restricted to respondents interviewed before October 27, 2014, i.e., before the start of the 2014/15 iodine tablet distribution. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being a woman and left–right political position. Columns (5) and (6) additionally include language-region fixed effects.

Table B.25: GRDD estimates for opinion on nuclear power (SHP 2023, iodine boundary 2014/15, pre-distribution sample)

	Opinion on nuclear power			
	(1)	(2)	(3)	(4)
RD estimate	0.248	0.141	0.256	0.142
	(0.222)	(0.208)	(0.217)	(0.208)
controls	No	No	No	No
language-region FE	No	No	Yes	Yes
bw contr. (km)	23.78	61.41	23.50	61.28
bw treat. (km)	23.78	18.27	23.50	18.28
obs. left	448	834	439	834
obs. right	593	466	589	467

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the 2014/15 iodine distribution boundary is the forcing variable. The sample is restricted to respondents interviewed before October 16, 2023, i.e., before the start of the 2023/24 iodine tablet distribution. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) additionally include language-region fixed effects.

Table B.26: Covariate continuity tests for opinion on nuclear power (SHP 2023, iodine boundary 2014/15, pre-distribution sample)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	-0.009	0.022	448 / 834	593 / 466
	(0.083)	(0.068)		
Age 65+	0.104	0.145	448 / 834	593 / 466
	(0.122)	(0.126)		
Has children	-0.032	0.012	441 / 819	583 / 456
	(0.101)	(0.111)		
Educational attainment	-0.060	-0.070	448 / 834	593 / 466
	(0.054)	(0.056)		
Political interest	0.033	0.071	448 / 834	590 / 463
	(0.052)	(0.051)		
Left–right political position	-0.013	-0.014	394 / 744	549 / 431
	(0.050)	(0.047)		
Log net personal income	-0.130	-0.224	407 / 756	555 / 438
	(0.294)	(0.309)		
Residence duration	-6.518*	-4.636	438 / 819	587 / 460
	(3.738)	(3.586)		
Moved after 2015	0.082	-0.019	438 / 819	587 / 460
	(0.090)	(0.082)		
bw contr. (km)	23.78	61.41		
bw treat. (km)	23.78	18.27		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports covariate continuity tests corresponding to the restricted-sample GRDD specification in Table B.25. The sample is restricted to respondents interviewed before October 16, 2023. The listed covariates are used as dependent variables, while the symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power in the restricted sample. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric.

Table B.27: GRDD estimates for opinion on nuclear power (SHP 2023, iodine boundary 2023/24, post-distribution sample)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.023	-0.230	-0.265	-0.291	-0.283	-0.261
	(0.512)	(0.443)	(0.527)	(0.431)	(0.530)	(0.466)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	16.49	34.87	16.22	37.39	16.11	38.20
bw treat. (km)	16.49	12.66	16.22	12.13	16.11	11.12
obs. left	192	337	169	316	169	320
obs. right	203	155	189	128	186	105

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the 2023/24 iodine distribution boundary is the forcing variable. The sample is restricted to respondents interviewed after November 19, 2023, i.e., after the iodine tablet distribution to private households had been completed. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for political interest and log net personal income, both of which show evidence of discontinuity in the symmetric bandwidth specification (Table B.28).

Table B.28: Covariate continuity tests for opinion on nuclear power (SHP 2023, iodine boundary 2023/24, post-distribution sample)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.190	0.188	192 / 337	203 / 155
	(0.185)	(0.203)		
Age 65+	0.008	-0.177	192 / 337	203 / 155
	(0.161)	(0.168)		
Has children	-0.105	-0.136	186 / 328	194 / 147
	(0.289)	(0.227)		
Educational attainment	0.044	-0.088	192 / 337	203 / 155
	(0.151)	(0.109)		
Political interest	0.268*	0.125	191 / 336	203 / 155
	(0.156)	(0.129)		
Left–right political position	0.016	0.149	180 / 316	192 / 145
	(0.140)	(0.121)		
Log net personal income	-0.914*	-0.717	174 / 310	189 / 144
	(0.501)	(0.583)		
Residence duration	5.774	0.044	192 / 334	201 / 153
	(7.536)	(6.939)		
bw contr. (km)	16.49	34.87		
bw treat. (km)	16.49	12.66		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports covariate continuity tests corresponding to the restricted-sample GRDD specification in Table B.27. The sample is restricted to respondents interviewed after November 19, 2023. The listed covariates are used as dependent variables, while the symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power in the restricted sample. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric.

Table B.29: Robustness: pre-expansion placebo GRDD estimates for opinion on nuclear power (SHP 2003, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.159	0.264	-0.152	0.285	-0.095	0.211
	(0.385)	(0.216)	(0.386)	(0.219)	(0.386)	(0.223)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	6.61	30.05	6.61	28.82	6.80	26.76
bw treat. (km)	6.61	6.99	6.61	6.99	6.80	6.87
obs. left	276	1,739	276	1,717	348	1,601
obs. right	200	222	200	222	222	222

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

The table reports robust bias-corrected local linear GRDD estimates using the 2003 SHP wave as a pre-expansion placebo. Municipalities are classified according to whether they subsequently fall inside or outside the 2004/05 iodine tablet distribution boundary. The RD estimate therefore captures a pre-existing discontinuity at the future treatment boundary rather than an effect of iodine tablet receipt. Driving distance to the 2004/05 boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being aged 65 or older, which shows evidence of discontinuity in the corresponding covariate continuity test (Table B.30).

Table B.30: Covariate continuity tests for opinion on nuclear power (SHP 2003, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	-0.054	-0.015	276 / 1,739	200 / 222
	(0.108)	(0.080)		
Age 65+	0.089	0.111*	276 / 1,739	200 / 222
	(0.085)	(0.059)		
Has children	-0.394	-0.235	276 / 1,739	200 / 222
	(0.300)	(0.206)		
Educational attainment	0.005	0.075	276 / 1,739	200 / 222
	(0.101)	(0.063)		
Political interest	0.086	0.107	275 / 1,738	200 / 222
	(0.096)	(0.071)		
Left–right political position	-0.004	-0.059	252 / 1,586	181 / 202
	(0.106)	(0.070)		
Log net personal income	0.425	0.195	259 / 1,611	186 / 208
	(0.776)	(0.646)		
bw contr. (km)	6.61	30.05		
bw treat. (km)	6.61	6.99		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, and having children are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted. As the SHP wave predates the 2004/05 expansion of iodine tablet distribution, the 2004/05 boundary represents the future treatment boundary in this sample.

Table B.31: Robustness: pre-expansion placebo GRDD estimates for opinion on nuclear power (SHP 2004, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-1.325**	-0.141	-1.394***	-0.153	-1.318***	-0.405
	(0.525)	(0.325)	(0.535)	(0.326)	(0.494)	(0.334)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	4.45	28.31	4.42	28.22	4.59	22.78
bw treat. (km)	4.45	5.67	4.42	5.65	4.59	5.46
obs. left	124	1,423	121	1,412	144	1,184
obs. right	108	170	108	170	121	147

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates using the 2004 SHP wave as a pre-expansion placebo at the future 2004/05 iodine distribution boundary. The sample is restricted to respondents interviewed before November 15, 2004. Municipalities are classified according to whether they subsequently fall inside or outside the 2004/05 iodine tablet distribution boundary. The RD estimate therefore captures a pre-existing discontinuity at the future treatment boundary rather than an effect of the 2004/05 iodine tablet distribution. Driving distance to the 2004/05 boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for educational attainment, which shows evidence of discontinuity in the symmetric bandwidth specification (Table B.32).

Table B.32: Covariate continuity tests for opinion on nuclear power (SHP 2004, pre-treatment sample, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.014	-0.013	124 / 1,423	108 / 170
	(0.281)	(0.173)		
Age 65+	-0.101	0.097	124 / 1,423	108 / 170
	(0.244)	(0.145)		
Has children	-0.052	-0.010	124 / 1,423	108 / 170
	(0.374)	(0.158)		
Educational attainment	-0.311**	-0.097	124 / 1,423	108 / 170
	(0.134)	(0.090)		
Political interest	-0.074	-0.043	124 / 1,422	108 / 170
	(0.157)	(0.120)		
Left–right political position	-0.011	-0.020	110 / 1,307	98 / 154
	(0.133)	(0.095)		
Log net personal income	-1.097	-0.375	114 / 1,298	95 / 151
	(1.152)	(0.780)		
bw contr. (km)	4.45	28.31		
bw treat. (km)	4.45	5.67		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, and having children are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. The symmetric and asymmetric estimation and bias bandwidths are those selected for opinion on nuclear power in the pre-treatment sample. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both opinion on nuclear power and the respective covariate. The triangular kernel is used and mass points are adjusted. The sample is restricted to respondents interviewed before November 15, 2004, such that the 2004/05 iodine distribution boundary represents the future treatment boundary in this sample.

B.4 Alternative specifications

Table B.33: Robustness: GRDD estimates for opinion on nuclear power; common samples and uniform bandwidths

	Unadjusted		Controls		Controls + language-region FE	
	Symmetric	Asymmetric	Symmetric	Asymmetric	Symmetric	Asymmetric
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Iodine boundary 2004/05						
SHP 2005	-0.288	0.575*	-0.300	0.574*	-0.364	0.333
	(0.378)	(0.332)	(0.379)	(0.333)	(0.340)	(0.276)
SHP 2011	0.699	0.607**	0.643	0.569**	0.636	0.475*
	(0.463)	(0.264)	(0.471)	(0.261)	(0.457)	(0.268)
SHP 2014	0.103	0.590**	0.087	0.598**	0.105	0.427
	(0.429)	(0.284)	(0.428)	(0.284)	(0.382)	(0.262)
Panel B: Iodine boundary 2014/15						
SHP 2014	-0.018	-0.022	-0.099	-0.129	-0.093	-0.126
	(0.173)	(0.166)	(0.165)	(0.160)	(0.157)	(0.156)
SHP 2017	0.029	-0.010	0.009	-0.028	0.013	-0.050
	(0.102)	(0.113)	(0.098)	(0.110)	(0.088)	(0.102)
SHP 2023	-0.003	-0.019	-0.031	-0.046	-0.031	-0.049
	(0.130)	(0.117)	(0.124)	(0.112)	(0.124)	(0.113)
Panel C: Iodine boundary 2023/24						
SHP 2023	0.167	-0.020	-0.045	-0.116	-0.037	-0.125
	(0.189)	(0.169)	(0.165)	(0.138)	(0.167)	(0.139)

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates using common complete-case samples and uniform bandwidths across specifications. Within each SHP wave and iodine boundary, all specifications are estimated on the common sample defined by the availability of the variables included in the corresponding language-region fixed-effects specification. The bandwidths selected from the unadjusted model are applied uniformly across specifications. Columns (1), (3), and (5) use the common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2), (4), and (6) use the asymmetric MSE-optimal bandwidths (msetwo). Covariate-adjusted specifications use the boundary- and wave-specific controls of the corresponding baseline specifications.

Table B.34 reports specifications with canton fixed effects across all survey waves and iodine boundaries. For the 2004/05 boundary, for which the canton fixed effects estimates differ materially from the corresponding baseline estimates, we additionally report the full estimation results for each SHP wave as well as further diagnostics on within-canton support and sensitivity to canton composition (Tables B.35–B.37, B.38, and B.39). For the later boundaries, including canton fixed effects does not alter the substantive conclusions.

Table B.34: Robustness: GRDD estimates for opinion on nuclear power; canton fixed effects

	Canton FE		Canton FE + restriction		Canton FE + baseline sample/bw	
	Symmetric	Asymmetric	Symmetric	Asymmetric	Symmetric	Asymmetric
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Iodine boundary 2004/05						
SHP 2005	-0.466	0.080	-0.466	0.080	-0.448	0.101
	(0.315)	(0.263)	(0.315)	(0.263)	(0.322)	(0.268)
SHP 2011	0.382	0.293	0.686*	0.320	0.555	0.331
	(0.336)	(0.197)	(0.370)	(0.225)	(0.380)	(0.263)
SHP 2014	-0.091	0.283	0.079	0.363	-0.065	0.338
	(0.341)	(0.235)	(0.366)	(0.264)	(0.365)	(0.263)
Panel B: Iodine boundary 2014/15						
SHP 2014	-0.022	-0.085	-0.015	-0.064	-0.102	-0.113
	(0.182)	(0.165)	(0.184)	(0.167)	(0.145)	(0.149)
SHP 2017	-0.049	-0.071	-0.052	-0.077	-0.009	-0.071
	(0.099)	(0.098)	(0.101)	(0.098)	(0.087)	(0.101)
SHP 2023	-0.077	-0.145	-0.084	-0.151	-0.056	-0.086
	(0.119)	(0.107)	(0.119)	(0.106)	(0.114)	(0.104)
Panel C: Iodine boundary 2023/24						
SHP 2023	-0.080	-0.136	-0.072	-0.134	-0.064	-0.144
	(0.144)	(0.128)	(0.146)	(0.130)	(0.164)	(0.136)

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates with canton fixed effects. Driving distance to the iodine boundary is the forcing variable. All specifications include the boundary- and wave-specific covariates of the corresponding baseline specification. Columns (1) and (2) use bandwidths selected separately for the canton-fixed-effects specifications. Columns (3) and (4) additionally apply the corresponding sample restriction: Panel A excludes municipalities affected by cross-boundary mergers, while Panels B and C exclude municipalities whose actual iodine-tablet allocation deviated from the treatment status implied by the corresponding distribution boundary. Columns (5) and (6) use the common complete-case sample and the estimation and bias bandwidths selected by the corresponding baseline specifications without canton fixed effects. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo).

Table B.35: Robustness: GRDD estimates for opinion on nuclear power; canton fixed effects (SHP 2005, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.466	0.080	-0.466	0.080	-0.448	0.101
	(0.315)	(0.263)	(0.315)	(0.263)	(0.322)	(0.268)
cross-boundary mergers	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
controls	Yes	Yes	Yes	Yes	Yes	Yes
canton FE	Yes	Yes	Yes	Yes	Yes	Yes
baseline sample/bw	No	No	No	No	Yes	Yes
bw contr. left (km)	6.28	22.12	6.28	22.12	6.47	23.43
bw treat. right (km)	6.28	6.15	6.28	6.15	6.47	5.63
obs. left	290	1,556	290	1,556	311	1,687
obs. right	249	245	249	245	264	227

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to boundary is the forcing variable. All specifications include the covariates and canton fixed effects. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (1) and (2) use bandwidths selected separately for the canton-fixed-effects specifications. Columns (3) and (4) exclude merger-affected municipalities (in 2005, only Belfaux) and likewise use separately selected bandwidths. Columns (5) and (6) again include merger-affected municipalities but use the common complete-case sample and the estimation and bias bandwidths selected by the corresponding baseline specifications without canton fixed effects.

Table B.36: Robustness: GRDD estimates for opinion on nuclear power; canton fixed effects (SHP 2011, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.382	0.293	0.686*	0.320	0.555	0.331
	(0.336)	(0.197)	(0.370)	(0.225)	(0.380)	(0.263)
cross-boundary mergers	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
controls	Yes	Yes	Yes	Yes	Yes	Yes
canton FE	Yes	Yes	Yes	Yes	Yes	Yes
baseline sample/bw	No	No	No	No	Yes	Yes
bw contr. left (km)	6.19	35.31	5.72	35.49	5.42	22.34
bw treat. right (km)	6.19	6.56	5.72	6.04	5.42	5.40
obs. left	349	2,798	256	2,799	258	1,955
obs. right	308	332	252	269	239	239

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to boundary is the forcing variable. All specifications include the covariates and canton fixed effects. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (1) and (2) use bandwidths selected separately for the canton-fixed-effects specifications. Columns (3) and (4) exclude merger-affected municipalities and likewise use separately selected bandwidths. Columns (5) and (6) again include merger-affected municipalities but use the common complete-case sample and the estimation and bias bandwidths selected by the corresponding baseline specifications without canton fixed effects.

Table B.37: Robustness: GRDD estimates for opinion on nuclear power; canton fixed effects (SHP 2014, iodine boundary 2004/05)

	Opinion on nuclear power					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.091	0.283	0.079	0.363	-0.065	0.338
	(0.341)	(0.235)	(0.366)	(0.264)	(0.365)	(0.263)
cross-boundary mergers	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
controls	Yes	Yes	Yes	Yes	Yes	Yes
canton FE	Yes	Yes	Yes	Yes	Yes	Yes
baseline sample/bw	No	No	No	No	Yes	Yes
bw contr. left (km)	6.03	28.25	5.87	30.14	5.81	32.64
bw treat. right (km)	6.03	6.01	5.87	5.71	5.81	5.50
obs. left	330	2,263	278	2,435	304	2,575
obs. right	252	252	233	219	243	202

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. All specifications control for being aged 65 or older and political interest and include canton fixed effects. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (1) and (2) use bandwidths selected separately for the canton-fixed-effects specifications. Columns (3) and (4) exclude merger-affected municipalities and likewise use separately selected bandwidths. Columns (5) and (6) again include merger-affected municipalities but use the common complete-case sample and the estimation and bias bandwidths selected by the corresponding baseline specifications without canton fixed effects.

Table B.38: Diagnostics for canton fixed-effects specifications in opinion on nuclear power (iodine boundary 2004/05)

Panel A: Within-canton treatment–control support

	Symmetric bandwidth		Asymmetric bandwidth	
	Bandwidth contr./treat.	Two-sided / total cantons	Bandwidth contr./treat.	Two-sided / total cantons
SHP 2005	6.28 / 6.28	8 / 9	22.12 / 6.15	9 / 11
SHP 2011	6.19 / 6.19	8 / 9	35.31 / 6.56	9 / 14
SHP 2014	6.03 / 6.03	8 / 9	28.25 / 6.01	9 / 13

Panel B: Leave-one-canton-out sensitivity

	Symmetric bandwidth		Asymmetric bandwidth	
	w canton FE (1)	w/o canton FE (2)	w canton FE (3)	w/o canton FE (4)
SHP 2005				
Full-sample estimate	-0.466	-0.325	0.080	0.530
Maximum absolute change	0.244	0.380	0.124	0.222
SD of leave-one-out estimates	0.152	0.176	0.073	0.090
SHP 2011				
Full-sample estimate	0.382	0.425	0.293	0.446
Maximum absolute change	0.361	0.250	0.274	0.149
SD of leave-one-out estimates	0.159	0.116	0.113	0.059
SHP 2014				
Full-sample estimate	-0.091	0.075	0.283	0.548
Maximum absolute change	0.447	0.306	0.281	0.166
SD of leave-one-out estimates	0.185	0.142	0.115	0.082

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: Panel A summarises within-canton treatment–control support for the primary canton fixed-effects specifications. Bandwidths are reported in kilometres as control-side / treatment-side bandwidths. “Two-sided” denotes cantons containing at least one respondent on both sides of the iodine boundary within the corresponding estimation window. “Total cantons” denotes all cantons represented by at least one observation within the estimation window. Merger-affected municipalities are included to correspond to the primary canton fixed-effects specifications.

Panel B reports leave-one-canton-out sensitivity. Each specification is re-estimated after excluding all respondents from one two-sided canton at a time, holding the bandwidths fixed at those of the corresponding full-sample canton-fixed-effects specification. The number of cantons omitted separately therefore corresponds to the number of two-sided cantons reported in Panel A. For direct comparison, specifications without canton fixed effects use the same estimation samples and bandwidths. Cantons represented on only one side of the cutoff are not omitted separately because they provide no direct within-canton treatment–control contrast.

Table B.39: Cantonal composition of canton fixed-effects estimation samples (iodine boundary 2004/05)

	SHP 2005		SHP 2011		SHP 2014	
Canton	Sym.	Asym.	Sym.	Asym.	Sym.	Asym.
Bandwidth (km)	6.28/6.28	22.12/6.15	6.19/6.19	35.31/6.56	6.03/6.03	28.25/6.01
Zurich	48/16	465/14	55/15	876/15	59/13	701/13
Bern	94/76	368/76	104/95	549/105	87/74	502/74
Lucerne	25/13	90/13	32/16	329/16	32/12	173/12
Zug	–	–	–	42/0	–	3/0
Fribourg	29/51	55/51	25/68	125/68	26/56	95/56
Solothurn	15/12	63/12	21/11	89/11	14/5	88/5
Basel-Stadt	–	116/0	–	113/0	–	104/0
Basel-Landschaft	21/25	131/25	28/31	184/36	28/26	176/26
Schaffhausen	–	1/0	–	43/0	–	14/0
Aargau	42/44	109/42	65/57	144/66	63/46	152/46
Thurgau	–	–	–	8/0	–	–
Vaud	0/2	12/2	0/5	26/5	0/8	16/8
Neuchâtel	16/10	146/10	19/10	262/10	21/12	237/12
Jura	–	–	–	8/0	–	2/0
Total respondents	290/249	1,556/245	349/308	2,798/332	330/252	2,263/252
Total municipalities	71/60	305/58	81/59	471/64	75/51	380/51

Entries report control/treatment counts.

Note: The table reports the cantonal composition of the estimation samples used in the primary canton fixed-effects specifications for the 2004/05 iodine boundary. Canton-level entries report control/treatment respondent counts; "–" indicates that no respondents from the canton fall within the corresponding estimation window. The final two rows report total control/treatment respondent and municipality counts. Bandwidths are reported in kilometres as control-side/treatment-side bandwidths. The symmetric specifications use a common MSE-optimal bandwidth on both sides of the boundary (mserd), whereas the asymmetric specifications allow for separate MSE-optimal bandwidths (msetwo). Merger-affected municipalities are included, corresponding to the primary canton fixed-effects specifications.

Table B.40: GRDD estimates for opinion on nuclear power using straight-line distance (iodine boundary 2004/05)

	Unadjusted		Controls		Language-region FE	
	Sym.	Asym.	Sym.	Asym.	Sym.	Asym.
SHP 2005						
RD estimate	0.001	0.392***	-0.001	0.394***	-0.105	0.244*
	(0.203)	(0.140)	(0.203)	(0.140)	(0.184)	(0.126)
bw contr. (km)	5.99	19.07	5.99	19.02	5.88	18.56
bw treat. (km)	5.99	5.20	5.99	5.22	5.88	5.76
obs. left	494	1,965	494	1,962	490	1,893
obs. right	423	347	423	347	409	407
SHP 2011						
RD estimate	0.166	0.311***	0.164	0.298***	0.096	0.234**
	(0.151)	(0.101)	(0.147)	(0.097)	(0.143)	(0.098)
bw contr. (km)	6.25	16.18	6.21	16.37	6.52	15.48
bw treat. (km)	6.25	7.33	6.21	7.67	6.52	9.09
obs. left	640	2,008	634	2,017	679	1,979
obs. right	537	658	534	670	549	763
SHP 2014						
RD estimate	0.088	0.203*	0.098	0.214*	0.004	0.165
	(0.187)	(0.122)	(0.189)	(0.122)	(0.161)	(0.112)
bw contr. (km)	5.93	27.97	5.81	26.67	6.10	18.59
bw treat. (km)	5.93	6.50	5.81	6.37	6.10	6.70
obs. left	586	2,729	567	2,687	602	2,147
obs. right	482	515	475	508	499	525

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using straight-line distance to the iodine distribution boundary as the forcing variable. Symmetric specifications use a common MSE-optimal bandwidth on both sides of the cutoff (mserd), while asymmetric specifications allow separate MSE-optimal bandwidths on the control and treatment sides (msetwo). Covariate-adjusted specifications use the wave-specific controls of the corresponding baseline specification. Standard errors are clustered at the municipality level.

Table B.41: Robustness: GRDD estimates for opinion on nuclear power excluding potentially endogenous controls

	Without language-region FE		With language-region FE	
	Symmetric (1)	Asymmetric (2)	Symmetric (3)	Asymmetric (4)
SHP 2011, iodine boundary 2004/05				
RD estimate	0.499	0.533**	0.395	0.430**
	(0.420)	(0.220)	(0.373)	(0.203)
Remaining covariates	Woman	Woman	Woman	Woman
bw contr. (km)	5.84	22.36	6.28	20.08
bw treat. (km)	5.84	6.03	6.28	6.72
SHP 2014, iodine boundary 2004/05				
RD estimate	0.062	0.581**	0.077	0.401
	(0.427)	(0.284)	(0.370)	(0.254)
Remaining covariates	Age 65+	Age 65+	Age 65+	Age 65+
bw contr. (km)	5.82	32.71	5.89	26.97
bw treat. (km)	5.82	5.49	5.89	5.62
SHP 2014, iodine boundary 2014/15				
RD estimate	-0.034	-0.034	-0.017	-0.025
	(0.168)	(0.157)	(0.162)	(0.145)
Remaining covariates	Woman	Woman	Woman	Woman
bw contr. (km)	28.98	43.80	26.91	44.26
bw treat. (km)	28.98	23.99	26.91	25.14
SHP 2023, iodine boundary 2023/24				
RD estimate	0.159	-0.015	0.160	-0.027
	(0.173)	(0.152)	(0.173)	(0.150)
Remaining covariates	None	None	None	None
bw contr. (km)	18.82	30.41	18.78	31.47
bw treat. (km)	18.82	17.67	18.78	17.76

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates after excluding political covariates that may themselves be affected by iodine-tablet exposure. For SHP 2011 at the 2004/05 boundary, political interest is excluded and the indicator for being a woman is retained. For SHP 2014 at the 2004/05 boundary, political interest is excluded and the indicator for being aged 65 or older is retained. For SHP 2014 at the 2014/15 boundary, left–right political position is excluded and the indicator for being a woman is retained. For SHP 2023 at the 2023/24 boundary, both political interest and left–right political position are excluded, leaving no additional covariates. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) additionally include language-region fixed effects.

Table B.42: Bandwidth sensitivity of GRDD estimates for opinion on nuclear power (SHP 2005, iodine boundary 2004/05)

Panel A: Symmetric bandwidths							
	half MSEo	2.5 km	5 km	7.5 km	10 km	12.5 km	15 km
Unadjusted	-1.152	-3.061**	-0.317	-0.180	-0.186	-0.184	-0.140
	(0.790)	(1.494)	(0.392)	(0.356)	(0.336)	(0.359)	(0.424)
Controls	-1.156	-3.027**	-0.324	-0.190	-0.195	-0.192	-0.149
	(0.791)	(1.483)	(0.392)	(0.356)	(0.336)	(0.359)	(0.423)
Language-region FE	-1.132	-3.445**	-0.374	-0.293	-0.328	-0.328	-0.291
	(0.740)	(1.645)	(0.356)	(0.309)	(0.288)	(0.298)	(0.348)
Panel B: Treatment-side bandwidth variation							
	half MSEo	3 km	5 km	7 km	9 km	11 km	13 km
Unadjusted	-0.737	-0.635	0.478	0.631*	0.624**	0.619*	0.722**
	(0.935)	(0.804)	(0.336)	(0.329)	(0.310)	(0.318)	(0.358)
Controls	-0.738	-0.641	0.475	0.628*	0.622**	0.616*	0.718**
	(0.934)	(0.805)	(0.337)	(0.329)	(0.311)	(0.318)	(0.358)
Language-region FE	-0.761	-0.755	0.177	0.371	0.354	0.312	0.384
	(0.653)	(0.676)	(0.263)	(0.254)	(0.233)	(0.228)	(0.246)
Panel C: Control-side bandwidth variation							
	half MSEo	10 km	15 km	20 km	25 km	30 km	35 km
Unadjusted	0.237	0.169	0.362	0.525	0.585*	0.603*	0.607*
	(0.366)	(0.383)	(0.348)	(0.334)	(0.331)	(0.330)	(0.329)
Controls	0.232	0.164	0.358	0.523	0.584*	0.602*	0.606*
	(0.367)	(0.384)	(0.349)	(0.335)	(0.332)	(0.331)	(0.330)
Language-region FE	0.011	-0.039	0.117	0.263	0.337	0.355	0.360
	(0.306)	(0.321)	(0.279)	(0.263)	(0.262)	(0.261)	(0.261)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates with municipality-clustered CR1 standard errors. The triangular kernel is used and mass points are adjusted. Panel A varies a common bandwidth on both sides of the cutoff. Panel B holds the control-side bandwidth at its specification-specific MSE-optimal value and varies the treatment-side bandwidth. Panel C holds the treatment-side bandwidth at its specification-specific MSE-optimal value and varies the control-side bandwidth. In each panel, the first column uses one-half of the corresponding MSE-optimal bandwidth. The MSE-optimal bandwidths differ slightly across specifications: in Panel A, the half-MSE bandwidths are 3.23, 3.23, and 3.21 km for the unadjusted, covariate-adjusted, and language-region fixed-effects specifications, respectively. In Panel B, the corresponding fixed control-side bandwidths are 23.43, 23.32, and 22.34 km, while the half-MSE treatment-side bandwidths are 2.82, 2.83, and 3.08 km. In Panel C, the fixed treatment-side bandwidths are 5.63, 5.65, and 6.16 km, while the half-MSE control-side bandwidths are 11.72, 11.66, and 11.17 km. The corresponding MSE-optimal bias bandwidths are held fixed within each panel.

Table B.43: Bandwidth sensitivity of GRDD estimates for opinion on nuclear power (SHP 2011, iodine boundary 2004/05)

Panel A: Symmetric bandwidths							
	half MSEo	2.5 km	5 km	7.5 km	10 km	12.5 km	15 km
Unadjusted	0.134	-1.377	0.681	0.413	0.393	0.438	0.543
	(1.595)	(1.831)	(0.498)	(0.358)	(0.340)	(0.365)	(0.428)
Controls	0.283	-1.345	0.611	0.352	0.326	0.340	0.407
	(1.404)	(1.807)	(0.494)	(0.343)	(0.318)	(0.330)	(0.375)
Language-region FE	0.617	1.028	0.581	0.292	0.226	0.226	0.275
	(1.179)	(1.741)	(0.472)	(0.322)	(0.293)	(0.295)	(0.324)
Panel B: Treatment-side bandwidth variation							
	half MSEo	3 km	5 km	7 km	9 km	11 km	13 km
Unadjusted	-0.457	-0.420	0.544*	0.579***	0.545***	0.557***	0.593**
	(1.427)	(1.139)	(0.287)	(0.215)	(0.201)	(0.210)	(0.244)
Controls	-0.483	-0.491	0.501*	0.517***	0.473***	0.471***	0.486**
	(1.057)	(1.107)	(0.271)	(0.196)	(0.179)	(0.180)	(0.199)
Language-region FE	-0.286	-0.462	0.392	0.421**	0.374**	0.367**	0.376**
	(0.772)	(1.079)	(0.270)	(0.194)	(0.179)	(0.176)	(0.185)
Panel C: Control-side bandwidth variation							
	half MSEo	10 km	15 km	20 km	25 km	30 km	35 km
Unadjusted	0.454	0.456	0.513*	0.595**	0.603**	0.590**	0.578**
	(0.282)	(0.290)	(0.270)	(0.262)	(0.260)	(0.259)	(0.258)
Controls	0.386	0.389	0.438*	0.512**	0.514**	0.499**	0.487**
	(0.242)	(0.253)	(0.228)	(0.218)	(0.215)	(0.213)	(0.213)
Language-region FE	0.304	0.303	0.342	0.418**	0.433**	0.424**	0.419**
	(0.231)	(0.232)	(0.208)	(0.196)	(0.192)	(0.189)	(0.187)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates with municipality-clustered CR1 standard errors. The triangular kernel is used and mass points are adjusted. Panel A varies a common bandwidth on both sides of the cutoff. Panel B holds the control-side bandwidth at its specification-specific MSE-optimal value and varies the treatment-side bandwidth. Panel C holds the treatment-side bandwidth at its specification-specific MSE-optimal value and varies the control-side bandwidth. In each panel, the first column uses one-half of the corresponding MSE-optimal bandwidth. The MSE-optimal bandwidths differ slightly across specifications: in Panel A, the half-MSE bandwidths are 2.73, 2.95, and 3.23 km for the unadjusted, covariate-adjusted, and language-region fixed-effects specifications, respectively. In Panel B, the corresponding fixed control-side bandwidths are 22.34, 22.64, and 20.22 km, while the half-MSE treatment-side bandwidths are 2.72, 3.06, and 3.45 km. In Panel C, the fixed treatment-side bandwidths are 5.45, 6.13, and 6.90 km, while the half-MSE control-side bandwidths are 11.17, 11.32, and 10.11 km. The corresponding MSE-optimal bias bandwidths are held fixed within each panel.

Table B.44: Bandwidth sensitivity of GRDD estimates for opinion on nuclear power (SHP 2014, iodine boundary 2004/05)

Panel A: Symmetric bandwidths							
	half MSEo	2.5 km	5 km	7.5 km	10 km	12.5 km	15 km
Unadjusted	0.060	-1.730	0.042	0.079	0.084	0.106	0.169
	(1.054)	(1.686)	(0.463)	(0.369)	(0.354)	(0.386)	(0.473)
Controls	0.205	-1.244	0.023	0.080	0.089	0.121	0.188
	(1.101)	(1.727)	(0.462)	(0.370)	(0.356)	(0.391)	(0.480)
Language-region FE	0.730	1.775	0.021	0.053	0.036	0.088	0.173
	(0.982)	(1.944)	(0.406)	(0.323)	(0.304)	(0.335)	(0.415)
Panel B: Treatment-side bandwidth variation							
	half MSEo	3 km	5 km	7 km	9 km	11 km	13 km
Unadjusted	-0.187	-0.072	0.537*	0.495**	0.430*	0.456*	0.520*
	(0.886)	(0.709)	(0.274)	(0.245)	(0.232)	(0.241)	(0.289)
Controls	-0.134	-0.009	0.551**	0.511**	0.444*	0.472*	0.542*
	(0.909)	(0.718)	(0.276)	(0.248)	(0.235)	(0.246)	(0.296)
Language-region FE	0.063	-0.001	0.357	0.356	0.287	0.312	0.369
	(0.823)	(0.685)	(0.255)	(0.222)	(0.208)	(0.216)	(0.261)
Panel C: Control-side bandwidth variation							
	half MSEo	15 km	20 km	25 km	30 km	35 km	40 km
Unadjusted	0.546*	0.530*	0.588**	0.597**	0.591**	0.585**	0.580**
	(0.294)	(0.296)	(0.288)	(0.286)	(0.284)	(0.283)	(0.282)
Controls	0.555*	0.539*	0.604**	0.610**	0.604**	0.599**	0.594**
	(0.297)	(0.299)	(0.290)	(0.288)	(0.286)	(0.286)	(0.285)
Language-region FE	0.290	0.324	0.393	0.422	0.424*	0.424*	0.424*
	(0.274)	(0.270)	(0.261)	(0.258)	(0.257)	(0.256)	(0.256)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates with municipality-clustered CR1 standard errors. The triangular kernel is used and mass points are adjusted. Panel A varies a common bandwidth on both sides of the cutoff. Panel B holds the control-side bandwidth at its specification-specific MSE-optimal value and varies the treatment-side bandwidth. Panel C holds the treatment-side bandwidth at its specification-specific MSE-optimal value and varies the control-side bandwidth. In each panel, the first column uses one-half of the corresponding MSE-optimal bandwidth. The MSE-optimal bandwidths differ slightly across specifications: in Panel A, the half-MSE bandwidths are 2.91, 2.90, and 2.93 km for the unadjusted, covariate-adjusted, and language-region fixed-effects specifications, respectively. In Panel B, the corresponding fixed control-side bandwidths are 32.65, 32.25, and 26.84 km, while the half-MSE treatment-side bandwidths are 2.76, 2.73, and 2.80 km. In Panel C, the fixed treatment-side bandwidths are 5.52, 5.47, and 5.60 km, while the half-MSE control-side bandwidths are 16.32, 16.12, and 13.42 km. The corresponding MSE-optimal bias bandwidths are held fixed within each panel.

B.5 Spatial heterogeneity

Table B.45: Component-specific GRDD estimates for opinion on nuclear power (iodine boundary 2004/05)

		Unadjusted		Controls		Language-region FE	
		Sym. (1)	Asym. (2)	Sym. (3)	Asym. (4)	Sym. (5)	Asym. (6)
SHP 2005	*Mühleberg*						
	RD estimate	-0.206 (0.296)	0.294 (0.266)	-0.219 (0.296)	0.273 (0.268)	-0.259 (0.296)	0.140 (0.242)
	bw contr./treat. (km)	10.06/10.06	26.49/10.62	10.02/10.02	25.78/10.64	9.94/9.94	39.05/10.66
	obs. left/right	201/223	630/223	200/223	567/223	200/213	749/223
	Other						
	RD estimate	-0.663* (0.401)	0.189 (0.289)	-0.668* (0.403)	0.184 (0.289)	-0.608 (0.404)	0.184 (0.288)
	bw contr./treat. (km)	6.76/6.76	21.78/8.70	6.75/6.75	21.60/8.77	6.75/6.75	21.74/8.80
	obs. left/right	226/157	1,053/198	226/157	1,051/198	226/157	1,053/198
SHP 2011	*Mühleberg*						
	RD estimate	-0.103 (0.217)	0.127 (0.160)	-0.111 (0.227)	0.121 (0.162)	-0.151 (0.219)	0.009 (0.159)
	bw contr./treat. (km)	9.88/9.88	31.28/12.47	9.29/9.29	32.36/12.24	9.98/9.98	35.19/12.25
	obs. left/right	211/278	833/371	191/263	836/371	211/278	855/371
	Other						
	RD estimate	2.365** (1.140)	0.899** (0.445)	2.081* (1.069)	0.845* (0.451)	2.249** (1.092)	0.832* (0.456)
	bw contr./treat. (km)	3.75/3.75	19.17/3.38	4.01/4.01	19.46/3.42	3.89/3.89	19.88/3.41
	obs. left/right	87/65	979/64	90/66	1,001/64	89/66	1,014/64
SHP 2014	*Mühleberg*						
	RD estimate	-0.252 (0.278)	-0.022 (0.200)	-0.253 (0.266)	-0.022 (0.200)	-0.314 (0.246)	-0.056 (0.164)
	bw contr./treat. (km)	7.80/7.80	21.03/10.31	8.15/8.15	21.18/10.45	8.01/8.01	35.28/10.23
	obs. left/right	144/173	581/278	148/173	582/278	144/173	807/277
	Other						
	RD estimate	0.363 (0.511)	0.565* (0.332)	0.339 (0.537)	0.615* (0.349)	0.330 (0.526)	0.574* (0.331)
	bw contr./treat. (km)	6.50/6.50	27.61/6.49	6.42/6.42	26.81/6.36	6.52/6.52	27.87/6.55
	obs. left/right	265/131	1,482/131	262/129	1,467/129	265/131	1,501/131

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates for the two spatially distinct components of the 20 km iodine distribution boundary. "Other" denotes the non-Mühleberg boundary component. Bandwidths are selected separately for each boundary component and specification. Within each specification, the symmetric estimate uses a common MSE-optimal bandwidth on both sides of the boundary (mserd), while the asymmetric estimate allows for separate MSE-optimal bandwidths on each side (msetwo). Covariate-adjusted specifications use the wave-specific controls of the corresponding baseline specification. Bandwidth entries report control-side/treatment-side bandwidths; observation-count entries report left-side/right-side observations.

Table B.46: Component-specific GRDD estimates using pooled bandwidths for opinion on nuclear power (iodine boundary 2004/05)

		Unadjusted		Controls		Language-region FE	
		Sym. (1)	Asym. (2)	Sym. (3)	Asym. (4)	Sym. (5)	Asym. (6)
SHP 2005	*Mühleberg*						
	RD estimate	-0.883 (0.968)	-0.868 (1.113)	-0.915 (0.976)	-0.864 (1.114)	-0.918 (0.970)	-0.673 (0.782)
	bw contr./treat. (km)	6.47/6.47	23.43/5.63	6.46/6.46	23.32/5.65	6.43/6.43	22.34/6.16
	obs. left/right	100/136	535/121	100/136	534/121	100/136	513/129
	Other						
	RD estimate	-1.149 (0.720)	-1.775*** (0.684)	-1.162 (0.721)	-1.777*** (0.676)	-0.813 (0.751)	-1.178** (0.532)
	bw contr./treat. (km)	6.47/6.47	23.43/5.63	6.46/6.46	23.32/5.65	6.43/6.43	22.34/6.16
	obs. left/right	211/128	1,152/106	211/128	1,152/106	207/126	1,131/116
SHP 2011	*Mühleberg*						
	RD estimate	-2.684 (1.651)	-2.400 (1.527)	-1.399 (1.289)	-1.181 (1.058)	-0.933 (0.948)	-1.264** (0.627)
	bw contr./treat. (km)	5.46/5.46	22.34/5.45	5.89/5.89	22.64/6.13	6.45/6.45	20.22/6.90
	obs. left/right	68/133	642/131	79/159	647/159	89/173	606/182
	Other						
	RD estimate	3.418*** (1.322)	0.579 (0.817)	3.391*** (1.106)	1.342** (0.648)	3.106*** (1.012)	1.455*** (0.517)
	bw contr./treat. (km)	5.46/5.46	22.34/5.45	5.89/5.89	22.64/6.13	6.45/6.45	20.22/6.90
	obs. left/right	210/108	1,313/108	240/129	1,326/135	274/155	1,111/192
SHP 2014	*Mühleberg*						
	RD estimate	-0.818 (1.159)	-1.125 (1.419)	-0.881 (1.153)	-1.161 (1.465)	-0.917 (1.071)	-1.048 (1.099)
	bw contr./treat. (km)	5.82/5.82	32.65/5.52	5.80/5.80	32.25/5.47	5.86/5.86	26.84/5.60
	obs. left/right	78/138	793/117	78/138	793/117	78/138	747/138
	Other						
	RD estimate	1.364 (1.193)	0.316 (0.838)	1.329 (1.272)	0.299 (0.885)	1.352 (1.236)	0.398 (0.818)
	bw contr./treat. (km)	5.82/5.82	32.65/5.52	5.80/5.80	32.25/5.47	5.86/5.86	26.84/5.60
	obs. left/right	226/105	1,785/99	226/105	1,763/85	232/108	1,467/99

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates for the two spatially distinct components of the 20 km iodine distribution boundary. "Other" denotes the non-Mühleberg boundary component. Columns (1), (3), and (5) use the symmetric bandwidth selected by the corresponding pooled specification, while columns (2), (4), and (6) use the corresponding pooled asymmetric bandwidths. Within each specification, the same bandwidths are imposed on both boundary components. Covariate-adjusted specifications use the wave-specific controls of the corresponding baseline specification. Bandwidth entries report control-side/treatment-side bandwidths; observation-count entries report left-side/right-side observations.

Table B.47: Formal equality tests across boundary components for opinion on nuclear power (iodine boundary 2004/05)

		Component-specific bandwidths		Pooled bandwidths	
		Sym. (1)	Asym. (2)	Sym. (3)	Asym. (4)
SHP 2005	Unadjusted	0.983	0.179	0.266	0.907
		(0.829)	(0.607)	(1.193)	(1.275)
	Controls	0.992	0.173	0.246	0.929
		(0.836)	(0.608)	(1.196)	(1.267)
	Language-region FE	0.728	0.131	-0.053	0.660
		(0.853)	(0.595)	(1.240)	(0.946)
SHP 2011	Unadjusted	-9.485***	-2.061	-6.102***	-2.980*
		(2.474)	(1.767)	(2.086)	(1.682)
	Controls	-7.854***	-1.318	-4.799***	-2.513**
		(2.283)	(1.763)	(1.731)	(1.223)
	Language-region FE	-8.847***	-1.482	-4.074***	-2.720***
		(2.309)	(1.752)	(1.402)	(0.829)
SHP 2014	Unadjusted	-1.451	-1.028	-2.182	-1.441
		(1.240)	(0.735)	(1.642)	(1.595)
	Controls	-1.402	-1.024	-2.210	-1.519
		(1.256)	(0.752)	(1.736)	(1.680)
	Language-region FE	-1.373	-1.167	-2.301	-1.505
		(1.274)	(0.741)	(1.735)	(1.365)

Robust bias-corrected differences; municipality-clustered SEs.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports formal tests of equality between the estimated RD effects at the Mühleberg and other boundary components. The contrast is defined as the effect at the Mühleberg component minus the effect at the other boundary component. Reported coefficients are robust bias-corrected differences, with robust standard errors in parentheses. Columns (1) and (2) use MSE-optimal bandwidths selected separately for each boundary component and specification. Columns (3) and (4) use the bandwidths selected by the corresponding pooled specification and impose them identically on both boundary components. Covariate-adjusted specifications use the wave-specific controls of the corresponding baseline specification. Equality tests use `rdhte_lincom` with municipality-clustered standard errors and a triangular kernel. Reported differences may deviate from the separate `rdrobust` estimates due to different bias-correction procedures.

Table B.48: GRDD estimates for opinion on nuclear power with boundary-segment fixed effects (SHP 2017, iodine boundary 2014/15)

	Segment-FE bandwidths		Assignment restriction		Baseline sample/bw	
	Sym. (1)	Asym. (2)	Sym. (3)	Asym. (4)	Sym. (5)	Asym. (6)
5 boundary segments						
RD estimate	-0.025	-0.035	-0.033	-0.039	0.003	-0.040
	(0.095)	(0.099)	(0.098)	(0.100)	(0.088)	(0.102)
Assignment-deviation mun.	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Baseline sample/bw	No	No	No	No	Yes	Yes
bw contr. (km)	25.18	32.90	24.95	33.24	31.86	32.02
bw treat. (km)	25.18	20.32	24.95	20.65	31.86	19.10
obs. left	1,155	1,356	1,133	1,347	1,316	1,318
obs. right	1,494	1,208	1,450	1,180	2,182	1,066
10 boundary segments						
RD estimate	-0.028	-0.014	-0.036	-0.019	0.012	-0.016
	(0.101)	(0.100)	(0.103)	(0.102)	(0.088)	(0.101)
Assignment-deviation mun.	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Baseline sample/bw	No	No	No	No	Yes	Yes
bw contr. (km)	22.97	35.24	23.13	35.72	31.86	32.02
bw treat. (km)	22.97	18.95	23.13	19.13	31.86	19.10
obs. left	926	1,391	1,026	1,396	1,316	1,318
obs. right	1,309	1,057	1,274	1,037	2,182	1,066

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates including fixed effects for equal-length segments of the 50 km iodine distribution boundary. All specifications control for being a woman. Columns (1) and (2) use bandwidths selected separately for the respective boundary-segment fixed-effects specification. Columns (3) and (4) additionally exclude municipalities whose actual iodine-tablet allocation deviated from the treatment status implied by the predefined distribution boundary and use separately selected bandwidths. Columns (5) and (6) include municipalities with assignment deviations but use the common complete-case sample and the estimation and bias bandwidths selected by the corresponding baseline specification without boundary-segment fixed effects. Symmetric specifications use a common MSE-optimal bandwidth on both sides of the cutoff (mserd), while asymmetric specifications allow separate MSE-optimal control- and treatment-side bandwidths (msetwo).

C Trust

C.1 Detailed baseline estimates

Table C.1: GRDD estimates for trust in government (SHP 2005, iodine boundary 2004/05)

	Trust in government					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.122	-0.072	-0.102	-0.073	-0.046	-0.016
	(0.089)	(0.078)	(0.084)	(0.075)	(0.080)	(0.060)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	5.19	29.45	5.39	31.48	6.33	45.97
bw treat. (km)	5.19	5.19	5.39	5.22	6.33	6.59
obs. left	203	2,158	204	2,288	295	2,711
obs. right	204	202	207	204	272	283

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for educational attainment, which shows evidence of discontinuity in the symmetric bandwidth specification (Table C.8).

Table C.2: GRDD estimates for trust in government (SHP 2011, iodine boundary 2004/05)

	Trust in government					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.021	-0.017	0.015	-0.033	0.005	-0.038
	(0.063)	(0.052)	(0.059)	(0.055)	(0.053)	(0.055)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	8.74	41.69	9.39	39.35	9.50	39.31
bw treat. (km)	8.74	9.19	9.39	8.82	9.50	8.38
obs. left	529	3,111	617	3,025	617	3,025
obs. right	502	506	524	501	539	412

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being aged 65 or older and political interest, which show evidence of discontinuity in at least one bandwidth specification (Table C.9).

Table C.3: GRDD estimates for trust in government (SHP 2014, iodine boundary 2004/05)

	Trust in government					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.042	0.041	-0.061	0.020	-0.065	-0.005
	(0.064)	(0.048)	(0.064)	(0.049)	(0.051)	(0.040)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	7.18	35.56	6.92	45.31	7.52	31.35
bw treat. (km)	7.18	7.90	6.92	8.08	7.52	8.69
obs. left	472	2,756	401	3,108	480	2,591
obs. right	357	375	340	375	366	485

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being aged 65 or older and political interest, which show evidence of discontinuity in at least one bandwidth specification (Table C.10).

Table C.4: GRDD estimates for trust in government (SHP 2014, iodine boundary 2014/15)

	Trust in government					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.025	0.021	0.027	0.026	0.027	0.028
	(0.025)	(0.026)	(0.025)	(0.024)	(0.024)	(0.024)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	27.25	35.14	29.28	49.63	29.09	49.62
bw treat. (km)	27.25	25.73	29.28	25.96	29.09	25.71
obs. left	941	1,089	861	1,204	861	1,204
obs. right	1,556	1,465	1,473	1,343	1,471	1,333

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates using the boundary of the 2014/15 iodine tablet distribution. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being a woman and left–right political position, which show evidence of discontinuity in at least one bandwidth specification (Table C.11).

Table C.5: GRDD estimates for trust in government (SHP 2017, iodine boundary 2014/15)

	Trust in government					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	-0.009	-0.003	-0.008	-0.002	-0.008	-0.002
	(0.022)	(0.020)	(0.021)	(0.020)	(0.021)	(0.020)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	35.25	58.27	35.68	58.20	35.53	57.12
bw treat. (km)	35.25	30.44	35.68	30.71	35.53	30.84
obs. left	1,429	1,974	1,443	1,972	1,439	1,961
obs. right	2,506	2,152	2,615	2,159	2,554	2,169

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for being a woman, which shows evidence of discontinuity in both bandwidth specifications (Table C.12).

Table C.6: GRDD estimates for trust in government (SHP 2023, iodine boundary 2014/15)

	Trust in government					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.036	0.031	0.018	0.016	0.022	0.018
	(0.038)	(0.036)	(0.035)	(0.034)	(0.034)	(0.032)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	22.06	34.16	22.96	32.83	20.67	35.90
bw treat. (km)	22.06	19.12	22.96	19.91	20.67	19.63
obs. left	1,028	1,632	1,045	1,599	919	1,652
obs. right	1,433	1,191	1,470	1,277	1,341	1,258

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for political interest, which shows evidence of discontinuity in both bandwidth specifications (Table C.13).

Table C.7: GRDD estimates for trust in government (SHP 2023, iodine boundary 2023/24)

	Trust in government					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.041	0.018	-0.013	0.009	-0.013	0.008
	(0.042)	(0.037)	(0.041)	(0.037)	(0.041)	(0.037)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	20.61	39.59	18.61	65.41	18.68	64.20
bw treat. (km)	20.61	18.29	18.61	14.84	18.68	14.87
obs. left	1,132	1,777	971	2,366	971	2,358
obs. right	1,342	1,175	1,102	878	1,107	878

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates using the boundary of the 2023/24 iodine tablet distribution. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for having children, political interest, and left–right political position, which show evidence of discontinuity in at least one bandwidth specification (Table C.14).

C.2 Covariate continuity

Table C.8: Covariate continuity tests for trust in government (SHP 2005, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.075	-0.141	203 / 2,158	204 / 202
	(0.146)	(0.131)		
Age 65+	0.139	0.001	203 / 2,158	204 / 202
	(0.149)	(0.120)		
Has children	-0.017	-0.094	203 / 2,158	204 / 202
	(0.279)	(0.140)		
Educational attainment	-0.187**	-0.009	203 / 2,158	204 / 202
	(0.087)	(0.082)		
Political interest	0.034	0.102	203 / 2,157	204 / 202
	(0.140)	(0.092)		
Left–right political position	0.027	-0.015	188 / 1,962	187 / 185
	(0.104)	(0.086)		
Log net personal income	-0.209	0.308	189 / 1,990	194 / 192
	(0.946)	(0.928)		
bw contr. (km)	5.19	29.45		
bw treat. (km)	5.19	5.19		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, and having children are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. The symmetric and asymmetric estimation and bias bandwidths are those selected for trust in government. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both trust in government and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table C.9: Covariate continuity tests for trust in government (SHP 2011, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	-0.042	-0.030	529 / 3,111	502 / 506
	(0.088)	(0.070)		
Age 65+	0.198*	0.067	529 / 3,111	502 / 506
	(0.119)	(0.086)		
Has children	-0.106	-0.025	529 / 3,111	502 / 506
	(0.164)	(0.119)		
Educational attainment	-0.002	-0.017	529 / 3,111	502 / 506
	(0.078)	(0.048)		
Political interest	0.096	0.130**	529 / 3,111	501 / 505
	(0.077)	(0.054)		
Left–right political position	-0.053	-0.038	484 / 2,851	471 / 475
	(0.081)	(0.060)		
Log net personal income	0.459	-0.164	490 / 2,928	476 / 479
	(0.749)	(0.503)		
Residence duration	6.998	1.141	480 / 2,871	470 / 473
	(4.674)	(2.594)		
Moved after 2005	-0.007	-0.044	480 / 2,871	470 / 473
	(0.170)	(0.118)		
bw contr. (km)	8.74	41.69		
bw treat. (km)	8.74	9.19		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, having children, and having moved after 2005 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for trust in government. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both trust in government and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table C.10: Covariate continuity tests for trust in government (SHP 2014, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	-0.149	-0.148	472 / 2,756	357 / 375
	(0.126)	(0.099)		
Age 65+	0.370**	0.170	472 / 2,756	357 / 375
	(0.162)	(0.115)		
Has children	0.166	0.135	444 / 2,618	349 / 366
	(0.136)	(0.086)		
Educational attainment	-0.073	-0.006	472 / 2,756	357 / 375
	(0.100)	(0.054)		
Political interest	0.208**	0.175***	472 / 2,754	357 / 375
	(0.098)	(0.065)		
Left–right political position	-0.015	-0.037	426 / 2,502	334 / 350
	(0.091)	(0.066)		
Log net personal income	0.610	0.045	441 / 2,594	333 / 350
	(0.898)	(0.500)		
Residence duration	15.591***	7.666*	435 / 2,580	339 / 357
	(5.997)	(4.086)		
Moved after 2005	-0.311*	-0.177*	435 / 2,580	339 / 357
	(0.165)	(0.104)		
bw contr. (km)	7.18	35.56		
bw treat. (km)	7.18	7.90		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, having children, and having moved after 2005 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for trust in government. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both trust in government and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table C.11: Covariate continuity tests for trust in government (SHP 2014, iodine boundary 2014/15)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.114***	0.115***	941 / 1,089	1,556 / 1,465
	(0.042)	(0.042)		
Age 65+	0.015	-0.002	941 / 1,089	1,556 / 1,465
	(0.077)	(0.069)		
Has children	0.016	0.001	897 / 1,034	1,483 / 1,397
	(0.066)	(0.062)		
Educational attainment	0.015	0.032	941 / 1,089	1,556 / 1,465
	(0.046)	(0.045)		
Political interest	0.002	0.004	940 / 1,088	1,555 / 1,464
	(0.044)	(0.040)		
Left–right political position	-0.046	-0.060*	835 / 964	1,425 / 1,340
	(0.038)	(0.035)		
Log net personal income	0.057	0.021	882 / 1,019	1,468 / 1,382
	(0.263)	(0.257)		
Residence duration	-2.476	-2.423	891 / 1,025	1,466 / 1,381
	(3.010)	(2.839)		
bw contr. (km)	27.25	35.14		
bw treat. (km)	27.25	25.73		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, and having children are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for trust in government. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both trust in government and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table C.12: Covariate continuity tests for trust in government (SHP 2017, iodine boundary 2014/15)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.087**	0.063**	1,429 / 1,974	2,506 / 2,152
	(0.036)	(0.031)		
Age 65+	0.038	0.054	1,429 / 1,974	2,506 / 2,152
	(0.054)	(0.051)		
Has children	0.035	0.018	1,411 / 1,947	2,485 / 2,134
	(0.065)	(0.057)		
Educational attainment	-0.011	-0.040	1,429 / 1,974	2,506 / 2,152
	(0.040)	(0.034)		
Political interest	0.008	0.010	1,429 / 1,973	2,504 / 2,150
	(0.031)	(0.028)		
Left–right political position	-0.039	-0.019	1,285 / 1,771	2,306 / 1,986
	(0.037)	(0.030)		
Log net personal income	-0.015	-0.014	1,330 / 1,831	2,351 / 2,019
	(0.181)	(0.183)		
Residence duration	-3.242	-1.974	1,381 / 1,906	2,424 / 2,080
	(2.558)	(2.496)		
Moved after 2015	-0.007	-0.007	1,381 / 1,906	2,424 / 2,080
	(0.034)	(0.033)		
bw contr. (km)	35.25	58.27		
bw treat. (km)	35.25	30.44		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, having children, and having moved after 2015 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for trust in government. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both trust in government and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table C.13: Covariate continuity tests for trust in government (SHP 2023, iodine boundary 2014/15)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.091	0.077	1,028 / 1,632	1,433 / 1,191
	(0.059)	(0.051)		
Age 65+	0.066	0.052	1,028 / 1,632	1,433 / 1,191
	(0.084)	(0.091)		
Has children	-0.009	0.013	1,002 / 1,591	1,401 / 1,168
	(0.080)	(0.089)		
Educational attainment	-0.017	-0.009	1,027 / 1,631	1,432 / 1,190
	(0.051)	(0.050)		
Political interest	0.074*	0.074**	1,025 / 1,629	1,428 / 1,188
	(0.041)	(0.037)		
Left–right political position	-0.003	-0.006	911 / 1,450	1,325 / 1,104
	(0.048)	(0.041)		
Log net personal income	-0.121	-0.250	922 / 1,466	1,312 / 1,091
	(0.222)	(0.234)		
Residence duration	-2.180	-1.713	1,012 / 1,608	1,411 / 1,172
	(3.019)	(2.856)		
Moved after 2015	0.047	-0.003	1,012 / 1,608	1,411 / 1,172
	(0.067)	(0.066)		
bw contr. (km)	22.06	34.16		
bw treat. (km)	22.06	19.12		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, having children, and having moved after 2015 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for trust in government. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both trust in government and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table C.14: Covariate continuity tests for trust in government (SHP 2023, iodine boundary 2023/24)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	0.072	0.033	1,132 / 1,777	1,342 / 1,175
	(0.046)	(0.042)		
Age 65+	0.087	0.049	1,132 / 1,777	1,342 / 1,175
	(0.100)	(0.105)		
Has children	-0.001	0.155*	1,100 / 1,728	1,318 / 1,152
	(0.095)	(0.087)		
Educational attainment	0.085	0.020	1,130 / 1,774	1,341 / 1,174
	(0.063)	(0.048)		
Political interest	0.077*	0.019	1,129 / 1,774	1,338 / 1,172
	(0.047)	(0.039)		
Left–right political position	-0.140***	-0.030	1,059 / 1,653	1,265 / 1,108
	(0.052)	(0.038)		
Log net personal income	0.052	-0.098	1,029 / 1,621	1,216 / 1,069
	(0.272)	(0.258)		
Residence duration	-0.253	0.132	1,120 / 1,758	1,323 / 1,161
	(3.742)	(3.435)		
bw contr. (km)	20.61	39.59		
bw treat. (km)	20.61	18.29		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. Woman, age 65 or older, and having children are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for trust in government. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both trust in government and the respective covariate. The triangular kernel is used and mass points are adjusted.

C.3 Identification checks

Table C.15: Robustness to assignment- and merger-related sample restrictions

	Unadjusted		Controls		Controls + language-region FE	
	Symmetric	Asymmetric	Symmetric	Asymmetric	Symmetric	Asymmetric
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Iodine boundary 2004/05 – assignment-rule mismatches and cross-boundary mergers						
SHP 2005	-0.100	-0.065	-0.078	-0.064	-0.033	-0.019
	(0.084)	(0.076)	(0.078)	(0.073)	(0.078)	(0.057)
SHP 2011	0.049	-0.009	0.023	-0.029	0.008	-0.038
	(0.080)	(0.065)	(0.076)	(0.065)	(0.065)	(0.061)
SHP 2014	0.022	0.092*	0.008	0.076	0.003	0.040
	(0.073)	(0.056)	(0.072)	(0.056)	(0.060)	(0.046)
Panel B: Iodine boundary 2014/15 – treatment-assignment deviations						
SHP 2014	0.031	0.025	0.035	0.030	0.035	0.032
	(0.026)	(0.026)	(0.024)	(0.024)	(0.024)	(0.024)
SHP 2017	-0.012	-0.005	-0.010	-0.004	-0.011	-0.004
	(0.022)	(0.020)	(0.022)	(0.020)	(0.022)	(0.020)
SHP 2023	0.062	0.047	0.042	0.032	0.045	0.033
	(0.038)	(0.035)	(0.035)	(0.033)	(0.033)	(0.031)
Panel C: Iodine boundary 2023/24 – treatment-assignment deviations						
SHP 2023	0.046	0.026	-0.004	0.012	-0.004	0.011
	(0.038)	(0.033)	(0.039)	(0.034)	(0.039)	(0.034)

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates after applying assignment-related sample restrictions. Panel A excludes municipalities whose observed treatment status is inconsistent with the reconstructed 20 km assignment criterion as well as municipalities affected by cross-boundary mergers. Panels B and C exclude municipalities whose actual iodine-tablet allocation deviated from the treatment status implied by the corresponding 50 km distribution boundary. Details on these exclusions are provided in Section A. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Covariate-adjusted specifications use the boundary- and wave-specific controls of the corresponding baseline specifications. Bandwidths and estimation samples are selected separately for each specification.

Table C.16: Robustness: GRDD estimates for trust in government; reduced sample of stayers

	Trust in government					
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: SHP 2011, iodine boundary 2004/05						
RD estimate	0.037	0.003	0.034	-0.013	0.025	-0.016
	(0.064)	(0.061)	(0.067)	(0.061)	(0.068)	(0.061)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	10.07	32.62	9.59	31.15	9.11	30.98
bw treat. (km)	10.07	9.91	9.59	9.89	9.11	9.74
obs. left	461	2,034	440	2,012	419	2,011
obs. right	396	383	377	383	352	377
Panel B: SHP 2014, iodine boundary 2004/05						
RD estimate	-0.070	0.030	-0.082	0.017	-0.092	-0.003
	(0.064)	(0.047)	(0.063)	(0.048)	(0.069)	(0.048)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	7.30	35.05	7.19	34.64	6.19	34.43
bw treat. (km)	7.30	8.76	7.19	8.90	6.19	8.10
obs. left	311	1,872	306	1,858	229	1,856
obs. right	249	313	244	313	191	257

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

The table reports robust bias-corrected local linear GRDD estimates for reduced samples of stayers, defined as respondents who did not move after 2005. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). Covariate-adjusted specifications control for being aged 65 or older and political interest.

Table C.17: Robustness: GRDD estimates for trust in government; pre-information campaign 2012 sample (SHP 2011, iodine boundary 2004/05)

	Trust in government					
	(1)	(2)	(3)	(4)	(5)	(6)
RD estimate	0.017	-0.021	0.009	-0.035	-0.002	-0.041
	(0.059)	(0.053)	(0.059)	(0.057)	(0.055)	(0.057)
controls	No	No	Yes	Yes	Yes	Yes
language-region FE	No	No	No	No	Yes	Yes
bw contr. (km)	9.40	39.63	9.52	36.22	9.23	36.90
bw treat. (km)	9.40	9.26	9.52	8.79	9.23	8.31
obs. left	612	3,014	623	2,870	597	2,879
obs. right	523	507	538	499	506	410

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

The table reports robust bias-corrected local linear GRDD estimates for the pre-information sample, restricted to respondents interviewed up to and including January 30, 2012. Driving distance to the boundary is the forcing variable. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo). The adjusted specifications control for political interest, which shows evidence of discontinuity in the asymmetric bandwidth specification.

Table C.18: Covariate continuity tests for trust in government; pre-information campaign 2012 sample (SHP 2011, iodine boundary 2004/05)

	Estimated discontinuity		Observations	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Woman	-0.077	-0.047	612 / 3,014	523 / 507
	(0.088)	(0.072)		
Age 65+	0.165	0.071	612 / 3,014	523 / 507
	(0.110)	(0.085)		
Has children	-0.077	-0.013	612 / 3,014	523 / 507
	(0.155)	(0.120)		
Educational attainment	0.011	-0.015	612 / 3,014	523 / 507
	(0.073)	(0.049)		
Political interest	0.068	0.129**	612 / 3,014	522 / 506
	(0.072)	(0.053)		
Left–right political position	-0.056	-0.038	565 / 2,761	491 / 476
	(0.079)	(0.062)		
Log net personal income	0.175	-0.176	570 / 2,835	495 / 480
	(0.701)	(0.507)		
Residence duration	6.944	1.513	560 / 2,777	489 / 475
	(4.255)	(2.592)		
Moved after 2005	-0.011	-0.047	560 / 2,777	489 / 475
	(0.160)	(0.117)		
bw contr. (km)	9.40	39.63		
bw treat. (km)	9.40	9.26		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables for the pre-information sample, restricted to respondents interviewed up to and including January 30, 2012. Woman, age 65 or older, having children, and having moved after 2005 are binary indicators. Educational attainment, political interest, and left–right political position are rescaled to range from zero to one. Income is measured as the logarithm of one plus annual net personal income. Residence duration is measured in years. The symmetric and asymmetric estimation and bias bandwidths are those selected for trust in government in columns (1) and (2) of Table C.17. Municipality-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side observations within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. Samples are restricted to respondents with non-missing information on both trust in government and the respective covariate. The triangular kernel is used and mass points are adjusted.

Table C.19: Robustness: GRDD estimates for trust in government excluding potentially endogenous controls

	Without language-region FE		With language-region FE	
	Symmetric	Asymmetric	Symmetric	Asymmetric
	(1)	(2)	(3)	(4)
SHP 2011, iodine boundary 2004/05				
RD estimate	0.023	-0.018	0.011	-0.019
	(0.058)	(0.052)	(0.051)	(0.053)
Remaining covariates	Age 65+	Age 65+	Age 65+	Age 65+
bw contr. (km)	9.41	41.88	10.02	41.77
bw treat. (km)	9.41	9.24	10.02	8.84
SHP 2014, iodine boundary 2004/05				
RD estimate	-0.053	0.037	-0.057	0.010
	(0.062)	(0.047)	(0.050)	(0.038)
Remaining covariates	Age 65+	Age 65+	Age 65+	Age 65+
bw contr. (km)	7.16	37.51	7.86	31.23
bw treat. (km)	7.16	8.06	7.86	8.87
SHP 2014, iodine boundary 2014/15				
RD estimate	0.027	0.022	0.027	0.023
	(0.025)	(0.026)	(0.026)	(0.026)
Remaining covariates	Woman	Woman	Woman	Woman
bw contr. (km)	26.99	35.74	26.46	35.92
bw treat. (km)	26.99	25.65	26.46	25.51
SHP 2023, iodine boundary 2014/15				
RD estimate	0.036	0.031	0.041	0.034
	(0.038)	(0.036)	(0.036)	(0.034)
Remaining covariates	None	None	None	None
bw contr. (km)	22.06	34.16	19.27	37.04
bw treat. (km)	22.06	19.12	19.27	18.51
SHP 2023, iodine boundary 2023/24				
RD estimate	0.034	0.014	0.034	0.012
	(0.045)	(0.039)	(0.045)	(0.039)
Remaining covariates	Children	Children	Children	Children
bw contr. (km)	19.46	42.76	19.44	45.41
bw treat. (km)	19.46	16.25	19.44	16.31

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates after excluding political covariates that may themselves be affected by iodine-tablet exposure. For SHP 2011 at the 2004/05 boundary, political interest is excluded and the indicator for being aged 65 or older is retained. For SHP 2014 at the 2004/05 boundary, political interest is excluded and the indicator for being aged 65 or older is retained. For SHP 2014 at the 2014/15 boundary, left–right political position is excluded and the indicator for being a woman is retained. For SHP 2023 at the 2014/15 boundary, political interest is excluded, leaving no additional covariates; the specifications without language-region fixed effects therefore coincide with the unadjusted baseline. For SHP 2023 at the 2023/24 boundary, political interest and left–right political position are excluded and the indicator for having children is retained. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) additionally include language-region fixed effects.

C.4 Alternative specifications

Table C.20: Robustness: GRDD estimates for trust in government; canton fixed effects

	Canton FE		Canton FE + restriction		Canton FE + baseline sample/bw	
	Symmetric	Asymmetric	Symmetric	Asymmetric	Symmetric	Asymmetric
	(1)	(2)	(3)	(4)	(5)	(6)
Iodine boundary 2004/05						
SHP 2005	-0.129	-0.083	-0.129	-0.083	-0.116	-0.076
	(0.103)	(0.062)	(0.103)	(0.062)	(0.097)	(0.064)
SHP 2011	-0.005	-0.039	-0.010	-0.050	-0.007	-0.044
	(0.055)	(0.050)	(0.051)	(0.050)	(0.056)	(0.048)

Robust bias-corrected estimates; municipality-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

The table reports robust bias-corrected local linear GRDD estimates with canton fixed effects. Driving distance to the iodine boundary is the forcing variable. All specifications include the wave-specific covariates of the corresponding baseline specification. Columns (1) and (2) use bandwidths selected separately for the canton-fixed-effects specifications. Columns (3) and (4) additionally exclude municipalities affected by cross-boundary mergers; in SHP 2005, this restriction excludes only Belfaux. Columns (5) and (6) include merger-affected municipalities but use the common complete-case sample and the estimation and bias bandwidths selected by the corresponding baseline specifications without canton fixed effects. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (mserd), while columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on each side (msetwo).

Table C.21: Bandwidth sensitivity of GRDD estimates for trust in government (SHP 2005, iodine boundary 2004/05)

Panel A: Symmetric bandwidths							
	half MSEo	2.5 km	5 km	7.5 km	10 km	12.5 km	15 km
Unadjusted	-0.265	-0.256	-0.127	-0.105	-0.106	-0.131	-0.152
	(0.269)	(0.274)	(0.091)	(0.076)	(0.076)	(0.090)	(0.110)
Controls	-0.244	-0.218	-0.110	-0.090	-0.089	-0.111	-0.130
	(0.251)	(0.277)	(0.088)	(0.074)	(0.073)	(0.085)	(0.103)
Language-region FE	-0.221	-0.413	-0.072	-0.037	-0.024	-0.033	-0.036
	(0.188)	(0.314)	(0.097)	(0.073)	(0.070)	(0.072)	(0.082)
Panel B: Treatment-side bandwidth variation							
	half MSEo	3 km	5 km	7 km	9 km	11 km	13 km
Unadjusted	-0.073	-0.053	-0.071	-0.088	-0.089	-0.093	-0.107
	(0.208)	(0.180)	(0.079)	(0.068)	(0.066)	(0.072)	(0.084)
Controls	-0.035	-0.024	-0.070	-0.089	-0.091	-0.095	-0.110
	(0.204)	(0.176)	(0.076)	(0.066)	(0.064)	(0.069)	(0.081)
Language-region FE	0.027	0.002	0.002	-0.026	-0.025	-0.019	-0.023
	(0.137)	(0.147)	(0.070)	(0.058)	(0.055)	(0.055)	(0.059)
Panel C: Control-side bandwidth variation							
	half MSEo	10 km	15 km	20 km	25 km	30 km	35 km
Unadjusted	-0.079	-0.078	-0.078	-0.074	-0.073	-0.072	-0.073
	(0.079)	(0.081)	(0.079)	(0.078)	(0.078)	(0.078)	(0.078)
Controls	-0.074	-0.068	-0.074	-0.072	-0.072	-0.072	-0.073
	(0.076)	(0.077)	(0.076)	(0.075)	(0.075)	(0.075)	(0.075)
Language-region FE	-0.021	-0.019	-0.024	-0.020	-0.020	-0.018	-0.017
	(0.060)	(0.064)	(0.061)	(0.060)	(0.060)	(0.060)	(0.060)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates with municipality-clustered CR1 standard errors. The triangular kernel is used and mass points are adjusted. Panel A varies a common bandwidth on both sides of the cutoff. Panel B holds the control-side bandwidth at its specification-specific MSE-optimal value and varies the treatment-side bandwidth. Panel C holds the treatment-side bandwidth at its specification-specific MSE-optimal value and varies the control-side bandwidth. In each panel, the first column uses one-half of the corresponding MSE-optimal bandwidth. In Panel A, the half-MSE bandwidths are 2.60, 2.70, and 3.17 km for the unadjusted, covariate-adjusted, and language-region fixed-effects specifications, respectively. In Panel B, the corresponding fixed control-side bandwidths are 29.45, 31.48, and 45.97 km, while the half-MSE treatment-side bandwidths are 2.59, 2.61, and 3.30 km. In Panel C, the fixed treatment-side bandwidths are 5.19, 5.22, and 6.59 km, while the half-MSE control-side bandwidths are 14.72, 15.74, and 22.98 km. The corresponding MSE-optimal bias bandwidths are held fixed within each panel.

Table C.22: Bandwidth sensitivity of GRDD estimates for trust in government (SHP 2011, iodine boundary 2004/05)

Panel A: Symmetric bandwidths							
	half MSEo	2.5 km	5 km	7.5 km	10 km	12.5 km	15 km
Unadjusted	-0.081	-0.471	-0.037	0.022	0.018	0.010	0.012
	(0.108)	(0.346)	(0.090)	(0.066)	(0.060)	(0.057)	(0.058)
Controls	-0.071	-0.561	-0.051	0.013	0.011	0.005	0.008
	(0.096)	(0.346)	(0.088)	(0.064)	(0.057)	(0.054)	(0.054)
Language-region FE	-0.071	-0.298	-0.053	0.007	0.002	-0.002	0.004
	(0.083)	(0.269)	(0.077)	(0.057)	(0.052)	(0.050)	(0.050)
Panel B: Treatment-side bandwidth variation							
	half MSEo	2.5 km	5 km	7.5 km	10 km	12.5 km	15 km
Unadjusted	-0.040	-0.169	-0.027	-0.017	-0.017	-0.022	-0.020
	(0.082)	(0.168)	(0.073)	(0.056)	(0.051)	(0.049)	(0.050)
Controls	-0.065	-0.251	-0.044	-0.033	-0.032	-0.036	-0.035
	(0.086)	(0.161)	(0.074)	(0.058)	(0.053)	(0.051)	(0.052)
Language-region FE	-0.081	-0.250	-0.056	-0.039	-0.038	-0.041	-0.039
	(0.088)	(0.161)	(0.072)	(0.056)	(0.052)	(0.051)	(0.052)
Panel C: Control-side bandwidth variation							
	half MSEo	20 km	25 km	30 km	35 km	40 km	45 km
Unadjusted	-0.011	-0.010	-0.011	-0.012	-0.015	-0.017	-0.018
	(0.053)	(0.053)	(0.053)	(0.052)	(0.052)	(0.052)	(0.052)
Controls	-0.025	-0.026	-0.027	-0.029	-0.031	-0.033	-0.034
	(0.056)	(0.056)	(0.056)	(0.055)	(0.055)	(0.055)	(0.055)
Language-region FE	-0.034	-0.034	-0.034	-0.035	-0.037	-0.038	-0.040
	(0.054)	(0.054)	(0.055)	(0.055)	(0.055)	(0.055)	(0.055)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates with municipality-clustered CR1 standard errors. The triangular kernel is used and mass points are adjusted. Panel A varies a common bandwidth on both sides of the cutoff. Panel B holds the control-side bandwidth at its specification-specific MSE-optimal value and varies the treatment-side bandwidth. Panel C holds the treatment-side bandwidth at its specification-specific MSE-optimal value and varies the control-side bandwidth. In each panel, the first column uses one-half of the corresponding MSE-optimal bandwidth. The MSE-optimal bandwidths differ slightly across specifications: in Panel A, the half-MSE bandwidths are 4.37, 4.69, and 4.75 km for the unadjusted, covariate-adjusted, and language-region fixed-effects specifications, respectively. In Panel B, the corresponding fixed control-side bandwidths are 41.69, 39.35, and 39.31 km, while the half-MSE treatment-side bandwidths are 4.59, 4.41, and 4.19 km. In Panel C, the fixed treatment-side bandwidths are 9.19, 8.82, and 8.38 km, while the half-MSE control-side bandwidths are 20.84, 19.68, and 19.65 km. The corresponding MSE-optimal bias bandwidths are held fixed within each panel.

D Political behaviour

D.1 Detailed baseline estimates

Table D.1: GRDD estimates for voter turnout (Nuclear phase-out initiative 2016, iodine boundary 2004/05)

	Voter turnout			
	(1)	(2)	(3)	(4)
RD estimate	-0.008	0.026	-0.009	0.019
	(0.038)	(0.025)	(0.033)	(0.026)
controls	No	No	No	No
language-region FE	No	No	Yes	Yes
bw contr. (km)	8.88	22.02	8.78	20.47
bw treat. (km)	8.88	8.46	8.78	7.97
obs. left	195	527	192	496
obs. right	176	166	176	158
clusters left	9	11	9	11
clusters right	9	9	9	9
	Robust bias-corrected estimates; canton-clustered CR1 SEs.			
	Local linear estimation; triangular kernel; mass points adjusted.			

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates for voter turnout in the 2016 *Nuclear phase-out* initiative at the 2004/05 iodine distribution boundary. Driving distance to the boundary is the forcing variable. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) include language-region fixed effects.

Table D.2: GRDD estimates for the share of "yes"-votes (Nuclear phase-out initiative 2016, iodine boundary 2004/05)

	Share of "yes"-votes			
	(1)	(2)	(3)	(4)
RD estimate	-0.011	0.029	-0.019	0.005
	(0.060)	(0.042)	(0.035)	(0.023)
controls	No	No	No	No
language-region FE	No	No	Yes	Yes
bw contr. (km)	11.60	33.43	11.02	27.98
bw treat. (km)	11.60	13.17	11.02	12.61
obs. left	265	766	255	663
obs. right	235	261	219	253
clusters left	9	14	9	13
clusters right	9	9	9	9

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates for the share of "yes"-votes in the 2016 *Nuclear phase-out* initiative at the 2004/05 iodine distribution boundary. Driving distance to the boundary is the forcing variable. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) include language-region fixed effects.

Table D.3: GRDD estimates for the Green Party vote share (Swiss National Council elections 2011, iodine boundary 2004/05)

	Green Party vote share			
	(1)	(2)	(3)	(4)
RD estimate	-0.018	-0.001	-0.018	-0.003
	(0.019)	(0.011)	(0.019)	(0.011)
controls	No	No	No	No
language-region FE	No	No	Yes	Yes
bw contr. (km)	13.57	37.79	13.84	38.18
bw treat. (km)	13.57	17.99	13.84	18.00
obs. left	352	910	358	914
obs. right	276	357	284	357
clusters left	9	15	9	15
clusters right	9	9	9	9

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates of the effect of being located inside the iodine distribution boundary on the Green Party vote share in the 2011 Swiss National Council elections. Driving distance to the boundary is the forcing variable. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) include language-region fixed effects.

Table D.4: GRDD estimates for voter turnout (Nuclear phase-out initiative 2016, iodine boundary 2014/15)

	Voter turnout			
	(1)	(2)	(3)	(4)
RD estimate	0.006	0.007	0.010	0.012
	(0.019)	(0.020)	(0.017)	(0.016)
controls	No	No	No	No
language-region FE	No	No	Yes	Yes
bw contr. (km)	27.46	32.14	23.32	28.71
bw treat. (km)	27.46	22.98	23.32	20.90
obs. left	318	365	267	328
obs. right	381	305	311	276
clusters left	11	11	11	11
clusters right	11	11	11	11

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates of the effect of being located inside the 50 km iodine distribution boundary on voter turnout in the 2016 *Nuclear phase-out* initiative. Driving distance to the boundary is the forcing variable. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) include language-region fixed effects.

Table D.5: GRDD estimates for the share of "yes"-votes (Nuclear phase-out initiative 2016, iodine boundary 2014/15)

	Share of "yes"-votes			
	(1)	(2)	(3)	(4)
RD estimate	-0.013	0.001	0.008	0.014
	(0.045)	(0.046)	(0.016)	(0.016)
controls	No	No	No	No
language-region FE	No	No	Yes	Yes
bw contr. (km)	25.86	30.80	25.42	31.09
bw treat. (km)	25.86	23.99	25.42	22.16
obs. left	299	354	293	355
obs. right	351	322	345	294
clusters left	11	11	11	11
clusters right	11	11	11	11

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates of the effect of being located inside the 50 km iodine distribution boundary on the share of "yes"-votes in the 2016 *Nuclear phase-out* initiative. Driving distance to the boundary is the forcing variable. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) include language-region fixed effects.

Table D.6: GRDD estimates for the Green Party vote share (Swiss National Council elections 2015, iodine boundary 2014/15)

	Green Party vote share			
	(1)	(2)	(3)	(4)
RD estimate	0.005	0.008	0.011	0.012
	(0.024)	(0.024)	(0.015)	(0.015)
controls	No	No	No	No
language-region FE	No	No	Yes	Yes
bw contr. (km)	27.43	30.76	24.70	25.75
bw treat. (km)	27.43	24.94	24.70	25.14
obs. left	304	337	272	286
obs. right	386	340	335	341
clusters left	9	9	9	9
clusters right	10	10	10	10
	Robust bias-corrected estimates; canton-clustered CR1 SEs.			
	Local linear estimation; triangular kernel; mass points adjusted.			

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates of the effect of being located inside the iodine distribution boundary on the Green Party vote share in the 2015 Swiss National Council elections. Driving distance to the boundary is the forcing variable. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (mserd). Columns (2) and (4) allow for separate MSE-optimal bandwidths on each side (msetwo). Columns (3) and (4) include language-region fixed effects.

D.2 Covariate continuity and sample composition

Table D.7: Covariate continuity tests for voter turnout (Nuclear phase-out initiative 2016, iodine boundary 2004/05)

	Estimated discontinuity		Municipalities	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Women share	0.003	0.004	195 / 527	176 / 166
	(0.005)	(0.005)		
Share aged 65+	-0.010	-0.012	195 / 527	176 / 166
	(0.021)	(0.017)		
High-income taxpayer share	-0.010	0.018	195 / 527	176 / 166
	(0.022)	(0.019)		
Population size (log)	-0.613	-0.101	195 / 527	176 / 166
	(0.563)	(0.490)		
PT travel time to agglomeration (log)	-0.225	-0.282	195 / 527	176 / 166
	(0.244)	(0.233)		
bw contr. (km)	8.88	22.02		
bw treat. (km)	8.88	8.46		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. The shares of women, residents aged 65 or older, and high-income taxpayers are measured as proportions ranging from zero to one. Population size and public-transport travel time to the nearest agglomeration are logarithmically transformed. The symmetric and asymmetric estimation and bias bandwidths are those selected for voter turnout in the 2016 *Nuclear phase-out* initiative and correspond to Columns (1) and (2) of the voter turnout specification. Canton-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side municipalities within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. A triangular kernel is used.

Table D.8: Covariate continuity tests for the share of "yes"-votes (Nuclear phase-out initiative 2016, iodine boundary 2004/05)

	Estimated discontinuity		Municipalities	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Women share	0.003	0.003	265 / 766	235 / 261
	(0.004)	(0.003)		
Share aged 65+	-0.004	-0.002	265 / 766	235 / 261
	(0.020)	(0.016)		
High-income taxpayer share	-0.016	0.011	265 / 766	235 / 261
	(0.019)	(0.018)		
Population size (log)	-0.578	-0.180	265 / 766	235 / 261
	(0.462)	(0.446)		
PT travel time to agglomeration (log)	-0.123	-0.128	265 / 766	235 / 261
	(0.214)	(0.210)		
bw contr. (km)	11.60	33.43		
bw treat. (km)	11.60	13.17		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. The shares of women, residents aged 65 or older, and high-income taxpayers are measured as proportions ranging from zero to one. Population size and public-transport travel time to the nearest agglomeration are logarithmically transformed. The symmetric and asymmetric estimation and bias bandwidths are those selected for the share of "yes"-votes in the 2016 *Nuclear phase-out* initiative and correspond to Columns (1) and (2) of the yes-vote share specification. Canton-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side municipalities within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. A triangular kernel is used.

Table D.9: Covariate continuity tests for the Green Party vote share (Swiss National Council elections 2011, iodine boundary 2004/05)

	Estimated discontinuity		Municipalities	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Women share	0.004	0.001	352 / 910	276 / 357
	(0.004)	(0.003)		
Share aged 65+	-0.003	0.002	352 / 910	276 / 357
	(0.014)	(0.012)		
High-income taxpayer share	-0.012	0.008	352 / 910	276 / 357
	(0.020)	(0.020)		
Population size (log)	-0.363	-0.102	352 / 910	276 / 357
	(0.442)	(0.373)		
PT travel time to agglomeration (log)	-0.112	-0.044	352 / 910	276 / 357
	(0.204)	(0.152)		
bw contr. (km)	13.57	37.79		
bw treat. (km)	13.57	17.99		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. The shares of women, residents aged 65 or older, and high-income taxpayers are measured as proportions ranging from zero to one. Population size and public-transport travel time to the nearest agglomeration are logarithmically transformed. The symmetric and asymmetric estimation and bias bandwidths are those selected for the Green Party vote share in the 2011 Swiss National Council elections and correspond to Columns (1) and (2) of the Green Party vote-share specification. Canton-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side municipalities within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. A triangular kernel is used.

Table D.10: Covariate continuity tests for voter turnout (Nuclear phase-out initiative 2016, iodine boundary 2014/15)

	Estimated discontinuity		Municipalities	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Women share	0.001	0.001	318 / 365	381 / 305
	(0.003)	(0.003)		
Share aged 65+	0.009	0.004	318 / 365	381 / 305
	(0.010)	(0.011)		
High-income taxpayer share	0.007	0.008	318 / 365	381 / 305
	(0.013)	(0.013)		
Population size (log)	0.319	0.243	318 / 365	381 / 305
	(1.059)	(1.012)		
PT travel time to agglomeration (log)	0.041	0.063	318 / 365	381 / 305
	(0.153)	(0.149)		
bw contr. (km)	27.46	32.14		
bw treat. (km)	27.46	22.98		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. The shares of women, residents aged 65 or older, and high-income taxpayers are measured as proportions ranging from zero to one. Population size and public-transport travel time to the nearest agglomeration are logarithmically transformed. The symmetric and asymmetric estimation and bias bandwidths are those selected for voter turnout in the 2016 *Nuclear phase-out* initiative and correspond to Columns (1) and (2) of the voter-turnout specification. Canton-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side municipalities within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. A triangular kernel is used.

Table D.11: Covariate continuity tests for the share of "yes"-votes (Nuclear phase-out initiative 2016, iodine boundary 2014/15)

	Estimated discontinuity		Municipalities	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Women share	-0.001	0.000	299 / 354	351 / 322
	(0.003)	(0.003)		
Share aged 65+	0.004	0.001	299 / 354	351 / 322
	(0.011)	(0.010)		
High-income taxpayer share	0.012	0.012	299 / 354	351 / 322
	(0.015)	(0.015)		
Population size (log)	0.485	0.273	299 / 354	351 / 322
	(1.087)	(1.039)		
PT travel time to agglomeration (log)	0.021	0.064	299 / 354	351 / 322
	(0.169)	(0.157)		
bw contr. (km)	25.86	30.80		
bw treat. (km)	25.86	23.99		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. The shares of women, residents aged 65 or older, and high-income taxpayers are measured as proportions ranging from zero to one. Population size and public-transport travel time to the nearest agglomeration are logarithmically transformed. The symmetric and asymmetric estimation and bias bandwidths are those selected for the share of "yes"-votes in the 2016 *Nuclear phase-out* initiative and correspond to Columns (1) and (2) of the yes-vote share specification. Canton-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side municipalities within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. A triangular kernel is used.

Table D.12: Covariate continuity tests for the Green Party vote share (Swiss National Council elections 2015, iodine boundary 2014/15)

	Estimated discontinuity		Municipalities	
	Symmetric	Asymmetric	Control	Treatment
	(1)	(2)	(3)	(4)
Women share	0.002	0.003	304 / 337	386 / 340
	(0.003)	(0.003)		
Share aged 65+	0.007	0.003	304 / 337	386 / 340
	(0.010)	(0.010)		
High-income taxpayer share	0.017	0.016	304 / 337	386 / 340
	(0.014)	(0.014)		
Population size (log)	0.497	0.454	304 / 337	386 / 340
	(1.117)	(1.099)		
PT travel time to agglomeration (log)	0.007	0.016	304 / 337	386 / 340
	(0.154)	(0.148)		
bw contr. (km)	27.43	30.76		
bw treat. (km)	27.43	24.94		

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using the listed covariates as dependent variables. The shares of women, residents aged 65 or older, and high-income taxpayers are measured as proportions ranging from zero to one. Population size and public-transport travel time to the nearest agglomeration are logarithmically transformed. The symmetric and asymmetric estimation and bias bandwidths are those selected for the Green Party vote share in the 2015 Swiss National Council elections and correspond to Columns (1) and (2) of the Green Party vote-share specification. Canton-clustered CR1 standard errors are reported in parentheses. The observation columns report the numbers of control- and treatment-side municipalities within the symmetric and asymmetric bandwidths, respectively, in the form symmetric / asymmetric. A triangular kernel is used.

Table D.13: Sample composition of the language-region fixed-effects specifications for political behaviour

	Symmetric bandwidth		Asymmetric bandwidth	
	Control	Treatment	Control	Treatment
Voter turnout				
2016, iodine boundary 2014/15				
Bandwidth (km)	23.32	23.32	28.71	20.90
Non-German	138	118	168	106
German	129	193	160	170
Share of "yes"-votes				
2016, iodine boundary 2014/15				
Bandwidth (km)	25.42	25.42	31.09	22.16
Non-German	151	125	182	112
German	142	220	173	182
Green Party vote share				
2011, iodine boundary 2004/05				
Bandwidth (km)	13.84	13.84	38.18	18.00
Non-German	70	22	297	22
German	288	262	617	335
2015, iodine boundary 2014/15				
Bandwidth (km)	24.70	24.70	25.75	25.14
Non-German	151	126	157	128
German	121	209	129	213

Note: The table reports the composition of the estimation samples used in the language-region fixed-effects specifications for the political-behaviour outcomes reported in Table 3. The voter-turnout and "yes"-vote-share specifications, as well as the Green Party vote-share specification for 2015, use the 2014/15 iodine distribution boundary. The Green Party vote-share specification for 2011 uses the 2004/05 iodine distribution boundary. The symmetric specifications use a common MSE-optimal bandwidth on both sides of the cutoff (*mserd*), whereas the asymmetric specifications allow for separate MSE-optimal bandwidths on the control and treatment sides (*msetwo*). Observations correspond to municipalities.

D.3 Identification checks

Table D.14: Robustness to assignment- and merger-related sample restrictions

	Unadjusted		Language-region FE	
	Symmetric	Asymmetric	Symmetric	Asymmetric
	(1)	(2)	(3)	(4)
Voter turnout				
2016, iodine boundary 2014/15				
Treatment-assignment deviations excluded				
RD estimate	0.005	0.007	0.010	0.011
	(0.019)	(0.020)	(0.017)	(0.016)
bw contr. (km)	28.26	32.98	24.26	29.13
bw treat. (km)	28.26	23.71	24.26	21.52
Share of "yes"-votes				
2016, iodine boundary 2014/15				
Treatment-assignment deviations excluded				
RD estimate	-0.014	0.002	0.006	0.013
	(0.045)	(0.046)	(0.015)	(0.016)
bw contr. (km)	25.33	30.84	24.56	31.25
bw treat. (km)	25.33	23.80	24.56	21.47
Green Party vote share				
2011, iodine boundary 2004/05				
Assignment-rule mismatches and cross-boundary mergers excluded				
RD estimate	-0.015	0.003	-0.014	0.003
	(0.022)	(0.012)	(0.022)	(0.012)
bw contr. (km)	12.37	38.04	12.72	39.38
bw treat. (km)	12.37	18.63	12.72	18.63
2015, iodine boundary 2014/15				
Treatment-assignment deviations excluded				
RD estimate	0.004	0.008	0.010	0.011
	(0.024)	(0.025)	(0.015)	(0.015)
bw contr. (km)	27.36	30.94	24.92	25.78
bw treat. (km)	27.36	25.18	24.92	25.67

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

The table reports robust bias-corrected local linear GRDD estimates after applying assignment-related sample restrictions. For voter turnout, the share of "yes"-votes, and the Green Party vote share in 2015, municipalities whose actual iodine-tablet allocation deviated from the treatment status implied by the 2014/15 distribution boundary are excluded. For the Green Party vote share in 2011, municipalities whose observed treatment status is inconsistent with the reconstructed 20 km assignment criterion as well as municipalities affected by subsequent cross-boundary mergers are excluded. Details on these exclusions are provided in Section A. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (*mserd*), while columns (2) and (4) allow for separate MSE-optimal bandwidths on the control and treatment sides (*msetwo*). Bandwidths and estimation samples are selected separately for each specification.

D.4 Alternative specifications

Table D.15: Robustness: GRDD estimates for political behaviour; common samples and uniform bandwidths

	Unadjusted		Language-region FE	
	Symmetric	Asymmetric	Symmetric	Asymmetric
	(1)	(2)	(3)	(4)
Voter turnout				
2016, iodine boundary 2014/15	0.006	0.007	0.010	0.011
	(0.019)	(0.020)	(0.016)	(0.016)
bw contr. (km)	27.46	32.14	27.46	32.14
bw treat. (km)	27.46	22.98	27.46	22.98
Share of "yes"-votes				
2016, iodine boundary 2014/15	-0.013	0.001	0.008	0.015
	(0.045)	(0.046)	(0.017)	(0.018)
bw contr. (km)	25.86	30.80	25.86	30.80
bw treat. (km)	25.86	23.99	25.86	23.99
Green Party vote share				
2011, iodine boundary 2004/05	-0.018	-0.001	-0.018	-0.002
	(0.019)	(0.011)	(0.019)	(0.011)
bw contr. (km)	13.57	37.79	13.57	37.79
bw treat. (km)	13.57	17.99	13.57	17.99
2015, iodine boundary 2014/15	0.005	0.008	0.010	0.013
	(0.024)	(0.024)	(0.015)	(0.014)
bw contr. (km)	27.43	30.76	27.43	30.76
bw treat. (km)	27.43	24.94	27.43	24.94

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

The table reports robust bias-corrected local linear GRDD estimates using common complete-case samples and uniform bandwidths across specifications. For each political-behaviour outcome, all specifications are estimated on the common sample defined by the variables required for the corresponding language-region fixed-effects specification. The bandwidths selected from the unadjusted model are applied uniformly across specifications. Columns (1) and (3) use a common MSE-optimal bandwidth on both sides of the boundary (*mserd*), while columns (2) and (4) use the asymmetric MSE-optimal bandwidths (*msetwo*).

For the 2011 Green Party vote share and the 2016 "yes"-vote share, for which the canton fixed effects estimates differ materially from the corresponding baseline estimates in some specifications, we additionally report diagnostics on within-canton treatment–control support and sensitivity to canton composition (Tables D.17 and D.18). For voter turnout and the 2015 Green Party vote share, including canton fixed effects does not alter the substantive conclusions.

Table D.16: Robustness: GRDD estimates for political behaviour; canton fixed effects

	Canton FE		Canton FE + restriction		Canton FE + baseline sample/bw	
	Symmetric	Asymmetric	Symmetric	Asymmetric	Symmetric	Asymmetric
	(1)	(2)	(3)	(4)	(5)	(6)
Voter turnout						
2016, iodine boundary 2014/15						
RD estimate	0.006	0.004	-0.049	-0.053	0.005	-0.013
	(0.022)	(0.017)	(0.096)	(0.116)	(0.017)	(0.012)
bw contr. (km)	12.77	12.30	3.99	4.17	27.46	32.14
bw treat. (km)	12.77	12.56	3.99	4.14	27.46	22.98
Share of "yes"-votes						
2016, iodine boundary 2014/15						
RD estimate	-0.037	-0.030*	-0.090**	0.057	-0.006	-0.008
	(0.024)	(0.018)	(0.039)	(0.099)	(0.012)	(0.016)
bw contr. (km)	10.42	9.36	6.80	7.56	25.86	30.80
bw treat. (km)	10.42	14.64	6.80	6.58	25.86	23.99
Green Party vote share						
2011, iodine boundary 2004/05						
RD estimate	-0.026*	-0.012	-0.020**	-0.017**	-0.017**	-0.007
	(0.013)	(0.011)	(0.009)	(0.009)	(0.009)	(0.007)
bw contr. (km)	12.90	13.54	12.92	14.15	13.57	37.79
bw treat. (km)	12.90	11.66	12.92	11.57	13.57	17.99
2015, iodine boundary 2014/15						
RD estimate	0.003	-0.0001	0.003	0.002	0.004	0.004
	(0.006)	(0.005)	(0.006)	(0.006)	(0.004)	(0.004)
bw contr. (km)	13.10	12.14	12.46	11.22	27.43	30.76
bw treat. (km)	13.10	13.95	12.46	14.70	27.43	24.94

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p<0.1; **p<0.05; ***p<0.01.

The table reports robust bias-corrected local linear GRDD estimates with canton fixed effects. Driving distance to the iodine boundary is the forcing variable. All specifications include canton fixed effects and no additional controls. Columns (1) and (2) use bandwidths selected separately for the canton-fixed-effects specifications. Columns (3) and (4) additionally apply the corresponding sample restriction: for voter turnout, the share of "yes"-votes, and the Green Party vote share in 2015, municipalities with treatment-assignment deviations are excluded; for the Green Party vote share in 2011, municipalities affected by cross-boundary mergers are excluded. Columns (5) and (6) use the common complete-case sample and the estimation and bias bandwidths selected by the corresponding baseline specifications without canton fixed effects. Columns (1), (3), and (5) use a common MSE-optimal bandwidth on both sides of the boundary (*mserd*), while columns (2), (4), and (6) allow for separate MSE-optimal bandwidths on the control and treatment sides (*msetwo*).

Table D.17: Diagnostics for canton fixed-effects specifications in political behaviour

Panel A: Within-canton treatment–control support

	Symmetric bandwidth		Asymmetric bandwidth	
	Bandwidth contr./treat.	Two-sided / total cantons	Bandwidth contr./treat.	Two-sided / total cantons
Green Party vote share, 2011 (iodine boundary 2004/05)				
Primary specification	12.90 / 12.90	9 / 9	13.54 / 11.66	9 / 9
Share of "yes"-votes, 2016 (iodine boundary 2014/15)				
Assignment deviations included	10.42 / 10.42	7 / 12	9.36 / 14.64	7 / 12
Assignment deviations excluded	6.80 / 6.80	7 / 10	7.56 / 6.58	7 / 10

Panel B: Leave-one-canton-out sensitivity

	Symmetric bandwidth		Asymmetric bandwidth	
	w canton FE (1)	w/o canton FE (2)	w canton FE (3)	w/o canton FE (4)
Green Party vote share, 2011 (iodine boundary 2004/05)				
Full-sample estimate	-0.026	-0.017	-0.012	-0.020
Maximum absolute change	0.019	0.009	0.011	0.010
SD of leave-one-out estimates	0.005	0.005	0.005	0.006
Share of "yes"-votes, 2016 (iodine boundary 2014/15)				
Assignment deviations included				
Full-sample estimate	-0.037	-0.052	-0.030	-0.054
Maximum absolute change	0.024	0.018	0.010	0.033
SD of leave-one-out estimates	0.012	0.009	0.007	0.014
Assignment deviations excluded				
Full-sample estimate	-0.090	-0.036	0.057	-0.027
Maximum absolute change	0.242	0.047	0.151	0.045
SD of leave-one-out estimates	0.107	0.019	0.044	0.019

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: Panel A reports within-canton treatment–control support. Bandwidths are shown as control-side / treatment-side bandwidths. "Two-sided" denotes cantons with at least one municipality on both sides of the cutoff, while "total cantons" denotes all cantons represented in the corresponding estimation window. For the Green Party vote share, merger-affected municipalities are included. For the share of "yes"-votes, specifications are reported with and without municipalities exhibiting treatment-assignment deviations.

Panel B reports leave-one-canton-out sensitivity. Each two-sided canton is excluded separately while holding the bandwidths fixed at those of the corresponding canton fixed-effects specification. Specifications without canton fixed effects use the same samples and bandwidths. One-sided cantons are not omitted separately because they provide no direct within-canton treatment–control contrast.

Table D.18: Cantonal composition of canton fixed-effects estimation samples for political behaviour

	Green Party vote share, 2011 (iodine boundary 2004/05)				Share of "yes"-votes, 2016 (iodine boundary 2014/15)			
	Mergers included		Mergers excluded		Assignment deviations included		Assignment deviations excluded	
Canton	Sym.	Asym.	Sym.	Asym.	Sym.	Asym.	Sym.	Asym.
Bandwidth (km)	12.90/12.90	13.54/11.66	12.92/12.92	14.15/11.57	10.42/10.42	9.36/14.64	6.80/6.80	7.56/6.58
Aargau	45/92	47/79	45/93	48/79	–	0/1	–	–
Bern	110/67	118/65	108/67	123/64	7/5	6/13	3/3	3/2
Basel-Landschaft	13/31	14/29	13/31	15/29	–	–	–	–
Fribourg	46/25	48/22	46/24	51/21	12/13	12/31	8/6	10/6
Lucerne	32/11	32/11	32/11	33/11	0/14	0/18	0/3	0/3
Neuchâtel	15/4	16/4	15/4	18/4	1/2	1/6	1/1	1/1
Nidwalden	–	–	–	–	4/1	4/1	2/1	2/1
Obwalden	–	–	–	–	1/0	–	–	–
Schaffhausen	–	–	–	–	0/2	0/3	0/1	0/1
Schwyz	–	–	–	–	8/0	7/0	3/0	3/0
Solothurn	34/17	37/15	34/16	40/13	–	–	–	–
Thurgau	–	–	–	–	13/6	11/8	6/6	8/6
Vaud	5/4	5/4	5/4	5/4	48/30	41/37	28/17	34/17
Zug	–	–	–	–	0/6	0/9	–	–
Zurich	31/13	33/13	31/13	35/13	11/30	11/44	8/13	9/13
Total municipalities	331/264	350/242	329/263	368/238	105/109	93/171	59/51	70/50

Entries report control/treatment municipality counts.

Note: The table reports the cantonal composition of the estimation samples used in the canton fixed-effects specifications for the Green Party vote share in the 2011 National Council elections and the share of "yes"-votes in the 2016 Nuclear phase-out initiative. Canton-level entries report control/treatment municipality counts; "–" indicates that no municipality from the canton falls within the corresponding estimation window. Bandwidths are reported in kilometres as control-side/treatment-side bandwidths. The symmetric specifications use a common MSE-optimal bandwidth on both sides of the boundary (*mserd*), whereas the asymmetric specifications allow for separate MSE-optimal bandwidths (*msetwo*). For the Green Party vote share, results are reported with merger-affected municipalities included and excluded. For the share of "yes"-votes, results are reported with municipalities exhibiting treatment-assignment deviations included and excluded.

Table D.19: GRDD estimates for political behaviour using straight-line distance

	Unadjusted		Language-region FE	
	Sym.	Asym.	Sym.	Asym.
Voter turnout, 2016 Nuclear phase-out initiative (iodine boundary 2014/15)				
RD estimate	0.020	0.019	0.020	0.021
	(0.023)	(0.022)	(0.015)	(0.015)
bw contr. (km)	28.84	31.14	22.13	25.06
bw treat. (km)	28.84	24.39	22.13	21.29
obs. left	468	492	381	427
obs. right	612	510	463	448
Share of "yes"-votes, 2016 Nuclear phase-out initiative (iodine boundary 2014/15)				
RD estimate	0.013	0.016	0.020	0.024
	(0.040)	(0.040)	(0.015)	(0.015)
bw contr. (km)	23.38	25.86	20.55	22.90
bw treat. (km)	23.38	21.87	20.55	17.29
obs. left	407	436	359	397
obs. right	490	457	428	360
Green Party vote share, Swiss National Council elections 2011 (iodine boundary 2004/05)				
RD estimate	0.0003	0.006	0.001	0.008
	(0.019)	(0.017)	(0.020)	(0.018)
bw contr. (km)	14.68	30.79	14.93	36.76
bw treat. (km)	14.68	17.44	14.93	17.49
obs. left	594	965	604	1,086
obs. right	381	400	381	400
Green Party vote share, Swiss National Council elections 2015 (iodine boundary 2014/15)				
RD estimate	0.007	0.007	0.010	0.011
	(0.019)	(0.019)	(0.012)	(0.012)
bw contr. (km)	21.49	22.76	18.40	18.41
bw treat. (km)	21.49	20.76	18.40	19.64
obs. left	354	379	321	322
obs. right	456	442	382	411

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates using straight-line distance to the respective iodine distribution boundary as the forcing variable. Symmetric specifications use a common MSE-optimal bandwidth on both sides of the cutoff (mserd), while asymmetric specifications allow separate MSE-optimal bandwidths on the control and treatment sides (msetwo). Columns (3) and (4) include language-region fixed effects. Standard errors are clustered at the canton level.

Table D.20: Bandwidth sensitivity of GRDD estimates for voter turnout (Nuclear phase-out initiative 2016, iodine boundary 2014/15)

Panel A: Symmetric bandwidths							
	half MSEo	15 km	20 km	25 km	30 km	35 km	40 km
Unadjusted	0.001	-0.003	0.001	0.006	0.004	0.001	0.002
	(0.026)	(0.026)	(0.023)	(0.020)	(0.019)	(0.019)	(0.018)
Language-region FE	0.009	0.003	0.007	0.010	0.008	0.005	0.006
	(0.023)	(0.022)	(0.018)	(0.017)	(0.017)	(0.017)	(0.016)
Panel B: Treatment-side bandwidth variation							
	half MSEo	10 km	15 km	20 km	25 km	30 km	35 km
Unadjusted	0.013	0.014	0.009	0.006	0.007	0.005	0.001
	(0.020)	(0.024)	(0.019)	(0.021)	(0.020)	(0.019)	(0.019)
Language-region FE	0.013	0.013	0.013	0.012	0.013	0.011	0.008
	(0.022)	(0.023)	(0.015)	(0.016)	(0.016)	(0.016)	(0.016)
Panel C: Control-side bandwidth variation							
	half MSEo	20 km	25 km	30 km	35 km	40 km	45 km
Unadjusted	-0.005	0.002	0.006	0.007	0.008	0.009	0.009
	(0.026)	(0.022)	(0.020)	(0.020)	(0.020)	(0.019)	(0.019)
Language-region FE	0.004	0.009	0.011	0.012	0.012	0.014	0.014
	(0.022)	(0.018)	(0.017)	(0.017)	(0.016)	(0.016)	(0.016)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates with canton-clustered CR1 standard errors. The triangular kernel is used and mass points are adjusted. Panel A varies a common bandwidth on both sides of the cutoff. Panel B holds the control-side bandwidth at its specification-specific MSE-optimal value and varies the treatment-side bandwidth. Panel C holds the treatment-side bandwidth at its specification-specific MSE-optimal value and varies the control-side bandwidth. In each panel, the first column uses one-half of the corresponding MSE-optimal bandwidth. In Panel A, the half-MSE bandwidths are 13.73 and 11.66 km for the unadjusted and language-region fixed-effects specifications, respectively. In Panel B, the corresponding fixed control-side bandwidths are 32.14 and 28.71 km, while the half-MSE treatment-side bandwidths are 11.49 and 10.45 km. In Panel C, the fixed treatment-side bandwidths are 22.98 and 20.90 km, while the half-MSE control-side bandwidths are 16.07 and 14.36 km. The corresponding MSE-optimal bias bandwidths are held fixed within each panel.

Table D.21: Bandwidth sensitivity of GRDD estimates for the share of "yes"-votes (Nuclear phase-out initiative 2016, iodine boundary 2014/15)

Panel A: Symmetric bandwidths							
	half MSEo	15 km	20 km	25 km	30 km	35 km	40 km
Unadjusted	-0.038	-0.036	-0.021	-0.013	-0.011	-0.013	-0.015
	(0.042)	(0.044)	(0.046)	(0.046)	(0.044)	(0.044)	(0.045)
Language-region FE	-0.015	-0.005	0.006	0.007	0.008	0.007	0.006
	(0.015)	(0.015)	(0.016)	(0.016)	(0.017)	(0.017)	(0.017)
Panel B: Treatment-side bandwidth variation							
	half MSEo	10 km	15 km	20 km	25 km	30 km	35 km
Unadjusted	-0.002	-0.002	-0.006	-0.001	0.001	0.001	0.0004
	(0.037)	(0.037)	(0.040)	(0.045)	(0.046)	(0.045)	(0.045)
Language-region FE	-0.001	-0.005	0.010	0.014	0.014	0.012	0.010
	(0.019)	(0.022)	(0.017)	(0.016)	(0.016)	(0.016)	(0.016)
Panel C: Control-side bandwidth variation							
	half MSEo	20 km	25 km	30 km	35 km	40 km	45 km
Unadjusted	-0.025	-0.013	-0.004	0.001	0.003	0.004	0.004
	(0.052)	(0.049)	(0.047)	(0.046)	(0.046)	(0.046)	(0.046)
Language-region FE	0.002	0.008	0.010	0.014	0.015	0.016	0.016
	(0.017)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates with canton-clustered CR1 standard errors. The triangular kernel is used and mass points are adjusted. Panel A varies a common bandwidth on both sides of the cutoff. Panel B holds the control-side bandwidth at its specification-specific MSE-optimal value and varies the treatment-side bandwidth. Panel C holds the treatment-side bandwidth at its specification-specific MSE-optimal value and varies the control-side bandwidth. In each panel, the first column uses one-half of the corresponding MSE-optimal bandwidth. In Panel A, the half-MSE bandwidths are 12.93 and 12.71 km for the unadjusted and language-region fixed-effects specifications, respectively. In Panel B, the corresponding fixed control-side bandwidths are 30.80 and 31.09 km, while the half-MSE treatment-side bandwidths are 12.00 and 11.08 km. In Panel C, the fixed treatment-side bandwidths are 23.99 and 22.16 km, while the half-MSE control-side bandwidths are 15.40 and 15.54 km. The corresponding MSE-optimal bias bandwidths are held fixed within each panel.

Table D.22: Bandwidth sensitivity of GRDD estimates for Green Party vote share (Swiss National Council elections 2011, iodine boundary 2004/05)

Panel A: Symmetric bandwidths							
	half MSEo	7.5 km	10 km	12.5 km	15 km	17.5 km	20 km
Unadjusted	-0.026	-0.027	-0.024	-0.020	-0.017	-0.018	-0.020
	(0.017)	(0.018)	(0.018)	(0.019)	(0.019)	(0.018)	(0.019)
Language-region FE	-0.026	-0.026	-0.024	-0.020	-0.017	-0.018	-0.020
	(0.017)	(0.017)	(0.018)	(0.019)	(0.019)	(0.018)	(0.019)
Panel B: Treatment-side bandwidth variation							
	half MSEo	12.5 km	15 km	17.5 km	20 km	22.5 km	25 km
Unadjusted	-0.003	-0.001	0.0001	-0.0005	-0.001	-0.001	-0.001
	(0.010)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Language-region FE	-0.006	-0.003	-0.002	-0.002	-0.003	-0.003	-0.003
	(0.010)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Panel C: Control-side bandwidth variation							
	half MSEo	20 km	25 km	30 km	35 km	40 km	45 km
Unadjusted	-0.008	-0.007	-0.006	-0.004	-0.002	0.0001	0.001
	(0.013)	(0.013)	(0.012)	(0.011)	(0.011)	(0.011)	(0.011)
Language-region FE	-0.009	-0.008	-0.007	-0.005	-0.004	-0.002	-0.001
	(0.013)	(0.013)	(0.012)	(0.011)	(0.011)	(0.011)	(0.011)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates with canton-clustered CR1 standard errors. The triangular kernel is used and mass points are adjusted. Panel A varies a common bandwidth on both sides of the cutoff. Panel B holds the control-side bandwidth at its specification-specific MSE-optimal value and varies the treatment-side bandwidth. Panel C holds the treatment-side bandwidth at its specification-specific MSE-optimal value and varies the control-side bandwidth. In each panel, the first column uses one-half of the corresponding MSE-optimal bandwidth. In Panel A, the half-MSE bandwidths are 6.78 and 6.92 km for the unadjusted and language-region fixed-effects specifications, respectively. In Panel B, the corresponding fixed control-side bandwidths are 37.79 and 38.18 km, while the half-MSE treatment-side bandwidths are 8.99 and 9.00 km. In Panel C, the fixed treatment-side bandwidths are 17.99 and 18.00 km, while the half-MSE control-side bandwidths are 18.90 and 19.09 km. The corresponding MSE-optimal bias bandwidths are held fixed within each panel.

Table D.23: Bandwidth sensitivity of GRDD estimates for Green Party vote share (Swiss National Council elections 2015, iodine boundary 2014/15)

Panel A: Symmetric bandwidths							
	half MSEo	15 km	20 km	25 km	30 km	35 km	40 km
Unadjusted	0.002	0.001	0.002	0.005	0.004	0.004	0.003
	(0.027)	(0.027)	(0.027)	(0.025)	(0.024)	(0.025)	(0.025)
Language-region FE	0.010	0.010	0.010	0.011	0.010	0.010	0.010
	(0.016)	(0.016)	(0.016)	(0.015)	(0.015)	(0.015)	(0.016)
Panel B: Treatment-side bandwidth variation							
	half MSEo	10 km	15 km	20 km	25 km	30 km	35 km
Unadjusted	0.011	0.013	0.009	0.008	0.008	0.008	0.008
	(0.025)	(0.025)	(0.025)	(0.025)	(0.024)	(0.024)	(0.024)
Language-region FE	0.014	0.013	0.014	0.013	0.012	0.011	0.011
	(0.015)	(0.014)	(0.014)	(0.015)	(0.015)	(0.015)	(0.015)
Panel C: Control-side bandwidth variation							
	half MSEo	20 km	25 km	30 km	35 km	40 km	45 km
Unadjusted	0.001	0.004	0.007	0.008	0.009	0.008	0.007
	(0.028)	(0.027)	(0.025)	(0.024)	(0.024)	(0.025)	(0.025)
Language-region FE	0.008	0.010	0.012	0.013	0.013	0.012	0.011
	(0.016)	(0.017)	(0.015)	(0.014)	(0.014)	(0.015)	(0.015)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates with canton-clustered CR1 standard errors. The triangular kernel is used and mass points are adjusted. Panel A varies a common bandwidth on both sides of the cutoff. Panel B holds the control-side bandwidth at its specification-specific MSE-optimal value and varies the treatment-side bandwidth. Panel C holds the treatment-side bandwidth at its specification-specific MSE-optimal value and varies the control-side bandwidth. In each panel, the first column uses one-half of the corresponding MSE-optimal bandwidth. In Panel A, the half-MSE bandwidths are 13.72 and 12.35 km for the unadjusted and language-region fixed-effects specifications, respectively. In Panel B, the corresponding fixed control-side bandwidths are 30.76 and 25.75 km, while the half-MSE treatment-side bandwidths are 12.47 and 12.57 km. In Panel C, the fixed treatment-side bandwidths are 24.94 and 25.14 km, while the half-MSE control-side bandwidths are 15.38 and 12.87 km. The corresponding MSE-optimal bias bandwidths are held fixed within each panel.

D.5 Spatial heterogeneity

Table D.24: Component-specific GRDD estimates for Green Party vote share (Swiss National Council elections 2011, iodine boundary 2004/05)

		Unadjusted		Language-region FE		Canton FE	
		Sym.	Asym.	Sym.	Asym.	Sym.	Asym.
		(1)	(2)	(3)	(4)	(5)	(6)
Component-specific bandwidths	*Other boundary component*						
	RD estimate	-0.013	0.004	-0.012	0.001	-0.017**	-0.009
		(0.019)	(0.018)	(0.019)	(0.018)	(0.007)	(0.008)
	bw contr./treat. (km)	27.60/27.60	49.88/29.05	28.56/28.56	57.36/29.05	20.20/20.20	18.25/24.66
	obs. left/right	351/261	509/261	362/261	547/261	275/240	256/258
	Mühleberg boundary component						
	RD estimate	-0.029	-0.006	-0.027	-0.011	-0.016	0.003
		(0.027)	(0.026)	(0.027)	(0.027)	(0.015)	(0.010)
	bw contr./treat. (km)	8.79/8.79	22.73/6.42	9.48/9.48	24.57/6.93	6.87/6.87	11.45/4.54
	obs. left/right	105/71	297/49	112/77	319/54	71/54	140/33
Pooled bandwidths	*Other boundary component*						
	RD estimate	-0.033	-0.005	-0.032	-0.004	-0.027	-0.027
		(0.031)	(0.019)	(0.031)	(0.019)	(0.019)	(0.018)
	bw contr./treat. (km)	13.57/13.57	37.79/17.99	13.84/13.84	38.18/18.00	12.90/12.90	13.54/11.66
	obs. left/right	181/170	440/225	182/177	441/225	168/164	180/147
	Mühleberg boundary component						
	RD estimate	-0.037	-0.019	-0.037	-0.021	-0.022	-0.016
		(0.024)	(0.019)	(0.023)	(0.019)	(0.013)	(0.012)
	bw contr./treat. (km)	13.57/13.57	37.79/17.99	13.84/13.84	38.18/18.00	12.90/12.90	13.54/11.66
	obs. left/right	171/106	470/132	176/107	473/132	163/100	170/95

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports robust bias-corrected local linear GRDD estimates, estimated separately for the two spatially distinct components of the 20 km iodine distribution boundary. "Other" denotes the non-Mühleberg boundary component. For the component-specific estimates, MSE-optimal bandwidths are selected separately for each boundary component and specification. For the pooled-bandwidth estimates, the bandwidths selected by the corresponding pooled specification are imposed identically on both boundary components. Symmetric specifications use a common bandwidth on both sides of the boundary (mserd), while asymmetric specifications allow for separate bandwidths on each side (msetwo). Bandwidth entries report control-side/treatment-side bandwidths; observation-count entries report left-side/right-side observations.

Table D.25: Formal equality tests across boundary components for Green Party vote share (Swiss National Council elections 2011, iodine boundary 2004/05)

	Component-specific bandwidths		Pooled bandwidths	
	Sym.	Asym.	Sym.	Asym.
	(1)	(2)	(3)	(4)
Unadjusted	-0.013	0.017	-0.004	-0.013
	(0.015)	(0.015)	(0.035)	(0.023)
Language-region FE	-0.009	0.005	-0.005	-0.017
	(0.012)	(0.013)	(0.034)	(0.024)
Canton FE	-0.010	0.000	0.006	0.011
	(0.018)	(0.012)	(0.030)	(0.029)

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

The table reports formal tests of equality between the estimated RD effects at the Mühleberg and other boundary components. The contrast is defined as the effect at the Mühleberg component minus the effect at the other boundary component. Reported coefficients are robust bias-corrected differences, with robust standard errors in parentheses. Columns (1) and (2) use MSE-optimal bandwidths selected separately for each boundary component and specification. Columns (3) and (4) use the bandwidths selected by the corresponding pooled specification and impose them identically on both boundary components. Equality tests use `rdhte_lincom` with canton-clustered standard errors and a triangular kernel. Reported differences may deviate from the separate `rdrobust` estimates due to different bias-correction procedures.

Table D.26: GRDD estimates for political behaviour with boundary-segment fixed effects (iodine boundary 2014/15)

		Segment-FE bandwidths		Assignment restriction		Baseline sample/bw	
		Sym.	Asym.	Sym.	Asym.	Sym.	Asym.
		(1)	(2)	(3)	(4)	(5)	(6)
Voter turnout 2016 initiative	*5 boundary segments*						
	RD estimate	-0.0005 (0.012)	-0.002 (0.012)	-0.001 (0.012)	-0.002 (0.012)	-0.002 (0.012)	-0.003 (0.012)
	Assignment dev.	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
	Baseline sample/bw	No	No	No	No	Yes	Yes
	10 boundary segments						
	RD estimate	-0.001 (0.011)	-0.002 (0.011)	-0.001 (0.011)	-0.002 (0.011)	-0.001 (0.012)	-0.003 (0.011)
	Assignment dev.	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
	Baseline sample/bw	No	No	No	No	Yes	Yes
Share of "yes"-votes 2016 initiative	*5 boundary segments*						
	RD estimate	0.0001 (0.013)	0.001 (0.013)	-0.003 (0.012)	-0.002 (0.012)	0.002 (0.013)	0.005 (0.015)
	Assignment dev.	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
	Baseline sample/bw	No	No	No	No	Yes	Yes
	10 boundary segments						
	RD estimate	0.004 (0.013)	0.006 (0.013)	0.003 (0.012)	0.004 (0.013)	0.004 (0.013)	0.009 (0.014)
	Assignment dev.	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
	Baseline sample/bw	No	No	No	No	Yes	Yes
Green Party vote share 2015 election	*5 boundary segments*						
	RD estimate	0.012 (0.012)	0.014 (0.010)	0.011 (0.012)	0.013 (0.010)	0.013 (0.010)	0.016* (0.009)
	Assignment dev.	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
	Baseline sample/bw	No	No	No	No	Yes	Yes
	10 boundary segments						
	RD estimate	0.012 (0.010)	0.015* (0.009)	0.011 (0.010)	0.014* (0.009)	0.012 (0.009)	0.014* (0.008)
	Assignment dev.	Incl.	Incl.	Excl.	Excl.	Incl.	Incl.
	Baseline sample/bw	No	No	No	No	Yes	Yes

Robust bias-corrected estimates; canton-clustered CR1 SEs.
Local linear estimation; triangular kernel; mass points adjusted.

Note: *p< 0.1; **p< 0.05; ***p< 0.01.

All specifications include the indicated number of equal-length boundary-segment fixed effects and no additional controls. Columns (1)–(2) use bandwidths selected separately for the respective segment fixed effects specification. Columns (3)–(4) additionally exclude municipalities whose actual iodine-tablet allocation deviated from the predefined assignment rule, while columns (5)–(6) use the common complete-case sample and bandwidths of the corresponding baseline specification without segment fixed effects. Symmetric specifications use a common MSE-optimal bandwidth on both sides of the cutoff (mserd), whereas asymmetric specifications allow separate control- and treatment-side bandwidths (msetwo).

Table D.27: Within-segment support across five and ten boundary segments for the Green Party vote share (Swiss National Council elections 2015, iodine boundary 2014/15)

	Main sample		Assignment dev. excluded		Baseline sample/bw	
	sym.	asym.	sym.	asym.	sym.	asym.
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Five boundary segments						
bw control (km)	21.03	21.43	21.09	21.55	27.43	30.76
bw treatment (km)	21.03	21.15	21.09	21.33	27.43	24.94
Boundary segment 1	61 / 78	62 / 78	61 / 78	63 / 78	85 / 104	97 / 93
Boundary segment 2	15 / 52	16 / 53	14 / 48	15 / 49	22 / 71	25 / 61
Boundary segment 3	20 / 40	21 / 40	21 / 38	21 / 38	24 / 69	26 / 53
Boundary segment 4	29 / 31	30 / 31	29 / 31	30 / 31	35 / 43	38 / 39
Boundary segment 5	102 / 80	102 / 80	102 / 80	103 / 81	138 / 99	151 / 94
Panel B: Ten boundary segments						
bw control (km)	21.58	24.83	22.86	27.17	27.43	30.76
bw treatment (km)	21.58	21.55	22.86	21.84	27.43	24.94
Boundary segment 1	41 / 46	49 / 46	44 / 51	54 / 46	54 / 68	61 / 59
Boundary segment 2	23 / 33	28 / 33	24 / 33	31 / 33	31 / 38	36 / 35
Boundary segment 3	15 / 29	18 / 29	16 / 27	20 / 26	21 / 39	23 / 33
Boundary segment 4	1 / 25	1 / 25	0 / 24	0 / 23	1 / 31	2 / 27
Boundary segment 5	4 / 7	4 / 7	4 / 5	4 / 5	5 / 10	7 / 9
Boundary segment 6	17 / 36	19 / 35	19 / 41	20 / 37	20 / 59	20 / 45
Boundary segment 7	5 / 3	6 / 3	5 / 4	7 / 4	7 / 4	7 / 4
Boundary segment 8	28 / 33	29 / 33	28 / 37	30 / 34	30 / 46	33 / 41
Boundary segment 9	84 / 44	105 / 44	91 / 45	116 / 45	118 / 45	131 / 45
Boundary segment 10	17 / 33	17 / 33	17 / 35	17 / 34	17 / 46	17 / 42

Note: Entries report the number of control- and treatment-side municipalities within each boundary segment and estimation bandwidth, in the form control / treatment. Panel A reports the five-segment specification and Panel B the ten-segment specification. Columns (1)–(2) use the full estimation sample and bandwidths selected for the respective boundary-segment fixed-effects specification. Columns (3)–(4) exclude municipalities with treatment-assignment deviations and re-select the bandwidths. Columns (5)–(6) use the common complete-case sample and the bandwidths of the corresponding baseline specifications. Symmetric columns use mserd; asymmetric columns use msetwo.