

# Constituencies for German Federal Elections: Legal Requirements and Their Observance

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**Abstract.** About half of the seats in German Parliament (Bundestag) are assigned through relative majority vote in each of the 299 constituencies in German Federal Elections. Legal requirements and jurisprudence of courts regulate the characteristics and principles that have to or rather should be satisfied by constituencies in Germany. We investigate how well these requirements are met and whether some legal guidelines are given preferential treatment. We further analyze if, and to what extent, the decision-maker of the constituencies, i.e., the legislator, adopts proposals made by an independent Constituency Commission. No systematic and numerical study of constituency delimitation laws and practices in Germany has been conducted to date. This paper rectifies that shortcoming and provides the basis to prepare substantive arguments for upcoming delimitation debates in Germany. Our work is based on an extensive set of geographical and population data of the last five German Federal Elections, including the last one in September 2017.

## 1 Introduction

The delimitation of constituencies for the German Federal Election in autumn 2017 passed German legislation in spring 2016 (BGBl. I, p. 1062, 2016; BT-Drs 18/7873, 2016). Adaptations to the 299 constituencies compared to the German Federal Election of 2013 were necessary due to changes in population and local administrative reforms. Modifications to constituencies are common before each German Federal Election as is public dialogue about those rearrangements. Before a final decision is reached, an independent commission has to validate the current constituencies, report on changes in population figures, and make suggestions on how to modify the constituency boundaries (cf., e.g., (BT-Drs 18/3980, 2015; BT-Drs 18/7350, 2016)). This Constituency Commission is nominated by the German Federal President and consists of the Federal Returning Officer, a judge of the Federal Constitutional Court, and five other members. However, the commission's recommendations by the commission are not binding on the German legislator.

The Federal Election Act (German: Bundeswahlgesetz, abbreviated BWG) constitutes in section 3, subsection 1 the essential legal basis for the delimitation of constituencies for German Federal Elections. It lists details regarding the distribution of the 299 constituencies among the German Federal States as well as other principles that must be followed when drawing constituency boundaries. For the sake of electoral equality required by the German constitution (German: Grundgesetz, abbreviated GG), all constituencies should ideally reflect the same share of the population. For this, the law defines population limits that each constituency should or must adhere to. Furthermore, established and historically evolved administrative borders should preferably be respected. In recent years, the legal requirements and guidelines for the delimitation of constituencies have been extended by decisions of the Federal Constitutional Court (German: Bundesverfassungsgericht, abbreviated BVerfG). For example, the court ruled that legislature has to strive for a certain degree of continuity in the spatial shape of the constituencies.

In practice, it is impossible to fulfill these competing and conflicting requirements entirely and simultaneously. The fact that the law does not clearly rank the principles complicates the matter further. In this context, we answer the following questions:

- To what extent are the legal principles for the delimitation of the German constituencies adhered to?
- Does the legislator take advantage of the liberty allowed by the vague phrasing of the legal requirements?
- Do the actual constituencies show that the legislator values certain principles more than others?
- To what extent is the German Federal Parliament following the suggestions of the Constituency Commission when deciding on a new delimitation of constituencies?

For all legal requirements and the mentioned questions above, we compile and visualize key figures in this article. Our work is based on an extensive data set, including population data, and detailed geographical information about the constituencies and administrative levels. We consider delimitation of constituencies for the German Federal Elections of the years 2009, 2013, and 2017 as well as the suggestions of the Constituency Commission regarding those elections. To the best of our knowledge, we created the most comprehensive, accurate, and current data set of this kind.

A comparative survey of constituency delimitation laws and practices of 87 countries is provided by Handley (2008). The work includes a study on the practice of employing nonpartisan constituency commissions in the process of delimiting constituencies. Balinski et al. (2010) focus on the design of constituencies in the United Kingdom. The authors inform the public and analyze the consequences of a bill of 2010, changing the rules for defining constituencies in the UK. Schrott (2006) provides information about the history of redistricting in

Germany between 1958 and 2003. The author concludes that the German legislator often accepts only constituency changes that are enforced by law, retaining the status quo as much as possible.

The article is structured as follows: In Section 2, we present in detail the legal requirements and principles of the German Federal Election Act and Federal Constitutional Court concerning the German constituencies. In Section 3, we analyze the delimitations of constituencies in past German Federal Elections with respect to the observance of the requirements. We close with a discussion and a summary in Section 4.

## 2 Legal Requirements for Delimitation of Constituencies

The principles that have to be considered during the delimitation of constituencies for German Federal Elections are stated in the Federal Election Act, section 3, subsection 1. In the last few years, those legal requirements have been complemented by the Federal Constitutional Court (BVerfGE 121, 226, 2008; BVerfGE 130, 212, 2012; BVerfGE 95, 335, 1997). In no particular order, the legal requirements are as follows.

*Distribution of constituencies among Federal States* (cf. sec. 3 subsec. 1 nos. 1 and 2 BWG). Since the German Federal Election in 2002, the territory of the German Federal Republic has been subdivided into 299 constituencies. By virtue of the constitutionally established federalism, the boundaries of the 16 German Federal States (German: Bundesländer) must be observed. Based on a state's population and a procedure described in the electoral law (cf. sec. 6 subsec. 2 sentences 2 to 7 BWG), the 299 constituencies are distributed among the states. This apportionment method is known as Webster/Sainte-Laguë procedure or divisor method with standard rounding. It is the subject of numerous mathematical publications (cf., e.g., (Balinski and Young, 1982; Pukelsheim, 2014)). The method ensures, in a certain sense, the best possible proportionality between the share of population and number of constituencies of the states.

*Population numbers* (cf. sec. 3 subsec. 1 sentence 2 BWG). The Federal Election Act states that *non-Germans* are not considered in the calculated population numbers for the constituencies. Therefore, the *German* population is the basis of assessment. The Federal Constitutional Court has extended the aspect to the effect that, additionally, the percentage of minors, thus, the proportion of non-eligible voters of the German population, has to be considered (BVerfGE 130, 212, 2012). After examining the numbers, the Constituency Commission ascertained most recently that the percentage of minors in the German population varied insignificantly in most cases (cf. in particular section 2 in (BT-Drs 18/3980, 2015)). According to the commission, the German population figures

can still be used as a reliable measurement. In addition, the Federal Constitutional Court instructs the legislator to take the trends of the long-term demographic development into account (BVerfGE 130, 212, 2012).

*Two-stage deviation limit of constituency's population* (cf. sec. 3 subsec. 1 no. 3 BWG). According to the principle of electoral equality, each constituency must preferably comprise the same number of people. The law provides a two-staged scope for the deviation of the constituency's population from the average. Dividing the German population by the number of constituencies yields the expected average population per constituency. This currently is about 246 000. According to the Federal Election Act, the population of a constituency *should* not deviate more than 15% upward or downward from the average (15% tolerance limit). The absolute maximum limit of the population deviation that *has* to be adhered to is 25%. This two-stage deviation limit with a should-regulation and a must-regulation is interpreted by the Constituency Commission as follows (cf. section 4.2.1, penultimate paragraph in (BT-Drs 17/4642, 2011)): 'The absolute maximum limit of 25% may not be maxed out ad libitum. Exceeding the 15%-tolerance limit can only be justified on a case-by-case basis and by factually founded reasons.'<sup>1</sup>

*Conformity of constituency boundaries with administrative boundaries* (cf. sec. 3 subsec. 1 no. 5 BWG). As far as possible, the delimitation of constituencies should be oriented toward (administrative) boundaries of the districts, urban districts, and municipalities. Even though it is not mentioned in the legal principles, the observance of the boundaries of municipal associations, possible existing governmental districts, and constituencies for the Federal State's election is supported. The conformity with known boundaries helps the territorial roots of a constituency from the voters' perspective as well as the electoral candidate. Thereby, the constituency can be easier to identify. Furthermore — and this aspect can in no way be neglected — it simplifies the administrative and organizational work around an election.

*Connectedness of constituency* (cf. sec. 3 subsec. 1 no. 4 BWG). Every constituency is supposed to form a connected, i.e., a coherent area. With respect to this and the aforementioned principle about the observance of historically rooted or administrative boundaries, the Federal Constitutional Court notes that a constituency should be a cohesive and rounded entity (BVerfGE 95, 335, 1997). This serves as an additional visual aspect of a constituency. Its territory should resemble a circle than a lengthened and frayed entity. The concept of compactness of a constituency does not play a relevant role in public debates and legal requirements in Germany, in marked contrast to the electoral discussions in the

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<sup>1</sup> Original German quote: 'Hierbei darf die 25 Prozent-Grenze nicht nach Belieben ausgeschöpft werden, sondern es müssen im Einzelfall besondere, sachlich fundierte Gründe vorliegen, um ein Abgehen von der 15 Prozent-Toleranzgrenze rechtfertigen zu können.' (BT-Drs 17/4642, 2011)

United States of America (cf. public and political discussion as well as American legislation on the subject of Gerrymandering).

*Continuity of delimitation of constituencies* (BVerfGE 130, 212, 2012; BVerfGE 95, 335, 1997). The Federal Constitutional Court argues that it would be contrary to the principles of democratic representation, if constantly large and numerous changes were made to the constituencies. A certain degree of continuity is needed in the geographic layout of the constituencies to enable the establishment of adequate relationship between the representative and the constituency's population. While the continuity of constituencies is not mentioned in the Federal Election Act, it can justify exceeding the 15%-tolerance deviation limit from the viewpoint of the Federal Constitutional Court. The Constituency Commission notes that the reasons have to be more and more solid the closer the deviation of population moves toward the maximum limit of 25% (cf. section 4.2.1, penultimate paragraph in (BT-Drs 17/4642, 2011)).

### 3 Observance of the Legal Requirements and Principles

We analyze in the following sections the extent to which the legal requirements and principles of the constituencies for German Federal Elections are observed. Sections 3.1 – 3.5 deal with one regulation as introduced in Section 2. In Section 3.6, we analyze the extent to which the suggestions of the Constituency Commission were considered by the German Federal Parliament. The key figures and outcomes rely on population and territory data from the Federal Statistical Office and the Federal Agency for Cartography and Geodesy, respectively.<sup>2</sup> Key figures are available on demand from the corresponding author.

#### 3.1 Distribution of Constituencies among Federal States

There is no leeway, as the constituencies are distributed among the Federal States through a predetermined and unambiguous algorithm there is no leeway. Nevertheless, we want to evaluate how well the principle of electoral equality is being respected. The distribution of the constituencies yields for each state a different average population number compared to the national average. The state-specific deviations measure how a state's number of constituencies relates to the state's share of the German population.

For most Federal States, it is possible to be within a 5% range of the national population average. It is, however, different for states with a comparably few constituencies. For the 2013 and 2017 elections, the states Thuringia (9 and 8 constituencies, respectively), Mecklenburg-Vorpommern (6), and Saarland (4)

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<sup>2</sup> Sec. 3.1: German population with key dates: 2002/12/31 (Election 2002), 2005/12/31 (Election 2005), 2009/09/30 (Election 2009), 2013/09/30 (Election 2013), 2015/12/31 (Election 2017). Sec. 3.2 – 3.5: German population and geodata with key dates: 2009/12/31 (Election 2009), 2013/12/31 (Election 2013), 2015/06/30 (Election 2017, German population), 2016/02/29 (Election 2017, geodata).

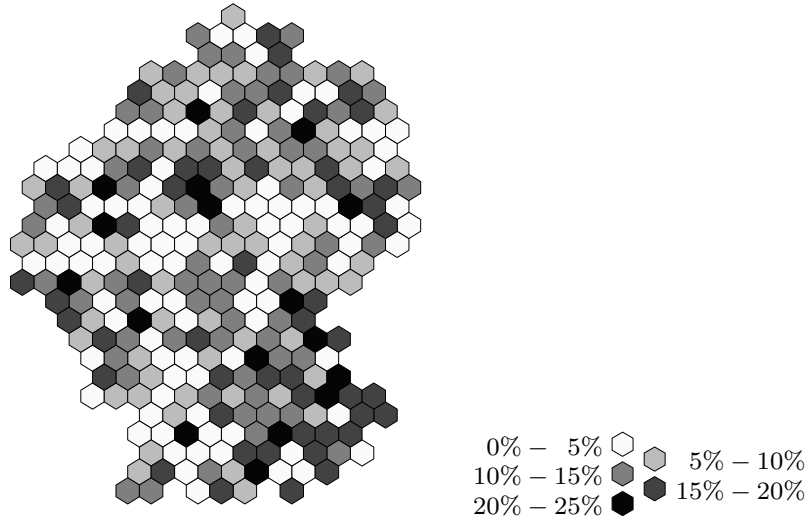


Fig. 1: One-hexagon-per-constituency cartogram showing population deviations.

amounts to between 5% and 10%. In all the analyzed elections, the least populous German state, Bremen, has a state-specific deviation that exceeds even 15%. Thus, it is not possible to delimit constituencies in Bremen, all of which observe the 15%-tolerance limit. Calculations in (Goderbauer, 2016a,b) reveal that increasing the number of German constituencies — staying, however, close to 299 — can lead to deviation values above the admissible 25% in Bremen.

### 3.2 Deviation of Constituency Population from Average

Even though the constituencies are defined up to 18 months before a German Federal Election, their delimitation must take place in such a way that the constituencies meet the legal requirements at the time of the election. Owing to permanent population changes, foresight is necessary with regard to the population deviation limits.

The cartogram<sup>3</sup> in Figure 1 shows for each constituency of the 2017 German Federal Election the individual deviation of the constituency population from the national average. The darker the coloring of a constituency’s hexagon, the greater is its deviation. The most populous constituency has 303,880 Germans (constituency 243 Fürth, Bavaria, +23.1% deviation). The other extreme can also be found in Bavaria: Just 189,238 Germans live in the least populous constituency (constituency 238 Coburg, Bavaria, -23.1% deviation).

Figure 2 shows the distribution of the deviation values of the constituency populations over the course of time. It becomes clear that the modifications to

<sup>3</sup> Hexagonally tiled cartogram with one hexagon per constituency. Tile map generated with own implementation, based on work of McNeill and Hale (2017).

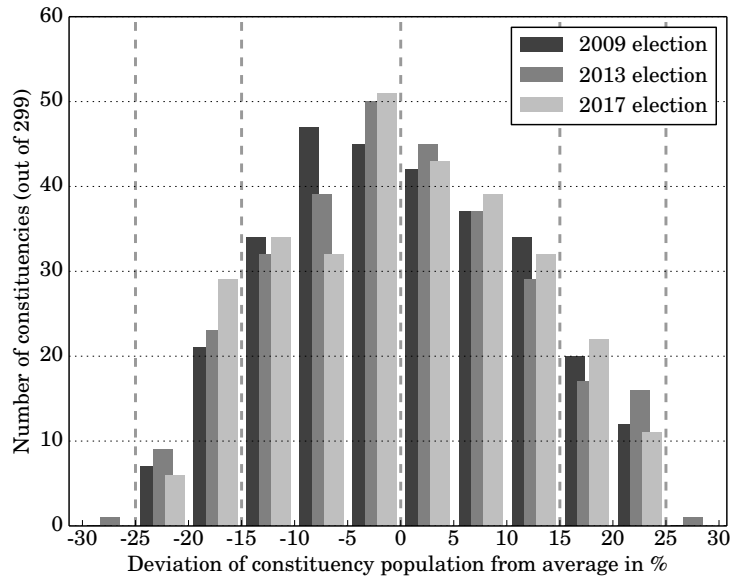


Fig. 2: Distribution of the population deviations of constituencies for the 2009, 2013, and 2017 elections.

the delimitation of constituencies for the 2017 Federal Election led to improvements in terms of population deviations: The histogram classes  $(-25\%, -20\%)$  and  $(20\%, 25\%)$  of the 2013 election are losing in favour of more inward classes. The two constituencies of 2013 with deviations above 25% and below  $-25\%$  also left their histogram class for the 2017 election. Slightly more than every second constituency remains below the deviation value of 10%. About four out of five German constituencies comply with the legal tolerance limit of 15%. Since we calculated the deviation values of the constituencies for the 2017 election on the basis of population data as of 06/30/2015, it remains to be seen whether the delimitation for 2017 was robust enough and chosen with sufficient farsightedness.

### 3.3 Connectedness of Constituency

According to the Federal Election Act, the area of each constituency should form a coherent area. For the 2013 and 2017 elections, we found that this legal principle was adhered to in general. However, there are exceptions. Apart from some negligible cases, we would like to emphasize two non-connected constituencies. Negligible cases are, for example, non-connected constituencies, where islands, exclaves or non-connected municipalities cause the non-connectivity.

The Hessian constituency Bergstraße (see Figure 3a) was created for the first election in West Germany after World War II in 1949 and has since been a part of the delimitation of constituencies. It consists entirely of the non-connected district of Bergstraße. Interestingly, for the three elections in the years 1965 – 1972,

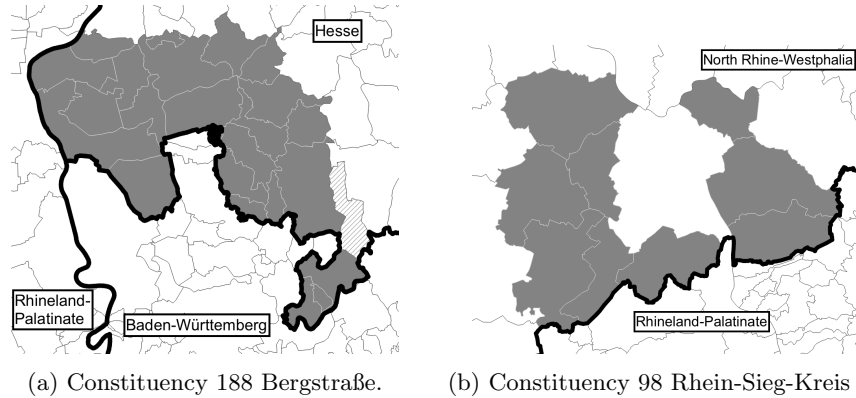


Fig. 3: Two non-connected constituencies of the elections in 2013 and 2017. Boundary lines: ©GeoBasis-DE / BKG 2011 (data changed).

a municipality from a neighbouring district was assigned to the constituency so that it was connected during this time (see the highlighted municipality in Figure 3a).

The North Rhine-Westphalian constituency Rhein-Sieg-Kreis II (see Figure 3b) consists of two separate parts of the Rhine-Sieg district. The western part of this constituency consists entirely of the left-Rhine municipalities of the Rhine-Sieg district and, thus, is delineated by the district boundaries as well as the natural border of the Rhine River. This non-connected constituency around the city of Bonn has existed in this form since the 1980 election.

### 3.4 Conformity with Administrative Borders

The Federal Election Act requires that the boundaries of municipalities, districts and urban districts should be respected as much as possible. It is apparent that other administrative and/or historical boundaries are also included in the planning. In a hierarchical order, this includes boroughs, city districts, municipal associations, and potential governmental districts. Seen on the basis of their population strengths, the districts and urban districts are most comparable in size to a constituency. There are, on the one hand, constituencies which contain several (urban) districts completely. On the other hand, there are (urban) districts that are divided into multiple constituencies. Municipalities (apart from large cities, which are mostly administered as urban districts) and also municipal associations are usually too small to form a constituency by themselves. Governmental districts, however, are too large and comprise several constituencies.

*Governmental districts* (German: Regierungsbezirke). Four German Federal States are subdivided into governmental districts and the following applies to the constituencies in those states at the 2013 and 2017 elections. In Bavaria (7 governmental districts) and North Rhine-Westphalia (5), all governmental districts are



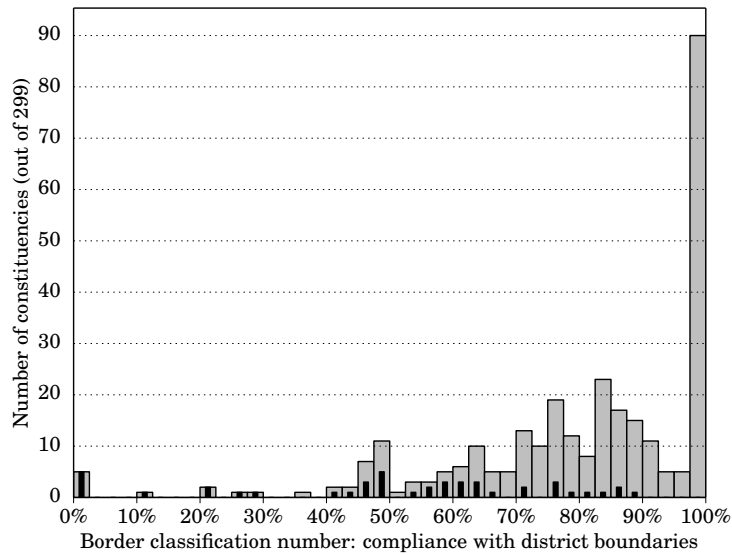


Fig. 4: In gray: Distribution of the border classification number (compliance with the boundaries of (urban) districts) of the constituencies for the election in 2017. In black: Constituencies whose border classification number is not very meaningful, since they are part of a set of constituencies that exactly partition a (urban) district.

respected by the delimitation of constituencies. In Baden-Wurttemberg (4) and Hesse (3) only a few constituencies cover areas from more than one governmental district.

*Districts and urban districts* (German: Kreise und kreisfreie Städte). An interpretation of the legal requirement for conforming to administrative boundaries is that the delimitation of constituencies should have as few differences as possible with the boundaries of the (urban) districts. In other words: The share of the constituency boundaries, which at the same time are also boundaries on the district level, should be as large as possible. We chose the length of the constituency borders as a basis for assessment. This so-called border classification number can be expressed for each constituency, and also for a region or for Germany as a whole. Examples of the 2017 election: (i) Constituency 248 matches exactly with the union of three districts in northern Bavaria. All boundaries of this constituency are also the boundaries of the district level, that is, a border classification number of 100%; (ii) Constituency 283 consists of the district Emmendingen and the southern part of the district Ortenaukreis. The northern and the north-western borders of the constituency are not district boundaries. The border classification number of this constituency amounts to 64%.

Figure 4 shows the distribution of the border classification number of the constituencies for the 2017 election in a class histogram. It shows that the majority of constituencies tend to comply with boundaries of districts and urban districts. 90 of the 299 constituencies are in the last histogram class. In 88 of these constituencies, the boundaries even correspond to 100% with boundaries at the district level. Five constituencies have a border classification number of 0%. These are the two constituencies of Hanover (which is officially not an urban district, but a municipality in the district of Hanover) and three constituencies of Berlin, which lie completely within the city/Federal State area. Seen across the whole of Germany, 86.6% of the constituency boundaries in the Federal Elections in 2017 coincide with boundaries at the district level. This value is similar for the 2013 election (86.7%) and the 2009 election (88.0%).

For certain constituencies, the border classification numbers is a questionable key figure. For example, the urban district of Munich is made up of exactly four constituencies. None of these constituencies contains areas outside the urban area. Thus, the entire border of Munich is a constituency border. Within Munich, the four constituencies are forced to create borders that deviate from Munich's city borders. Thus, the border classification numbers of these constituencies are less than 100%, namely around 50%. But constituencies that match the exact area of a (highly populated) district or urban district fulfill, in our view, the principle of observance of district boundaries completely. Obviously, the border classification numbers do not take this into account. According to this interpretation, an additional 44 constituencies (including the mentioned four in Munich) for the 2017 election were fully in line with the boundaries of the districts and urban districts. In Figure 4, these constituencies are represented in the form of the black class fractions.

*Municipal associations* (German: Gemeindeverbände). A municipal association is the association of at least two municipalities. In Germany, there are almost 1 300 municipal associations. At the delimitation of constituencies for the 2013 election, four municipal associations were not fully in one constituency. For the 2017 election, this number increases by one.

*Municipalities* (German: Gemeinden). In general, the boundaries of the municipalities are respected when defining constituencies. In fact, mathematically, there is only one understandable reason why a municipality is not completely in one constituency or not partitioned into a certain number of constituencies: The restriction of the constituency population in the form of the deviation limit of 25%. The deviation limit can imply the existence of a constituency containing parts of a city and of the city's surrounding area.

### 3.5 Continuity of Delimitation of Constituencies

The requirement that as few modifications to the constituencies as possible should be made between one election and the next is not formulated in the Federal Election Act. This was imposed by the Federal Constitutional Court.

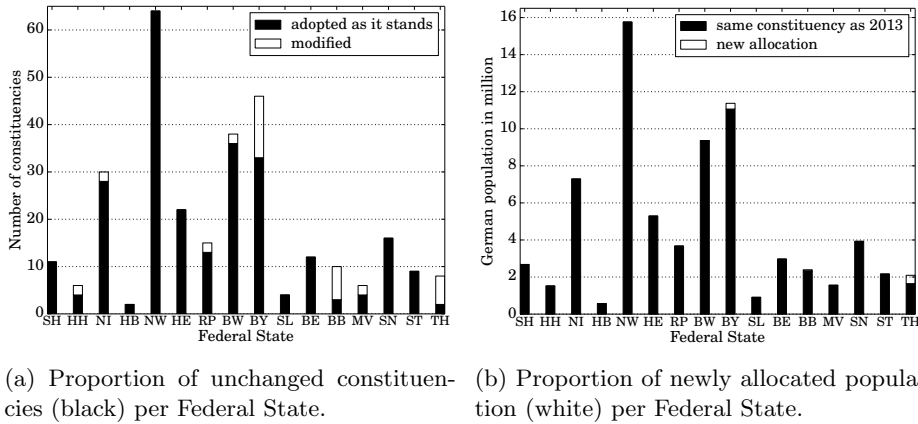


Fig. 5: The extent of continuity from 2013 to 2017 elections as measured by the share of (a) adopted constituencies and (b) newly allocated population (Federal States are abbreviated with their ISO 3166-2:DE code).

We measure the continuity by the number of modified constituencies and the population that has changed its constituency.

In all, 267 of the 299 constituencies were adopted unchanged from the 2009 to the 2013 elections. This corresponds to about 89%. In the transition to the 2017 election, 263 of the 299 constituencies of the 2013 election, i.e., 88%, remain intact. Figure 5 illustrates the extent of the continuity of constituencies for the 2017 election, based on the number of (un)altered constituencies and the newly allocated population per Federal State. The Federal States where the numbers of constituencies were changed (Bavaria +1, Thuringia -1) recorded the most significant adjustments. With the exception of these states, the newly assigned population is so small that their share in the diagram is hard to recognize. Nationwide, almost 1.2% of the population has changed its constituency from the 2013 to the 2017 elections.

### 3.6 Adoption of Proposed Amendments suggested by Constituency Commission

The proposals developed by the Constituency Commission about amendments to the delimitation of constituencies are not binding on the legislator’s decision. This section states whether, and to what extent, the constituencies decided by the legislator deviate from the commission’s recommendations.

For the 2017 election, the Constituency Commission proposed changes to a total of 62 constituencies<sup>4</sup> due to excessive deviations in the constituency popu-

<sup>4</sup> The dissolved constituency in Thuringia and the newly founded one in Bavaria are counted only once.

lation (BT-Drs 18/3980, 2015; BT-Drs 18/7350, 2016).<sup>5</sup> In the final delimitation for the 2017 election, only 34% (21 out of 62) of these suggested amendments were adopted. In addition, 11 other constituencies underwent changes, which were not proposed by the commission, through the legislator. Thus, about one in three constituencies changed for the election in 2017 were drafted not by the commission, but by parliamentary parties of the Bundestag (BT-Drs 18/7873, 2016).<sup>6</sup>

## 4 Summary and Discussion

Our analysis shows that the observance of legal principles varies in the delimitation of constituencies for German Federal Elections varies. The requirements and legal principles are incorporated differently into the decision-making process. Some legal guidelines are given preference. Differences in the interpretation of the regulations between the legislator and the Constituency Commission are identified.

Regarding the constituency population, about one in every five constituencies exceeds the 15%-tolerance deviation limit. Approximately one in every ten constituencies has a deviation of 20% and more. Overall, the legally permissible deviation interval up to the maximum limit of 25% has been exhausted. The population deviation distribution (cf. Figures 2 and 6) shows that the 15%-tolerance limit is not a limit that is actively targeted.

Much more attention is paid to the principle of compliance with administrative boundaries. Boundaries of governmental districts are almost fully respected, municipal associations are, almost without exception, enclosed in a constituency, and municipalities are, generally, only divided into several constituencies in the form of some large cities. In addition, constituency boundaries are clearly aligned with the boundaries of districts and urban districts. It is also shown in Figure 6 that the principle of administrative conformity is much more respected than the one concerning population deviations.

Furthermore, the analysis shows that continuity of the constituencies is preferred. Before an election, as few constituencies as possible are modified as little as possible. Here, the views of the legislator and the commission differ as follows. The legislator only modifies constituencies that are currently infeasible due to their population deviations or are in danger of becoming so until the day of the

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<sup>5</sup> On occasion, the commission has prepared more than one proposal for certain issues. In these cases, the suggestion which is named first by the commission is used as their unique proposal in our analysis.

<sup>6</sup> For completeness it should be stated that further proposals for amendments were suggested and partly accepted: (i) In order to have a unique assignment of certain unincorporated and uninhabited areas (in contrast to past delimitations of constituencies) two further minor changes were proposed by the commission and adopted by the legislator. (ii) On the basis of official regional changes, the commission proposed amendments to four constituencies. The legislator approved two of them.

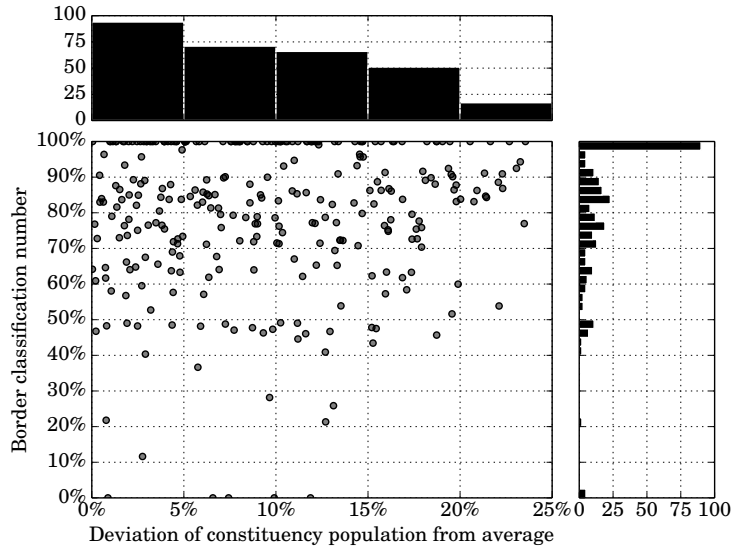


Fig. 6: Scatterplot and histograms of the population deviations as well as border classification numbers for the delimitation of constituencies for the 2017 election.

election. That is, in practice, only the absolute maximum limit of 25% is used for the revision of constituencies. In contrast, the commission presents a large number of amendments justified by the exceeding of the 15%-tolerance limit. These are generally not considered by the legislator. The official justification of the law, which defines the delimitation of constituencies for the 2017 election, states unequivocally (BT-Drs 18/7873, 2016): 'If a constituency is beyond the tolerance limit of  $\pm 15\%$ , an amendment to the constituency boundaries is generally avoided under the aspect of continuity.'<sup>7</sup>

The coherence, i.e., connectivity of the constituencies, is usually present just as the legal requirements stipulate. However, two constituencies contain municipalities that are separated from the rest of the constituency. Since these two constituencies have existed in the current form for several decades, we assumed that this non-connectivity would be permitted for reasons of continuity. In the course of this analysis, we have not received any comment on the disregarding of the coherence principle either by the Bundestag or the commission.

In summary, the analysis of the delimitation of constituencies shows that the legislator values the requirements differently. The population deviation limit of 25% is regarded as a condition for the feasibility of a constituency. The same applies (with a few historical exceptions) to the connectivity of a constituency's area. The continuity of constituencies is absolutely the ultimate goal. If some-

<sup>7</sup> Original German quote: 'Soweit Wahlkreise jenseits der Toleranzgrenze von  $\pm 15\%$  [...] liegen, sieht der [Gesetz-] Entwurf von einer Neueinteilung unter dem anerkannten Aspekt der Wahlkreiscontinuität [...] grundsätzlich ab.' (BT-Drs 18/7873, 2016)

thing has to be modified in the run-up to an election in order to maintain legal admissibility, the legislator values the objectives in the following order: (i) maximize continuity, (ii) maximize observance of administrative boundaries, and (iii) minimize the deviation of constituency population.

The analysis also shows that the legislator uses the right to treat the report of the Constituency Commission only as a proposal. The fact that so many suggestions for amendments are not accepted by the legislator, and that numerous amendments are decided that are not part of the commission's work is surprising. In their reports, the commission stated that they had been in regular contact with the governments of all Federal States and parties represented in the German Bundestag (BT-Drs 17/4642, 2011; BT-Drs 18/3980, 2015; BT-Drs 18/7350, 2016). Many of the commission's suggestions for amendments contain the note that it would be supported by the government of the respective Federal State. It is evident that in the commission's proposals the tolerance limit of 15% for population deviation is considered. The commission is willing to abandon continuity in order to prevent the crossing of the 15% limit. In this respect, the approach of the Constituency Commission differs completely from that of the legislator.

There are a variety of arguments and justifications favoring the continuity and observance of administrative or known borders as important objectives. It may, however, be surprising that the deviation of constituency population plays a subordinate role in the German practice. The difference in population between the least and most populated constituency could, theoretically, constitute almost half a constituency. Regardless of the actual extent, the German legal deviation limits are very generous compared to European norms. The Council of Europe, whose decisions are represented by Germany as a member, recommends in a Code of Good Practice in Electoral Matters (Venice Commission, 2002) that countries comply with a population deviation tolerance limit of 10% and a maximum limit of 15%. Germany is far away from that — in practice as well as legal principles. Nearly every second German constituency exceeds the recommended tolerance limit of 10%. After the last two German Federal Elections in 2009 and 2013, election observers from the OSCE (Organization for Security and Co-operation in Europe) indicated that Germany should reduce the population deviations as recommended by the decision of the Council of Europe (OSCE, 2009, 2013).

## Acknowledgements

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