A case study of bureaucratic discretion: heterogeneous application of market entry regulation in Germany

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Abstract

All law is relatively coarse after its initial implementation as the legislature cannot foresee all contingencies that can arise in the actual application of the law. Therefore, decisions need to be made by street-level administrators as novel and particular circumstances arise. Economists have largely ignored the political science literature on street-level bureaucrats, such as policemen, welfare case managers, or regulatory agents. I present a case study in the context of market entry regulation in Germany. Qualitative and quantitative evidence suggests that bureaucratic discretion exists, that is, administrative actions can be found on different ends of a decision space, and that its effects are potentially large. Administrators do not apply legislation in a uniform manner and we observe a systematically different application of rules across subnational jurisdictions.

1. Introduction[1]

Bureaucracy is an organizational structure characterized by rules and standardized procedures. According to Max Weber, the ideal bureaucracy produces decisions made by professional bureaucrats, based on rules and legitimate procedures instead of sentiments or favoritism[2]. Bureaucratic performance is closely connected to state capacity, institutional development and economic growth (Williams, 2020). Real-world bureaucrats, as opposed to Webers's ideal type notion, bring with them their own values, beliefs and preferences, in short their own view of the world (Kaufman, 1956) and 'the existence of these "predilections" creates challenges for the leaders of the bureaucracy, who want to ensure consistency in policy implementation' (Keiser, 2010).

Street-level bureaucrats, such as police officers or social workers, can be defined as public employees at the local level who are tasked with implementing laws promulgated at the national level. Based on Lipsky's (1980) work, there have been numerous theoretical refinements and empirical investigations into the question of bureaucratic discretion and the topic continues to be a lively research agenda (see Bovens and Zouridis, 2002; Harrits and Møller, 2014; Keiser, 2010; Keiser *et al.*, 2004; Maynard-Moody *et al.*, 2003; Raaphorst, 2018; Sowa and Selden, 2003). Discretion represents a necessary element of any workable bureaucracy because legislation is relatively coarse, especially right after

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[1]I would like to thank Kübra Dilekoglu for her excellent research assistance.

[2]For a detailed discussion of Weber's notion of bureaucracy and its relationship to institutional economics, see Bruszt and Campos (2019)

its initial implementation, as it would otherwise not exhibit the degree of generality that is required, nor would it be sensible to include a multitude of contingencies, for this would exceed any tolerable bounds of brevity. Consequently, the legislation needs to be applied to specific contexts and civil servants occasionally find themselves in situations where they have to make decisions without clear-cut instructions based on the code of law.

Discretionary decisions can be based on a variety of personal beliefs and judgments, which in turn can be affected by regional cultural predilections. It may also reflect the dominant view of the regional branch of the public administration. Bureaucratic discretion allows for the possibility of differing decisions by two public agents who face similar circumstances. On the one hand, this permits administrators to adjust general rules to local circumstances. On the other hand, it potentially jeopardizes one of the basic tenets of the rule of law, that is, equality.

In this paper, I argue that the important insights generated in the work on street-level bureaucrats are relevant for the field of institutional economics but that these insights have been hitherto largely ignored. While some economists have studied discretionary bureaucracies on the organizational level and discussed the feasibility of legislative control (Niskanen, 1975, 1971; Shelanski and Huber, 1998; Weingast and Moran, 1983), they have largely failed to study street-level-bureaucracies where lower-level bureaucrats must apply legislative goals in a wide variety of specific contexts. Bureaucracies have been portrayed as monocentric, top-down orders that make deviations from established protocols difficult (Storr *et al.*, 2017). At the same time, the concept of bureaucratic discretion points to the heterogeneity of bureaucratic decision-making within such a top-down system.

The previous literature on street-level bureaucrats is primarily concerned with matters of public administration, such as police officer behavior or distribution of welfare benefits. In this paper, I expand the scope of the literature by analyzing a regulatory question concerning entrepreneurship policy. A case study of market entry regulation (and its exceptions) in Germany serves to illustrate that the band of discretion can be considerable. The German crafts sector is governed by an educational licensing scheme. To start a business in most crafts occupations, an advanced vocational training certificate is required. However, there is quantitative evidence that the likelihood of obtaining an exception to this rule varies considerably by region. In addition, qualitative evidence suggests that administrators themselves are aware of the varying leniency in granting exceptions and that they regard it as a necessary byproduct of the regulatory system.

The study of bureaucratic discretion has important implications for the field of institutional economics. Institutions can be defined as 'established and prevalent social rules that structure social interactions' (Hodgson, 2006)[3]. While the law carries the presumption of a unified vision, this case study shows that one particular institution, the regulatory law pertaining to market entry in the German crafts sector, is being applied quite differently across regions. Consequently, legislation never speaks with a single voice because the application of institutional rules is affected by the idiosyncratic behavior of regional bureaucracies.

2. Case study: exceptions to market entry regulations in Germany

2.1 Background

In Germany, 93 trades belong to what is legally defined as the crafts sector, which comprises about 5 million professionals, or 12.5% of the labor force (Federal Statistical Office, 2016). These trades are governed by a set of laws, the Trade and Crafts Code (TCC, Handwerksordnung). In most crafts trades, an advanced vocational training certificate is required to start a business (i.e. a *Meister* degree).

To become a master craftsman (*Meister*), a basic training period, as well as an additional advanced training must be undergone. Basic training refers to a period of about three years, successful completion of which grants the journeyman degree (*Geselle*). Basic training conveys the knowledge and skills of the trade and contains both practical, in-company components as well as theoretical components, the combination of which is called dual-training. The advanced training period lasts about one year and teaches advanced trade skills as well as business principles, such as accounting and marketing. Upon completion, the trainee receives the *Meister*-degree, which is required for starting a business.

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[3]For an alternative definition of institution, see Hindriks and Guala (2015).

As an exception to the general rule, highly experienced crafts people may be permitted to start a business (HwO §7b, *Altgesellenregelung*) even if they do not possess a *Meister* degree. An experienced employee is defined as a person who has worked in the field for six years or more. In addition, an experienced individual must have worked in a managerial position for four years or more. A managerial position is defined as a position with executive decision-making capacity.

The exception is granted by the local crafts chamber,[4] an association of crafts companies in which membership is mandatory by law. The state ministries of economics delegate decision-making with regard to regulatory exceptions and other administrative functions to the crafts chambers. Individuals who make decisions about regulatory exceptions are employed by the crafts chamber, but they implicitly perform a bureaucratic task, and can be legitimately seen as *de facto* government administrators.

In the case of craft chamber exception granting, the individual administrator's decision can be influenced by the overall crafts chamber organization. The task of disentangling personal, cultural, and organizational influences on the administrator's decision, if all together possible, lies beyond the scope of this paper. And while pure individual discretion does not exist, as no individual exists within a social vacuum, the term will nevertheless be applied in this paper because the exception decision is ultimately made by one individual administrator in charge of the application.

2.2 Empirical approach

2.2.1 Semistructured interviews

In a first step, we conducted interviews with 18 crafts chamber employees in charge of exception granting, as well as one specialized legal scholar, one representative of a crafts interest group opposed to the regulation, and two craftsmen who won lawsuits for illegally operating without a *Meister* degree. The interview period lasted from October 2019 to February 2020. Qualitative methods can be applied to generate theoretical insights (Edmondson and McManus, 2007; Starr, 2014) and are becoming increasingly common within economics (Ben and Steemers, 2014; Bewley, 1995; Blinder *et al.*, 1998; Chamlee-Wright and Storr, 2011; Thonipara *et al.*, 2019). Guidelines for qualitative methods are discussed by Starr (2014) and Glaser and Strauss (1999). If there is little information on the subject's motivations and incentives, qualitative methods can be usefully employed to generate such information. A qualitative approach 'assumes that relatively flexible discussions with research subjects are needed for gaining a full and complete set of insights into the phenomenon of interest' (Starr, 2014: 240). In this particular case, the overarching research question concerns the existence of administrative decision spaces as well as the systematic exploitation of such a space.

The research team sent out letters of invitation, outlining the general research topic, that is, the process of starting and registering a business. The majority of interviews were conducted via phone. The conversations started off with a number of general questions concerning the registration process and the difficulties with classifying a business as belonging to the crafts sector (in which case firms must register with the crafts chamber) or the non-crafts sector (in which case most firms must register with the commercial and industrial chamber). In the course of the conversation, we inquired about the process of granting exceptions and the criteria used for decision-making. We asked for the existence of difficult and ambiguous cases and examples thereof. After having conducted a number of interviews, we developed additional questions based on the information gathered. The research team continued the interviews until a level of theoretical saturation was reached, that is, until additional interviews yielded little novel information and no additional questions were being developed.

2.2.2 Quantitative analysis

The empirical strategy builds upon the hypothesis that bureaucratic discretion allows for systematically different decisions across regions as different administrators exploit the decision space differently. Each crafts chamber region makes yes-no-type decisions about exceptions. If no (or little) bureaucratic

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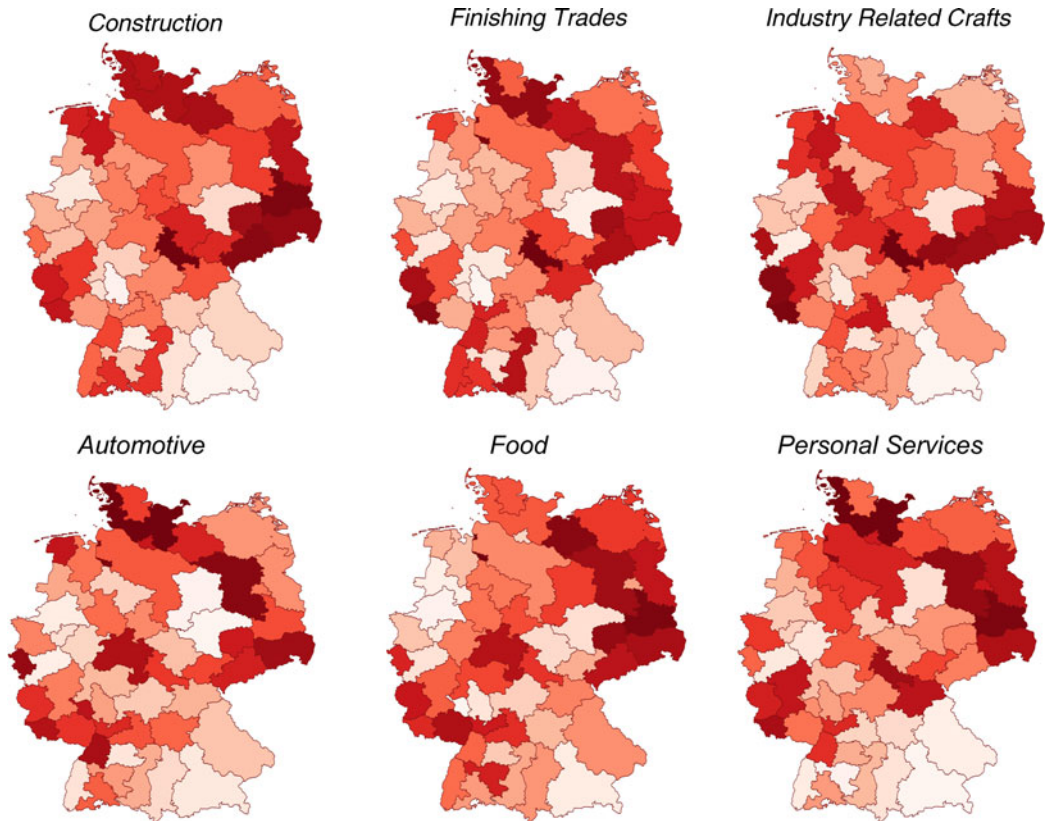[4]As of 2020, there are 53 crafts chambers in Germany.

Figure 1. Exceptions as a fraction of the total number of entries (by crafts chamber region, TCC §7.b).
Source: ZDH Data; map rendered with QGIS.
Note: The darker the area, the higher the share of exceptions. Exceptions according to TCC §7.b are displayed here. See section 4.2 for additional types of exceptions.

discretion exists, these decisions will be drawn from the same underlying narrow distribution. If bureaucratic discretion exists and administrators position themselves on different points along the decision space, decisions will be drawn from different underlying distributions.

Ideally, we would use the ratio of granted exceptions over the number of applications. However, these data are not available. Instead, the main variable of analysis in this paper is the number of granted exceptions as a fraction of market entries (Figure 1). The total number of exceptions is divided by the total number of market entries in each crafts chamber to control for different crafts chamber sizes. The data are obtained from the German Confederation of Skilled Crafts (ZDH) and are available for all crafts chamber regions for the years 2004 until 2018. The raw data display considerable regional differences in the share of exceptions. While the exception share in some crafts chambers, such as Munich, Frankfurt, and Münster, lies below 1 percent, others are greater than 6 percent, such as Suhl, Saarland, and Chemnitz.

The exception share is available for six subsectors (Construction, Finishing Trades, Industry Related Crafts, Automotive, Food, and Personal Services). However, a factor analysis confirms the visual impression that these six subsector variables can be reduced to one, as there is only one factor with an eigenvalue >1 and all six variables load positively and highly onto this factor.[5] Thus, we sum up all exceptions across sectors and this variable will be used in the analysis below.

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[5]A parallel analysis confirms the eigenvalue >1 rule.

The main challenge to the analysis lies in the existence of omitted variable bias, that is, the existence of factors, besides bureaucratic discretion, that affect the differences in regional exception shares. Fortunately, there seem to be few potentially biasing factors. The share of experienced craftsmen without a Meister degree[6] can vary systematically across regions, in which case the number of exception-applications will differ across regions as well, causing a larger number of exceptions in regions with many experienced craftsmen than in regions with fewer experienced craftsmen. There are two ways in which a proxy variable for the number of experienced craftsmen can be generated. First, I use the number of crafts individuals with basic training as a fraction of all crafts employees in each region (specification 1a). These data were gathered via large-scale company surveys by the ZDH in the years 2009, 2013, and 2017. As the number of survey answers in some crafts chamber regions in certain years is small, the average was calculated across all three years; thus, the variable is not available in panel format and does not vary across years. Second, the share of all employees (i.e. not only craftspeople) with basic training can be used (specification 1b) as a proxy for the number of experienced craftsmen.

Moreover, the foreigner share, that is, individuals without German citizenship, must be controlled for as it exerts two plausible effects on exception granting. On the one hand, migrants have lower job market experience and are therefore less likely to apply for, or receive, an exception. On the other hand, migrants are known to have a higher propensity for self-employment, thereby increasing the likelihood for exception-applications.[7] There are also demand-side factors that may affect the number of applications, and thereby the number of exceptions granted. Thus, data on regional unemployment rates and gross domestic product (GDP) per capita are gathered as well.

As a first step, an analysis of variance (ANOVA) will be implemented. If the decisions in each crafts chamber are drawn from the same underlying distribution, the F ratio will be small. In a second step, a multivariate specification regresses the share of exceptions on year (year) and region fixed effects (region) as well as controlling for the share of individuals with basic training and the share of foreigners (specification 1). A Least Square Dummy Variable estimator (LSDV), as opposed to the within-group estimator, will be employed as the region dummy coefficients will be plotted to examine the existence of significant differences.

$$\text{Exceptions}_{it} = \sum_{\tau=1}^{T} \propto_\tau \text{Year}_{\tau it} + \sum_{j=1}^{N} \propto_j \text{Region}_{jit} \tag{1}$$
$$+ \gamma \, \text{Basic Training Share}_{it} + \delta \, \text{Foreigners}_{it} + u_{it}$$

$$\text{where Region}_{jit} = \begin{cases} 1 & i = j \\ 0 & \text{otherwise} \end{cases}, \tag{2}$$

and N is the number of regionscomma T is the number of years.

The LSDV fixed-effects estimator represents a 'catch-all' variable as it captures regional heterogeneity that is not explained by the covariates in the empirical model. While significant differences in coefficients constitute evidence for different degrees of administrator leniency across regions, it does not reveal the sources of said differences. This paper primarily investigates whether administrative discretion exists, mostly sidestepping the question why it exists. It is likely that regional heterogeneity in administrative leniency is related to cultural differences. A detailed analysis of the historical sources lies outside the scope of this article. Nevertheless, a number of plausible hypotheses will be laid out in the discussion section below.

I will also perform a second regression analysis to examine the impact of additional observable region characteristics x_{it}, such as income levels, population density, and unemployment on the

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[6]Being an 'experienced' crafts person is a pre-requisite for applying for an exception.
[7]Ideally, I would use the number of migrants per year and region, regardless of citizenship status, which is not available. However, the foreigner share, as well as the share of migrants, should correlate highly.

Table 1. Descriptive statistics

Variable	Description	N	Mean	Standard deviation
Exceptions	Number of exceptions as a fraction of all newly registered companies	751	2.846	1.685
gdp	GDP per capita (thousand)	795	31.483	8.345
pop_dens	Population density	795	655.87	662.07
Unemployment	Unemployment rate	795	7.976	3.748
Entry	Number of crafts companies	795	1,805.79	1,418.24
Area	Size of region in km^2	795	6.720	4.397
Proximity dummy (less than 75 km)				
AT	Austria		0.04	0.19
BE	Belgium		0.06	0.23
CH	Switzerland		0.06	0.23
CZ	Czech Republic		0.09	0.29
DK	Denmark		0.02	0.14
FR	France		0.11	0.32
LU	Luxemburg		0.06	0.23
NL	Netherlands		0.13	0.34
PL	Poland		0.08	0.26
Foreigner	Share of foreigners	795	8.120	4.300
Basic training	Number of individuals with basic training divided by number of individuals in the labor force	424	36.089	5.390
Basic crafts training	Number of individuals with basic crafts training divided by number of craftspeople	795	42.266	6.464
cdu	Voting share, conservative party (2005, 2009, 2013, 2017)	795	36.914	7.447
afd	Voting share, right-wing party (2017 only)	795	13.626	5.622
green	Voting share, green party (2005, 2009, 2013, 2017)	795	8.472	3.063

Sources: ZDH data and INKAR regional statistics database; minimum distances calculated in QGIS.

leniency of administrators, measured as the exception share (specification 3). Table 1 summarizes and briefly explains all covariates (x_{it}). Some of these determinants resulted from the qualitative analysis as the interviewees suggested reasons for why systematic differences in granting exception across regions existed.

$$\text{Exceptions}_{it} = \sum_{\tau=1}^{T} \propto_\tau \text{year}_{\tau it} + \sum_{j=1}^{N} \propto_j \text{region}_{jit}$$

$$+ \gamma \, \text{Basic Training Share}_{it} + \delta \, \text{foreigners}_{it} + \eta \, x_{it} + u_{it}. \tag{3}$$

The relative wealth of region i at time t will be measured by GDP per capita. Interviewees suggested low relative wealth should increase the exception share because it is emotionally tougher to deny entry if few other labor market options exist. The regression also contains population density, the size of

each region (in km^2), as well as the number of crafts companies that enter for each region and year. The latter variable represents a proxy for the number of exception applications, for which data are not available. Time fixed effects are included, and robust standard errors are used.

Finally, the regression analysis will be extended by including additional spatial components (specification 4).

$$\text{Exceptions}_{it} = \sum_{\tau=1}^{T} \propto_{\tau} \text{year}_{\tau it} + \sum_{j=1}^{N} \propto_{j} \text{region}_{jit} + \gamma \text{ Basic Training Share}_{it}$$

$$+ \delta \text{ foreigners}_{it} + \eta \, x_{it} + \theta \, W_i \text{ Exceptions}_{it} + u_{it}. \tag{4}$$

I calculated the minimum distance between each county within Germany and each country bordering Germany by using the software QGIS. As each crafts chamber region contains several counties, the average distance of all counties within one chamber region was computed. The regression contains dummy variables for each country, which is equal to one if the distance between the crafts chamber region and the foreign country is less than 75 km.[8] Proximity dummies are included because craftsmen face competition from abroad. This should be especially relevant for the eastern parts of Germany that are close to Poland or the Czech Republic. Because of the European Common Market, craftspeople in these countries are not required to obtain the German Meister degree to operate in Germany, while a German company can only be registered if the owner holds the advanced training degree.[9] Thus, it seems to be likely that a crafts chamber close to the border of Poland will be more lenient in granting exceptions than a crafts chamber in the center of Germany, whose members face less competition from abroad.

As crafts chamber administrators are in contact with each other, and will exchange their views on difficult cases, the degree of leniency in one region is likely to affect the degree of leniency in neighboring regions. Consequently, the spatially lagged dependent variable will be included as a covariate (W_iExceptions$_{it}$). Descriptive statistics for all variables are presented in Table 1.

3. Results

3.1 Interview results

In 2005, the Federal Constitutional Court overrode the imposition of a fine that was to be paid for the illegal operation of a carpenter business without a Meister degree (BVerfG, 2006). The court decision criticized the insufficient execution of the law, which explicitly allows for exceptions to the market entry restriction. The court stated that previous rulings already suggested that exceptions were to be granted in a 'generous' manner (BVerfG, 2006: 73). However, 'administrative practice used these possibilities only timidly' (BVerfG, 2006: 73). It is apparent that even though there is a perceived gap between the law's intent and its application, the terms 'generous' and 'possibilities' speak to the subjective and contextual nature of administrative action. In addition, a more 'generous' exception-granting behavior would not entirely circumvent the problem of bureaucratic discretion because one can never fully anticipate nor define all potential circumstances under which an exception should be granted.

The interviews suggest that (a) bureaucratic discretion exists, and that (b) administrative actions can be found on different ends of a decision space. It is noteworthy that most interviewees initially asserted that the process of granting exceptions is neither difficult nor contentious. 'How many of these [applications] do I decide upon? Perhaps three new cases per day […] for me it isn't very difficult.' Another interviewee indicated '[the law] is the same for everyone, […] we treat everyone

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[8]The radius of operation of most craftspeople is less than 75 km (SMWA, 2020).

[9]The owner is required to hold an advanced training degree if the type of business about to be opened is listed in Annex A of the Trade and Crafts Code and if no exception is granted.

the same,' a statement that was frequently made in other interviews, usually at the start of the conversation. The existence of contradictory statements later on in the same interview shows that administrators are aware of the problematic and perhaps undesirable nature of bureaucratic discretion (and the resulting conflict with the principle of equality), and, at least initially, phrase their sentences carefully.

In due course however, about half of the 18 administrative interviewees described the exception-granting process as subjective and discretionary. One person expressed 'it [the decision] is always dependent on [subjective] judgement, and that's why every crafts chamber can act a little differently.' Similarly, 'I basically just have to be able to justify my decision' and 'The track [decision space] is quite wide, and within that track I can move freely and also make decisions.' Interviewees are not naively asserting their independence. Instead, they are aware of the tension between the normative goal of uniform administrative decision-making and the necessity of bureaucratic discretion, which becomes apparent in many statements. 'There are meetings of all crafts chambers, from all over Germany. Normally, all chambers should have uniform rules. But there are chambers that see things differently, and do things independently.' Practically speaking, administrative decision spaces become necessary because decisions need to be made. 'Individual life histories, CVs, that is important, sure, there must be a decision space because you cannot sort out everything in a law,' even though 'there is a striving toward uniformity [in rule application].'

There are five main dimensions of this decision space. First, several interviewees talked about idiosyncrasies related to individual decision makers, describing how exception-granting behavior can change abruptly when a new administrator takes over the job. 'While there is a strive for uniformity in decision making, at the same time, the specific person in charge plays a key role.' 'If I am a hardliner, I can call into question all the details. Did he [i.e. the company founder] really have managerial duties? Is he really making more money than others? Was he working longer hours?' Moreover, 'it is a question of personal [i.e. the administrator's] dedication. Do I want to make more work for myself and discuss every little detail, or can I not be bothered to do the work, and just grant an exception?'

Second, it was stressed how each case is unique and how many highly context-specific circumstances must be considered. In other words, 'every CV is unique' and 'there is certainly room for discretion, and it can lead to different decisions here and there, it cannot be otherwise. And not every case can be ruled the same way; it comes down to [individual] details.' The cases administrators decide upon are 'never 100% identical, and therefore one will not get a general decision-making rule.' The frequent occurrence of references to unique individual conditions illustrates the impossibility of encoding all ground-level contingencies within the code of law. In that sense, discretionary administrative spaces are not just the consequence of centralized decision-making but also an enabler of it.

Third, regional differences were said to play a key role. 'It is not a secret that the administrative decision making is relatively generous in Lower-Saxony, which we do not quite see to the same extent in other states.' Interestingly, this statement can be confirmed by consulting the cartographic depiction in Figure 1, where Lower-Saxony displays a higher exception share, especially when compared to the crafts chambers on the more restrictive end of the decision space, in which the speaker is located. Similarly, it is said that 'southern Germany is more strict, northern German more lax.' Although this statement also roughly corresponds with Figure 1, there appear to be a number of additional geographic dimensions.

Fourth, the interview results suggest that administrators deliberately chose to be on a certain point of the decision-making space, a fact that becomes apparent in interviewee statements on the dangers of precedent setting. On the one hand, it was stated 'Alright, sometimes you're even interested in creating a precedent, especially when it comes to §7.b.' The interviewee refers to the year 2004 in which exceptions were introduced by law but when no court decisions existed as of yet. Exceptions were therefore granted in a somewhat uncertain legal environment and administrators were hoping for precedent setting in court to aid their day-to-day decision-making. On the other hand, it was said 'You have to be careful [not to create precedents], something like that will go around fast. If one person says, I got [an exception due to] offering haircuts for men only in crafts chamber X, but then they go to another

crafts chamber.' The speaker went on to give an example, where a crafts chamber granted an exception because a similar case had been granted in another crafts chamber.

Overall, there are indications for the existence of an administrative decision-making space. Interviewees point to certain regional factors (geographic as well as sociodemographic) and idiosyncratic factors of the administrators themselves, which explain the systematic variation in leniency across crafts chamber regions. Administrators attempt to make decisions in a way that generates administrative uniformity but they also clearly express the limitations of such an approach, as the wide variety of specific circumstances requires some degree of flexible rule adjustment.

3.2 Quantitative results

The ANOVA F ratio test rejects the null hypothesis of no regional differences; $F(52, 698) = 15.9$; $p < 0.01$.[10] The exception share varies considerably across regions, some displaying a share of less than 1 percent, others more than 6 percent. Administrative agents in some regions appear to be six times more lenient in granting exceptions than agents in other regions, suggesting that administrators possess a high degree of independence as they position themselves on different ends of the decision space.

As stated above, the share of experienced craftspeople, and therefore the number of exception applications, may also differ across regions. If regional variation is entirely explained by this variable, the hypothesis of bureaucratic discretion must be rejected. Thus, I control for the number of craftspeople with basic vocational training as a fraction of all craftspeople (see the Appendix Table A1, Table 2, specification 1a) or the number of individuals with basic training as a fraction of all employees (specification 1b), as well as the foreigner share and unemployment. As expected, in both specifications, the basic training share exerts a positive influence on the share of exceptions. An increase in the share of basic training of 1 percent raises the share of exceptions by about 0.26 percentage points in specification (1a). The coefficient of the training variable is equal to 0.21 in specification (1b). The coefficients of the variables foreigner and unemployment are not statistically significant.

The region fixed effects for specification (1a) and (1b) are plotted in Figure 2. The differences across regions are statistically significant and large. The difference between the least and most lenient craft chamber regions is more than 6 percentage points. If every crafts chamber were as lenient as the 95th percentile (see the Appendix; Figure A2), that is, if the number of exceptions as a fraction of all entry was 6 percent; there would have been 3,000 additional new companies in the German crafts sector in the year 2017, or about 42,800 in the overall period under consideration (2004–2018). This back-of-the-envelope calculation suggests that the economic impact of bureaucratic discretion is potentially large.

In specifications (2a) to (2d), additional covariates are added to the regression analysis to examine the determinants of administrative leniency (see Table 3). The level of wealth is negatively associated with the exception share in specification (2a), but once we control for additional factors, the coefficient switches to a positive sign in specifications 2c, 2d, and 2e and becomes insignificant in specifications 2b, 2e, 3a, and 3b. The area size of the crafts chamber region and the number of newly founded companies affect the exception share negatively, the former becoming insignificant in specifications (3a) and (3b). The population density does not exert a consistent effect.

Proximity to certain national boundaries seems to be an important determinant of administrative leniency. Regions that are close to France, Poland, or Luxembourg exhibit higher exception shares (compared to non-border regions) and regions close to Switzerland exhibit lower exception shares. However, only the Poland and Luxembourg effects are consistently significant across all specifications.

These spatial patterns seem to be plausible for a number of reasons. First, the cases of Poland and France represent situations in which a relatively wealthy German region borders on a relatively less wealthy region in another country (see Appendix Figure A1). Thus, foreign craftspeople, who do

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[10]Although the unequal variance test rejects the null hypothesis of equal variances, the sample sizes are the same across all groups. Unequal variances are therefore not problematic (Welch, 1951).

Table 2. Pearson correlation of §7b- and §8-type exceptions

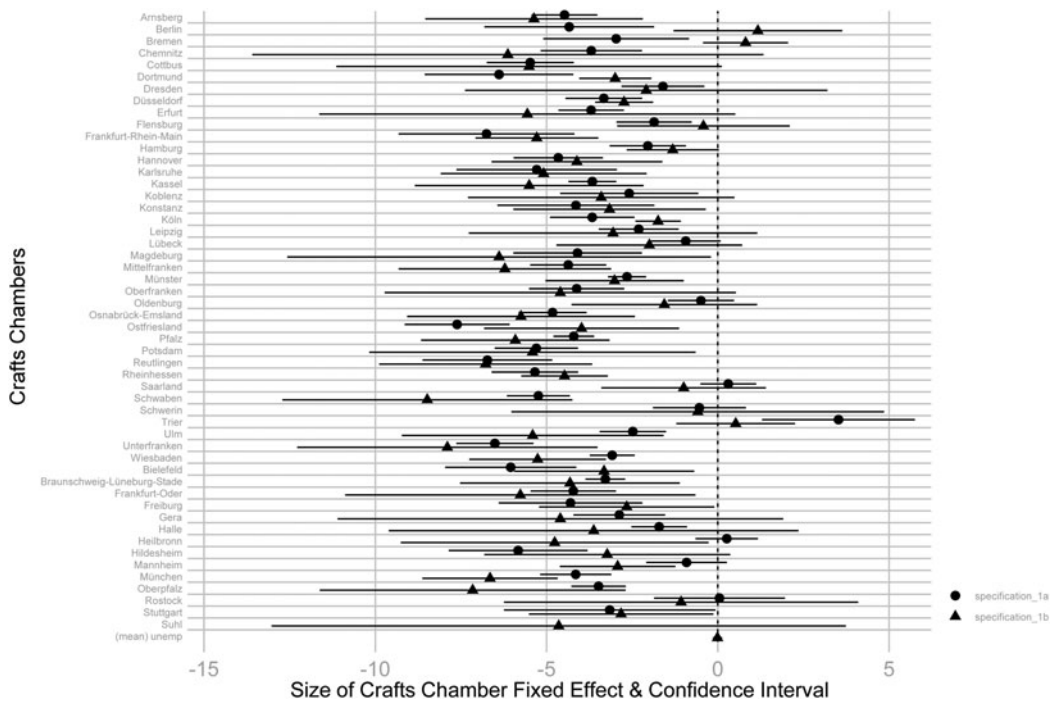|	Coefficient (2012)
Construction	0.52
Finishing trades	0.45
Industry-related crafts	0.31
Automotive	0.25
Food	−0.07
Personal services	0.36
All groups	0.61

Figure 2. Region fixed effects (regression specification 1, §7b-type exceptions)

not require an advanced vocational degree to start a business, have an incentive to take on jobs in Germany, thereby competing with German craftspeople who are governed by the market entry restriction.[11] Local administrators may therefore be more lenient in order to keep taxable crafts businesses in the region instead of indirectly favoring the non-German competition.

Regions close to Luxembourg also exhibit higher exception shares. Relatively less wealthy German counties[12] are situated close to relatively wealthier Luxembourg. Local crafts chamber employees state that many German craftspeople take on jobs in Luxembourg. Of course, it is possible that the higher

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[11]In a 2003 survey, German craftspeople exhibited an expectation of strongly increasing competition as a result of the European Union membership of Poland (Müller and Bang, 2003).

[12]For example, Eifelkreis Bitburg-Prüm and Trier-Saarburg.

Table 3. Determinants of administrative decisions (dependent variable share of exceptions)

	(2a)	(2b)	(2c)	(2d)	(2e)	(3a)	(3b)
gdp	−0.339**	0.085	0.195*	0.201**	0.134	−0.339**	−0.115
	(0.000)	(0.262)	(0.073)	(0.019)	(0.191)	(0.000)	(0.595)
pop. density	−0.111**	0.069	−0.117	0.004	−0.010	−0.111**	−0.125
	(0.037)	(0.214)	(0.318)	(0.965)	(0.931)	(0.037)	(0.504)
Unemployment	0.053**	−0.009	−0.087**	−0.023	−0.019	0.053**	0.001
	(0.026)	(0.708)	(0.015)	(0.539)	(0.641)	(0.026)	(0.802)
Entry	−0.335**	−0.159**	0.032	−0.109	−0.134*	−0.335**	−0.445**
	(0.000)	(0.006)	(0.702)	(0.147)	(0.085)	(0.000)	(0.008)
Area	−0.173**	−0.386**	−0.374**	−0.343**	−0.286**	−0.173**	−0.08
	−0.339**	0.085	0.195*	0.201**	0.134	−0.339**	(0.680)
Foreigner		−0.199**	−0.206**	−0.178**	−0.199**	0.041	0.012
		(0.000)	(0.000)	(0.000)	(0.000)	(0.559)	(0.857)
East			0.476*	0.205	0.908**	0.739	0.978**
			(0.067)	(0.441)	(0.021)	(0.138)	(0.040)
Close to border with (less than 75 km away from)							
AT			−0.532**	−0.300	−0.107	0.442	0.673
			(0.015)	(0.166)	(0.636)	(0.566)	(0.376)
BE			−0.463**	−0.400*	−0.440*	−0.72	−0.931
			(0.026)	(0.075)	(0.064)	(0.330)	(0.206)
CH			−0.479**	−0.353**	−0.432**	−0.664	−0.668
			(0.010)	(0.042)	(0.017)	(0.255)	(0.263)
CZ			0.051	0.171	0.504**	0.467	0.681
			(0.801)	(0.443)	(0.044)	(0.314)	(0.134)
DK			−0.004	0.066	0.096	0.781	0.418
			(0.990)	(0.851)	(0.807)	(0.414)	(0.655)

(*Continued*)

Table 3. (Continued.)

	(2a)	(2b)	(2c)	(2d)	(2e)	(3a)	(3b)
FR			0.556**	0.506**	0.557**	0.542	0.512
			(0.000)	(0.000)	(0.000)	(0.228)	(0.262)
LU			1.190**	1.178**	1.365**	1.629**	1.448*
			(0.000)	(0.000)	(0.000)	(0.038)	(0.082)
NL			−0.044	−0.205	−0.069	0.27	0.149
			(0.820)	(0.200)	(0.697)	(0.548)	(0.737)
PL			0.869**	0.841**	0.855**	0.921*	0.807
			(0.001)	(0.000)	(0.000)	(0.076)	(0.117)
Basic training			0.005				−0.001
(Craftspeople)			(0.658)				(0.987)
Basic training				0.013	0.040	0.085	
(All)				(0.739)	(0.330)	(0.135)	
afd_dummy					−0.954**	−0.612*	−0.522
					(0.008)	(0.096)	(0.157)
cdu_dummy					−0.130	−0.162	−0.15
					(0.650)	(0.192)	(0.226)
green_dummy					0.603**	0.027	0.018
					(0.043)	(0.848)	(0.898)
W_exceptions						0.139**	0.146**
						(0.018)	(0.012)
Year FE	YES	YES	YES	YES	YES	YES	YES
N	751	751	751	751	751	751	751
R^2	0.382	0.419	0.489	0.475	0.487	0.47	0.47

Sources: ZDH-Data and INKAR database.
Note: See Table 1 for explanation of variables. *p*-values in parentheses.

exception share is due to idiosyncratic characteristics of regional administrators, yet one might surmise that the larger customer base increases administrator's leniency because crafts chamber employees seek to maximize the number of memberships.

In contrast, regions close to Switzerland exhibit lower exception shares compared to non-border regions. Although there is a gap in living standards along the German-Swiss border, the state of Baden-Württemberg is one of the wealthiest German states. One can surmise that there are few individuals in that wealthy region who would be willing to work as a cross-border-craftsperson. However, the Switzerland effect vanishes in specifications (3a) and (3b).

The coefficients for the share of individuals with basic training and the unemployment variables are not consistently statistically significant but the coefficient for the share of foreigners is, except in the spatial regressions. If the share of foreigners rises by 1 percent, the exception share drops by 0.17–0.21 percentage points. Foreigners have, on average, less labor market experience and are therefore less likely to qualify for an exception. There is some limited evidence that ideology, as measured by voting behavior, affects exception granting. Regions with a high share of right-wing voters (AfD) are granting fewer exceptions.

In specification (3a) and (3b), the spatially lagged dependent variable is added as a covariate because a number of interviewees suggested that crafts chamber employees discuss cases with each other. It was stated that '…it helps – and we are actively doing this – when you regularly meet with other crafts chambers, colleagues within the region.' The regression results support this view, as the spatially lagged exception share seems to be an important factor. The coefficient suggests that a rise in the exception share in the neighboring region by 1 percent increases the exception share by 0.14–0.15 percentage points. In comparison with specification (2), many variable coefficients are no longer statistically significant in the spatial regressions. However, proximity to Luxembourg and Poland, the number of market entries, and the right-wing voter effect persist across most specifications.

3.3 Robustness check

Do administrators use different kinds of exceptions as substitutes? If so, does this undermine the case for bureaucratic discretion in exception granting? Besides §7b, there is one other type of exception that may be granted by administrators, i.e. §8. While §7b granted an exception in the case of experienced craftsmen, §8 allows administrators to grant exception when a craftsmen has the skills and the knowledge to run a business within a certain trade, and if the advanced training would constitute an unreasonable burden on the individual, for example in the case of health reasons. The two most exception types §7b and §8 correlate positively if weakly. Correlations in other years are lower and the possibility of substitution cannot be ruled out entirely. Thus, a lenient administrator may not use §7b-type exceptions but prefer using §8-type exceptions. See the Appendix for the geographic distribution of §8 exceptions.

There, the two exception types are summed up and used as a dependent variable in specifications (1a) and (1b). The region fixed effects are displayed in Figure A4. Regional variation becomes even larger when both exception types are considered. The range between the most lenient and least lenient crafts chamber increases to almost 12 percentage points. Again, a back-of-the-envelope calculation suggests that, if all crafts chambers were as lenient as the 95th percentile (11.5%), the number of newly founded companies would increase by roughly 4,700 each year, or 65,000 companies over the whole period under consideration (2004–2018).

4. Discussion

Both the qualitative as well as the quantitative results suggest that there are significant cross-regional differences in administrative leniency. Interviewees state that crafts chambers administrators make decisions differently across regions. Interview answers display an awareness of the difficult position that administrators find themselves in. On the one hand, there is the normative goal of administrative

uniformity, based on the principle of the equality of the law. On the other hand, administrative discretion constitutes a necessary element in any bureaucratic process because the administrator faces novel circumstances in a regular fashion. As neither the written law nor subsequent ordinance can anticipate all of these contingencies, administrative discretion is a necessary component of a workable bureaucracy. Without such discretion, bureaucratic tasks cannot be performed in the absence of instructions for a myriad of possible situations.

The regression results are also in line with the hypothesis of administrative discretion. The dependent variable (number of granted exceptions as a fraction of market entries) is regressed against regional dummy variables (i.e. region fixed effects). The dummy coefficients display considerable heterogeneity.

The quantitative analysis suffers from a number of limitations concerning data quality. Ideally, a quantitative approach would focus on the ratio of exceptions granted to the number of applications. However, such data are not available. As a proxy, I used the ratio of exceptions granted to the number of firms within a region. This poses the risk of omitted variables as there may exist unobserved factors that affect the number of exception applications, which in turn, would affect the number of exceptions granted. For example, the number of experienced craftsmen (who are eligible for an exception) may differ systematically by region. To reduce this problem, I controlled for labor market experience by using two proxy variables and included a number of additional covariates. However, the quantitative analysis may still be compromised by the existence of omitted factors. Nevertheless, in combination, the qualitative and quantitative evidence suggests that bureaucratic discretion exists and that its effects are potentially large.

Nevertheless, the analysis yields few indications why administrative leniency is different across regions. Plausible covariates such as unemployment levels, GDP per capita, population density, and the share of migrants do not consistently affect the dependent variable. Some regional effects as well as far-right voting patterns appear to be the only explanatory factors that affect administrative leniency somewhat consistently and the analysis of discretion determinants must remain an open topic for future research.

Right-wing party votes are associated with less lenient exception granting (see section 4.2). In fact, the AfD-political party has actively worked toward a stronger regulation of the crafts sector over the last years, arguing that German quality standards need to be enforced by active regulation. While the negative association between right-wing party votes and leniency is intuitively plausible, the overall spatial pattern of administrative leniency can hardly be explained by right-wing ideology. The regions with higher AfD voting shares are also regions with higher exception shares (see Figure 1).

Figure 1 appears to suggest that certain policies of the communist regime may be associated with the spatial pattern of administrative leniency. For example, administrators in the state of Sachsen-Anhalt do not grant many §7-exceptions, which could perhaps be traced back to the creation of heavy industrial zones (e.g. chemicals) within that state. However, Figure A3 (Appendix) shows that administrators in Sachsen-Anhalt seem to simply rely on a different type of exceptions (i.e. §8). In general, there is no clear-cut east-west division and the communist legacy does not appear to be a determinant of administrative leniency.

Are there any cultural factors that can explain the spatial heterogeneity in regulatory leniency? Administrators in Saxony, the northern coastal regions, parts of southwestern Germany (such as Baden-Württemberg and Saarland) and northern Bavaria are more lenient, whereas administrators in southern Bavaria and Hessen seem to be less lenient. One may speculate that lenient regions are perhaps rooted in a stronger tradition of craftsmanship, in which administrators are more inclined toward granting exceptions. Runst and Haverkamp (2018) show that contemporary regional craft firms density correlates with historical craft firm density. There seems to be considerable overlap between regions with higher exception shares and regions with a higher crafts density (i.e. regions with a stronger crafts tradition). The map presented by Runst and Haverkamp suggests that such an overlap applies to the regions of Saxony, norther Bavaria, the north-west coastal regions as well as parts in Baden-Württemberg. Nevertheless, a more detailed analysis of this hypothesis must remain a topic for future research.

5. Conclusion

Each new law represents a necessarily broad and vague formulation. Their designers can neither comprehensively anticipate all potential circumstances in which legislated guidelines might be applied nor can the code of law include the myriad of contingencies for practical reasons. Thus, bureaucratic agents are required to navigate the uncharted waters between the law and the application of that law to specific and unforeseen circumstances.

This paper presents a case study to illustrate the implications of bureaucratic discretion in the context of labor market regulation in Germany. Most start-ups in the German crafts sector must be owned (or managed) by an individual with an advanced vocational training degree. Crafts chambers can, however, grant an exception to this rule when certain conditions are met, introducing the possibility of discretion. The unique nature of each individual application cannot be anticipated by the legislature and requires bureaucratic decision-making on a case-by-case basis.

First, a number of semi-structured interviews were conducted most of which were with craft chamber administrators. The interviews suggest that bureaucratic discretion exists and that administrative actions can be found on different ends of a decision space (less lenient to more lenient). Second, data on the number of exceptions per region also permit a quantitative analysis. The share of exceptions as a fraction of the total number of firms varies by a factor of six across regions. Furthermore, controlling for important covariates, the region fixed effects remain statistically significant and large. It was also shown that there is a spatial structure to bureaucratic discretion. For example, the exception share of region i is affected by the exception of neighboring regions. In addition, certain border regions also exhibit higher exception shares.

The results have important implications for economics as well as administrative practice. First, future theorizing needs to consider the possibility that bureaucratic discretion can cause different regions to apply national legislation in a systematically different fashion. Second, by focusing on bureaucratic discretion on the organizational level, economists have failed to analyze the circumstances in which discretion is most prominent. Street-level bureaucrats deal with individuals whose unique biographies cause unanticipated situations that cannot be comprehensively addressed in the code of law. As these situations cannot be foreseen by the legislator, they must be considered by an administrative agent on a daily basis, and every workable bureaucracy must necessarily involve some degree of discretion.

Disclaimer

The statements in this manuscript are those of the author and do not reflect the position of the Institute of Small Business Economics at the University of Göttingen.

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APPENDIX A

Table A1. OLS regression, specification (1)

	(1a)	(1b)
Foreigners	0.105	0.024
	(0.164)	(0.784)
Basic training	0.257***	
(Craftspeople)	(0.000)	
Basic training		0.205**
(All employees)		(0.05)
Unemployment		0.164
Region dummies	YES	YES
Year dummies	2004–2018	2008–2018
N	751	530
R^2	0.719	0.739

Source: ZDH-Data, INKAR database.
Note: Region dummy coefficients are plotted in Figure 2.
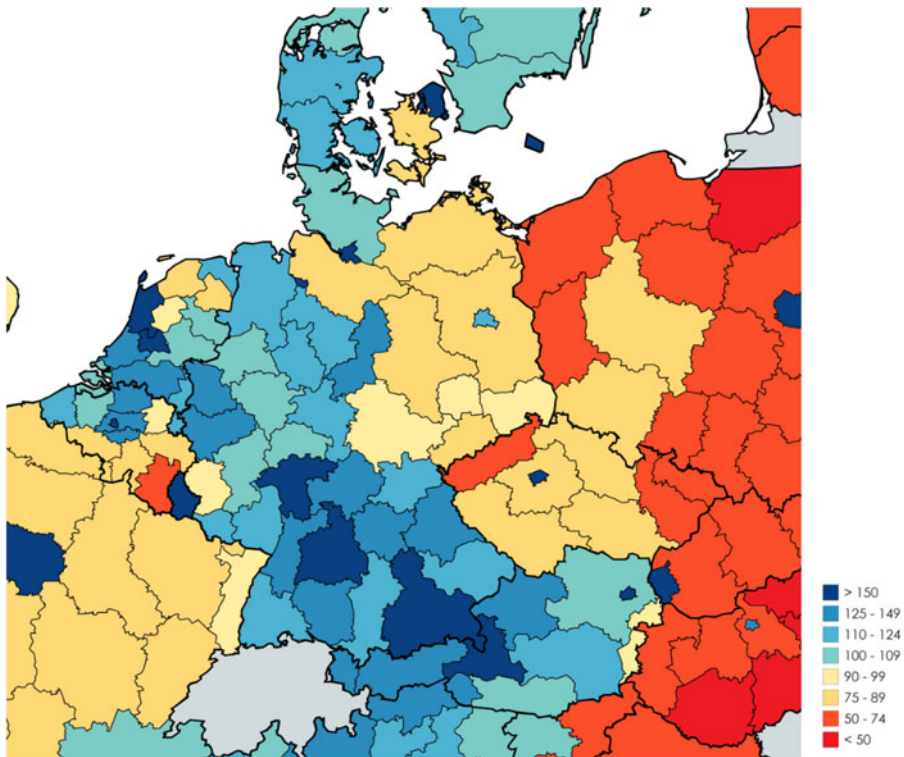
Figure A1. GDP per capita by NUTS2 region (2017).
Source: Eurostat.
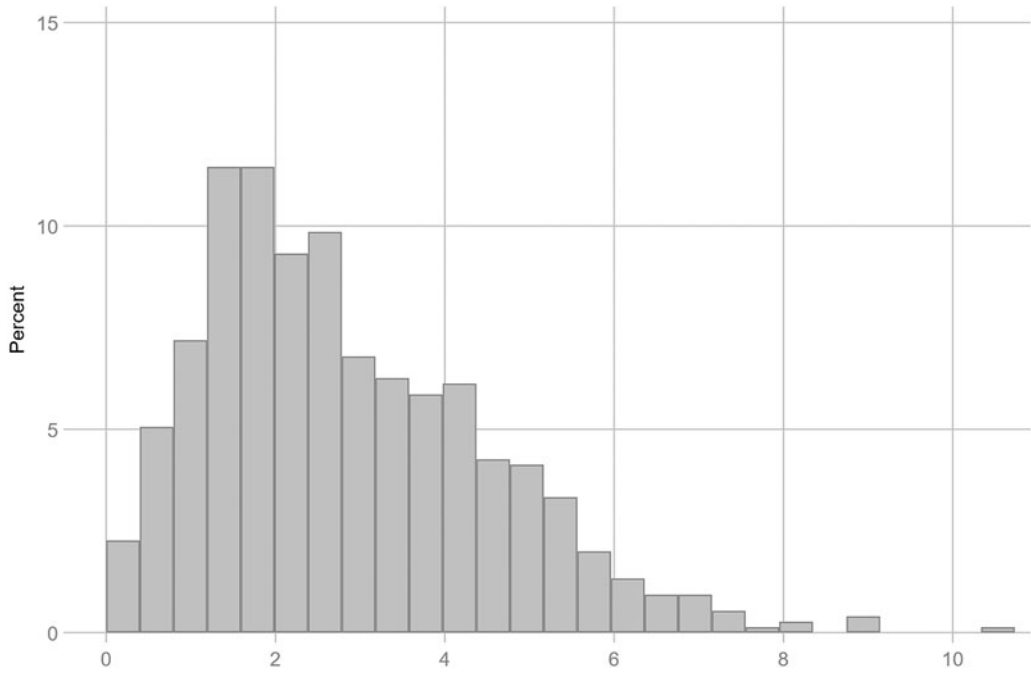
Figure A2. Histogram exception share.
Source: ZDH-Data.
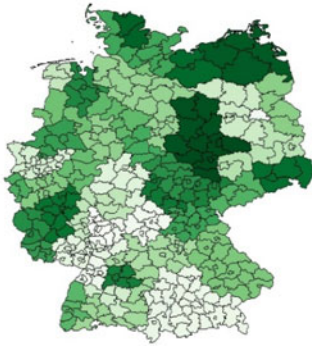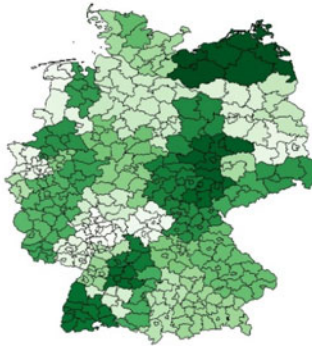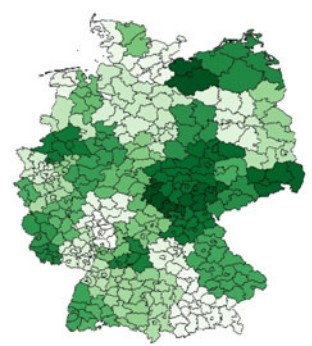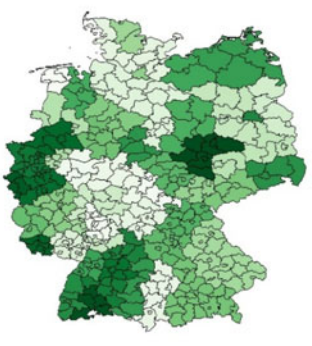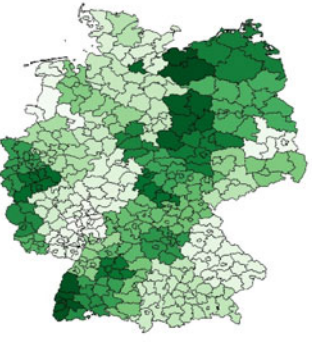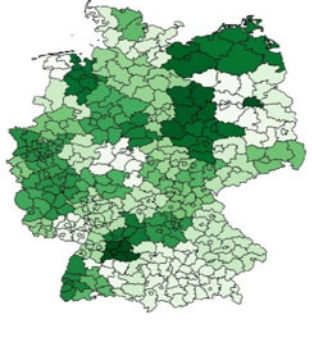
Figure A3. Exceptions as a fraction of the total number of entry (by crafts chamber region, TCC §8).
Source: ZDH-Data, map rendered with QGIS.
Notes: The darker the area, the higher the share of exceptions.
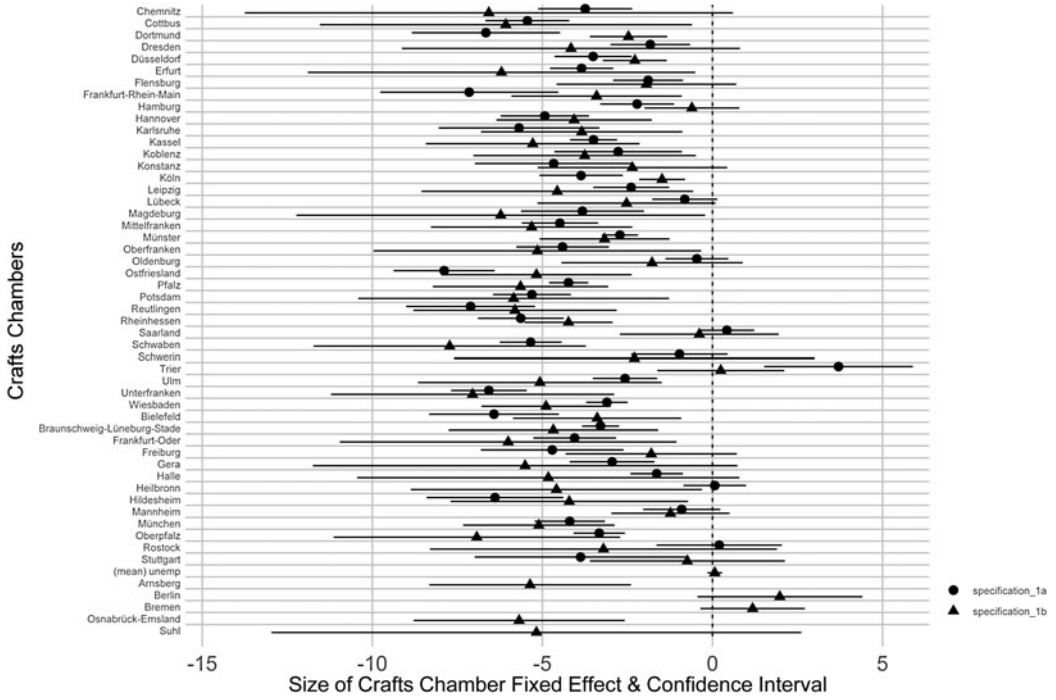Exceptions according to TCC §8 are displayed here.

Figure A4. Region fixed effects (regression specification 1, §7b- and §8-type exceptions).